

**ADMINISTRATOR KNOWLEDGE OF EARLY READING
INSTRUCTION**

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ABSTRACT

Reading achievement continues to be a significant focus in the U.S. educational system. Despite an abundance of evidence about the importance of early reading instruction, prior research has shown that many pre-service and in-service general education and special education teachers are not knowledgeable about basic reading concepts. Less is known about administrator knowledge of early reading instruction. School administrators often make decisions regarding professional development in reading for teachers. Since school administrators are making these decisions, it is important that their knowledge of early reading instruction is studied. The purpose of this study was to extend the research base by examining the knowledge that administrators have related to early reading instruction as well as their confidence in evaluating teachers of reading. The national questionnaire was completed by kindergarten through sixth grade administrators and incorporated questions from the *Survey of Language Constructs Related to Literacy Acquisition*, an instrument originally designed to assess teacher content knowledge of basic language constructs.

Overall, the data indicated that administrators are confident in their ability to provide feedback to teachers about early reading instruction. However, their knowledge is not extensive, and the relationship between knowledge and confidence, while significant, is modest. The data also showed that the administrators' degree (Master's or doctorate) does not affect either their knowledge or their confidence. What seems to be most important is the number of courses that administrators have taken in early reading instruction.

Keywords: Special Education, Literacy, Early Reading Instruction, Professional Development, Administrators, Teachers

This is dedicated to my sons, James William and Benjamin Thomas, and my dad, Walter William Frith, Jr. James and Benjamin, I am so proud to be your mom. It has taken me a decade to fulfill this goal, with many challenges arising that could have deterred me. But, for both of you, I kept pushing. I hope that you know that anything is possible in life, with grit, hard work, and determination. I love you both. Dad, throughout this journey you were my biggest supporter. When you transitioned to heaven in May 2021 I didn't know if I had the strength to continue, but you gave me signs that it was possible. You always called me, "Dr. Dan" and I hope you are proud that this dream for me is finally realized. Thank you, pops, for believing in me and helping me to see my own potential. I love you.

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TABLE OF CONTENTS

	Page
ABSTRACT.....	III
ACKNOWLEDGMENTS	VI
LIST OF TABLES	XI
LIST OF FIGURES	XII
 CHAPTER	
1. INTRODUCTION	1
Reading Achievement.....	1
Language Constructs.....	3
Simple View of Reading.....	5
Reading Terms	6
Word Recognition.....	6
Language Comprehension	6
Teaching Struggling Readers	9
School Administrators’ Role in Reading Instruction.....	9
Statement of Purpose	10
2. LITERATURE REVIEW	12
Reading Achievement.....	12
Core Elements of Effective Reading Instruction	13
Issues with Reading Instruction	15
Simple View of Reading.....	17

Theory of Change	22
Simple View of Reading & Reading Disabilities	24
An Extension of the Simple View of Reading.....	25
Knowledge of Language Constructs.....	26
Teacher Educators’ Knowledge of Language Constructs.....	26
Teachers’ Knowledge of Language Constructs	29
Assessment of Reading Problems/Disabilities.....	32
Teachers’ Response to Reading Difficulties.....	35
Instruction for Students with Reading Problems/Disabilities.....	36
Intensity of Reading Instruction.....	36
Differentiating Students with Dyslexia from Other Types of Problem Readers.....	38
Reading Problems of Students with LD.....	41
School Administrators’ Knowledge of Early Reading Instruction	43
Leadership and Student Achievement	45
Principals as Literacy Instructional Leaders	47
Administrator Feedback During Teacher Evaluation	49
The Role of Literacy Coaches.....	49
Professional Development for Teachers	50
School Administrators’ Involvement in Professional Development	51
3. METHODS	57
Research Questions.....	57
Recruitment.....	58

Questionnaire Instrument.....	58
Demographic Information.....	60
Procedures.....	60
Online Questionnaire	60
Pilot.....	60
Launch.....	61
Analyses	61
4. RESULTS	63
Introduction.....	63
Descriptive Findings	64
Descriptive Data on the Respondents	64
School Characteristics.....	66
Early Reading Instruction Experience of Respondents	67
Sources of Information About Early Reading Instruction	68
Confidence Ratings.....	69
Early Literacy Knowledge Questions	70
Answers to the Research Questions.....	71
Research Question #1	71
Research Question # 2	74
Research Question 3	75
Additional Analyses.....	76
Additional Research Question # 1: Which Variables Correlate with Administrators' Knowledge of Early Reading Instruction?	76

Additional Research Question #2: Is There a Difference in Knowledge or Confidence in Administrators with Different Positions in the School?.....	77
Additional Research Question # 3: Are the Significant Relationships Between Number of Courses in Reading Instruction and Number of Years of Reading Instruction Linear?	78
Summary	79
5. DISCUSSION	81
Study Foundation	81
Sample.....	82
Questionnaire Components.....	82
Summary of the Results	83
Additional Analyses.....	85
Interpretation of the Findings.....	86
Implications for Administrators and Teachers.....	87
Recommendations for Best Practices.....	89
Limitations	91
Future Research	92
Summary	93
REFERENCES	95
APPENDICES	
A. RECRUITMENT LETTER AND QUESTIONNAIRE INSTRUMENT.....	100
B. KNOWLEDGE QUESTIONS	109

LIST OF TABLES

Table	Page
4.1. Demographic Characteristics of the Respondents	65
4.2. Position and Experience of Respondents	66
4.3. School Characteristics.....	67
4.4. Experiences with Early Reading	68
4.5. Sources of Information About Early Reading Instruction	69
4.6. Confidence Ratings in Response to the Question: I am confident in my ability to provide feedback to a teacher after I observed a lesson on.....	70
4.7. Respondents' Scores on Assessment of Early Literacy Knowledge	70
4.8. Correlations Between Early Literacy Knowledge Scores and Confidence Ratings .	71
4.9. Correlations of Confidence with Demographic Variables.....	72
4.10. Regression of Confidence in Providing Feedback for Phonemic Awareness Controlling for Demographic Variables	73
4.11. Multiple Regression of Confidence in Providing Feedback for Phonics Controlling for Demographic Variables.....	73
4.12. Means, Standard Deviations, and t-test Results by Highest Degree for Knowledge of Early Reading Instruction.....	75
4.13. Means, Standard Deviations, and t-test Results by Degree for Confidence in Providing Feedback	76
4.14. Correlations with Administrator Knowledge.....	77
4.15. Knowledge and Confidence as a Function of Administrator Position.....	78
4.16. Data for Number of Courses in Early Reading Instruction.....	79
4.17. Data for Number of Years of Reading Instruction.....	79

LIST OF FIGURES

Figure	Page
2.1. The Simple View of Reading.....	19
2.2. Theory of Change for Administrators.....	22
2.3. The Active View of Reading Model.....	26
2.4. Classification System Based on the Simple View of Reading	41

CHAPTER I

INTRODUCTION

Reading Achievement

A large part of academic learning occurs through reading (Berkeley et al., 2010). There are few issues in the United States with greater inequality in outcomes than reading (Burns et al., 2023). Reading achievement is a major concern and focus in the United States. A report by the National Assessment of Educational Progress (NAEP, 2019) indicates that the percentage of fourth-grade public school students performing at or above the NAEP Proficient level in reading was 34 percent nationally. After reviewing more than 100,000 reading studies on how children learn to read, The National Reading Panel (NRP, 2000) identified that teaching phonemic awareness to children is an effective practice to support reading. According to Adams (1990), “explicit instruction in phonemic awareness is invaluable for reading acquisition” (p. 331) and Brady and Moats (1997) reported that students with reading difficulties need explicit instruction in the structure of the English language.

Despite this evidence about the importance of language structures for literacy development, studies have indicated that in-service teachers are not knowledgeable in the basic concepts of the English language (Joshi et al., 2009). Professional development related to language concepts could provide them with the necessary knowledge of language concepts related to early literacy instruction (Joshi et al., 2009). In a study conducted by Washburn and colleagues (2011), which examined elementary school teachers’ knowledge of basic language concepts and their knowledge and perceptions of dyslexia, findings indicated that teachers displayed implicit skills related to certain basic

language concepts (e.g., syllable counting), but failed to demonstrate explicit knowledge of others (e.g., phonics principles) (Washburn et al., 2011). Binks-Cantrell and colleagues explored the Peter Effect (i.e., one cannot be expected to give what one does not possess) within the context of preparing reading teachers. Teacher educators cannot prepare teacher candidates with an understanding of language constructs if they themselves do not possess this understanding.

The same argument might be applied to school administrators, although less is known about their knowledge of early reading instruction. Since the NCLB Act of 2001, school districts have been tasked with focusing on professional development that would result in improved teacher learning and also lead to increased student achievement (Cobb, 2005). School administrators often make decisions regarding the professional development that teachers will participate in, which is included in district-wide planning efforts. If school administrators are making these decisions, it is important that their knowledge of content is analyzed, asking the question, what do administrators know about early reading instruction? Equally important is the fact that these administrators are evaluating teachers based on this knowledge. Based on their study of school leaders and their ability to make their school more effective in assisting students to become more able readers, Townsend and Bayetto (2021) point out that school leaders need to know how students learn to read so that they can identify when something is or is not working and engage in meaningful conversations with teachers so that improvements can be initiated.

While we do not know everything about reading, it should not stop the field from moving forward with using research findings to support instructional practices that have a solid evidence base so they can be implemented in the classroom (Solari et al., 2020).

Administrators are in a position to facilitate teachers' efforts to provide effective, evidence-based reading instruction (Billingsley et al., 2019). The *Survey of Language Constructs Related to Literacy Acquisition* survey instrument has been used in studies with both preservice and in-service teachers to assess their knowledge and skills of language constructs (Binks-Cantrell et al., 2012; Joshi et al., 2009; Washburn et al., 2011; Washburn et al., 2011). However, to date, this survey has not been studied with school administrators, who regularly observe and evaluate teachers of reading. This study will help establish the current research base around administrator knowledge of early reading instruction given their involvement in decision-making related to reading.

Language Constructs

For this study, the definition of language constructs is taken from the work of Binks-Cantrell and colleagues, who developed a questionnaire instrument designed to measure teacher knowledge of basic language constructs of literacy (Binks-Cantrell et al., 2012). Basic language constructs include the following elements of the English language:

Phonological awareness

Phonemic awareness

Alphabetic principle/phonics

Morphology (affixes, roots, base words, and derivatives)

For purposes of this study, the definitions of each basic language construct provided by Binks-Cantrell and colleagues (2012) were used to help clarify what each construct is and how it relates to early reading instruction.

Phonological awareness encompasses an understanding of the different ways in which spoken language can be broken down and manipulated. **Phonological awareness**

skills include: rhyming and alliteration, sentence segmentation, syllable segmentation, onset-rime manipulation, and phonemic awareness. **Phonemic awareness** is characterized by the ability to notice, think about, or manipulate the individual sounds in words (phonemes). The **alphabetic principle/phonics** is an understanding of how written letters are systematically and predictably linked to spoken sounds (phonemes) and an understanding of how to apply that knowledge for the purposes of decoding and reading.

In 1994, Louis Moats discussed the necessity of teaching concepts about linguistic structure to beginning readers and to students with reading and spelling difficulties due to the fact that unskilled readers are unable to process efficiently and accurately the phonological building blocks of language and the units of print that represent them. Moats emphasizes the importance for teachers to be able to deliver linguistically-informed, code-emphasis reading instruction. In her study, Moats surveyed teachers' (n=89) background knowledge of language, assessing their knowledge of speech sounds, their identification of words, correspondence between sounds and symbols, concepts of language, and presences of morphemic units in words. Results indicated insufficiently developed concepts about language as well as weaknesses in skills needed to provide direct, language-focused reading instruction, which would indicate that the teachers would be unable to teach it explicitly to beginning readers or those with reading/spelling disabilities (Moats, 1994). Participants had poor understanding of the terms used in reading, phonic knowledge, phoneme, and morpheme awareness, all of which are necessary for effective instruction in reading (Washburn et al., 2011). Moats (1994) recommended that instruction in language concepts must be part of every teacher training program in literacy education. At the time, Moats contended “teachers are

inadequately prepared to teach emergent literacy, reading, and spelling to beginning readers and those encountering reading failure and it is our obligation to enable teachers to acquire it” (p. 99). Given the importance of teacher knowledge of language constructs, it can also be conceived that administrator knowledge of early reading instruction is an area that warrants examination, especially given that administrators observe teachers of reading and are often part of the process around professional development practices for these teachers.

Teaching reading requires knowledge of language structures and without such knowledge, teachers are not able to respond to student errors, choose examples for concepts, explain and contrast words and their parts, or judge what focus is needed in a lesson (Moats, 2020). Its application to teaching phoneme awareness underscores the importance of producing speech sounds accurately during reading (e.g. saying /t/ crisply and not “tuh”) , vocabulary, and spelling instruction as well as identifying, matching, and selecting appropriate examples of words containing specific phonemes (Moats, 2020).

Simple View of Reading

The simple view of reading (*SVR*) provides the theoretical framework for the importance of examining administrator knowledge of early reading instruction. *SVR* states that reading comprehension is the product of word recognition and language comprehension and that when a reader recognizes printed words accurately and automatically, reading comprehension is supported (Moats, 2020). This automatic word recognition requires proficient phonemic awareness, knowledge of sound symbol correspondences, recognition of print patterns and recognition of meaningful parts of words (morphemes) (Ehri, 2014). It is important for students to understand how print

represents sounds, syllables, and word parts; for the majority of students, this requires explicit instruction (Ehri, 2001). The word recognition component of reading depends heavily on the phonological aspect of language processing and the awareness of these linguistic elements is essential for making sense of print due to the fact that our alphabetic writing system represents language within consonant and vowel phonemes, spoken syllables, grammatical endings, and meaningful word parts (morphemes) (Moats, 2020). Without the ability to rapidly associate the sounds, syllables, and/or morphemes in spoken words with printed symbols, students will not be able to store words (Moats, 2020).

Reading Terms

The three components ($RC = WR \times LC$) of the simple view of reading are defined by Hoover and Gough (1990) as follows:

Word Recognition

For the *SVR*, skilled word recognition is simply efficient word recognition: the ability to rapidly derive a representation from printed input that allows access to the appropriate entry in the mental lexicon, and thus, the retrieval of semantic information at the word level.

Language Comprehension

In the *SVR*, language comprehension is the ability to take lexical information (i.e., semantic information at the word level) and derive sentence and discourse interpretations. Reading comprehension involves the same ability, but one that relies on graphic-based information arriving through the eye. A measure of linguistic comprehension must assess the ability to understand language (e.g., by assessing the ability to answer questions about

the contents of a listened to narrative). Similarly, a measure of reading skill must assess the same ability, but one where the comprehension process begins with print (e.g., by assessing the ability to answer questions about the contents of a narrative read independently by the reader).

Word recognition entails an outcome achieved both accurately *and* quickly as the incorrect identification of a word can lead to a divergent rendering of a sentence's meaning, and if word recognition does not occur quickly, potential limitations in short-term memory and cognitive capacity can come into play (Hoover & Tunmer, 2018). Hoover and Tunmer purport that the *SVR* holds that reading comprehension and language comprehension engage the same cognitive capacities except through different points of access, one through print and the other through speech.

There are three major predictions of the *SVR* purported by Hoover and Gough (1990). The first prediction is that word recognition and linguistic comprehension skills will contribute towards the explanation of variation in reading comprehension, but the product of skill within these two components (WR/LC) will improve the estimate of reading comprehension. The second prediction is that poor reading skills are a result of one of three conditions: (1) when word recognition skill is adequate but linguistic comprehension is weak, (2) when linguistic comprehension is adequate but linguistic comprehension is weak, or (3) when both word recognition and linguistic comprehension skills are weak (Hoover & Gough, 1990).

The *SVR* holds significant value for reading instruction and for producing skilled readers. When reading instruction advances skill in either word recognition or linguistic comprehension, overall reading skills will likely progress. The *SVR* holds that skill in

word recognition must be acquired for success in reading, and with regard to language comprehension, which underpins the focus of this study (i.e., knowledge of language constructs for administrators), linguistic comprehension is a necessary component of skilled reading. When a reader's knowledge base is developed, the greater their reading comprehension will be (Hoover & Gough, 1990).

The development of automatic word recognition depends on phonemic awareness skills, knowledge of sound-symbol correspondences, recognition of print patterns, and recognition of morphemes (meaningful word parts). Learning to read is a complex achievement, and learning to teach reading requires extensive knowledge and skills across the components of word recognition, language comprehension, spelling, and writing (Moats, 2020). Children who learn to read well have a sensitivity to linguistic structure, can recognize redundant patterns, and can connect letter patterns with sounds, syllables, and meaningful word parts quickly as well as accurately and unconsciously (Moats, 2020). Teachers of reading are more effective when they include these concepts in their instruction.

As Moats (2020) points out "some children learn language concepts and their application very easily in spite of incidental teaching, but others never learn unless they are taught in an organized, systematic, efficient way by a knowledgeable teacher using a well-designed instructional approach" (p. 5). As was reported in the study on teacher knowledge of language constructs, many teachers lack this knowledge. Once teachers of reading are in practice, they are observed and their instruction is critiqued by administrators. This study sought to better understand administrators' knowledge of early reading instruction within the context of these observations and critique.

Teaching Struggling Readers

Most reading failure is unnecessary and can be prevented in all but a small percentage of children who have serious learning disorders (Moats, 2020). It is important that teachers of students who have dyslexia or reading disabilities provide instruction that follows the significant body of research on effective practices. When teachers target their instruction on certain skills, there is a positive impact on reading achievement (Shanahan, 2021). For example, all students must learn how to decode to become readers and thus Shanahan purports that all students, including students with dyslexia and reading disabilities, will benefit from explicit decoding instruction. Children who are at risk for failure can be provided intense and explicit instruction that directly teaches foundational language skills that serve to promote proficient reading (Moats, 2020). Additionally, explicit phonemic awareness, phonics, and spelling instruction enhance reading achievement for a wide variety of readers (Shanahan, 2021). Teachers of students with dyslexia should be able to deliver quality instruction. Hypothetically, reading instruction for readers with disabilities should include explicit instruction, differentiated instruction, intense lessons aimed at the needs of struggling readers, lessons that are well-designed, and lessons that are well-implemented (Shanahan, 2021). According to Shanahan (2021) “there is sufficient evidence to suggest that at least some of these quality factors could matter in student learning” (p. 280).

School Administrators’ Role in Reading Instruction

Having an effective teacher can alter students’ educational and economic outcomes (Adnot et al., 2017). Although parents and tutors can contribute to reading success, the critical factor in preventing reading problems is effective classroom

instruction (Moats, 2020). Student reading success is a shared responsibility, and among those stakeholders involved are school administrators. As Moats points out (2020) “teachers deserve no less than the knowledge, skills, and supported practice that will enable their teaching to succeed and that there is no more important challenge for education to undertake” (p. 10). Moreover, school administrators play a critical role in the quality of reading instruction that occurs in classrooms.

Statement of Purpose

Given the importance of effective reading instruction for all students and the fact that school administrators influence teachers’ instruction through observations and evaluations of teachers, it is important to examine the reading knowledge of administrators in schools. The subsequent review of the literature will describe the importance of teacher knowledge of early reading instruction for reading instruction and will also provide an understanding of the importance of the role that school administrators play in teacher evaluation of reading instruction and in the process of providing professional development. Furthermore, there have not been any questionnaire studies conducted on administrator knowledge of early reading instruction, and thus, this study will add to the literature base.

In this study, the following research questions will be addressed:

Research Question 1. To what extent does administrator knowledge of early reading concepts predict confidence, beyond demographic variables, in providing feedback to teachers after observations of teachers’ reading lessons?

Research Question 2. To what extent does an administrator’s highest degree predict knowledge of early reading concepts beyond demographic variables?

Research Question 3. To what extent does an administrator's highest degree predict confidence, beyond demographic variables, in providing feedback after observing teachers reading lessons?

CHAPTER 2

LITERATURE REVIEW

Reading Achievement

After reviewing more than 100,000 reading studies on how children learn to read, The National Reading Panel (National Institute of Child Health and Human Development, 2000) identified that teaching phonemic awareness to children is an evidence-based practice to support reading. Brady and Moats (1997) reported that students with reading difficulties need explicit instruction in the structure of the English language. Past studies have indicated that in-service teachers lack knowledge related to basic concepts of the English language (Joshi et al., 2009). Professional development in this area could be one way to ameliorate this issue.

Learning to read can transform lives and is the basis for the acquisition of knowledge (Castles et al., 2018). Reading impacts academic achievement and arguably the most fundamental responsibility of schools is teaching students to read (Moats, 2020). Reading failure is something that can be prevented and most reading failure is unnecessary. When teachers adopt evidence-based reading practices, they are preventing and mitigating reading difficulty, which can have social and emotional, economic, and physical health implications (Moats, 2020). Reading achievement is a major concern and focus in the United States. A report by the National Assessment of Educational Progress (NAEP, 2019) indicates that the percentage of fourth-grade public school students performing at or above the NAEP Proficient level in reading was 34 percent nationally. Students who learn to read well are sensitive to linguistic structure, can recognize

redundant patterns, and can connect letter patterns with sound, syllables, and meaningful word parts (Moats, 2020). Teachers of reading must effectively teach these concepts.

Core Elements of Effective Reading Instruction

The National Reading Panel (NRP) report (National Institute of Child Health and Development, 2000) which examined research studies that focused on students in grades K-12, is considered the cornerstone of the federal literacy policy. From this report emerged the five pillars of reading instruction; phonemic awareness, phonics, oral reading fluency, vocabulary, and reading comprehension. Phonemic awareness refers to the ability to hear and manipulate individual sounds (phonemes) within words. Instruction in phonics teaches students the relationship between letters and sounds. According to Shanahan (2005) “phonemic awareness teaching was advantageous to children in the early stages of learning to read; such instruction led to higher achievement in early reading and spelling, and the impacts of reading were evident when measuring both word recognition and reading comprehension” (p. 8). More specifically, the phonemic awareness skills that related to the greatest reading advantage were segmenting and blending, and once students have these skills, there is little need for more instruction in phonemic awareness instruction (Shanahan, 2005). According to Shanahan (2005) “no matter what instructional approach is taken to learning to read, the ability to use phonics should be one of the outcomes” (p. 11). Oral reading fluency, which is the ability to read text aloud with accuracy, speed, and proper expression, was found to have improved reading regardless of how it was measured , thus supporting fluency instruction to improve oral reading fluency, decoding, word recognition, silent-reading comprehension, and overall reading achievement (Shanahan, 2005). Based on the NRP’s report, which

reviewed 45 studies on the teaching of vocabulary, it was concluded that vocabulary instruction does result in improved reading achievement. When teachers are teaching vocabulary, it is important that they directly teach vocabulary but that they also use school-day activities to enrich vocabulary knowledge (Shanahan, 2005). The final pillar from the NRP was reading comprehension, which refers to the ability to understand and interpret text. The NRP determined that question asking, monitoring, summarization, question answering, story mapping, graphic organizers, cooperative grouping, prior knowledge, and mental imagery were effective in promoting comprehension. Shanahan points out (2005) “as useful as any of these single strategies were, the most learning was obtained when multiple strategies were taught in combination” (p. 30) and that reading comprehension instruction should occur in both narrative and expository text.

Shanahan (2021) examined research evidence regarding the effects of classroom instruction for students with dyslexia and other reading problems. Within this examination, Shanahan discusses amount of classroom instruction, the content of classroom instruction, and the quality of classroom instruction. Shanahan (2021) points out that, “students with dyslexia struggle to learn to read, so the idea is to choose instructional routines that will have the greatest possibility of success” (p. 271). In his analysis of the research, Shanahan posits that the amount of instruction is important, especially for students with dyslexia; however, students with learning disabilities often receive less instruction than their peers. These beneficial skills include phonemic awareness, phonics, text-reading fluency, reading comprehension strategies, and written language features. In addition to the amount of classroom instruction and curriculum, Shanahan points out that the quality of instruction affects reading achievement. Quality

refers to how the teaching is delivered, and he hypothesizes that readers with disabilities benefit from explicit instruction, differentiated instruction, intense lessons, well-designed lessons, and well-implemented lessons (Shanahan, 2021).

Issues with Reading Instruction

Teachers of reading require knowledge of language structure. Lack of this knowledge may prevent teachers of reading from responding to student errors, selecting examples for concepts to explain and contrast words and their parts, or evaluate what the focus of a lesson should be (Moats, 2020). When instruction directly teaches the specific foundational language skills (e.g., metalinguistics, phonetics/phonology, phoneme awareness, morphology, orthography, semantics, syntax/text structure) on which reading depends, reading failure can be mitigated (Moats, 2020).

The language comprehension component of the *SVR*, which becomes more and more important as students' progress through the grades, requires background knowledge, vocabulary, the ability to decipher formal and complex sentence patterns, and recognition of the devices that hold a text together. Within a reading classroom, the simple view of reading should inform the instruction that is taking place. Reading instruction must include systematic and explicit teaching of word recognition and must develop students' subject-matter knowledge, vocabulary, sentence comprehension, and overall familiarity with the language in texts (Moats, 2020).

In a study by Fielding-Barnsley and Purdie (2005), they examined pre-service (n=93), general (n=209) and special education teachers' (n=38) attitudes to and knowledge of metalinguistics (awareness of language structure). Metalinguistics is an acquired awareness of language structure that includes an awareness of phonemes,

syllables, rhyme, and morphology. This awareness allows students to detect and correct errors when reading. The role of the reading teacher in developing these skills is of prime importance (Fiedling-Barnsley & Purdie, 2005). Results indicated a positive attitude but poor knowledge of metalinguistics in the process of learning to read. Results overall indicated that special education teachers performed significantly better with regard to attitude and knowledge, when compared to the other two groups of participants. Teachers of reading must understand the relationship between speech and print due to these basic language processes often being deficient in cases of reading failure (Fielding-Barnsley & Purdie, 2005).

Although a large number of students in our schools demonstrate significant reading difficulties (Burns et al., 2020), we can change the future for struggling readers (Allington, 2013) by ensuring that teachers are properly trained to implement evidence-based reading instruction. When students demonstrate difficulties in the classroom, they generally either receive special education services or intervention through the Response-to-Intervention (RTI) system (Burns et al., 2020). Despite receiving special education services, many of our students with disabilities continue to demonstrate reading proficiency skills that are below the basic level. These difficulties may persist due to ineffective services, a lack of evidence-based practices being implemented within the classroom, difficult-to-remediate deficits, and also a lack of consistency in how specific learning disabilities are defined in both policy and practice. RTI frameworks continue to be implemented across school districts. Research outcomes to date have yielded inconsistent and, at times, negligible or negative effects of RTI and additional research that examines student growth within a RTI framework is needed (Burns et al., 2020).

Simple View of Reading

Reading consists of only two parts, word recognition and language comprehension, both necessary for reading success, neither sufficient by itself. In a seminal article related to the Simple View of Reading (*SVR*), Gough and Tunmer (1986) set out to discuss the connection between decoding skill and reading ability. Decoding, undeniably, can mean different things to different people. Gough and Turner report that (1986) “the skilled decoder is exactly the reader who can read isolated words quickly, accurately, and silently” (p. 7) and that “they assume that decoding ability varies directly with knowledge of the spelling-sound correspondence rules of English” (p. 7). Consequently, “the purest measure of this is the ability to pronounce (or silently apprehend the pronunciation of) pseudowords like *clard*, or *phim*, or *stenk*, and it is the role of this ability in reading” (p. 7). Gough and Tunmer proposed the *SVR* (Gough & Tunmer, 1986; Hoover & Gough, 1990), which provides a model of reading where word recognition and language comprehension are required for reading comprehension to occur. The *SVR* has mostly had a positive impact and has led to significant advancements in our understanding of reading comprehension (Catts, 2018) and has widespread acceptance (Nilsson et al., 2021). In a play about the science of reading, the *SVR* would be the lead character (Cervetti et al., 2020).

This model, which does not deny that the reading process is complex (Hoover & Gough, 1990), can be used by professionals to understand the development of reading (Roberts & Scott, 2006). If reading comprehension (RC), word recognition (WR), and language comprehension (LC) are each thought of as variables ranging from 0 (nullity) to 1 (perfection), then the *SVR* can be expressed as $RC = WR \times LC$ (Hoover & Gough,

1990). Hoover and Tunmer (2018) define the three components of the conceptual model of the **simple view of reading (SVR)** as follows:

Reading comprehension is the ability to extract and construct literal and inferred meaning from linguistic discourse represented in print.

Word Recognition is the ability to recognize printed words accurately and quickly to efficiently gain access to the appropriate word meanings contained in the internal mental lexicon.

Language comprehension is the ability to extract and construct literal and inferred meaning from linguistic discourse represented in speech.

The *SVR* holds that both word recognition and language comprehension are of equal importance, that reading is not reduced to word recognition, that word recognition is of central importance in reading and that both word recognition and language comprehension are necessary for reading success, with neither being sufficient by itself (Hoover & Gough, 1990). When a student's word recognition skills allow them to efficiently decode any encountered words, then the overall limit on reading reflects the limit on language comprehension, and for each increase in language comprehension, there will be an equal increase in reading comprehension. Conversely, if a student's word recognition skills are not adequate but those word recognition skills improve, reading comprehension will improve in step with linguistic comprehension (Hoover & Gough, 1990).

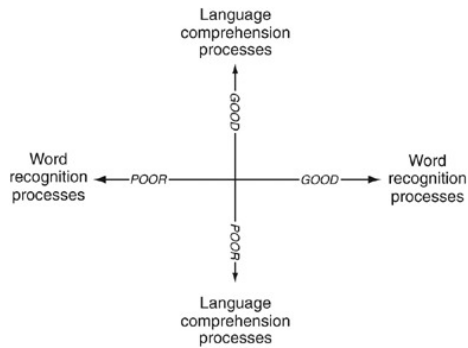


Figure 2.1. The Simple View of Reading. Stuart et al., 2008.

Stuart and colleagues point out (2008) “the *SVR* is preferable because it better accommodates research evidence as to the nature and operation of cognitive and linguistic processes in reading, the process which it aims to depict” (p. 62). They argue that it portrays the essential elements of reading that are necessary despite the socio-cultural and educational contexts that are situated within a learner. As it relates to teachers of reading, the *SVR* delineates word recognition and language comprehension as two components of reading. The *SVR* offers a clear framework for teachers. As seen in Figure 2.1, there is an interdependence of word recognition and language comprehension.

In an update to the dissemination of the *SVR*, Hoover and Tunmer (1990) discuss its applicability to reading instruction and the importance for teachers to keep the relationship between decoding and linguistic comprehension in mind when making instructional decisions around reading instruction. To illustrate the importance of reading instruction, they provide the example that younger students tend to have the capacity for language comprehension but lack decoding skills, which impacts their reading comprehension. These students can comprehend more via their language comprehension processes when accessed through speech. However, as their decoding skills improve, these students are able to understand through print anything they can understand through

speech and language comprehension has now become the limiting factor on reading comprehension (Hoover & Tunmer, 2018).

Although the *SVR* has positively shaped how teachers of reading provide instruction, its simplicity in presentation has unintentionally contributed to some false impressions about comprehension (Catts, 2018). One false impression involves how the components of the simple view are presented graphically, which might lead one to believe that comprehension is not at all different from decoding in terms of its complexity and malleability (Catts, 2018). Additionally, there is the false impression that comprehension is a “single thing” and is unidimensional and less complex than it actually is.

Advocates of the *SVR* model do not discount other potential contributors to the reading process, but agree that decoding and comprehension are core competencies for reading comprehension (Kendeou et al., 2009). Instructionally, the *SVR* provides a framework for designing appropriate teaching practices that target decoding and comprehension skills. In other words, the model provides an understanding of the basic components of a complex phenomenon (reading comprehension), and it makes it clear to teachers that word recognition is necessary but not sufficient for reading comprehension (Kendeou et al., 2009). Additionally, the framework explicitly conveys to teachers the idea that their students may differ with respect to word recognition and linguistic comprehension (Kendeou et al., 2009).

Both word recognition and language comprehension are necessary for reading success, and neither is sufficient alone (Roberts & Scott, 2006). The *SVR* provides a framework that links the oral and written forms of language. For example, a student’s

reading comprehension abilities can be reasonably predicted if their word recognition (decoding) skills and their language comprehension abilities are known. Given this, it is important that students are explicitly taught decoding skills along with language comprehension skills. Equally important is that students' decoding and language comprehension skills are assessed in order to inform intervention and instruction.

The importance of reading outcomes is exemplified in the statement by Burns and colleagues (2023) that “inequality in reading outcomes is perhaps the single greatest social justice issue faced by school psychologists, and school psychologists need a better understanding of reading theory and its application to intervention to better combat the important issue” (p. 30). Not only are school psychologists important stakeholders in literacy outcomes, but so are school administrators. In an article by Burns and colleagues, they examined the effect sizes of 333 studies from 26 meta-analyses and found that the *AVR* (self-regulation, word recognition, bridging processes, and language comprehension) added significant variance in reading. Further, large effects were found for interventions that focused on text structure, verbal reasoning, and vocabulary, moderate effects for fluency, language structure, motivation, and phonemes, and an overall limited amount of research related to some components of *AVR* (e.g., cultural/content knowledge) (Burns et al., 2023). The study revealed that the *AVR* could potentially help identify some of the structural inequities contributing to unequal reading outcomes. Moreover, the study's analyses do support the active view of reading; however, additional research is recommended, specifically to better understand reading intervention.

Theory of Change

Whereas the *SVR* provides the theoretical framework for the knowledge portion of this study's questionnaire, Theory of Change (*ToC*) provides a model for change. Specifically, this study involves administrator knowledge and confidence, which theoretically will impact professional development decisions, teacher practices and student learning. This study does not directly examine professional development decisions, teacher practices or student learning; however, future research should consider these variables.

The *ToC* model below, *Theory of Change for Administrator Knowledge of Early Reading Instruction* (Fig. 2.2), designed specifically for this study, evaluates administrator knowledge of early reading instruction and the extent to which that knowledge predicts confidence in providing feedback to teachers after observing their reading lessons.

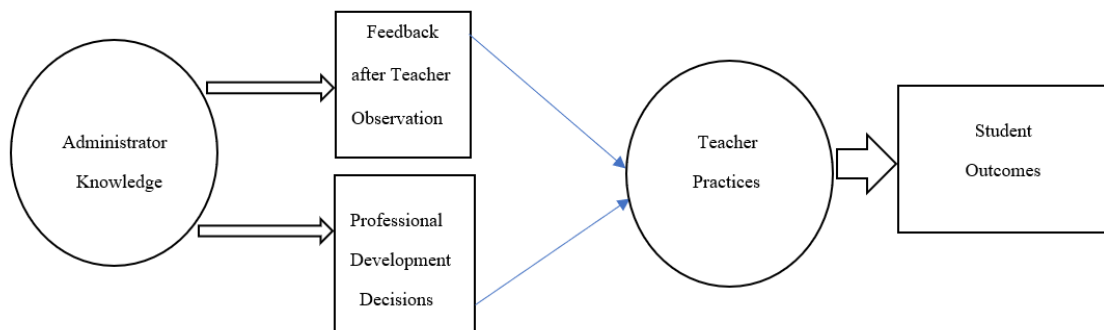


Figure 2.2. Theory of Change for Administrators

As shown in the *ToC* model (Figure 2.2), I anticipate that administrator knowledge will lead to improved feedback to teachers in reading and improved professional development decisions, which will subsequently impact teacher practices and student outcomes. The knowledge of administrators must be such that they can

confidently and accurately provide feedback after observations of reading instruction. Administrators can provide teachers with specific and actionable feedback (Kraft & Gilmour, 2016). Given this, if administrators are not knowledgeable about early reading instruction, their lack of knowledge could potentially adversely impact the quality of their feedback. According to Whitworth and Chiu (2015), “school and district leaders play a significant role in the planning and implementation of professional development, as well as providing ongoing leadership to support teacher change” (p. 121). This relates directly to the part of the model labeled “professional development decisions.” School administrators often make decisions regarding professional development (Kraft & Gilmour, 2016; Plaatjies, 2009) that can result in improved teacher learning and increased student achievement (Cobb, 2005). Professional development can foster improvements in teaching and lead to the implementation of evidence-based practices in early reading instruction and language concepts (Kennedy, 2016). The NRP supports the use of high-quality professional development opportunities for teachers of reading (Shanahan, 2003). Despite their call for more professional development, there remains a lack of research on this topic (Moats, 2020). Consequently, the lack of professional development for teachers impedes evidence-based reading instruction from being fully implemented for students (Solari et al., 2020). It is important to recognize that teacher change is complex; however, once positive changes in student learning occur, teachers are more likely to repeat new and effective practices (Guskey, 2002). Professional development that is grounded in research should lead to teacher practices that are evidence-based. The use of evidence-based practices should, in theory, lead to improved student outcomes in reading.

Simple View of Reading & Reading Disabilities

The *SVR* has undeniable implications for reading disabilities, given the fact that decoding and linguistic comprehension skills are directly related to literacy skills (Hoover & Gough, 1990). Reading skill is described as the product of decoding and comprehension. The *SVR* purports that decoding is necessary for reading, not that it is sufficient for reading. Decoding provides a step toward comprehension. According to Gough and Turner (1986) “the more interesting implication of the simple view, concerns reading disability” (p. 7). A reading disability could result from an inability to decode, an inability to comprehend, or both.

The *SVR* can be utilized as a model for students with dyslexia, who commonly have deficits in decoding. Overall, Hoover and Gough contend that (1990):

Implications of the simple view of reading contend that when skill in both components is non-zero, then instruction that advances skill in either component will advance skill in reading, that within the illiterate population, skill in decoding and linguistic comprehension will be inversely related if substantial skill is evidenced in either component, and advancing literacy by achieving equal linguistic and reading comprehension will not necessarily have direct impact on the problem of illiteracy if that problem is mainly seen as one of conceptual understanding. (p. 157)

For students with dyslexia, there is often the common denominator of difficulty with decoding (Gough & Tunmer, 1986). The simple view of reading holds that when students have proficient skills in decoding and comprehension, they will be proficient in reading comprehension. Otherwise, there could be some level of reading difficulty or disability (Hoover & Tunmer, 2018).

An Extension of the Simple View of Reading

In their article on the active *view of reading* (*AVR*), as shown in Figure 2.3, the authors acknowledge that the *SVR* is a useful and commonly presented tool that conveys the importance of decoding and language comprehension (Duke & Cartwright, 2021). Duke and Cartwright go on to discuss the expansion of the *SVR* based on scientific evidence that supports the following advances:

Reading difficulties have a number of causes, not all of which fall under decoding and/or listening comprehension as posited in the simple view, rather than influencing reading solely independently, as conceived in the simple view, decoding and listening comprehension (or in terms more commonly used in reference to the *SVR* today, word recognition and language comprehension) overlap in important ways, and there are many contributors to reading not named in the simple view, such as active, self-regulatory processes, that play a substantial role in reading. (p. 525)

While Duke and Cartwright (2021) offer the argument that the *AVR* is a potentially useful framework as it accounts for reading comprehension difficulty despite age-appropriate word recognition and language comprehension, the *SVR* is still the best theoretical explanation of reading, and thus will be used as the basis of this current study.

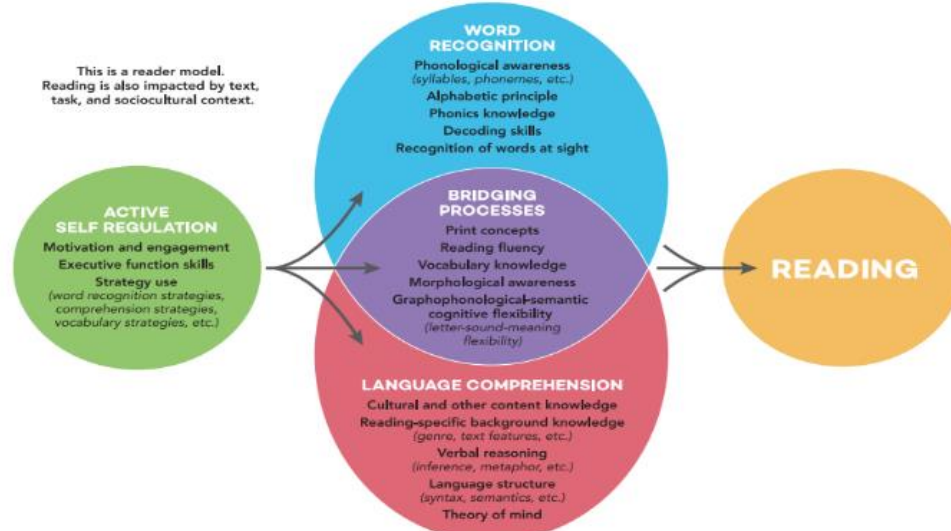


Figure 2.3. The Active View of Reading Model. Duke & Cartwright, 2021

Knowledge of Language Constructs

The *S/R*, which is the most prominently espoused theoretical reading framework, underscores the role of language comprehension in reading comprehension, yet studies have shown that teachers have a poor understanding of these language constructs (Joshi et al., 2009; Washburn et al., 2011). Both Joshi and colleagues (2009) and Washburn and colleagues (2011) have studied teacher knowledge of language constructs, and results have shown that teachers lack this important knowledge. These studies are summarized below.

Teacher Educators' Knowledge of Language Constructs

A study by Joshi and colleagues (2009), which used the *Survey of Language Constructs Related to Literacy Acquisition*, measured the linguistic knowledge of 78 teacher educators who were responsible for teaching reading education classes to prospective reading teachers (68 instructors had doctoral degrees and 10 were working on their doctoral degrees). These instructors were from various departments, including educational psychology, curriculum and instruction, special education, English as a

second language, bilingual education, and educational leadership, and were teaching between two and four courses in reading education to preservice elementary education teachers from approximately 30 different universities and community colleges from the southwestern United States (Joshi et al., 2009) and all instructors believed that they were well prepared to teach reading. Questions on this questionnaire measured how well university instructors felt prepared to teach typical readers as well as struggling readers. Results from this study indicated that instructors felt moderately confident to teach literacy skills to ELLs but felt more positive about teaching comprehension skills. Generally speaking, instructors performed better on phonology-based items than morphology-based items, with items relating to phonics and comprehension being answered correctly half of the time (Joshi et al., 2009). Additionally, a number of instructors were not fully familiar with certain linguistic constructs required to teach literacy skills, with 54 percent of participants being able to correctly recognize the definition of phonemic awareness. Joshi and colleagues emphasize that (2009) “it is noteworthy that a large number of studies have shown the importance of phonemic awareness in becoming a good reader not only in English but also in several other alphabetic languages” (p. 397).

Of the study’s participants, only 50% could correctly recognize the principle governing the use of the letter *c* for /k/ at the initial position, and only 21% of participants could correctly identify the principle governing the use of the letter *k* for /k/ (Joshi et al., 2009). Good performance from the instructors was noted in some areas of this study; for example, more than 90% of them defined and counted the number of syllables correctly, 98% correctly recognized the definition of a phoneme, and 92% correctly recognized that

chef and *shoe* begin with the same sound. There were moderate weaknesses with recognizing words with two closed syllables, recognizing words with open syllables, knowledge of the definition of phonological awareness, correctly recognizing the definition of phonemic awareness, counting speech sounds in words (such as through), and correctly identifying the definition of a morpheme. Weaknesses labeled as “severe” were seen in the following areas: 42% correctly counted the speech sounds in words such as *box*, 27% could correctly recognize words with final stable syllables (paddle), 50% recognized the pattern that governs the use of *c* in the initial position for the phoneme /k/, and 21% correctly recognized the pattern that governs the use of *k* in the initial position for the phoneme /k/. Identifying morphemes in words was also a reported area of weakness for the instructors. This study was then replicated in a different state in the United States.

The *Survey of Language Constructs Related to Literacy Acquisition* was completed by 50 instructors from 12 universities in a midwestern state. Questionnaire questions related to the causes of reading disability, general philosophy of teaching reading, and based practices in teaching the five components identified by the National Reading Panel (NRP) (phonological awareness, phonics, fluency, vocabulary, and text comprehension). All participants had doctoral degrees and believed they were academically well prepared to teach reading. Joshi and colleagues point out that while most participants cited socioeconomic status, family background, and English as a second language and ELL status as the most common factors associated with the high incidence of reading disability, the factor of quality reading instruction was not mentioned (Joshi et al., 2009). Seventy-five percent of participants reported their philosophy of teaching

reading to be in line with the balanced approach, 25% cited the whole language approach, and 15% reported to be philosophically aligned with the language experience approach. Only 20% of participants correctly identified the definition of phonological awareness and 80% defined it as letter-sound correspondence. A total of 8% of participants identified phonics instruction as the best method to teach decoding and phonological awareness.

While this statistic is positive and aligns with the research, the first study (Joshi et al., 2009) discussed above revealed that teacher educators were not knowledgeable about the actual steps required for systematic and explicit phonics instruction. This observation has been reported in other studies as well. Succinctly put, the results of these two studies reveal that instructors of preservice educators may not be knowledgeable about the basic linguistic constructs needed for literacy development (Joshi et al., 2009). As Joshi and colleagues point out (2009), “reading is an essential skill, and individuals in early grades who experience difficulties in learning to read continue to struggle in school and in life” (p. 400). While evidence-based reading practices are known, many teachers have not received adequate professional development to apply this knowledge. To that end, Joshi and colleagues recommend (2009) “one way to accomplish this goal is to provide ongoing professional development and collaborative opportunities for preservice reading instructors” (p. 400).

Teachers’ Knowledge of Language Constructs

Given that many teachers teach students who struggle with language processing difficulties, Washburn and colleagues sought to examine the knowledge base of first year teachers and teachers with experience (kindergarten through 5th grade, 99 teachers from

Midwestern state, 86 teachers from Southwest US) with regard to basic language concepts related to reading instruction (phonological awareness, phonemic awareness, alphabetic principle/phonics, and morphological awareness) and dyslexia (Washburn et al., 2011). A questionnaire was used to conduct the study, and included 51 items which related to basic language constructs. Results revealed that teachers had a strength in syllable counting. Only 45% of teachers were able to identify the definition of phonological awareness, 29% were able to identify the correct definition of phonemic awareness, and 82% of teachers correctly identified the definition of a phoneme. With regard to teachers' knowledge of alphabetic principle/phonics, the mean percent correct across all items was 52%. Areas of strength were aligned to implicit skill, with syllable types being an area of weakness. Knowledge of morphology items indicated that teachers felt most prepared to teach vocabulary and their knowledge of word parts (e.g., affixes, roots) was low. Questionnaire results around the teachers' knowledge of dyslexia reaffirmed the misconception that dyslexia is a result of visual deficits. Based on this study, on average, teachers lack explicit knowledge about important concepts related to teaching struggling readers (Washburn, 2011).

Given that the prevalence of reading disabilities among students is between 15-20% of the general population (Washburn et al., 2010), it is likely that teachers will encounter these students in the classroom. In their study, given that teacher preparation programs were not providing preservice teachers with information about basic language constructs, Washburn and colleagues sought to examine elementary school preservice teachers' knowledge of basic language constructs, perceived teaching ability of typically

developing readers, struggling readers, phonemic awareness, alphabetic principle/phonics, and vocabulary and their perception and knowledge about dyslexia.

The premise of this work is predicated upon the suggestion that teachers must have a solid understanding of basic language constructs of the English language. A total of 91 preservice teachers from a university-based teacher preparation program in the southwestern part of the United States were included in the study. Each participant would be required to take four literacy courses and were enrolled in the course to teach the structure of the English language with a scientific approach to teaching reading. It should be noted that the study's questionnaire was administered prior to any instruction in that course. The questionnaire that was used consisted of 39 total items; however, only 28 of the items were used for analysis to account for the fact that some items targeted areas outside of the scope of the study (e.g., comprehension). Results indicated that preservice teachers indicated a moderate level of ability as it relates to their teaching of struggling readers. Vocabulary was an area of perceived strength. The knowledge and skill scores revealed strength in the area of phonological awareness (syllable counting). Only 58% of preservice teachers were able to identify the correct definition of phonological awareness, whereas 92% of them were able to correctly identify the definition of a phoneme, and 59% were able to identify the correct definition of phonemic awareness.

With regard to the preservice teachers' knowledge of alphabetic principle/phonics, overall, they performed better with items that targeted implicit knowledge of letter-sound correspondences. Conversely, few had explicit knowledge of terminology associated with phonics instruction and knowledge of phonics principles (Washburn et al., 2011). With regard to morphological instruction, preservice teachers

felt more prepared to teach vocabulary despite their knowledge of word parts (e.g., affixes) being low. The items that examined preservice teachers' knowledge of dyslexia revealed that only seven of the 91 participants corrected indicated either "probably or definitely false" to "seeing letters and words backwards is a characteristic of dyslexia", which is an important finding given that dyslexia is language-based and not related to general visual-perceptual deficits (Washburn et al., 2011). Overall, the findings on these items revealed that preservice teachers have some knowledge of dyslexia; however, myths around dyslexia prevailed (e.g., mentioned above) and could potentially continue during their years of classroom teaching. The analysis of the preservice teachers' perceived teaching ability and knowledge revealed that some of them held perceptions about their teaching ability that were significantly correlated with some areas of knowledge and skill being small to moderate, some being negative and some not significantly related. Washburn and colleagues conclude that (2011) "preservice teachers on average and in most areas (excluding phonics) perceived their teaching ability to be greater than their actual ability" (p. 35).

Assessment of Reading Problems/Disabilities

Language skills are the basis of skilled reading comprehension and it is important that educators have sufficient expertise in language development and instruction (Justice & Jiang, 2023). The use of assessment to inform this instruction is essential to the implementation of evidence-based reading instruction and teachers must be able to accurately assess their students' needs so that they can adjust their instruction based on assessment data (Hougen & Smartt, 2020).

Burns and colleagues (2022) compared the efficacy of decoding intervention that involved modeling and practice for twenty-nine kindergarteners and first graders (n=20 kindergarteners, n= 9 first graders). The first intervention utilized modeling of the correct sounds of letters and aligned to the acquisition phase of learning. The second intervention used practice based on the repeated reading of words with target letter sounds; this aligned to the fluency building phase of learning. Decoding skills were screened using the NWF from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS, 8th edition, University of Oregon, 2018), which assesses how well a student can apply their understanding of phonics rules in learning to decode. For this task, students are presented with VC and CVC pseudowords randomly and then given one minute to orally state the letter sound of each letter or read the nonsense word in its entirety. Data were interpreted based on sounds read correctly. If kindergarteners scored less than 37 correct letter sounds and if first graders scored less than 73 correct letter sounds they were included in the study. The overall percentage of correct letter sounds was used to estimate the accuracy with which the students read the sounds (Burns et al., 2022). The results of this study indicated that grade was not a significant predictor of the effectiveness of intervention; however, preintervention accuracy in nonsense word fluency was. Given that decoding is connected to overall reading proficiency, this study is important as it demonstrates that decoding skills can be taught . While this study did not include students with reading disabilities, these outcomes can have potential implications for that population of students, given that these students often have poor decoding.

Burns and colleagues indicate that (2020) “reading growth is a commonly used metric in evaluating the effectiveness of education, special education, and RTI and that

examining this growth is necessary to provide insight into the effectiveness of tiered interventions and special education services” (p. 445). Using a quasi-experimental research design, the researchers examined response and non-response to an intervention and compared the reading growth of students with and without learning disabilities and students with and without reading deficits within a RTI framework (tier 2). The following questions were included: what is the effect of targeted reading interventions on the growth of students with severe reading deficits compared to typically developing peers and what is the effect of targeted reading interventions on the growth of students with severe reading deficits compared to students receiving special education for reading? The study’s 499 participants included students from one of six urban elementary schools that participated in the Path to Reading Excellence in School Sites (PRESS) project. Four schools used a balanced literacy curriculum and two schools used Reading Mastery (SRA/McGraw Hill, 2008). This study utilized the Measures of Academic Progress for Reading (MAP-R), curriculum-based measures of reading, and the PRESS decoding inventory. Students who were identified as having a phonics’ deficit received one of six phonics interventions, students who scored at or below the 10th percentile on the fall MAP-R assessment and who did not receive special education services, received a standing protocol reading intervention (interventions were based on individual student reading needs), and fluency interventions were used with students who showed mastery with phonemic awareness and phonics. Explicit instruction on letter-sound relationships was emphasized through various tasks (e.g., Elkonin boxes). Results of this study revealed that for those students who participated in the reading intervention group, their growth was at a rate equal to their typically developing peers, but grew at a significantly

higher rate than same-age students in the special education group (Burns et al., 2020).

Although not without limitations, the implications of this study are highly contributory to the field of literacy instruction and for students in special education and those receiving interventions within a RTI framework. With regards to students in special education, this study's outcomes suggest that systematically implementing evidence-based targeted reading interventions with students that have severe reading difficulties can result in improved reading outcomes (Burns et al., 2020). This study supports that practitioners should implement targeted intervention packages as intended and that interventions in tier two should support student need.

Teachers' Response to Reading Difficulties

In an article, *Response to Intervention (RTI): What Teachers of Reading Need to Know*, Mesmer and Mesmer (2008) outline the steps that are taken in the RTI process for students who have difficulty with reading. Universal literacy practices are established and universal literacy screenings are implemented to effectively identify students who could be at risk . Data are used to determine if students are not meeting benchmarks. For students who do not meet benchmarks, scientifically valid interventions are implemented to help them improve their reading skills . Once these interventions are implemented, the students' progress is closely monitored. Mesmer and Mesmer (2008) point out that "RTI requires that progress-monitoring data are continuously collected as students receive interventions. Progress-monitoring assessments should address the skills that are being targeted for intervention and should indicate if the intervention is changing the student's reading" (p. 283). Eventually, all data are reviewed and it is determined by a multidisciplinary team whether or not the student is eligible for special education and

related services. It is important for interventions to be well-implemented for a sufficient period of time so that if a lack of response occurs, it can be determined if it is due to a learning disability or some other factor, which can be determined through additional assessments (Mesmer & Mesmer, 2008).

Instruction for Students with Reading Problems/Disabilities

There is evidence suggesting that language skills are the basis of skilled reading comprehension and explicit teaching of these skills in the primary grades should be prioritized (Justice & Jiang, 2023). Educators should view teaching language as an essential aspect of reading instruction. According to Justice and Jiang (2023) “ensuring that teachers have sufficient knowledge about language to promote students’ reading comprehension should be a fundamental goal of teaching credentialing programs worldwide” (p. 136).

Intensity of Reading Instruction

A study by Torgesen and colleagues (2001) investigated the conditions needed to remediate reading difficulties of children with learning disabilities. Sixty children between the ages of 8 and 10, who were previously identified as having learning disabilities, were included in this study. To be included in the study, students met the following criteria: identified by their teachers as having serious difficulty acquiring word-level reading skills; their average standard score on two measures of word-level reading was at least 1.5 SDs below average for their age; their estimated verbal intelligence was above 75 and, they performed below minimum required levels for their grade on a measure of phonological awareness. Study participants were randomly assigned to either an Auditory Discrimination in Depth Program (ADD) group (i.e., that used the

Lindamood Phoneme Sequencing Program for Reading, Spelling, and Speech) or an Embedded Phonics (EP) group. Both interventions used explicit and systematic instruction in word-reading skills. The ADD curriculum used articulatory cues to stimulate phonemic awareness and the EP curriculum used writing and spelling activities to teach phonemic awareness, taught phonemic decoding strategies directly, and used connected text to teach reading and writing.

A total of five teachers taught the ADD program and five teachers taught the EP curriculum. Pretesting included two measures of phonological awareness, two measures of phonological coding in working memory, two measures of rate of access to phonological awareness in long-term memory, eight measures of reading skills, two measures of other academic skills (spelling/math), measures of expressive and receptive language skills, a full scale IQ test, three teacher checklists to measure behaviors associated with attention deficit, two questionnaires completed by parents to assess home reading environment, SES and medical history, and a physical/neurological examination that included assessment of fine motor skills.

Treatment occurred in a one-on-one format over two 50-minute sessions. The sessions replaced the time the students would have spent in their learning disabilities resource room. Following instruction, students received generalization training to help them apply what they learned in the training to their work in the learning disabilities resource room. A total of 50 participants completed this study. Intervention effects were substantial and stable during the two-year follow-up period, with outcomes being similar for both ADD and EP. Statistically significant growth was observed in standard scores for all reading measures across both treatment groups. During the follow-up period a decline

in standard scores was observed on one test and gains in standard scores were noted on three tests, with stable performance on four tests. Normal growth was not noted on the Word Attack test during this follow-up for students in the ADD treatment group. Conversely, stable performance was noted on the Phonemic Decoding Efficiency measure. The measure of sight word vocabulary showed increases two years post intervention. Torgesen and colleagues report (2001) “for none of the reading variables was there a significant treatment x time interaction, nor were the two groups significantly different from one another on any of the measures during the follow-up period” (p. 41). Study participants who started the study with higher reading skills had higher reading skills at the conclusion of the study. Overall, the students in this study, who are severely disabled (with high needs for support) readers, made gains in reading achievement and maintained those gains over a two-year period following intervention. The authors conclude that both interventions, ADD and EP, provided equally effective instruction. The most significant outcome of the study was the large, generalized, and stable changes in the students’ word-reading abilities. Additionally, both of the interventions in this study embodied explicit instruction in phonemic awareness, phonemic decoding, and sight word recognition skills, which supports the use of methods within explicit “structured language” approaches (Torgesen et al., 2001).

Differentiating Students with Dyslexia from Other Types of Problem Readers

Given the importance of language comprehension within the SVR, it is important to understand how deficits in this area can affect reading comprehension. In two studies, Catts and colleagues (2006) examined the language problems of poor comprehenders in eighth grade (children with specific reading comprehension deficits) through a

comparison to typical readers in the same grade. In the first study (Catts et al., 2006), students were divided into three groups: 57 children with poor reading comprehension but normal word recognition; 27 children with poor word recognition but normal reading comprehension; and, 98 children with normal word recognition and normal reading comprehension. Reading comprehension was measured using the Passage Comprehension subtest of the Woodcock reading Mastery Tests - Revised (WRMT-R), the comprehension component of the Gray Oral Reading Test - 3, and a comprehensive measure of two grade-appropriate passages from the Qualitative Reading Inventory, Second Edition. Word recognition was measured using the Word Identification and Word Attack subtests of the WRMT-R, which measured ability to accurately pronounce printed English words and ability to read pronounceable nonwords that varied in complexity. IQ was measured using subtests from the Wechsler Intelligence Scale for Children - Third Edition. Language comprehension was assessed using the Peabody Picture Vocabulary Test - Revised, the Concepts and Directions subtest from the Clinical Evaluation of Language Fundamentals, Third Edition, the QRI-2, and an experimental measure of discourse comprehension developed by one of the study's authors. Phonological processing was assessed using three measures that looked at phoneme deletion and pig Latin and phonological memory. Overall, based on the analysis of assessments administered, poor comprehenders had deficits in language comprehension but normal abilities in phonological processing, whereas poor decoders performed poorly on measures of phonological processing but performed well on language comprehension measures (Catts et al., 2006).

According to Catts and colleagues (2006), “this double dissociation in language deficits is predicted by the simple view of reading and the phonological deficit hypothesis” (p. 284). As a reminder, the *SVR* reflects that reading comprehension is the product of word recognition and language comprehension. The study’s authors sought to determine whether the language comprehension and phonological processing abilities were present in eighth grade or if they were present in earlier grades, in order to possibly support the possibility of early identification.

In their second, follow-up study, they reviewed data from these same students in kindergarten, second, and fourth grades. Data showed that the dissociation observed in eighth grade was also apparent in earlier grades as well. Poor comprehenders had language comprehension issues in kindergarten, second, and fourth grades. Catts and colleagues state (2006) “consistent with previous studies, the results of our study indicate that children with specific problems in reading comprehension have deficits in more general language comprehension and that these deficits may be present from the early school grades, although they may not always be clinically apparent” (p. 290).

As shown in Figure 2.4, Catts and colleagues suggest that students should be classified according to a system derived from the *SVR*, which would categorize them based on their strengths and weaknesses in word recognition and language comprehension.

		Word Recognition	
		Poor	Good
Language Comprehension	Good	Dyslexia	No Impairment
	Poor	Mixed Deficit	Specific Comprehension Deficit

Figure 2.4. Classification System Based on the Simple View of Reading. Catts et al., 2006

Reading Problems of Students with LD

Several studies have examined the reading problems of students with LD and found that many students with LD are not receiving enough reading instruction in phonemic awareness, phonics, reading fluency, comprehension, and vocabulary instruction. Furthermore, these studies revealed a research to practice gap.

In one study Berkeley et al. (2010) conducted a meta-analysis that examined reading comprehension for students with learning disabilities (LD). Their results revealed several effective reading comprehension interventions for students with LD that include fundamental reading instruction, text enhancements, and questioning/strategy instruction. Moreover, they point out that very little specialized instruction is presently taking place during reading, particularly in general education settings, even when special education teachers are present.

In another study, Swanson and Vaughn (2010) sought to examine the amount of quality of reading instruction given to second through fifth grade students with learning disabilities within a resource room setting. A total of 10 special education resource room teachers were included. Results revealed that teachers were focused on providing reading instruction to students and students remained on task. Teachers were observed to engage

in phonemic awareness instruction; however, the authors point out that the activities being used were not closely related to word reading skills. Phonics and word study instruction averaged fifteen minutes, prompting the authors to suggest that there is a need for additional instruction that focuses on applying letter-sound correspondence knowledge to reading words. Students were reported to make statistically significant gains on oral reading fluency as a result of repeating reading and modeling. For comprehension, the most common type of instruction observed consisted of the teacher asking questions following text reading. Eight of the teachers in the study provided vocabulary instruction.

Based on the results, which were labeled descriptive, more progress is needed. Swanson and Vaughn concluded that (2010) “as teachers seek out and school districts plan for professional development, findings from this study may be used to reflect on practices in classrooms and may serve to guide the types of training to pursue” (p. 491).

Swanson (2008) synthesized 21 research studies that examined reading instruction for students with LD. Results indicated that: students with LD spent little time engaged in phonemic awareness, phonics, reading fluency, comprehension, and vocabulary instruction; that students with LD were often grouped inappropriately during reading instruction; that students were engaged in very little comprehension instruction; and, students with learning disabilities spent little time actually engaged in the task of reading. Swanson suggests that responsibility falls on teacher education programs as well as a need to provide teachers with opportunities to practice the necessary skills. She concluded “it is apparent from this synthesis that the field has work to do in order to

bridge the gap between what is known to be effective through research and what is observed in the classroom” (p. 132).

Finally, Seo and researchers (2008) carried out a study that looked at the classroom reading practices of beginning special education teachers, specifically examining their ability to promote student engagement. Over a six-month span, special education teachers were observed, and four themes emerged: instructional quality, responsiveness to student needs, socioemotional climate of the classroom, and student autonomy. Overall, three of the study’s participants were determined to be highly engaging, six were moderately engaging, and four were low engaging. This study establishes the need for additional research on the instructional practices of beginning special educators (Seo et al., 2008).

In summary, the aforementioned studies highlight the importance of explicit instruction in phonemic awareness and structured language approaches. The evidence base around this instruction serves as an impetus for this study. Additionally, as Catts and colleagues pointed out, the SVR is the best theoretical explanation of reading, and should be used as a basis for identifying students’ strengths and weaknesses related to word recognition and language comprehension.

School Administrators’ Knowledge of Early Reading Instruction

School administrators play an important role in helping teachers teach reading to students. School administrators are responsible for observing teachers, providing feedback, and making suggestions to help them improve their teaching. For purposes of this study, participants included administrators who conduct observations/evaluations of teachers of reading in grades kindergarten through sixth. These included school

principals/vice principals, directors, and superintendents. For this study, reading coaches were excluded as it is assumed that they had acquired basic knowledge of language constructs through their training.

Stein and Nelson (2003) purport that “the study of administrators’ understanding of subject matter and how it must be transformed for the purposes of leadership, has been similarly neglected in research on educational administration” (p. 424). They argue that administrators who profess to be instructional leaders must have some degree of understanding of the various subject areas under their purview. Additionally, they point out that administrators should recognize strong instruction when they see it, correct it when they don’t, and encourage continuous professional development among their teachers. The construct that they discuss is *leadership content knowledge*, which is knowledge of subjects and how students learn them. Administrators then use these skills and knowledge when they function as instructional leaders (Stein & Nelson, 2003).

A questionnaire study conducted by Theobald and colleagues (2022) analyzed the degree to which special education teacher preparation, district literacy instructional practices, and alignment between preparation and practices were associated with reading test score gains of students with high-incidence disabilities. This study found that there was a disconnect between what science suggests is evidence-based literacy practice and the practices used in public schools. The authors found that one reason for the disconnect rests on the notion that special education directors may not be familiar with the evidence base on the science of reading. In an article by Townsend and Bayetto (2021), the authors discuss the impact of the *Principals as Literacy Leader* program on the capacity of school leaders to engage, involve, and support teachers for making their schools more

effective in assisting students to be more able readers and that the elements of the program that were most influential related to content knowledge for administrators. School leaders don't need to know the specifics of how to teach reading at different ages and stages of development, but they need to know the underlying principles, so they can see when something is, or is not, working, so they can then have meaningful conversations with teachers that would enable improvements to be initiated (Townsend & Bayetto, 2021). Administrators must be able to know strong instruction when they see it, to encourage it when they don't, and be able to set the conditions for continuous learning among their teachers (Stein & Nelson, 2003).

Leadership and Student Achievement

In another article, Grissom and colleagues (2021) found that leadership does matter for student achievement. Their study found that effective principals play a key role on student achievement, with students showing larger gains in reading achievement in schools with effective principals. Moreover, principals play a large role within the teacher evaluation system. In an interview-based study by Kraft and Gilmour (2016) of 24 principals, the researchers found principals do lack experience with some subjects. This point underscores the importance of this study on administrator knowledge of early reading instruction. One of the challenges for principals that emerged includes having to provide feedback outside of their expertise. According to Kraft and Gilmour (2016) “when they evaluated teachers in subjects and grades they had not taught, principals felt less comfortable and confident in their abilities to evaluate instruction accurately or provide meaningful support” (p. 733). This consequence underscores the importance of this study. Another consequence that emerged was that when principals had a lack of

content expertise, it led them to narrow their focus of the evaluation to general instructional practices and strategies.

Whereas preservice and in-service teachers' knowledge of language constructs has been studied, little is known about school administrators' knowledge of language in relation to literacy. Since the NCLB Act of 2001, school districts have been tasked with focusing on professional development that would result in improved teacher learning and also lead to increased student achievement (Cobb, 2005). Stein and Nelson (2003) purported that administrators are instructional leaders - superintendents; deputy, assistant, or area superintendents; and principals, --must have some degree of understanding of the various subject areas under their purview. Administrators are in a position to facilitate teachers' efforts to provide effective, research- or evidence-based reading instruction (Billingsley et al., 2019). As a result of several studies emphasizing the need for administrators to have subject expertise, this study was designed to examine what administrators know about early reading instruction.

In a study by Schraeder and colleagues (2020), three styles of leadership were examined to understand the implication that leadership has on intervention for dyslexia (transformational, instructional, and integrated leadership). Through the use of a questionnaire, K-2 principals' leadership skills, knowledge, beliefs about dyslexia, preparation in reading disorders and/or dyslexia received from degree programs and professional development, and services provided to students with dyslexia were examined. Results of this study revealed that regardless of their leadership style, principals who have greater knowledge as well as more correct beliefs about dyslexia provide more appropriate school-based services for students with dyslexia. Schraeder and

colleagues conclude that “the principals’ knowledge and beliefs about dyslexia and appropriate intervention positively predicted the school-based level of appropriate intervention for students with dyslexia” (p. 540). By knowing more about dyslexia, principals may be able to improve the academic achievement in their schools through earlier identification, provision of intervention, and through appropriate professional development. Additionally, Schraeder and colleagues recommend that principals should be acquiring knowledge about dyslexia in principal preparation programs. These findings support the need for the current study given the fact that school leaders have a positive influence on student learning.

Principals as Literacy Instructional Leaders

In a paper by Plaatjies (2019), which investigated the capacity of primary school principals with regard to literacy instructional leadership, the importance of principals serving as instructional leaders with a clear vision and mission for literacy instruction was emphasized. Through a qualitative lens, Plaatjies explored the following questions through semi-structured interviews: how do principals understand their roles as literacy instructional leaders?, what are principals’ capacities to utilize data to improve literacy instruction, what are principals’ capacities to empower staff through professional development activities?, what are principals’ capacities to transfer their literacy-vision into action to respond to contextual challenges?, and what are principals’ understanding of the features of literacy instruction? Results revealed that some of the principals have a poor understanding of instructional leadership in literacy and thus neglect support to teachers in their supervision of literacy instruction (Plaatjies, 2019). In addition, it was found that principals did not empower staff through professional development activities

and they lacked an understanding of the literacy curriculum, thus preventing them from providing support to literacy teachers. Overall, the study's participants demonstrated challenges in leading literacy instructional practices, due to their lack of curricular understanding, work overload, and a lack of understanding of data-driven decision-making (Plaatjies, 2019). Further, the researchers suggest that principals should receive subject-specific professional development. Finally, in an interview study of 24 principals that focused on their perspectives and experiences with classroom observations and feedback, Krat and Gilmour (2016) discussed the idea that administrators can provide teachers with specific and actionable feedback. If administrators are not knowledgeable about early reading instruction, this could potentially adversely impact the quality of their feedback. They found that classroom observations are often the best professional tool in the evaluation process.

In summary, school administrators often make decisions regarding the professional development that teachers will participate in (Kraft & Gilmour, 2016; Plaatjies, 2009) and this includes district-wide planning efforts. If school administrators are making these decisions, it is important that their knowledge of content is analyzed, asking the question, what do administrators know about early reading instruction? As research shows (Plaatjies, 2019), school administrators demonstrate challenges in leading literacy instructional practices. If teachers of students with reading disabilities are not provided with the appropriate professional development, those students may be less likely to receive the instruction and accommodations they need.

Administrator Feedback During Teacher Evaluation

Teacher evaluation does not occur in a vacuum. As Tuytens and Devos (2017) point out “although we do not want to deny the importance of others in supporting the teacher, we can state there are no doubts about the essential role which the school leader has to play for formal teacher evaluation and teacher improvement in general” (p. 9). In their study, which analyzed the relationship between the feedback which teachers discuss during formal evaluation conferences from their school leader, the authors found that school leaders tend to give broader feedback about pedagogy, with less attention on course content. This dissertation evaluated administrator knowledge as well as confidence, to help determine if there is a relationship between the two variables.

The Role of Literacy Coaches

In many schools, literacy coaches continue to play an integral role on literacy teams (Kissel et al., 2011). This emergence reflects the idea that schools are recognizing the need for on-site professional development. Literacy coaches tend to perform their role in a nonevaluative way so that teachers perceive them as being supportive, rather than authoritative (Kissel et al., 2011). In their study, Kissel and colleagues sought to examine the role of early childhood literacy coaches and the suggestions coaches have for improving the effectiveness of their literacy coaching role in early childhood settings. Results revealed that the literacy coaches devoted the majority of their time to three roles: the coach as a content expert, the coach as a promoter of self-reflection, and the coach as a professional development facilitator. Coaches also reported spending time on discussing literacy content and the curriculum with teachers. Interestingly, the majority of the literacy coaches in this study did not view outreach beyond the classroom as a major

component of their job role and their communication with administrators was limited (Kissel et al., 2011). As a result, the school community lacked an understanding of how the literacy coach supports teachers and students in reading. Kissel and colleagues recommend (2011) “they must also make administrators and parents’ aware of their influence in classrooms” (p. 302). Without administrative support, the on-site professional development may be in jeopardy.

Professional Development for Teachers

Just about all children can be taught to read, which justifies the need for teachers to receive better preparation around effective reading instruction, professional development, and resources to be able to effectively and deliberately instruct students in reading (Moats, 2020). As early as 2005, when a major shift in the conception and delivery of professional development was occurring, schools were being tasked with looking at professional development from more of a systems thinking lens and less of a single-event in-service (Cobb, 2005). Cobb states “there was a call to focus on professional development that would improve teacher learning and lead to increased student achievement” (p. 388). It is important that schools are conscientious consumers of professional development and that decisions are made in the best interest of student achievement (Cobb, 2005). In a synthesis of observation studies investigating reading instruction for students with disabilities in grades K-12, Walker and Stevens (2017) report that there exists a disconnect between research and practice as it relates to reading instruction for students with learning disabilities. They posit that this disconnect could be a result of teacher attitudes, school resources, insufficient teacher preparation, or professional development. They suggest that by providing continued professional

development with opportunities for modeling, guided practice, and technical assistance this might promote the integration of effective practices (Walker & Stevens, 2017).

School Administrators' Involvement in Professional Development

In addition to identifying evidence-based practices in reading, the NRP also supported high-quality professional development opportunities for teachers of reading (Shanahan, 2003). In addition to inadequate teacher preparation, the lack of professional development for in-service teachers impedes evidence-based reading instruction from being implemented for students (Solari et al., 2020). Although there is ample research around effective teaching of reading, widely-used curricula and professional development do not reflect this research (Moats, 2020).

Professional development (PD) can foster improvements in teaching. As Kennedy points out (2016) “PD is required by virtually every teaching contract in the country, and teachers participate in PD every year” (p. 945). She reviewed experimental studies of PD carried out in K-12 education within the United States and published since 1975 and concluded that more attention to PD providers is needed. Of the programs reviewed, those that were most effective included PD offered by individuals or groups who had long histories of working with teachers, were very familiar with teachers and with their problems they face, and based their programs on their own personal experience and expertise (Kennedy, 2016). She suggests that there should be discussions around how PD providers are selected, their preparation, and how the efficacy of their work is measured. Kennedy discusses the idea of motivation in PD; mandated PD can exacerbate the notion that attendance is mandatory but learning is not. PD should promote authentic learning (Kennedy, 2016). As it relates to this study, the PD that teachers of reading are provided

should contribute to their overall learning of reading instruction. Administrators play a role in deciding which PD teachers receive. These decisions should reflect what the research tells us about the importance of teacher knowledge of language constructs. In-service teacher knowledge of language constructs can be enhanced through PD that is collaborative and ongoing and involves teachers receiving explicit instruction (Washburn et al., 2011). The research around effective reading instruction is robust. Despite this, teachers of reading continue to employ instructional practices that are not effective. If teachers have not received training in their pre-service preparation programs, it will be imperative that they receive professional development within their school districts. In order to effectively provide teachers of reading with the right professional development, the administrators who are observing them in the classroom during reading instruction should presumably possess knowledge of effective reading instruction as well. This study focused specifically on their knowledge of early reading instruction.

We know that teachers are an important predictor of students' future achievement, specifically in reading. Effective special education teachers are knowledgeable about instructional practices and how to integrate them in ways that promote student understanding (Jones et al., 2014). Special education teachers should provide explicit instruction allowing students to understand important concepts, skills, and strategies (Jones & Brownell, 2014). This type of instruction involves modeling or showing examples of the skill, providing clear explanations of concepts, and offering practice for students until they understand the concept and how to apply it. As it relates to reading instruction, if teachers are not knowledgeable about basic language constructs, they will be unable to effectively provide this instruction. In their article about the examination of

classroom observations in the evaluation of special education teachers, when discussing concerns around evaluating special education teachers, Jones and Brownell (2014) point out that, “chief among them is that school administrators, who will likely be tasked with conducting observations, may not be aware of the kinds of practices that are effective for students with disabilities” (p. 121). Administrators may have teaching backgrounds and experiences in teaching general education students; however, few are likely to be certified in special education. This concept relates to this study in that while administrators will observe and evaluate teachers of reading, it is likely that their training and experience in teaching reading may be limited.

When it comes to developing effective and committed special education teachers, Billingsley and colleagues reported that the use of high-leverage practices could be useful (Billingsley et al., 2019). These high-leverage practices address instructional practices. Billingsley and colleagues point out that “effective PD should help new teachers apply these practices (how to teach) to their specific content areas (what to teach)” (p. 371). Administrators need to deliberately plan how PD will help these teachers develop sufficient grounding (Billingsley et al., 2019). These administrators can collaborate with PD providers to make these deliberate decisions.

Within the context of administrative support for teachers, Bettini and colleagues (2020) focused specifically on special education teachers who teach reading to students with emotional and behavioral disorders. Students with emotional and behavioral disorders often demonstrate deficits in reading, and thus, effective reading instruction is especially important. One recommendation around administrator support relates to providing formal, ongoing professional development. Among other recommendations,

this professional development should be content-focused. For purposes of this study, the process of selecting professional development opportunities for teachers of reading was examined.

All 50 states require teacher evaluation, which includes classroom observations. Since there is evidence that teachers can learn through the evaluation process and as a result of receiving specific feedback on areas of improvement, it is imperative that those administrators who are conducting these observations and giving feedback are equipped with the knowledge base around basic language constructs. For example, through a mixed-methods study of beginning special education teachers who taught reading to elementary school students, Bishop and colleagues (2010) found that professional development should occur at the school and district level and include administrative support that focuses on instruction.

Brownell and colleagues (2012) discuss the importance of professional development being approached in coordinated ways, where general education and special education teachers can acquire necessary knowledge to respond to students' learning and behavior challenges. Specifically, regarding reading instruction, it is recommended that special education teachers should work with general education colleagues to plan differentiated instruction and provide whole-class and small-group instruction as well as to use instruction that is explicit and provides multiple opportunities to practice. They argue that in order for teachers to develop expertise in reading, they require repeated and sustained opportunities to learn about how to teach literacy; these opportunities should start in preservice programs but also extend into their teaching careers (Brownell et al.,

2006). Therefore, the focus of my study was on in-service administrator knowledge of early reading instruction.

Teachers need extended opportunities to develop both content knowledge and the knowledge they need for teaching content (Brownell et al., 2012). This knowledge should inform their teaching. Brownell and colleagues reported that extended opportunities for special education teachers to learn about the reading process and the structure of language, along with evidence-based strategies in decoding and fluency, enabling them to change their classroom instruction. Professional development opportunities in special education should emphasize not only implementation techniques for teachers of reading but also the knowledge that they need to be effective reading teachers. Professional development should also consider the use of peer support and accountability mechanisms and should include consistent feedback (Brownell et al., 2012). This feedback can come from administrators; however, the knowledge of administrators must be such that they can confidently and accurately provide feedback during observations of reading instruction.

In summary, existing research states that teachers tend to lack the knowledge to teach reading to struggling students, including students with disabilities and dyslexia. For example, in the questionnaire study by Washburn and colleagues in 2011, only 45% of teachers were able to identify the definition of phonological awareness and 29% were able to identify the correct definition of phonemic awareness. Given this information, on average, teachers lack explicit knowledge about important concepts related to teaching struggling readers (Washburn, 2011). Further, since school administrators are often involved in some aspect of the decision-making process related to reading instruction and

professional development for faculty members, the purpose of this study was to extend the research base by examining the knowledge that administrators have about early reading instruction.

CHAPTER 3

METHODS

This chapter presents and discusses the research design used to answer the study's three research questions. The research questions, recruitment procedures, and data collection procedures will be described and discussed in detail, along with the data analysis procedures.

Research Questions

This study includes questionnaire items from a validated survey tool developed by Binks-Cantrell and colleagues (2011), which was used to examine preservice and inservice teachers' knowledge of language constructs. This study examined kindergarten through sixth grade school administrators' (i.e., school principals, vice principals, special education directors/supervisors, and directors of curriculum and instruction) knowledge of early reading instruction. For this study, reading coaches were excluded as it was assumed that they have acquired basic knowledge of early reading instruction through their training. In its entirety, the questionnaire was designed to answer the following questions:

Research Question 1. To what extent does administrator knowledge of early reading concepts predict confidence, beyond demographic variables, in providing feedback to teachers after observations of teachers' reading lessons?

Research Question 2. To what extent does an administrator's highest degree predict knowledge of early reading concepts beyond demographic variables?

Research Question 3. To what extent does an administrator’s highest degree predict confidence, beyond demographic variables, in providing feedback after observing teachers reading lessons?

Recruitment

This study was designed specifically for school district administrators who observe and give feedback to teachers of reading in grades kindergarten through six in public schools across the United States. Participant recruitment occurred through social media; the questionnaire was posted to Facebook Groups (*Dissertation Support Group, Dissertation (PhD level) Writing Group, Dissertation Success Forum, Dissertation Survey Exchange, New Jersey Science of Reading, and national Science of Reading*), X (formerly Twitter), and LinkedIn. A follow-up post was made to X, exactly two weeks after the initial posting. E-mails were sent to administrative groups (The School Superintendents Association, New Jersey Principals and Supervisors Association, and the National School Boards Association), and through e-mails sent to a listserve of New Jersey school district administrators, which is publicly available via the New Jersey Department of Education. Responses were anonymous and there was not a time limit to complete the questionnaire. Results of this study helped identify administrator knowledge of early reading instruction, and if this knowledge predicts confidence in providing feedback to teachers after observing their reading lessons.

Questionnaire Instrument

The questionnaire incorporated questions from the *Survey of Language Constructs Related to Literacy Acquisition (Binks-Cantrell, et al., 2012)*, with permission from the first author. Binks-Cantrell and colleagues designed this instrument to assess

teacher content knowledge of basic language constructs. Basic language constructs include elements of the English language related to phonological awareness, phonemic awareness, alphabetic principle/phonics, and morphology (Binks-Cantrell et al., 2012).

Phonological awareness encompasses an understanding of the different ways in which spoken language can be broken down and manipulated. Phonological awareness skills include: rhyming and alliteration, sentence segmentation, syllable segmentation, onset-rime manipulation, and phonemic awareness. Phonemic awareness is characterized by the ability to notice, think about, or manipulate the individual sounds in words (phonemes). The alphabetic principle/phonics is an understanding of how written letters are systematically and predictably linked to spoken sounds (phonemes) and an understanding of how to apply that knowledge for the purposes of decoding and reading, and morphology is the use of meaningful word parts (affixes, base words, derivatives) for decoding and reading instruction.

Although prior studies utilized instruments designed to examine teacher knowledge of language constructs based on face validity, Binks-Cantrell developed their valid survey tool following examination of psychometric properties in order to assess teacher knowledge of basic language constructs essential for early reading instruction and student success in learning to read (Binks-Cantrell et al., 2012). Overall, the reliability was 0.90 using Cronbach's alpha, which is notably high. Binks-Cantrell and colleagues point out that this indicates a high internal consistency among the scores, as there are high correlations between item scores and the high reliability is also encouraging for use of the questionnaire in future research (p. 164). It should be noted that while this survey does offer strong evidence for construct validity, it does not demonstrate predictive

validity. The present study extended the line of research by examining administrators' knowledge of early reading instruction, including language constructs, given the role that they play in observing and evaluating teachers of reading and in professional development decisions related to teacher development in the area of literacy.

Demographic Information

Questionnaire participants were asked to provide demographic information on both respondent characteristics (gender, state, race, current position, degrees, years in teaching, years in administration, grades supervised) and school characteristics, such as type of school (e.g., urban, rural) and size of school.

Procedures

Online Questionnaire

The Administrator Knowledge of Early Reading Instruction questionnaire was converted from its original form (Microsoft Word) to Qualtrics platform. After obtaining IRB approval from Temple University, the Consent Form was created in Google Docs, then converted into a website link and added to the Qualtrics page. Prior to beginning the questionnaire, participants were asked to read and respond to the following prompt: "I have read the above and understand that by clicking "yes" I agree to take part in this study according to the terms in the consent form above." The questions were arranged in the following order: *demographics*, *experience*, and *knowledge*.

Pilot

In the early stages of the study, the questionnaire was shared with two elementary school principals, who reviewed it. I then met with each principal individually to discuss their feedback about the questionnaire. Feedback addressed the format of the

questionnaire questions to promote ease of answering for respondents. For example, on the demographic questions it was suggested to incorporate dropdowns and check boxes when possible. Additionally, it was suggested that for some terms (e.g., language constructs) they be defined in the questionnaire itself. One of the principals hypothesized that the questionnaire respondents would likely not know many of the answers to the questionnaire questions about language constructs and that the sequence of questions should entail more challenging questions being positioned at the end of the questionnaire.

Launch

The questionnaire was launched February 24, 2024 and remained open for two weeks. At the conclusion of the questionnaire, data were exported from Qualtrics using Excel in preparation for analysis.

Analyses

The Qualtrics platform was used to collect and store anonymous questionnaire respondent answers. After the data were collected, they were transferred from Qualtrics to an Excel spreadsheet and then loaded into the Statistical Package for the Social Sciences (SPSS) program, version 29. A series of statistical analyses were performed to address the three research questions and will be discussed in Chapter 4. To determine the extent to which administrator knowledge of early reading concepts predicts confidence, beyond demographic variables, in providing feedback to teachers after observations of teachers' reading lessons, Pearson correlations were conducted, followed by a least squares multiple regression. Separate samples t-tests were conducted to determine the extent to which an administrator's highest degree predicts knowledge of early reading concepts beyond demographic variables and to what extent an

administrator's highest degree predicts confidence, beyond demographic variables, in providing feedback after observing teachers reading lessons.

CHAPTER 4

RESULTS

Introduction

Chapter 4 will be presented in five sections. The first will present descriptive data on the sample. The second section will present descriptive data on the “The Administrator Knowledge of Early Reading Instruction Questionnaire”. Section three will present data to answer the three research questions. Section four will present some additional analyses that are included to extend and elaborate the analyses used to answer the research questions. Finally, section five will present a brief summary of the results. The Qualtrics platform was used to collect and store anonymous questionnaire respondent answers. After the data were collected, they were transferred from Qualtrics to an Excel spreadsheet and then loaded into the Statistical Package for the Social Sciences (SPSS) program, version 29.

A series of statistical analyses were performed to address the three research questions and will be discussed in Chapter 4. To determine the extent to which administrator knowledge of early reading concepts predicts confidence, beyond demographic variables, in providing feedback to teachers after observations of teachers’ reading lessons, Pearson correlations were conducted, followed by a least squares multiple regression. Separate samples t-tests were conducted to determine the extent to which an administrator’s highest degree predicts knowledge of early reading concepts beyond demographic variables and to what extent an administrator’s highest degree predicts confidence, beyond demographic variables, in providing feedback after observing teachers reading lessons.

Descriptive Findings

Descriptive Data on the Respondents

The Administrator Knowledge of Early Reading Instruction Questionnaire was completed by 130 administrators. A total of 16 questionnaires had to be discarded; 15 were discarded due to the respondents omitting questions, either due to error or not knowing the answer, and one was omitted due to the respondent not being a school administrator. As a result, the analyses were completed on the remaining 114 respondents.

As illustrated in Table 4.1, 21% of the respondents were male (n=24), 77% were female (n=88), and 2% (n=2) did not report out on gender. The race of the sample consisted of 2% of respondents who identified as Asian, 10% identified as Black, 85% identified as White, and 3% indicated a preference to not specify. Of the sample, 63% reported their highest degree as a Master's, 35% held a doctorate degree, and 2% did not specify their highest degree.

Table 4.1. *Demographic Characteristics of the Respondents*

Variable	Frequency	Percent of Sample
Gender:		
Male	24	21
Female	88	77
None Given	2	2
Race:		
Asian	2	2
Black	11	10
White	97	85
None given	4	3
Highest Degree:		
Masters	72	63
Doctorate	42	35
None Given	2	2

As shown in Table 4.2, positions of respondents included principals (n=38), supervisors (n=25), vice/assistant principals (n=9), director (n=15), superintendent (n=23), other (n=2), and two respondents did not report on their position. The majority of respondents reported that they have spent 11+ years teaching (n=54), and 44% of responds have taught between 0-5 years (n=11) or 6-10 years (n=39). Two percent of respondents did not report out on their teaching experience. Twenty-nine respondents have 0-5 years in administration, and 73% of respondents have spent either 6-10 years in administration (n=33) or 11+ years in administration (n=50). Two percent of respondents did not report out on their years in administration.

Table 4.2. *Position and Experience of Respondents*

Variable	Frequency	Percent of Sample
Position:		
Principal	38	33
Supervisor	25	22
Vice/Assistant Principal	9	8
Director	15	13
Superintendent	23	20
Other	2	2
None Given	2	2
Years Teaching:		
0 – 5	11	10
6 – 10	39	34
11+	66	54
None Given	2	2
Years in Administration:		
0 – 5	29	25
6 – 10	33	29
11+	50	44
None Given	2	2

School Characteristics

In Table 4.3 respondents reported out on two separate questions regarding the school in which they work; type of school and size of school. Twenty-percent of respondents reported that they work in a rural setting, 58% work in a suburban setting, and 20% work in an urban setting. Two-percent of respondents did not report on their type of school. In terms of school size, 5% of respondents work in a school with 0-150 students and 93% of respondents work in schools with 151-300 (n=24) or 301+ (n=82) students. Two percent of respondents did not report out on their school size.

Table 4.3. *School Characteristics*

Variable	Frequency	Percent of Sample
Type of School:		
Rural	23	20
Suburban	66	58
Urban	23	20
None Given	2	2
Size of School:		
0 – 150 Students	6	5
151 – 300 Students	24	21
301+ Students	88	72
None Given	2	2

Early Reading Instruction Experience of Respondents

In order to examine the early reading instruction experience of the respondents, they were asked to report on the total number of courses in early reading and number of years teaching early reading. As shown in Table 4.4, 18% of respondents took zero courses in early reading. This is concerning given that all of the questionnaire’s respondents are administrators who observe and evaluate teachers of reading in grades K-6. Forty-five percent of respondents took 1-3 courses in early reading, 22% took 4-6 courses, and 13% took more than six courses in early reading instruction. Eighteen-percent have taught early reading for 1-3 years, eleven percent have taught 4-6 years of early reading, and thirty-six percent of respondents have taught more than six courses in early reading. Two percent of respondents did not report on their early reading instruction experience for either question. Of more interest is the fact that the largest group of administrators (33%) have no years teaching early reading.

Table 4.4. *Experiences with Early Reading*

Variable	Frequency	Percent of Sample
Total Courses in Early Reading:		
0 Courses	21	18
1 – 3 Courses	51	45
4 – 6 Courses	25	22
More than 6 Courses	15	13
None given	2	2
Years Teaching Early Reading:		
None	38	33
1 – 3 Years	21	18
4 – 6 Years	12	11
More than 6 Years	41	36
None Given	2	2

Sources of Information About Early Reading Instruction

It was important to examine which sources of information administrators rely on for early reading instruction. These data are presented in Table 4.5.

Table 4.5. *Sources of Information About Early Reading Instruction*

Variable	Frequency	Percent of Sample
Internet	7	6
Internet and Journal Articles	14	12
Internet, Journal Articles, and Other Sources	20	18
Internet, Journal Articles, and social media	24	21
Internet, Journal Articles, social media, and Other Sources	18	16
Internet and Other Sources	2	2
Internet and social media	2	2
Internet, social media, and other sources	1	1
Journal Articles	4	4
Journal articles and other sources	4	4
Journal articles, social media, and other sources	1	1
Other sources	10	9

It was important to examine which sources of information administrators rely on for early reading instruction. As seen in Table 4.5, the majority of respondents use the Internet, either alone, or in combination with other sources (n=88). A total of forty-one percent of respondents indicated that they use social media as a source of early reading information. Journal articles are used by a total of seventy-six percent of respondents. Only four percent of respondents only use journal articles (n=4). Within the total sample, forty-one percent of respondents rely on “other sources” than the Internet, journal articles, or social media for early reading information. Nine-percent of respondents only use “other sources” for early reading information.

Confidence Ratings

The respondents were asked about their confidence in providing feedback to teachers on phonemic awareness and phonics. These data are presented in Table 4.6

Table 4.6. *Confidence Ratings in Response to the Question: I am confident in my ability to provide feedback to a teacher after I observed a lesson on*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Missing	Mean
Phonemic Awareness	1	3	17	40	47	6	4.19
Phonics	2	4	14	41	47	6	4.18

Note. These questions were scored on a Likert scale from 1 (strongly disagree) to 5 (strongly agree).

As shown in Table 4.6, the respondents were generally confident in their ability to provide feedback to teachers after observing a lesson. Approximately 75% either agree or strongly agree that they have the ability to provide such feedback.

Early Literacy Knowledge Questions

As mentioned in Chapter 3, the respondents were asked to complete a test measuring their knowledge of phonemic awareness and phonics. There were 30 questions on the test, 13 on phonemic awareness, nine on phonics, and eight that can be classified as “phonological processing”. Data on the respondents’ performance on this test are presented in Table 4.7.

Table 4.7. *Respondents’ Scores on Assessment of Early Literacy Knowledge*

Test Component	Mean	Standard Deviation	Highest Score	Lowest Score
Total (Total possible = 30)	18.70	8.16	30	1
Phonemic Awareness (Total possible = 13)	6.74	3.79	11	1
Phonics (Total possible = 9)	4.79	2.13	8	0
Phonological Processing (Total possible = 8)	6.03	2.03	8	0

As shown in Table 4.7, the respondents' scores ranged from a low of 1 to a high of 30 (perfect score). On average, the respondents answered slightly over 50% of the questions correctly, with a mean score of 18. They were strongest on the phonological processing questions (answered 75% of questions correctly) and weakest on the phonemic awareness questions (answered 52% of the questions correctly). The percentage correct on each of the 30 questions is presented in Appendix B. Appendix B also presents the questions separately for the three components.

Answers to the Research Questions

Research Question #1

To what extent does administrator knowledge of early reading concepts predict confidence, beyond demographic variables, in providing feedback to teachers after observations of teachers' reading lessons?

To answer the first research question, the total knowledge score, as well as the three component scores, were correlated with the two confidence ratings. These correlations are presented in Table 4.8.

Table 4.8. *Correlations Between Early Literacy Knowledge Scores and Confidence Ratings*

	Confidence in Providing Feedback on Phonemic Awareness	Confidence in Providing Feedback on Phonics
Total Knowledge	.245*	.267**
Phonemic Awareness knowledge	.281**	.313**
Phonics knowledge	.300**	.271**
Phonological Processing	.064	.089

Note. *p<.05 **p<.01

As shown in Table 4.8, there are significant correlations between knowledge and confidence in providing feedback for the Total Knowledge score as well as the Phonemic

Awareness and Phonics knowledge scores. While significant, the correlations are modest, accounting for less than 5% of the variance. To analyze the data to fully answer the first research question, a multiple regression was computed using the respondents' gender, race, degree, years teaching, years in administration, number of courses in early reading instruction, and number of years of teaching reading as the additional predictors. The results of this analysis are presented in Table 4.9.

Table 4.9. *Correlations of Confidence with Demographic Variables*

Predictor Variable	Confidence in Providing Feedback on Phonemic Awareness	Confidence in Providing Feedback on Phonics
Gender (a)	-.378**	-.345**
Race (b)	.108	.162
Degree (c)	-.039	-.042
Years Teaching	.250**	.278**
Years in Administration	.038	.045
Number of Courses in Early Reading	.501**	.455**
Number of Years Reading Instruction	.507**	.476**

Note. * $p < .05$; ** $p < .01$; (a) Females = 1; Males = 2; (b) Non-whites = 1; Whites = 2; (c) Masters = 1; Doctorate/Ed.S. = 2

As shown in Table 4.9, administrators who are more confident are females, have taught for more years, have taken more courses in early reading, and have more years of reading instruction. To complete the analysis for confidence, multiple regressions were computed using the respondents' gender, race, degree, years teaching, years in administration, number of courses in early reading instruction, number of years of teaching reading, and Total Knowledge as the predictors. The results of these analyses are presented in Table 4.10 and 4.11. As shown in Table 4.10, an administrator's knowledge of early reading instruction does not correlate with confidence when

demographic variables are controlled. The two variables that do predict confidence are the number of courses that an administrator has taken in early reading instruction, and, to a lesser extent, the number of years the administrator has taught reading.

Table 4.10. *Regression of Confidence in Providing Feedback for Phonemic Awareness Controlling for Demographic Variables*

Predictor Variable	Beta	Significance in the Equation
Gender	-.167	.067
Race (White vs. Other)	.083	.301
Degree	.001	.991
Years Teaching	.046	.601
Years in Administration	.137	.093
Number of Courses in Early Reading	.320	.001**
Number of Years Reading Instruction	.236	.025*
Total Knowledge	.13	.088

Note. Adjusted R² = .365, p = .000

Table 4.11. *Multiple Regression of Confidence in Providing Feedback for Phonics Controlling for Demographic Variables*

Predictor Variable	Beta	Significance in the Equation
Gender	-.141	.131
Race (White vs. Other)	.072	.393
Degree	.000	.976
Years Teaching	.074	.417
Years in Administration	.041	.629
Number of Courses in Early Reading	.283	.004*
Number of Years Reading Instruction	.198	.071
Total Knowledge	.162	.066

Note. Adjusted R² = .301, p = .000

As shown in Table 4.10 and 4.11, an administrator's knowledge of early reading instruction does not correlate with confidence when demographic variables are

controlled. In both multiple regressions, the strongest predictor is the number of courses in early reading instruction that the administrator has taken. The number of years of reading instruction also predicts confidence in providing feedback on phonemic awareness. As an additional set of analyses, the total knowledge score was replaced by the specific knowledge score (Phonemic Awareness for the first analysis, and Phonics for the second). The results were essentially identical.

Research Question # 2

To what extent does an administrator's highest degree predict knowledge of early reading concepts beyond demographic variables?

To answer this research question, respondents with master's degrees were compared to those with doctorates. The means and standard deviations for the total knowledge score as well as the three components by degree are presented in Table 4.12. The table also contains the results of the separate samples t-tests comparing the two means as well as Cohen's d. For consistency with Research Question # 1, the Pearson correlations are also included.

Table 4.12. *Means, Standard Deviations, and t-test Results by Highest Degree for Knowledge of Early Reading Instruction*

Score	Mean (Standard Deviation) for Master's	Mean (Standard Deviation) for Doctorate	t-test	p	d	r
Total Knowledge	18.39 (8.36)	20.15 (6.86)	1.14	.259	.224	.108
Phonemic Awareness	6.42 (3.57)	7.63 (3.35)	1.76	.082	.346	.165
Phonics	4.85 (2.22)	4.90 (1.77)	.129	.898	.025	.012
Phonological Processing	6.04 (2.74)	6.30 (2.10)	.517	.606	.102	.049

As shown in Table 4.12, respondents with master's degrees did not differ from those with doctorates on total knowledge or on any of the three components. For consistency with Research Question # 1, a multiple regression was conducted using the same demographic control variables. Administrator degree was not significant in the equation.

Research Question 3

To what extent does an administrator's highest degree predict confidence, beyond demographic variables, in providing feedback after observing teachers reading lessons?

To answer this research question, respondents with master's degrees were compared to those with doctorates on the two confidence ratings. The means and standard deviations for these ratings are presented in Table 4.13. The table also contains the results of the separate samples t-tests comparing the two means, Cohen's d, and the Pearson correlations.

Table 4.13. *Means, Standard Deviations, and t-test Results by Degree for Confidence in Providing Feedback*

Confidence Ratings	Mean (Standard Deviation) for Master's	Mean (Standard Devaiation) for Doctorates	T-test	p	d	r
Confidence (Phonemic Awareness)	4.22 (.86)	4.15 (.89)	.406	.686	.081	.038
Confidence (phonics)	4.21 (.94)	4.13 (.91)	.437	.663	.087	.042

As shown in Table 4.13, respondents with master's degrees did not differ from those with doctorates on either of the confidence ratings. As before, the multiple regression controlling for demographic variables demonstrated that administrator degree was not significant.

Additional Analyses

This section of the chapter contains a series of additional analyses that are included to extend and elaborate the results already presented. To simplify the narrative of the additional results, each analysis will be presented as an answer to a research question.

Additional Research Question # 1: Which Variables Correlate with Administrators' Knowledge of Early Reading Instruction?

The first research question presented above asked whether administrator knowledge predicted confidence. In this set of analyses, the predictor and criterion variables are reversed. That is, the question is: what correlates with or predicts administrator knowledge? The same variables used in the previous analysis were used as predictors. To make this analysis complete, the confidence ratings are also included. To make this analysis as complete as possible, the total knowledge scores, as well as the

three component scores were analyzed. The Pearson correlations with administrator knowledge are presented in Table 4.14.

Table 4.14. *Correlations with Administrator Knowledge*

Predictor Variable	Total Knowledge	Phonemic Awareness	Phonics	Phonological Processing
Gender	-.087	-.151	-.125	.093
Race (White vs. Other)	.120	.091	.072	.024
Degree	.108	.165	.012	.049
Years Teaching	.058	.037	-.008	.097
Years in Administration	-.138	-.214*	-.086	-.030
Number of Courses in Early Reading	.095	.091	.181	.025
Number of Years Reading Instruction	.252**	.264**	.305**	.070
Phonemic Awareness Confidence	.245**	.281**	.300**	.064
Phonics Confidence	.267**	.313**	.277**	.089

Note. * $p < .05$; ** $p < .01$; (a) Females = 1; Males = 2; (b) Non-whites = 1; Whites = 2; (c) Masters = 1; Doctorate/Ed.D. = 2

As shown in Table 4.14, the variables that correlate significantly with total knowledge, phonemic awareness, and phonics are the number of years of reading instruction and phonemic awareness confidence and phonics confidence. The one additional significant correlation was with phonemic awareness where administrators who have been in administration for a shorter period of time obtain higher scores on the questions that address phonemic awareness.

Additional Research Question #2: Is There a Difference in Knowledge or Confidence in Administrators with Different Positions in the School?

To answer this question the administrators were divided into four groups: Principals/Vice Principals, Supervisors, Directors, and Superintendents. The means for Total Knowledge, and the two confidence ratings are presented in Table 4.15.

Table 4.15. *Knowledge and Confidence as a Function of Administrator Position*

	Total Knowledge	Phonemic Awareness Confidence	Phonics Confidence
Principals	19.97	4.11	4.11
Supervisors	21.44	4.20	4.20
Directors	16.53	4.23	4.31
Superintendents	16.43	4.32	4.18

The data were analyzed using one-way ANOVAs. There were no significant differences for either of the confidence ratings. The difference among the means for Total Knowledge was significant ($F = 4.01, p = .014$). The post hoc Tukey test indicated that principals and supervisors' scores did not significantly differ, but both had significantly higher knowledge scores compared to directors or superintendents. The difference in total knowledge score between the directors and the superintendents was not significant.

Additional Research Question # 3: Are the Significant Relationships Between Number of Courses in Reading Instruction and Number of Years of Reading Instruction Linear?

As presented above, the two variables that consistently yield significant results are the number of courses in early reading instruction and the number of years of reading instruction. To investigate these relationships further, the variables were analyzed by ANOVA rather than correlations to ascertain if the relationships were linear. This analysis also can show whether administrators with no experience or no years of instruction are noticeably different from those with some experience. The means for confidence and knowledge for number of courses are presented in Table 4.16 and for number of years are presented in Table 4.17.

Table 4.16. *Data for Number of Courses in Early Reading Instruction*

	Total Knowledge	Confidence PA	Confidence Phonics
0 courses	17.57	3.52	3.43
1-3 courses	19.88	4.10	4.14
4-6 courses	16.04	4.52	4.52

Table 4.17. *Data for Number of Years of Reading Instruction*

	Total Knowledge	Confidence PA	Confidence Phonics
0 years	18.39	3.65	3.62
1-3 years	12.90	4.11	4.11
4-6 years	22.58	4.42	4.42
More than 6 years	21.68	4.68	4.65

As shown in Tables 4.16 and 4.17, the data for confidence are clearly linear. That is, as the number of courses and the number of years of early reading instruction increases, confidence increases linearly. The data for Total Knowledge are somewhat more complex. As shown in Table 4.16, the administrators with the greatest number of courses have the highest mean score, but those with 4 – 6 courses have the lowest mean. For years of reading instruction, those with 1 – 3 years have the lowest score while those with 4 – 6 years have the highest score.

Summary

Overall, the data indicated that administrators are confident in their ability to provide feedback to teachers about early reading instruction. However, their knowledge of early reading is not extensive, and the relationship between knowledge and confidence, while significant, is modest. The data also show that the administrators' degree (Master's

or doctorate) does not affect either their knowledge or their confidence. What seems to be most important is the number of courses that administrators have taken in early reading instruction. A more detailed discussion of the results is presented in Chapter 5.

CHAPTER 5

DISCUSSION

The aim of this study was to examine the knowledge about early reading instruction for K-6 school administrators and the extent to which their knowledge predicts confidence and to examine the extent to which the highest degree predicts their knowledge and confidence. This was for the purpose of informing administrator preparation programs, professional development practices, and other best practices. Based on the data that were collected and analyzed, the interpretations of these results demonstrated that all of the research questions have been addressed. Administrators in K-6 schools are confident in their ability to provide feedback to teachers about early reading instruction, after observing them teach reading. Despite this confidence, administrators' knowledge of early reading instruction is not extensive. A significant, yet modest relationship exists between their knowledge and their confidence. No effect was found among the administrators' degree and their knowledge or confidence. Through the data analysis, it was shown that the number of courses an administrator has taken in early reading instruction predicts confidence. Additionally, the number of years that an administrator has taught reading is also a predictor of confidence.

Study Foundation

Now, more than ever, reading instruction is a major focus in the U.S. and this has brought into focus the importance of teacher knowledge, professional development, and student outcomes. While teacher knowledge of early reading instruction has been extensively studied, administrator knowledge of early reading instruction has not been examined, despite the role that they play in evaluating teachers of reading, giving

feedback, and their involvement in professional development decisions. To that end, 114 school administrators, who observe and evaluate teachers of reading in grades K-6, participated in this study, via a questionnaire, to address the following research questions:

To what extent does administrator knowledge of early reading concepts predict confidence, beyond demographic variables, in providing feedback to teachers after observations of teachers' reading lessons?

To what extent does an administrator's highest degree predict knowledge of early reading concepts beyond demographic variables?

To what extent does an administrator's highest degree predict confidence, beyond demographic variables, in providing feedback after observing teachers reading lessons?

Sample

The questionnaire was completed by school administrators who supervise K-6 teachers who teach reading and provide observations or evaluations of these teachers during reading instruction. This questionnaire excluded reading coaches and included principals, supervisors, vice/assistant principals, directors, and superintendent. While a majority of the respondents were white females, about a quarter of them were male. In order to answer two of the research questions, it was necessary to know the highest degree held by the respondents. The results show that 63% held a Master's degree, 35% held a doctorate degree, and 2% did not specify their highest degree.

Questionnaire Components

The questionnaire items were organized into sections entitled: *Demographic Questions*, *Early Reading Instruction Experience Questions*, and *Literacy Instruction Knowledge Questions*. Demographic questions targeted gender, race, state, current

position, degrees, number of early reading courses, years teaching, years in administration, grades supervised, type of school, and size of school. Administrators were asked to report the number of years they spent teaching early reading and the sources they used for information about reading instruction. They were asked to report on their confidence in their ability to provide feedback to a teacher after observing lessons on phonemic awareness and phonics. Early reading knowledge was examined using questions about phonemic awareness, phonics, and phonological processing. For example, they were asked to define what a phoneme is and, “Identify the pair of words that begins with the same sound.”

Summary of the Results

Overall, each of the three research questions was answered through statistical analyses of the collected data on 114 questionnaire respondents.

As discussed in the results section, respondents were primarily female, of a White background, and have attained either a Master’s degree or doctorate degree. Positions of respondents include principals, supervisors, vice/assistant principals, superintendents and “other” (n=2). Respondents’ years of teaching experience ranged from 0-11+ years, with the majority having 6+ years of teaching experience. Most of the respondents have spent 6+ years in administration. When looking at the school characteristics of the respondents, the largest percentage work in suburban schools with 300 or more students. An analysis of early reading experiences shows that most of the respondents have taken at least one course in early reading. Interestingly, almost 20% have taken 0 courses.

When analyzing their years teaching early reading, most taught early reading; however, one-third of respondents reported that they had not taught early reading. Of

those that taught, the largest group of administrators had taught early reading for more than six years. In terms of sources of knowledge about reading instruction, the majority of respondents use the Internet, either alone or in combination with other sources (n=88), which were not reported. The respondents also reported using journal articles and social media, although usually in combination with the Internet.

When it comes to administrators' confidence, in general, administrators are confident that they can provide feedback to teachers in both phonemic awareness and phonics. Approximately 75% of administrators either *agree* or *strongly agree* that they have the ability to provide such feedback. In addition to measuring their confidence, the questionnaire also assessed their actual knowledge of early reading concepts (phonemic awareness, phonics) through 30 questions. Administrators answered slightly over 50% of the questions correctly (mean score of 18.7), indicating they have limited knowledge of reading concepts. Their response accuracy was weakest on the questions measuring phonemic awareness. Overall, there were significant correlations, although modest, between knowledge and confidence in providing feedback to teachers. Through a multiple regression analysis, the administrators' gender, race, degree, years teaching early reading, years in administration, number of courses in early reading instruction, and number of years of teaching reading were analyzed. Overall, it was found that administrators with the highest confidence are females, have taught early reading for more than six years and have taken 1-3 courses in early reading. Through additional multiple regressions, it was found that an administrator's knowledge of early reading instruction does not correlate with confidence when demographic variables are controlled. However, the number of courses that an administrator has taken in early

reading instruction does predict confidence in providing feedback to teachers. To a lesser extent, the number of years that an administrator spent teaching early reading was also a predictor.

When accounting for administrators' degrees, those with Master's degrees do not differ from those with doctorate degrees when it comes to knowledge about phonics and phonemic awareness. When analyzing whether an administrator's highest degree predicts confidence in providing feedback to teachers after observing them teach reading, it was determined that there is no difference in confidence for phonics or phonemic awareness whether they held a Master's degree or a doctorate degree.

Additional Analyses

In addition to answering the three primary research questions for this study, a series of additional analyses were conducted to extend those results. The first additional analysis showed that the number of years of reading instruction correlates with administrator knowledge. An interesting finding was that there was a significant correlation found with phonemic awareness knowledge and administrators who have been in administration for a shorter period of time (e.g., less than 6 years). The second additional analysis looked at whether there was a difference in knowledge of confidence in administrators with different positions in the school. Principals and supervisors did not significantly differ, but both had significantly higher knowledge scores compared to directors or superintendents. In addition, a third analysis further examined the number of courses in early reading instruction and the number of years of reading instruction, given these two variables yielded significant results. As the number of courses and the number of years of early reading instruction increases, confidence increases linearly.

Interpretation of the Findings

School administrators in K-6 schools who observe and evaluate teachers in reading have some knowledge of phonemic awareness and phonics, with their phonemic awareness knowledge being the weakest. It is possible that their low level of knowledge is a result of relying on others (e.g., reading coach, reading specialist) to fulfill the role of literacy expert. This said, typically, reading coaches and reading specialists are not the ones conducting classroom observations. Ultimately, this study did not examine whether administrators' knowledge of early reading concepts and instruction impact teacher practices and student outcomes, however, a study that does examine this relationship would be interesting. Despite these overall weaknesses in knowledge, they are confident in their ability to provide feedback to teachers about early reading instruction. It is important to note that the two confidence questions asked did not specify if they were providing feedback to teachers based on instruction or their knowledge of early reading concepts. Based on this study, an administrator's degree does not affect their knowledge of early reading instruction or their confidence in providing feedback to teachers. What seems to be most important is the number of courses that administrators have taken in early reading instruction. Despite the relevance of this finding, 18% of the administrators in this study took zero courses in early reading. Almost half took 1-3 courses, about a fifth took 4-6 courses, and 13% took more than six courses in early reading instruction. These same administrators were asked to report on how many years they taught early reading; more than one-third of the population spent zero years teaching early reading, while 29% spent between one and 6 years teaching early reading, and 36% spent more than six years teaching early reading. Administrators are using a variety of sources of

information about early reading, including the Internet, journal articles, social media, and other sources, of which were not reported.

Implications for Administrators and Teachers

Based on an interpretation of the questionnaire's results, there are implications for administrator knowledge, the impact of this knowledge on feedback to teachers and professional development decisions, which will be discussed. First, the results demonstrated that administrators' knowledge of early reading instruction does not correlate with confidence when demographic variables are controlled. When examining their knowledge of phonemic awareness and phonics, administrators only answered slightly over 50% of the questions correctly, with a mean score of 18.7. Administrators are weakest in the areas of phonemic awareness and phonics, two of the five pillars of reading instruction. The National Reading Panel (NRP, 2000) identified that teaching phonemic awareness and phonics to children supports reading. According to Adams (1990) "explicit instruction in phonemic awareness is invaluable for reading acquisition" (p. 331). Explicit phonics instruction enhances reading achievement for a wide variety of readers (Shanahan, 2021). Specifically, in this study, administrators were asked to report on the total courses in early reading and the number of years they spent teaching early reading. Eighteen percent of administrators have never taken a course in early reading and the largest group of administrators (33%) had no years teaching early reading. As administrators, they rely on the Internet, journal articles, social media and other sources for information about early reading instruction. Of concern is the accuracy of their sources on early reading and whether or not it is based on evidence-based practices. If administrators are not knowledgeable about early reading instruction, their lack of

knowledge could potentially adversely impact their ability to provide teachers with specific and actionable feedback (Kraft & Gilmour, 2016).

School administrators play a significant role in the planning and implementation of professional development. While evidence-based reading practices are known, many teachers have not received adequate professional development to apply this knowledge. Given the lack of knowledge that emerged through this study, administrators remain confident in their ability to give feedback to teachers. This “false sense” of confidence could have implications for the quality of feedback given to teachers and the professional development decisions that are being made. Administrators play a significant role in the planning and implementation of professional development that fosters improvements (Kennedy, 2016) as well as the provision of ongoing leadership to support teachers (Whitworth & Chiu, 2015). Professional development that does not address evidence-based practices can impact whether or not evidence-based reading instruction is being implemented for students (Solari et al., 2020).

Reading outcomes continue to be one of the greatest issues in education (Burns et al., 2023). This study involved administrator knowledge and confidence about early reading instruction. The theory of change model developed specifically for this study positioned their knowledge as a contributor to their ability to provide teachers feedback and make professional development decisions, which would impact teacher practices and student outcomes. The results indicated that administrators, who reported feeling confident in providing feedback to teachers about their reading lessons on phonics and phonemic awareness, are not very knowledgeable about those very concepts. It is assumed that the quality of their feedback and professional development decisions are

adversely impacted by this lack of knowledge, although this study did not examine those variables. Teachers need high quality professional development (Shanahan, 2003) and the feedback that they receive needs to be specific and actionable (Kraft & Gilmour, 2016).

Recommendations for Best Practices

The implications, based on the data analysis and answers to the research questions, are the foundation for these recommendations for best practices for administrator knowledge and professional development.

The early reading instruction experiences of administrators are important. It is anticipated that improved administrator knowledge will lead to improved teacher feedback in reading and improved professional development decisions, which will subsequently impact teacher practices and student outcomes (Shanahan, 2003, Joshi et al., 2009; & Kennedy, 2016). It should be emphasized that some K-6 administrators have never taken a course in early reading, despite observing and giving feedback to teachers of reading. While administrator knowledge was not shown to predict confidence (e.g., when demographic variables are controlled), the strongest predictor was the number of courses taken in early reading instruction. One recommendation is for administrator-prep programs to include courses in early reading instruction. If administrators have not taken these courses upon serving in administrative positions, districts should require professional development that addresses early reading instruction evidence-based practices.

As shown throughout this study, administrators are relying on a variety of sources of information for knowledge. These sources include social media, journal articles, and the Internet. While some sources (e.g., journal articles) are valuable for increasing their

knowledge of early reading, other sources (e.g., social media) may not provide information that is evidence-based, and thus the information may be inaccurate.

Another recommendation is for administrators to seek out and utilize sources that reflect the latest research, which will require them to properly vet these resources.

Although there is ample research on effective teaching of reading, widely-used curricula and professional development do not reflect this research (Moats, 2020). We know that school administrators make decisions regarding professional development in reading for teachers. While this study did not examine professional development decisions made by administrators, it is important to recognize that administrators feel confident in giving feedback to teachers after observing their reading lessons despite their overall lack of knowledge of early reading instruction. This lack of knowledge could adversely impact the professional development decisions that are made. Administrators should be making decisions regarding high-quality professional development opportunities for teachers of reading (Shanahan, 2003). Without these opportunities, evidence-based reading instruction may be prevented from being implemented for students (Solari et al., 2020). If administrators are interested in increasing high-quality professional development opportunities for teachers of reading, administrators should consider a self-assessment of their own knowledge (e.g., similar to this study's questionnaire), as well as their target audience, to help determine gaps in their own knowledge. In turn, knowledge about areas for improvement could lead to them providing better guidance when determining professional development for teachers. If administrators are not knowledgeable, they may inadvertently provide erroneous information to teachers, or, they may miss things during their observations that warrant

professional development (Kraft & Gilmour, 2016). Within a special education context, the implications of administrative decisions around professional development are even greater. Many students with reading disabilities demonstrate reading skills that are below the basic level (Swanson, 2008). It is important to bridge the gap between research and instruction for students with reading disabilities (Swanson, 2008).

Limitations

The limitations of this study that warrant further discussion include sampling, self-reporting, questionnaire items, and researcher biases. In terms of sampling, whereas the use of social media allowed the questionnaire to reach a high volume of potential respondents, this also created potential limitations, as there are school administrators who do not use social media and usage of social media is not predictable. The overall geographical nature of respondents was also a limitation. A secondary issue related to sampling includes the limited amount of time the questionnaire was available for responses, which was a two-week timeframe. Additionally, incentives were not offered, which may have enhanced the response rate.

All data for this study were provided via self-reporting. It is conceivable that the administrators are not as confident as they are reporting. Self-report data may not be accurate due to over or under confidence of participants' knowledge and skills, although this cannot be verified.

Another potential limitation is that the questionnaire items included in this study were derived from questions from the validated survey tool, *Survey of Language Constructs Related to Literacy Acquisition*, and the results of the knowledge portion of this study were limited to those questions (Binks-Cantrell et al., 2012). Related to this, the

questionnaire used in this study was modified from the original that was designed specifically for teachers, not administrators.

Another limitation of this study involves the construct being examined; while the title of the study relates to early reading instruction, it is important to note that the knowledge questions being asked pertained to early reading concepts and not instructional practices. Additionally, the two questions on administrator confidence did not specify instruction or concepts, rather they were asked to report their ability to provide feedback to a teacher after they observed a lesson on phonemic awareness/phonics. Again, the wording of these two questions may have been interpreted differently.

The order of questions in the questionnaire is another limitation. Administrators first reported on their confidence and then they answered questions about their knowledge. Had the order of questions been reversed, it is possible that their self-reported confidence may have been impacted and the outcomes of the study would have been different.

I am a former classroom teacher and current special education professor and provider of school-based professional development. These perspectives might have influenced aspects of this study, including the variables of knowledge and confidence of school administrators.

Future Research

The interpretation of the results, implications, and limitations of this study point out potential areas for future research. Future research efforts should focus on administrator preparation programs and how administrators are taught about evidence-

based reading instruction as well as how to provide teachers with feedback that is based on research. Additionally, research might focus on the examination of how administrator feedback and professional development decisions impact teachers' practices and student outcomes. In addition, future research should examine how administrators address their own shortcomings in early reading. Based on this study, administrators obtain information through Internet sources, journal articles, social media and other sources. Future research might examine how, specifically, administrations use this information to inform their decision-making and how administrators could access professional resources that would include evidence-based practices and current practices in the field. For example, attending professional conferences is one way administrators could access professional resources in early reading. Finally, future research might involve an examination of administrator knowledge of both instructional practices and concepts at the middle school and high school levels.

Summary

School administrators play a significant role in the implementation and evaluation of early reading instruction. While many studies have been conducted on pre-service and in-service teachers' knowledge of reading, less is known about administrator knowledge. This study examined their knowledge and confidence when observing and giving feedback to teachers of reading instruction. Results show that administrators are more confident than they are knowledgeable about early reading instruction. Their literacy experience varies significantly, from taking no courses in early reading to taking more than six courses. This study was guided by both the simple view of reading (*SVR*), which provides the theoretical framework for the importance of examining administrator

knowledge of early reading instruction and Theory of Change (*ToC*), which anticipates that administrator knowledge will lead to improved feedback to teachers in reading and improved professional development decisions, which will subsequently impact teacher practices and student outcomes. K-6 administrators play a significant role in ensuring that the early reading instruction taking place in their care aligns with evidence-based practices. To that end, their own knowledge should be developed.

REFERENCES

- Adnot, M., Dee, T., Katz, V., & Wyckoff, J. (2017). Teacher turnover, teacher quality, and student achievement in DCPS. *Educational Evaluation and Policy Analysis*, 39(1), 54-76. <https://doi.org/10.3102/0162373716663646>
- Allington, R. (2013). What really matters when working with struggling readers. *The Reading Teacher*, 66(7), 520-530. <http://dx.doi.org/10.1002/TRTR.1154>
- Berkeley, S., Scruggs, T. E., & Mastropieri, M. A. (2010). Reading comprehension instruction for students with learning disabilities, 1995-2006: A meta-analysis. *Remedial and Special Education*, 31(6), 423-436. <https://psycnet.apa.org/doi/10.1177/0741932509355988>
- Bettini, E., Cumming, M. M., Brunsting, N. C., McKenna, J. W., Schneider, C. C., Muller, R., & Peyton, D. (2020). Administrators' roles: Providing special educators with opportunities to learn and enact effective reading practices for students with EBP. *Beyond Behavior*, 29(2), 52-61. <https://doi.org/10.1177/1074295620904024>
- Billingsley, B., Bettini, E., & Jones, N. D. (2019). Supporting special education teacher induction through high-leverage practices. *Remedial and Special Education*, 40(6), 365-379. <https://doi.org/10.1177/0741932518816826>
- Binks-Cantrell, E., Joshi, R. M., & Washburn, E. K. (2012). Validation of an instrument for assessing teacher knowledge of basic language constructs of literacy. *Annals of Dyslexia*, 62(3), 153-171. <http://www.jstor.org/stable/23764667>
- Bishop, A. G., Brownell, M. T., Klinger, J. K., Leko, M. M., & Galman, S. A. C. (2010). Differences in beginning special education teachers: The influence of personal attributes, preparation, and school environment on classroom reading practices. *Learning Disability Quarterly*, 33, 75-92. <https://doi.org/10.2307/25701435>
- Brownell, M. T., Lauterbach, A., Benedict, A., Kimerling, J., Bettini, E., & Murphy, K. (2012). Preparing teachers to effectively deliver reading instruction and behavioral supports in response to intervention frameworks. *Advances in Learning and Behavioral Disabilities*, 25, 247-277. [https://doi.org/10.1108/S0735-004X\(2012\)0000025013](https://doi.org/10.1108/S0735-004X(2012)0000025013)
- Burns, M. K., Maki, K. E., Brann, K. L., McComas, J. J., & Helman, L. A. (2020). Comparison of reading growth among students with severe reading deficits who received intervention to typically achieving students and students receiving special education. *Journal of Learning Disabilities*, 53(6), 444-453. <https://psycnet.apa.org/doi/10.1177/0022219420918840>

- Burns, M. K., Young, H., McCollom, E. M., Stevens, M. A., & Izumi, J. T. (2022). Predicting intervention effects with preintervention measures of decoding: Evidence for a skill-by-treatment interaction with kindergarten and first-grade students. *Learning Disability Quarterly*, 1-11. <http://dx.doi.org/10.1177/07319487221113026>
- Burns, M. K., Duke, N., & Cartwright, K. B. (2023). Evaluating components of the active view of reading as intervention targets: Implications for social justice. *School Psychology*, 38(1), 30-41. <https://psycnet.apa.org/doi/10.1037/spq0000519>
- Catts, H. W., Adlof, S. M., & Weismer, S. E. (2006). Language deficits in poor comprehenders: A case for the simple view of reading. *Journal of Speech, Language, and Hearing Research*, 49, 278-293. [https://doi.org/10.1044/1092-4388\(2006/023\)](https://doi.org/10.1044/1092-4388(2006/023))
- Catts, H. W. (2018). The simple view of reading: Advancements and false impressions. *Remedial and Special Education*, 39(5), 317-323. <https://doi.org/10.1177/0741932518767563>
- Cervetti, G. N., Pearson, P. D., Palincsar, A. S., Afflerbach, P., Kendeou, P., Biancarosa, G., Higgs, J., Fitzgerald, M. S., & Berman, A. I. (2020). How the reading for understanding initiative's research complicates the simple view of reading invoked in the science of reading. *Reading Research Quarterly*, 55(S1), S161-S172. <https://doi.org/10.1002/rrq.343>
- Ciullo, S., Ely, E., McKenna, J. W., Alves, K. D., & Kennedy, M. J. (2019). Reading instruction for students with learning disabilities in grades 4 and 5: An observation study. *Learning Disability Quarterly*, 42(2), 67-79. <http://dx.doi.org/10.1177/0731948718806654>
- Cobb, C. (2005). Professional development for literacy – Who's in charge? *The Reading Teacher*, 59(4) 388-390. <http://dx.doi.org/10.1598/RT.59.4.9>
- Duke, N., & Cartwright, K. B. (2021). The science of reading progresses: Communicating advances beyond the simple view of reading. *Reading Research Quarterly*, 56(S1), S25-S44. <https://doi.org/10.1002/rrq.411>
- Fielding-Barnsley, R., & Purdie, N. (2005). Teachers' attitude to and knowledge of metalinguistics in the process of learning to read. *Asia-Pacific Journal of Teacher Education*, 33(1), 65–76. <https://doi.org/10.1080/1359866052000341133>
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6-10. <https://doi.org/10.1177/074193258600700104>
- Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). How principals affect students and schools: A systematic synthesis of two decades of research. New York: The Wallace Foundation. <http://www.wallacefoundation.org/principalsynthesis>.

- Guskey, T. R. (2002). Professional development and teacher change, *Teachers and Teaching*, 8(3), 381-391, [10.1080/135406002100000512](https://doi.org/10.1080/135406002100000512)
- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2, 127-160.
<https://psycnet.apa.org/doi/10.1007/BF00401799>
- Hoover, W. A., & Tunmer, W. E. (2018). The simple view of reading: Three assessments of its adequacy. *Remedial and Special Education*, 39(5), 304-312.
<https://doi.org/10.1177/0741932518773154>
- Hougen, M. C. & Smartt, S. M. (2020). Fundamentals of literacy instruction and assessment. Brookes Publishing Co. Jones, N. D., & Brownell, M. T. (2014). Examining the use of classroom observations in the evaluation of special education teachers. *Assessment for Effective Intervention*, 39(2), 112-124.
<https://psycnet.apa.org/doi/10.1177/1534508413514103>
- Joshi, R. M., 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>
- Justice, L. M. & Jiang, H. (2023). Language is the basis of skilled reading comprehension. In Cabell, S. Q., Neuman, S. B., & Terry, N. P. (Eds.). *Handbook on the science of early literacy* (pp. 131-138). The Guilford Press.
- Kendeou, P., Savage, R., & van den Broek, P. (2009). Revisiting the simple view of reading. *British Journal of Educational Psychology*, 79, 353-370.
<https://psycnet.apa.org/doi/10.1348/978185408X369020>
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945-980.
<https://doi.org/10.3102/0034654315626800>
- Kissel, B., Mraz, M., Algozzine, B., & Stover, K. (2011). Early childhood literacy coaches' role perceptions and recommendations for change. *Journal of Research in Childhood Education*, 25, 288-303.
<http://dx.doi.org/10.1080/02568543.2011.580207>
- Kraft, M. A., & Gilmour, A. F. (2016). Can principals promote teacher development as evaluators? A case study of principals' views and experiences. *Educational Administration Quarterly*, 52(5), 711-753.
<https://doi.org/10.1177/0013161X16653445>
- Mesmer, E. M., & Mesmer, H. A. E. (2008). Response to Intervention (RTI): What teachers of reading need to know. *The Reading Teacher*, 62(4), 280-290.
<http://www.jstor.org/stable/27699692>

- Moats, L. C. (2020). *Teaching reading is rocket science*. American Federation of Teachers. <https://www.aft.org/sites/default/files/moats.pdf>
- Nilsson, K., Danielsson, H., Elwer, A., Messer, D., Henry, L., & Samuelsson, S. (2021). Investigating reading comprehension in adolescents with intellectual disabilities: Evaluating the simple view of reading. *Journal of Cognition*, 4(1), 1-20. <https://doi.org/10.5334/joc.188>
- Plaatjies, B. (2019). Investigating principal capacity in literacy instructional leadership at selected primary schools. *Journal of Social Studies Education Research*, 10(3), 136-160. <https://files.eric.ed.gov/fulltext/EJ1229399.pdf>
- Schiffman, G. (1969). Dyslexia – The administrator’s dilemma. *Journal of Learning Disabilities*, 2(11), 17-18. <https://doi.org/10.1177/002221946900201103>
- Schraeder, M., Fox, J., & Mohn, R. (2021). K-2 principal knowledge (not leadership) matters for dyslexia intervention. *Dyslexia*, 27(4), 525–547. <https://doi.org/10.1002/dys.1690>
- Shanahan, T. (2003). Research-baesd reading instruction: Myths about the national reading panel report. *The Reading Teacher*, 56(7), 646-655.
- Shanahan, T. (2005). *The national reading panel report: Practical advice for teachers*. Learning Point Associates. <https://eric.ed.gov/?id=ED489535>
- Shanahan, T. (2021). A review of the evidence on tier 1 instruction for readers with dyslexia. *Reading Research Quarterly*, 58(2), 268-284. <https://doi.org/10.1002/rrq.438>
- Seo, S., Brownell, M. T., Bishop, A. G., & Dingle, M. (2008). Beginning special education teachers' classroom reading instruction: Practices that engage elementary students with learning disabilities. *Exceptional Children*, 75(1), 97–122. <https://doi.org/10.1177/001440290807500105>
- Solari, E. J., Terry, N. P., Gaab, N., Hogan, T. P., Nelson, N. J., Pentimonti, J. M., Petscher, Y., & Sayko, S. G. (2020). Translational science: A roadmap for the science of reading. *Reading Research Quarterly*, 55(S1), S347-S360. <http://dx.doi.org/10.1002/rrq.357>
- Stein, M. K., & Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis*, 25(4), 423-448. <https://doi.org/10.3102/01623737025004423>
- Stuart, M., Stainthorp, R., & Snowling, M. (2008). Literacy as a complex activity: Deconstructing the simple view of reading. *Literacy*, 42(2), 59-66. <http://dx.doi.org/10.1111/j.1741-4369.2008.00490.x>

- Swanson, E. A. (2008). Observing reading instruction for students with learning disabilities: A synthesis. *Learning Disability Quarterly*, 31(3), 115–133. <https://doi.org/10.2307/25474643>
- Swanson, E. A., & Vaughn, S. (2010). An observation study of reading instruction provided to elementary students with learning disabilities in the resource room. *Psychology in the Schools*, 47(5), 481-492. <http://dx.doi.org/10.1002/pits.20484>
- Theobald, R. J., Goldhaber, D. D., Holden, K. L., & Stein, M. L. (2022). Special education teacher preparation, literacy instructional alignment, and reading achievement for students with high-incidence disabilities. *Exceptional Children*, 88(4), 381-400. <http://10.1177/00144029221081236>.
- Townsend, T., & Bayetto, A. (2021). Supporting school leaders to become more effective in leading reading improvements. *School Effectiveness and School Improvement*, 32(3), 363-386. <https://doi.org/10.1080/09243453.2020.1858118>
- Tuytens, M. & Devos, G. (2017). The role of feedback from the school leader during teacher evaluation for teacher and school improvement. *Teachers and Teaching*, 23(1), 6-24. [10.1080/13540602.2016.1203770](https://doi.org/10.1080/13540602.2016.1203770)
- Walker, M. W., & Stevens, E. A. (2017). Reading instruction for students with learning disabilities: An observation study synthesis (1980-2014). *Learning Disability Quarterly*, 40(1), 17-28. <http://dx.doi.org/10.1177/0731948716633868>
- Washburn, E. K., Joshi, R. M., & Cantrell, E. B. (2011). Are preservice teachers prepared to teach struggling readers? *Annals of Dyslexia*, 61(1), 21–43. <http://www.jstor.org/stable/23764822>
- Washburn, E. K., Joshi, R. M. & Binks-Cantrell, E. S. (2011). Teacher knowledge of basic language concepts and dyslexia. *Dyslexia*, 17(2), 165-183. <https://doi.org/10.1002/dys.426>
- Whitworth, B. A., & Chiu, J. L. (2015). Professional development and teacher change: The missing leadership link. *Journal of Science Teacher Education*, 26, 121-137. <http://dx.doi.org/10.1007/s10972-014-9411-2>

APPENDIX A

RECRUITMENT LETTER AND QUESTIONNAIRE INSTRUMENT

Dear Colleague in Education,

My name is Danielle M. Frith and I am a Ph.D. candidate at Temple University and am conducting a dissertation questionnaire on administrator knowledge of language constructs. Your responses to this anonymous questionnaire will help me determine administrator knowledge of reading and how administrators use that knowledge to improve teachers' teaching of reading.

In order for you to contribute to this questionnaire it is required that you conduct observations/evaluations of teachers of reading in grades K-6, excluding reading coaches.

If you do not, please share this questionnaire with a school administrator who does.

Please complete the following questions. This questionnaire is completely anonymous.

Demographic Questions

- 1) Gender
 - a. Male
 - b. Female
 - c. Other
- 2) State (choose from drop-down menu)
- 3) Race (choose from drop-down menu)
- 4) Your Current Position

Principal, Vice Principal/Assistant Principal, Supervisor, OTHER (describe)

5) a. Your Degrees (including your highest degree and areas of degree(s). (select all that apply)

B.A./B.S.

MA/MS

EdD/PhD

OTHER

b. Undergraduate/graduate courses in early reading instruction

None

1-3

4-6

More than 6

6) Years Teaching

0-5

6-10

11-plus

7) Years in Administration

0-5

6-11

11-plus

8) Grades You Supervise

K, 1, 2, 3, 4, 5, 6 (select all that apply)

9) Type of School

urban

rural

suburban

10) Size of School

0-150 Students

151-300 Students

301-plus Students

Early Reading Instruction Experience Questions

1) Years teaching early reading

- a. None
- b. 1-3
- c. 4-6
- d. More than 6

2) From which sources have you received information about reading instruction?

- a. Internet Sources(e.g. Reading Rockets website, reading blogs)

- b. Journal Articles
- c. Social Media (e.g. X, Facebook)
- d. Other (please explain) (check all that apply)

Early Literacy Instruction Knowledge Questions

1) I am confident in my *ability* to provide feedback to a teacher after I observed a lesson on phonemic awareness.

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

2) I am confident in my *ability* to provide feedback to a teacher after I observed a lesson on phonics.

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

The following questions are based on early reading instruction knowledge and may be challenging. Do your best!

3) A phoneme refers to

- a. a single letter b. a single speech sound c. a single unit of meaning
d. a grapheme e. no idea

4) If *tife* is a word, the letter “i” would probably sound like the “i” in:

- a. if b. beautiful c. find d.
ceiling e. sing f. no idea

5) A combination of two or three consonants pronounced so that each letter keeps its own identity is called:

- a. silent consonant b. consonant digraph c. diphthong d.
consonant blend f. no idea

6) How many speech sounds are in the following words? For example, the word “cat” has 3 speech sounds ‘k’-‘a’-‘t’. Speech sounds do not necessarily equal the number of letters.

- a. box 4
b. grass 4
c. ship 3
d. moon 3
e. brush 4

- f. knee 2
- g. through 3

7) What type of task would the following be? “Say the word ‘cat.’ Now say the word without the /k/ sound.”

- a. blending
- b. rhyming
- c. segmentation
- d. deletion
- e. no idea

8) soft c is in the word:

- a. Chicago
- b. cat
- c. chair
- d. city
- e. none of the above
- f. no idea

9) Identify the pair of words that begins with the same sound:

- a. joke-goat
- b. chef-shoe
- c. quiet-giant
- d. chip-chemist
- e. no idea

(The next 2 items involve saying a word and then reversing the order of the sounds. For example, the word “back” would be “cab.”)

10) If you say the word, and then reverse the order of the sounds, *ice* would be:

- a. easy
- b. sea
- c. size
- d. sigh
- e. no idea

11) If you say the word, and then reverse the order of the sounds, *enough* would be:

- a. fun b. phone c. funny
d. one e. no idea

12) All of the following nonsense words have a silent letter, except:

- a. bamb b. wrin c. shipe d. knam e. phop f. no idea

13) For each of the words on the left, determine the number of syllables.

	# of syllables
a. disassemble	4
b. heaven	2
c. observer	3
d. spinster	2
e. pedestal	3
f. frogs	1
g. teacher	2

14) Which of the following words has an example of a final stable syllable?

- a. wave b. bacon c. paddle d. napkin e. none of the
above f. no idea

15) Which of the following words has 2 closed syllables?

- a. wave b. bacon c. paddle d. napkin e. none of the
above f. no idea

16) Which of the following words contains an open syllable?

- a. wave b. bacon c. paddle d. napkin e. none of the
above f. no idea

17) Phonological awareness is:

- a. the ability to use letter-sound correspondences to decode.
- b. the understanding of how spoken language is broken down and manipulated.
- c. a teaching method for decoding skills.
- d. the same as phonics.
- e. no idea

18) Phonemic awareness is:

- a. the same as phonological awareness.
- b. the understanding of how letters and sounds are put together to form words.
- c. the ability to break down and manipulate the individual sounds in spoken language.

- d. the ability to use sound-symbol correspondences to spell new words.
- e. no idea

19) What is the rule that governs the use of 'c' in the initial position for /k/?

- a. 'c' is used for /k/ in the initial position before e, i, or y
- b. the use of 'c' for /k/ in the initial position is random and must be memorized
- c. 'c' is used for /k/ in the initial position before a, o, u, or any consonant
- d. none of the above
- e. no idea

20) What is the rule that governs the use of 'k' in the initial position for /k/?

- a. 'k' is used for /k/ in the initial position before e, i, or y
- a. the use of 'k' for /k/ in the initial position is random and must be memorized
- b. 'k' is used for /k/ in the initial position before a, o, u, or any consonant
- c. none of the above
- d. no idea

APPENDIX B
KNOWLEDGE QUESTIONS

Question	% Correct
3	.79
4	.85
5	.79
6a	.29
6b	.45
6c	.66
6d	.71
6e	.34
6f	.72
6g	.51
7	.61
8	.76
9	.75
10	.59
11	.49
12	.23
13a	.82
13b	.82
13c	.83

13d	.75
13e	.79
13f	.72
13g	.80
14	.49
15	.64
16	.37
17	.50
18	.49
19	.61
20	.54
Total Knowledge	18.70