

UNDERSTANDING THE LIVED EXPERIENCES OF ELEMENTARY TEACHERS WHO
TEACH STUDENTS WITH DYSLEXIA HOW TO READ: A TRANSCENDENTAL
PHENOMENOLOGY

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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Abstract

This transcendental phenomenology sought to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. The central question guiding this study was: “What are the lived experiences of elementary teachers who teach students with dyslexia how to read?” Three sub-questions looked more deeply into the phenomenon. The first sub-question asked: “What internal influences shape elementary teachers’ experiences when teaching students with dyslexia how to read?” The second sub-question asked: “What external influences shape elementary teachers’ experiences when teaching students with dyslexia how to read?” Finally, the third sub-question asked: “How do internal and external influences shape elementary teachers’ experiences when teaching students with dyslexia how to read?” Bandura’s social cognitive theory (SCT) guided this study, as its model of triadic reciprocal causation provided a framework for understanding the internal and external influences that shaped elementary teachers’ experiences when teaching reading to students with dyslexia. A total of 14 teachers were purposefully selected either from public and private elementary teacher Facebook groups across the United States or snowball sampling. Participants were K-4 classroom teachers, special education teachers, and reading specialists. Data were collected from individual interviews, document analysis, and participant journaling. Moustakas’ (1994) data analysis procedures were used to reveal the essence of participants’ lived experiences of the phenomenon. Thus, the science of reading, barriers to teaching students with dyslexia, and the pandemic and dyslexia strongly shaped elementary teachers’ instruction when teaching students with dyslexia how to read.

Keywords: dyslexia, basic language constructs, reading instruction, phonics

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Dedication

I dedicate this dissertation to Eden, Laurel, and Patric.

My beloved children, I will love you forever.

Acknowledgments

I want to thank my husband Marc for his endless supply of love and support.

I love you.

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List of Abbreviations

Balanced Literacy (BL)

Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

Guided Reading (GR)

Individuals with Disabilities Education Act (IDEA)

Institute for Educational Sciences (IES)

Institutional Review Board (IRB)

International Dyslexia Association (IDA)

International Reading Association (IRA)

Language Essentials for Teachers of Reading and Spelling (LETRS)

Leveled Literacy Intervention (LLI)

National Assessment of Educational Progress (NAEP)

National Center for Educational Statistics (NCES)

National Early Literacy Panel (NELP)

National Institute of Child Health and Development (NICHD)

National Reading Panel (NRP)

National Science Foundation (NSF)

Office of Special Education Programs (OSEP)

Phonological Deficit Theory (PDT)

Professional Development (PD)

Qualitative Reading Inventory (QRI)

Research Excellence and Advancement for Dyslexia (READ)

Response to Intervention (RTI)

Social Cognitive Theory (SCT)

Socioeconomic Status (SES)

Standards of Learning (SOL)

Structured Literacy (SL)

Structured Word Inquiry (SWI)

Teachers Pay Teachers (TPT)

Triadic Reciprocal Determinism (TRD)

Typical Literacy Practices (TLP)

University of Florida Literacy Institute (UFLI)

Virginia Literacy Act (VLA)

What Works Clearinghouse (WWC)

Whole Language (WL)

CHAPTER ONE: INTRODUCTION

Overview

Dyslexia is a language-based learning disability caused by a deficit in phonological processing (Kang et al., 2016). According to Shaywitz and Shaywitz (2020), dyslexia is the most common learning disability, affecting roughly 80% of individuals with disabilities. As many as 20% of students have dyslexia (D'Mello & Gabrieli, 2018; Shaywitz & Shaywitz, 2020). A review of the literature on reading instruction and dyslexia revealed that teachers of young readers frequently exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020) and dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020) that influence their instructional reading practices (Al Otaiba et al., 2018; Suarez et al., 2018). Qualitative studies examining elementary teachers' instructional reading practices used to teach students with dyslexia how to read are noticeably absent from the literature.

This transcendental phenomenology aimed to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. Chapter One provides background information on the study's historical, social, and theoretical context. It also addresses the problem, purpose, and questions guiding the study. Additionally, the chapter describes the study's practical, empirical, and theoretical significance. Finally, a list of terms and definitions will help the reader understand the literature.

Background

The historical context of dyslexia sheds light on the misconceptions (Orton, 1937) and debates (Fallon & Katz, 2020) surrounding the disorder and how they can contribute to elementary teachers' knowledge and action gaps. The social context of dyslexia describes how parents, organizations, legislators, and researchers have vocalized the problems that children

with dyslexia face and demanded the passage of legislation so that states address the problems (Gearin et al., 2021; Youman & Mather, 2018). Finally, the theoretical context of dyslexia discusses the most widely accepted theory of dyslexia (Share, 2021). It also explains a research-based reading model (Gough & Tunmer, 1986) and describes research findings (Castles et al., 2018; NELP, 2008; NRP, 2000) related to what poor readers need to be successful.

Historical Context

The history of dyslexia is fraught with controversy (Fallon & Katz, 2020), but the contributions made by past and present researchers (Morgan, 1896; Orton, 1937) have instructional implications for teachers who teach reading to students with dyslexia. The first reference to dyslexia was in 1884 by German ophthalmologist Rudolph Berlin (Berlin, 1884, as cited in Stein, 2018) when he described adults who lost their ability to read following a stroke but maintained everyday speech, eyesight, and cognitive functioning. However, most physicians of that era referred to dyslexia as word blindness (Orton, 1937). A little over a decade later, doctors began reporting cases of congenital word blindness (Morgan, 1896). They noted that children of at least average intelligence and who excelled in most subject areas exhibited unexpected reading impairments that prevented them from reading written language (Morgan, 1896; Shaywitz, 2003).

Later, American neurologist Samuel Orton theorized that the brains of children with word blindness lacked hemispheric dominance, causing them to reverse letters and words (Orton, 1937, 1963). His recommended treatment for children with congenital word blindness included instruction in phoneme-grapheme correspondences, appropriate sequencing of written and auditory symbols, and the use of multiple sensory pathways (Kuerten et al., 2020).

Orton's theories and recommendations have instructional implications for today's teachers. For instance, Orton's belief that dyslexia caused letter and word reversals (Orton, 1937, 1963) continues to be a common misconception, even among educators who teach students with dyslexia how to read (White et al., 2020).

Orton's recommended treatment for dyslexia proved correct. Science has shown that appropriate reading instruction is the most effective way to treat the underlying deficit in phonological processing (Share, 2021). Eventually, psychologist Anna Gillingham used Orton's ideas about multisensory instruction (Henry, 1998) to create a reading approach for students with dyslexia called Orton-Gillingham (Gillingham & Stillman, 1997). The popular approach (Gillingham & Stillman, 1997) has since led to the development of several reading programs based (e.g., Wilson, 1988) on Orton's principles.

In time, scientists began recognizing dyslexia as a linguistic condition that caused problems acquiring phonological skills (Stein, 2018) and neuroimaging studies provided physical evidence of this (Langer et al., 2017). Thus, researchers discovered that the brains of typical readers differed from those of poor readers with dyslexia and that a neural signature for dyslexia was present in children before they learned to read (Shaywitz & Shaywitz, 2020). Furthermore, Langer et al. (2017) found that white matter in the brain differed between infants with and without a family member with dyslexia. Finally, neuroimaging revealed that dyslexia did not cause letter or word reversals (Carrion-Castillo et al., 2013), and phonics instruction can change the dyslexic brain's activation patterns (Simos et al., 2002).

Despite overwhelming evidence that dyslexia is an actual condition (Ferrer et al., 2015; Langer et al., 2017; Simos et al., 2002), it has been a topic of debate for decades (Fallon & Katz, 2020). Even though researchers cannot agree on a single definition of dyslexia (Elliott &

Grigorenko, 2014), there is a consensus that dyslexia is a developmental language disorder (Kuerten et al., 2020) of neurobiological origin that causes poor reading skills (Cook & Ryan, 2016). The International Dyslexia Association (IDA, 2002) defines dyslexia in the following manner:

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge. (p. 4)

Social Context

Interest in dyslexia has increased in recent years (Gearin et al., 2021), namely because of poor reading performance on national assessments like the National Assessment of Educational Progress (NAEP) by students with disabilities and from 40 years of empirical research on dyslexia, reading development, and reading interventions (National Early Literacy Panel [NELP], 2008; National Reading Panel [NRP], 2000). Within the last twenty years, dyslexia-related legislation has significantly increased throughout states due to pressure from parent activists and advocacy groups like Decoding Dyslexia (Gearin et al., 2021). Thus, parents of children with dyslexia have been vocal about their concerns for their children's education and the need for all students with dyslexia to be identified and provided the educational services they require (Gearin et al., 2021; Youman & Mather, 2018).

To support parents' efforts, speakers at state legislative hearings blamed teachers and schools for failing their children (Gearin et al., 2020). Moreover, researchers have spoken to Congress about why schools are not addressing the needs of students with dyslexia. For example, Sally Shaywitz of the Yale Center for Dyslexia and Creativity told members that there was no shortage of high-quality, scientific knowledge about dyslexia and that an action gap was the source of the problem (Gearin et al., 2020). Based on findings from multiple studies (Pittman et al., 2020; Spear-Swerling & Cheesman, 2012; Washburn et al., 2016b), Shaywitz was partially correct.

Teachers of young readers have an insufficient understanding of basic language constructs (Pittman et al., 2020) and dyslexia (Gonzalez, 2021), causing a knowledge gap. However, studies (Arrow et al., 2019) have also shown that, even when teachers possess adequate knowledge to implement evidence-based reading instruction, some either resist using the knowledge or are prevented from acting on it. To address these gaps, federal legislators passed the Research Excellence and Advancement for Dyslexia Act, also known as the READ Act (READ Act, 2016). As the first federal dyslexia law, the READ Act requires the National Science Foundation (NSF) to set aside 2.5 million dollars annually for research on early identification, professional development, curricula, and student educational tools.

Theoretical Context

Since the 19th century, physicians and researchers have theorized about the cause of dyslexia (Share, 2021), created reading intervention models (Gough & Tunmer, 1986), and conducted research studies (NELP, 2008; NRP, 2000) to help inform educators' instructional practices when teaching students with dyslexia how to read. The phonological deficit theory of dyslexia (PDT) is currently the most widely accepted theory for explaining the underlying causes

of dyslexia (Share, 2021). PDT confirms that a significant reason that students with dyslexia have trouble learning to read is because of a phonological-core deficit that impairs one's ability to process speech sounds (Snowling, 2001).

The phonological-core deficit causes several problems related to phonological awareness (e.g., weaknesses in phonemic awareness, phonemic blending, rapid automatized naming, phonological working memory, and letter-sound skills; (Kilpatrick, 2015; Kilpatrick et al., 2019). According to PDT, phonological deficits emerge before students learn to read, thereby increasing their risk for dyslexia and making early instruction in phoneme segmentation imperative. Despite its value as a theory, PDT cannot explain all of the reading challenges that students with dyslexia experience because it is not a unitary deficit theory (Share, 2021).

In 1986, Gough and Tunmer posited that the ability to comprehend written text depended upon two equally important components: word recognition and language comprehension. The simple view of reading is a reading model teachers can utilize to conceptualize reading development and difficulties (Oakhill et al., 2019). Gough and Tunmer (1986) identified reading profiles for three types of struggling readers: dyslexic, hyperlexic, and mixed type. Students with the dyslexia profile possess average or higher language comprehension skills but weak word recognition, causing their reading to be labored and error-prone (Gillis, 2017). For this study, students with dyslexia will include any student with a dyslexic profile identified by the simple view of reading (Gough & Tunmer, 1986).

Today, a large volume of literature addresses how best to teach reading to struggling readers (Castles et al., 2018; NELP, 2008; NRP, 2000). Moreover, teachers can utilize these data to inform their instructional reading practices. The NRP (2000) identified five key areas that improve reading: phonics, phonemic awareness, vocabulary, reading fluency, and reading

comprehension. In addition, the panel's experts found that systematic and explicit phonics instruction significantly improved word recognition and spelling for struggling readers in grades K-1 (Moats, 2020).

Two years later, the NELP began reviewing existing research on instructional reading practices used with children from birth to age five, resulting in a report (NELP, 2008) that validated the findings of the NRP (2000; Pearson & Hiebert, 2010). The group identified alphabet knowledge, phonological awareness, rapid automatic naming of letters, writing, and phonological memory as precursor literacy skills with at least medium-sized predictive power (NELP, 2008). Despite the findings, there continues to be a misalignment between the most popular reading approaches and programs utilized in today's elementary schools and science (Denton et al., 2014).

Problem Statement

The problem was that many teachers of young readers exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020) and dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020) that influence their instructional reading practices (Al Otaiba et al., 2018; Suarez et al., 2018). Despite 40 years of reading research that identifies the causes of reading problems and how to prevent and treat them (NELP, 2008; NRP, 2000), only 12% of American fourth graders with disabilities are proficient readers (NCES, 2019). Unfortunately, reading problems experienced by students with dyslexia during the first couple of school years rarely go away. Studies (Ferrer et al., 2015) have found that students with dyslexia develop an achievement gap as early as the first grade that persists during adolescence and beyond.

Purpose Statement

The purpose of this phenomenological study was to understand how dyslexia affects the instructional reading practices of elementary teachers across the country. At this stage in the research, dyslexia was generally defined as a specific learning disability characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities resulting from a deficit in phonological processing (IDA, 2002). Specifically, the study identified and explained how internal and external influences shaped elementary teachers' experiences teaching students with dyslexia how to read. Internal influences included but were not limited to teachers' personal factors and cognitions like expectations, self-efficacy, occupational stress, and professional knowledge. In contrast, external influences included but were not limited to behavioral and environmental factors such as teacher-student relationships, curricular resources, professional development, and school leadership. The theory guiding this study was Bandura's social cognitive theory (SCT, 1986), as its model of triadic reciprocal causation framed the study's research questions, data collection and analysis, results, and discussion regarding what elementary teachers experience when teaching reading to students with dyslexia.

Significance of the Study

Throughout this transcendental phenomenology, I inquired about the lived experiences of elementary teachers who teach students with dyslexia how to read. Phenomenology was an appropriate research design for this study because it allowed me to describe teachers' experiences and find the essence of those experiences. To do so effectively, I put my judgments aside, remained open, and looked with fresh eyes (Moustakas, 1994). This study may make empirical,

theoretical, and practical contributions to reading and dyslexia research and to individuals who want to know more about instructional reading practices for young students with dyslexia.

The findings from this phenomenology may have empirical significance because they add to the literature on reading instruction for students with dyslexia. A handful of quantitative studies have revealed that elementary teachers exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020; Washburn et al., 2016a) and dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020). However, qualitative studies examining teachers' knowledge of reading research and experiences teaching reading to students with dyslexia (Gonzalez, 2021) are missing from the literature.

This qualitative phenomenology may have theoretical significance because it expands Bandura's (1977, 1986) model of triadic reciprocal causation by using it as the framework to examine teachers' instructional reading practices. Once I collected data through individual interviews, document analysis, and participant journaling, I used Bandura's triadic model to identify personal, behavioral, and environmental influences that shaped elementary teachers' experiences teaching reading. I then used the framework to analyze how the reciprocal relationships amongst influences shaped teachers' instructional reading practices.

The findings from this transcendental phenomenology may have practical significance for teachers and school leaders because teachers report using evidence-based reading practices less than 50% of the time (Suarez et al., 2018). Because elementary teachers frequently use unproven literacy practices that limit student learning (Siegel & Mazabel, 2014), this study's findings may inform their instructional reading practices when teaching struggling readers with word-level deficits. Since many elementary school leaders do not know what constitutes appropriate reading

interventions for struggling readers (Fletcher et al., 2014), the findings from this study may improve their instructional leadership skills.

Research Questions

The following central and sub-questions aligned with the study's problem and purpose, which explained the need for this phenomenological study. Bandura's (1977, 1986) model of triadic reciprocal causation framed the research questions, data collection and analysis processes, and the final discussion.

Central Research Question

What are the lived experiences of elementary teachers who teach students with dyslexia how to read?

Sub-Question One

What internal influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Sub-Question Two

What external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Sub-Question Three

How do internal and external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Definitions

1. *Alphabetic Principle*- The understanding that letters and letter clusters in written words stand for sounds in spoken words (Buckingham et al., 2019).

2. *Basic Language Constructs*- Knowledge and skills related to understanding the structure of the English language, including phonological and phonemic awareness, the alphabetic principle, phonics instruction, orthography, morphology, and morpheme awareness (Joshi et al., 2009).
3. *Dyslexia*- A specific learning disability characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities resulting from a deficit in phonological processing (IDA, 2002).
4. *Grapheme*- The smallest part of written language that represents a phoneme in the spelling of a word. A grapheme can be one or more letters (NRP, 2000).
5. *Morphemic Awareness*- The ability to manipulate morphemes in written words (Joshi et al., 2009).
6. *Morphology*- The understanding that words can be broken down into parts containing meaning (affixes, base words) to decode words or combine to form complex words (Bowers et al., 2010).
6. *Orthography*- A written language system (Moats, 2020)
7. *Orthographic Processing*- An understanding of the writing conventions and knowledge of the correct and incorrect spellings of words for that language system (Moats, 2020).
8. *Phoneme*- The smallest unit of spoken language and can form larger units such as syllables and words (NRP, 2000).
9. *Phonemic Awareness*- A component of phonological awareness involved in identifying and manipulating individual phonemes (sounds) in spoken words (Ehri, 2005).
10. *Phonics*- A body of knowledge about the relationship between the sounds of spoken language and the letters that represent them in writing. Phonics instruction teaches

children this knowledge and how to apply it when reading (Buckingham et al., 2019).

11. *Phonological Awareness*- An understanding of the different ways in which units of sound can be broken down and manipulated, such as sentence segmentation, syllable segmentation, onset-rime manipulation, rhyming, alliteration, and phonemic awareness (Pinto et al., 2017; Washburn et al., 2016a).
12. *Word Identification*- The ability to produce an oral representation of a word from its written expression (Rasinski, 2017).

Summary

Researchers have identified the kinds of instruction that struggling readers with dyslexia need to prevent achievement gaps from forming (Ferrer et al., 2015; NRP, 2000). However, studies have shown that many teachers of young readers exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020) and dyslexia (Spear-Swerling & Cheesman, 2012; Washburn et al., 2016b) that influence their instructional reading practices. Presently, qualitative studies that examine teachers' knowledge of reading research and experiences teaching reading to students with dyslexia (Gonzalez, 2021) are missing from the literature. Furthermore, a gap in the literature exists related to why teachers make specific instructional decisions when teaching students with dyslexia how to read (Worthy et al., 2018).

This transcendental phenomenology sought to understand the internal and external influences that shaped teachers' experiences when teaching students with dyslexia how to read. SCT's model of triadic reciprocal causation (Bandura, 1977, 1986) aided in examining findings from this study and may help fill an existing gap in the literature (Bratsch-Hines et al., 2017; White et al., 2020). The study's findings may also inform teachers' instructional reading practices and principals' instructional leadership skills.

CHAPTER TWO: LITERATURE REVIEW

Overview

Section one of this chapter discusses Bandura's (1977, 1986) SCT and the model of triadic reciprocal causation. An explanation of how the triadic model was used to identify and explain the internal and external influences shaping elementary teachers' instructional reading practices is included. Section two of this chapter contains a synthesis of recent literature on what elementary teachers must know to successfully teach basic reading and what elementary teachers know about basic language constructs, evidence-based reading practices, response to intervention (RTI), and dyslexia. It also identifies influences that may contribute to teachers' knowledge and action gaps. The literature identified teacher preparation, the reading wars, socioemotional climate, occupational stress, instructional models, and school leadership and support as potential influences. In the end, a gap in the reading literature related to teachers' experiences teaching students with dyslexia how to read emerged, which presented a valid need for the current study.

Theoretical Framework

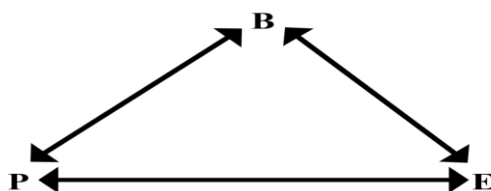
During the first half of the twentieth century, scientists believed environmental or internal influences shaped human behavior (Bandura, 2005). Behaviorist B. F. Skinner asserted that external stimuli and past environmental inputs regulated human behavior (Grusec, 1994), while other theorists suggested motivational forces (e.g., needs, drives, impulses) originating from within the individual shaped human behavior (Bandura, 1977). Bandura posited that cognitive factors like memory and attention could influence behavior, and environmental influences such as imitation and social praise could influence behavior and cognitive factors (Bandura, 1977). SCT differed considerably from popular conditioning approaches of the time (Grusec, 1994).

Bandura believed individuals could affect change within their lives by utilizing a network of reciprocally interacting influences.

A central component of SCT is its model of triadic reciprocal causation. As depicted in Figure 1, personal, behavioral, and environmental influences operate as interacting determinants of one another. Thus, personal factors (P) include but are not limited to expectations, beliefs, perceptions, goals, intentions, and cognitions such as aptitudes, attention, and motivation (Bandura, 1977, 1986). Because personal factors reside within an individual, they are called internal influences. In contrast, behavioral factors (B) include individuals' choices, responses, interactions, and performances made during a behavior. Finally, environmental factors (E) are both physical (e.g., surroundings, age, size, race, sex, physical attractiveness) and social (e.g., other individuals, reputation, status). Because behavioral and environmental factors reside outside an individual, they are called external influences.

Figure 1

Bandura's (1986) Model of Triadic Reciprocal Causation.



Note: From “Schematization of the Relations Between the Three Classes of Determinants in Triadic Reciprocal Causation,” by A. Bandura, 1986, *Social Foundations of Thought and Action*, p. 24. Copyright 1986 by Pearson. Reprinted with permission.

Application of the Model of Triadic Reciprocal Causation

Bandura's triadic model (Bandura, 1977, 1986) can explain the reciprocal relationships between personal, environmental, and behavioral factors. For example, a teacher's philosophy of reading (personal factor) can influence what reading approach they use (behavioral factor), which can then influence the materials they will use (environmental factor). Alternately, when a student acts out in class (environmental factor) because they cannot read the text put in front of them, the teacher may form expectations (personal factor) about the student's needs and ability (Bandura, 2006). The teacher's expectations may influence how they modify the student's reading instruction (behavioral factors; Rosenthal & Jacobson, 1968).

Study Implications

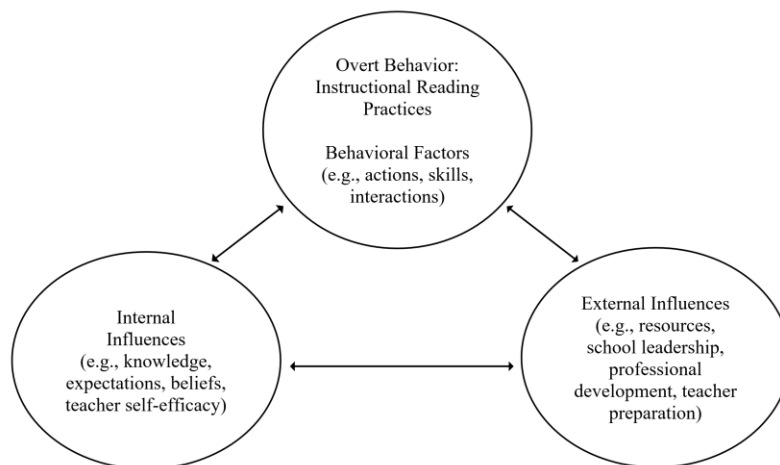
In this phenomenological study, instructional reading practices represented the behavior under investigation. Thus, Bandura's (1977, 1986) model of triadic reciprocal causation served as the framework to identify and explain how personal factors that are internal to teachers and behavioral and environmental factors that are external to teachers shape their experiences teaching reading to students with dyslexia. Previous studies used the model of triadic reciprocal causation to examine self-efficacy (Pajares & Usher, 2008), behavior (Runions & Bak, 2015), math achievement (Tosto et al., 2016), and information and communications technology (Sundqvist & Eklund, 2021). However, the model has not been used to examine instructional reading practices for students with dyslexia.

As depicted in Figure 2, the model of triadic reciprocal causation (Bandura, 1977, 1986) was adapted to identify and explain how internal and external influences shaped elementary teachers' experiences teaching reading. Some of the internal influences examined in this study included knowledge of basic language constructs (Pittman et al., 2020; Spear-Swerling & Cheesman, 2012; Washburn et al., 2016a) and dyslexia (Gonzalez, 2021; Washburn et al., 2017),

and beliefs about reading approaches (Semington & Kerns, 2021). Moreover, external influences like teacher preparation (Betts et al., 2019; Clark et al., 2013), professional development (Brownell et al., 2017; Lemons et al., 2016; Wijekumar et al., 2019), resources (Jackson & Makarin, 2018; Siuty et al., 2018), and school leadership (Bettini et al., 2017; Bettini et al., 2019) were also examined.

Figure 2

Adapted Version of Bandura's (1986) Model of Triadic Reciprocal Causation.



Note: Adapted from “Schematization of the Relations Between the Three Classes of Determinants in Triadic Reciprocal Causation,” by A. Bandura, 1986, *Social Foundations of Thought and Action*, p. 24. Copyright 1986 by Pearson. Adapted with permission.

After investigating how internal and external influences shape teachers’ experiences teaching reading to students with dyslexia, it was clear why elementary teachers experience knowledge and action gaps related to basic language constructs and dyslexia.

Related Literature

Each year, the United States government provides tens of millions of dollars to agencies like the National Institute of Child Health and Development (NICHD) and the Institute for

Educational Sciences (IES) to conduct reading research (Joshi, 2019). However, 40 years of research has not improved reading outcomes for America's students. According to scores on the 2019 NAEP (NCES, 2019), only thirty-five percent of fourth graders, thirty-four percent of eighth graders, and thirty-seven percent of twelfth graders read at a proficient level. These scores were only three to seven percentile points higher than what students achieved in 1992 after the first reading test administration (NCES, 2019).

One reason for students' dismal reading scores is that elementary teachers exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020) and dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020) that influence their instructional reading practices (Al Otaiba et al., 2018; Suarez et al., 2018). The following literature should clarify what elementary teachers must know to successfully teach basic reading to poor readers, what teachers know about basic language constructs, evidence-based practices, RTI, and dyslexia, and what influences may contribute to teachers' knowledge and action gaps.

What Teachers Must Know to Successfully Teach Basic Reading

Elementary teachers must possess a solid understanding of basic language constructs to help struggling readers because the English writing system is complex (Al Otaiba et al., 2012; Peltier et al., 2020). Also, researchers have found that teachers' knowledge of phonology, orthography, and morphology can predict students' word reading gains (Piasta et al., 2009). Elementary teachers must also be knowledgeable about evidence-based instructional practices (Joshi et al., 2009; NRP, 2000) because providing young readers with early, evidence-based reading instruction and interventions can reduce the number of at-risk students by 15 percentile points from 20% to 5% (Mathes et al., 2005; Torgesen, 2000).

Basic Language Constructs

Studies have shown that teachers who thoroughly understand basic language constructs can correct students' reading errors (Gambrell, 2015). In addition, more knowledgeable teachers are likely to provide explicit phonics instruction and adapt their reading instruction to meet the varied needs of their students (Joshi et al., 2009; NRP, 2000). Basic language and literacy constructs include alphabet knowledge, phonological and phonemic awareness, the alphabetic principle, phonics, decoding, encoding, and morphology (Binks-Cantrell et al., 2012; NRP, 2000; Washburn et al., 2016a).

Alphabet Knowledge. Alphabet knowledge strongly predicts long-term reading success (Georgiou et al., 2012; NELP, 2008). Students must be well-versed in letterforms, names, and sounds to understand the alphabetic principle fully, learn grapheme-phoneme correspondences (Ehri, 2005; Hulme et al., 2012), decode words, and store whole-word spellings as sight words (Ehri, 2014; Scanlon et al., 2016). Early reading delays increase the likelihood that students will lag behind their peers in reading and spelling (Piasta et al., 2021; Torppa et al., 2006) and develop a reading disability (Heilmann et al., 2018; Strang & Piasta, 2016).

Despite the importance of alphabet knowledge for learning how to read, many instructional practices used by elementary teachers are not empirically validated (Justice et al., 2006). For example, the popular letter-of-the-week approach (Piasta et al., 2021) does not accommodate students' varying alphabet knowledge levels (Puzio et al., 2020). Hence, spending a disproportionate amount of time teaching letter names and sounds can limit students' opportunities to learn other literacy content (Piasta, 2014; Snow & Matthews, 2016). Instead, researchers have found that brief alphabet instruction that teaches letter sounds through incremental rehearsal (Volpe et al., 2011) and introducing letters at a faster pace increases

students' letter-sound knowledge and word reading skills (Sunde et al., 2020). Furthermore, daily alphabet lessons with multiple cycles of practice and review increase students' letter naming ability more than the typical letter-of-the-week instruction (Jones et al., 2013; Jones & Reutzel, 2012).

Children benefit from letter name instruction because letter names can be used as cues to remember their sounds (Piasta & Wagner, 2010; Roberts et al., 2018). A strategy known as embedded picture mnemonics can help students with dyslexia improve their letter-sound knowledge (Ehri et al., 1984). *Mnemonics* is a technique to improve memory when teaching associations between unrelated items, and it is appropriate when teaching multiple and often unrelated letter shapes, names, and sounds (Shmidman & Ehri, 2010). Embedded picture mnemonics involve drawing a picture of an object (e.g., a mountain) that resembles the shape of the letter and has the same sound (/m/) taught and is more effective than selecting the same objects drawn in a different shape or not using pictures (Ehri et al., 1984). Embedding pictures into the letters improves memory because the information is stored verbally and non-verbally (Sadoski & Paivio, 2001).

Phonological Awareness. Phonological awareness is the understanding that words consist of smaller units (e.g., compound words, syllables, onset and rimes, and phonemes) that can be manipulated through rhyming, alliteration (Washburn et al., 2016a), and decoding (Castles & Coltheart, 2004; Ehri et al., 2001). However, researchers disagree on the most effective orthographic unit size to teach reading. Some researchers believe larger orthographic units like compound words (e.g., hot-dog) and syllables (e.g., ex-it) are more manageable for beginning readers to manipulate than smaller units like phonemes (e.g., /p/ /a/ /n/). The reason is that phonemes overlap seamlessly with other phonemes, making it difficult to discriminate

between them (Sargiani et al., 2018, 2022). Other researchers consider phonemes the ideal orthographic unit to teach reading because the English writing system represents speech using phonemes, and students use phonemes to decode words (Ehri, 2014).

Teachers who provide reading instruction to students with dyslexia must realize that reading development is not based on visual memory (Ehri, 2005; Kilpatrick, 2015; Share, 1995), and instructional methods that rely on memorizing visual forms instead of word analysis produce limited results. Furthermore, long-term word storage is based on letter order and not the visual characteristics of a word (Ehri, 2005, 2014; Kilpatrick, 2015; Share, 1995). A weak correlation exists between visual memory skills and word-level reading, but moderate to strong correlations exist between various phonemic tasks and word-level reading (Kilpatrick et al., 2019). Also, deaf individuals have great difficulty with word-level reading despite having at least average visual memory skills. Finally, brain imaging has shown that naming familiar written words, nonsense words, faces, and objects shows different activation patterns (Dehaene & Cohen, 2011).

Phonemic Awareness. Students with dyslexia exhibit weaknesses in phonemic awareness (Hulme & Snowling, 2016; Solheim et al., 2018), a component of phonological awareness that involves identifying, reflecting upon, or manipulating individual phonemes that make up spoken words (Washburn et al., 2016a). Phonemic awareness enables readers to segment and blend phonemes within words and to read words from memory (Boyer & Ehri, 2011; Shmidman & Ehri, 2010). It is also the most challenging level of phonological awareness, especially for students who cannot discriminate between similar phonemes (Cassar et al., 2005).

Phonemic awareness is highly predictive of reading growth (Schatschneider et al., 2004) because it maintains a reciprocal relationship with reading and spelling. Thus, as phonemic awareness improves a student's reading and spelling skills, those gains will increase their

phonemic awareness (Scanlon et al., 2016). Moreover, studies have shown that instructing students how to segment words into phonemes using letter tiles (NRP, 2000) improves word and nonword reading and spelling (Boyer & Ehri, 2011; Ehri et al., 2001). Also, adding pictures of articulatory gestures (an image of a mouth making a specific single sound) can increase learning even more (Boyer & Ehri, 2011). Kindergarteners who receive phonemic segmentation instruction using articulatory gestures can often spell target words without first learning how to spell them with letters (Castiglioni-Spalten & Ehri, 2003).

The Alphabetic Principle. The alphabetic principle is the understanding that letters and letter combinations represent spoken sounds (Washburn et al., 2016a). Typically, phonemic awareness and the alphabetic principle develop when students enter preschool and continue through first grade. However, students with dyslexia will require more time and specialized instruction before developing and applying the alphabetic principle effectively when decoding and spelling words (Lovett et al., 2000).

Phonics Instruction. Phonics instruction teaches readers how to decode words accurately by applying orthographic, phonological, and morphological knowledge (Beck & Beck, 2013; Washburn et al., 2016a). Critics argue that English spellings are too irregular for phonics instruction to make a difference in students' reading performance. However, studies have shown that phonics instruction produces significant word reading and spelling gains (Galuschka et al., 2014). Despite this, most elementary teachers use reading interventions other than phonics. For example, two-thirds of teachers use meaning-based approaches like Guided Reading (Fountas & Pinnell, 1996) to teach early literacy concepts (Denton et al., 2014).

Researchers (Al Otaiba & Torgesen, 2007) recommend that teachers spend a minimum of 30-45 minutes each day teaching phonics to poor readers to get the best results. During phonics

instruction, teachers can use Elkonin sound boxes to build and spell words (McCarthy, 2008), which is essential for students with dyslexia who have trouble manipulating spoken language (IDA, 2018; Shaywitz & Shaywitz, 2020). Instead of simply teaching phonics rules (Coyne & Koriakin, 2017), teachers can show students how to map phonetic elements (McCarthy, 2008) into the sound boxes using either an object or letters (Lane et al., 2009).

Decoding. Once students have acquired the alphabetic principle, the next milestone in their reading development will be to learn about grapheme-phoneme relationships through phonic decoding (Castles et al., 2018). Using a systematic phonics approach, teachers should instruct students on the most significant letter-sound relations and how to decode them. Through decoding, students will learn to analyze graphemes (letters, letter clusters), onsets and rimes, syllables, and morphemes (roots, prefixes, suffixes) within words (Moats, 2020; Treiman, 1985) to determine their pronunciation and meaning (Beck & Beck, 2013; Ehri, 1998). Acquiring decoding skills helps students identify unfamiliar words and store them in long-term memory for immediate and effortless recall (Ehri, 2014).

According to Ehri (1999), students move through a series of overlapping phases that specify the type of connection each will form to link the spelling of words with their pronunciations in memory. As students move through the phases, the grapho-phonemic units increase in size until they become consolidated into larger syllabic units. During the pre-alphabetic phase, students rely upon easily forgotten, non-phonologic visual or contextual cues to guess words because they have yet to master the alphabetic principle (Ehri, 2005). Once students have reached the partial alphabetic phase (Ehri, 2014), they have learned some letter-sound relationships. They can use partial-alphabetic cues like initial or final word endings to store

words in memory. Thus, their decoding skills are still primitive at this point, but they will use them to invent spellings to capture the sounds of words.

During the full-alphabetic phase, students will use their knowledge of grapheme-phoneme correspondences and phonemic awareness to consistently decode whole words through isolating and blending sounds (Castles et al., 2018) and store them in memory long-term (Ehri, 2014). Furthermore, readers will form complete grapheme-phoneme connections to fully bond spellings to pronunciations in memory, thus making word reading much more accurate. Finally, once students have reached the consolidated-alphabetic phase, they can successfully read larger chunks like syllables and morphemes to decode multisyllabic words and securely store them in memory (Ehri, 2014).

Sight Word Learning. *Sight word learning* occurs when information about a word's spelling, pronunciation, and meaning gets stored in memory for quick access (Ehri, 2005, 2014). For sight word learning to occur, readers must undergo a process referred to as orthographic mapping (Ehri, 2014, 2017). Through repeated examination of a word's spelling and pronunciation, its spelling becomes mapped onto its pronunciation and meaning graphemes. Decoding words activates these connections and enables readers to read the words automatically from memory by sight.

Once a word is stored in memory, it is referred to as a sight word because the sight of them immediately activates its pronunciation and meaning in memory (Ehri, 2005, 2014). This view of sight words differs significantly from one where sight words are read by ignoring letter-sound relations in words and memorizing them through repeated drills instead. Sight words used to be viewed strictly as high-frequency or irregularly spelled words, but research has shown that all words, when practiced, become read from memory by sight (Ehri, 2014).

Sight word learning is a typical literacy practice used by elementary teachers in which students are given wordlists like Dolch or Fry to memorize (Miles et al., 2018). However, this practice makes it difficult for students to secure high-frequency words in memory and perpetuates the belief that such words are irregular and impossible to decode. Since analyzing grapheme-phoneme relationships is the most effective way to store words in memory, having students memorize high-frequency words is problematic, especially for students with dyslexia (Treiman & Kessler, 2013).

Teachers may not realize that most high-frequency words are classified as either regularly spelled or temporarily irregularly spelled until students learn to decode them using knowledge of taught spelling patterns (Joshi et al., 2008; Moats, 2005). For example, an analysis of the Dolch and Fry pre-primer wordlists (Ehri, 1997) revealed that several words fall into the regularly and temporarily irregularly spelled categories. Therefore, students should be encouraged to decode these words.

Using manipulatives to decode words is an effective strategy for developing students' orthographic mapping skills (Keesey et al., 2015; Lane et al., 2009; Pullen & Lane, 2014). Hence, teachers can dictate words to students and have them use letter tiles or cards to build them (Keesey et al., 2015). For instance, the teacher might say something like, "Form the word cat and change it into bat." or "Make the word dog and then change the letter O to I and tell me the word you made."

Encoding Instruction. Whereas decoding involves translating written symbols into spoken language, encoding (spelling or building words) involves transposing speech into writing (Moats, 2019b; Weiser & Mathes, 2011). Encoding instruction increases the effectiveness of beginning reading lessons because it explicitly teaches students how to write words according to

their phoneme-grapheme correspondences, build words using manipulatives, and manipulate phoneme-grapheme relationships to make new words (Weiser & Mathes, 2011).

Activities completed during encoding instruction should require students to manipulate sounds (Moats, 2019b) using letter tiles and Elkonin boxes (Elkonin, 1973). Moreover, students who are explicitly and systematically taught to write and build words and manipulate phoneme-grapheme correspondences significantly improve their reading and spelling post-test scores (Weiser, 2013). Also, integrating decoding and encoding instruction can improve students' reading skills (Miller et al., 2017) and reduce the number of students at risk for dyslexia (Weiser, 2013).

Spelling. Students with dyslexia often struggle to spell words correctly (Shaywitz & Shaywitz, 2020) because spelling requires students to analyze the sounds of words and recall their meanings and letter sequences (Treiman, 2017). Thus, poor spellers are also usually poor readers and writers (Jones et al., 2016). However, growth in spelling can increase phonological awareness, word reading, reading comprehension, and writing skills (Treiman & Kessler, 2014; Weiser & Mathes, 2011) by forming more complete orthographic representations and storing them in memory (Gentry & Ouellette, 2019). As a component of encoding, spelling provides the foundation for the rapid and efficient encoding and decoding of words, allowing individuals more room for thinking and planning as they write and read (Templeton, 2020).

Invented spelling is a developmental process where students use self-direction to spell words, and teachers use the data to monitor their understanding and growth (Ouellette et al., 2013). Thus, allowing children to engage in the analytical process of invented spelling, followed by appropriate feedback, facilitates reading and spelling development (Ouellette & Sénéchal, 2017). Furthermore, students who engage in invented spelling and receive individualized

feedback demonstrate more robust gains in orthographic memory for target words than students who practice identifying the number of individual sounds in words (Ouellette & Sénéchal, 2008). Also, combining spelling and phonemic awareness training where students count phonemes in words, compare the number of phonemes using Elkonin sound boxes, and identify spelling patterns in words is a more effective reading approach than teaching word families (Ehri et al., 2009).

Morphology. *Morphology* is the conventional system by which the smallest units of meaning, called morphemes (e.g., bases, prefixes, and suffixes), combine to form complex words (Bowers et al., 2010). Morphemes are used during morphological decoding (Carlisle & Kearns, 2017; Deacon et al., 2017; Washburn et al., 2016a) because the chunks hold meaning, which helps readers figure out the meanings of words. Words may contain one morpheme or many. A single morpheme may be one syllable (e.g., bat) or more than one (e.g., tiger, banana). Free morphemes can stand alone (e.g., single-syllable words) or be combined to form multi-syllable words (e.g., homework). In contrast, bound morphemes (e.g., prefixes and suffixes) cannot stand alone as words and change the meaning of the words they are attached to (e.g., well/unwell).

Morphology is essential for reading and spelling development (Carlisle & Kearns, 2017; Castles et al., 2018) because it bridges form and meaning (Rastle, 2019) by linking phonology, orthography, and meaning (Kirby & Bowers, 2017). Morphology is also important because the English writing system is partially morphologically-based (Nagy et al., 2014). Morphological knowledge contributes to word recognition through chunking, which reduces the working memory demands of reading more protracted and complex words and may offer students with dyslexia a means to compensate for phonological weaknesses and improve their reading, spelling, and vocabulary (Goodwin & Ahn, 2010). In a study where students received a series of

morphological interventions (Goodwin & Ahn, 2010), evidence revealed significant growth in morphological knowledge, phonological awareness, vocabulary, spelling, and comprehension.

Evidence-Based Instructional Practices

As stated previously, evidence-based reading practices can significantly reduce the number of at-risk students (Mathes et al., 2005; Torgesen, 2000). For example, studies have shown that systematic, explicit, and differentiated instruction in phonemic awareness, phonics, and letter knowledge (NRP, 2000; Puzio et al., 2020; Wanzek et al., 2010) increases poor readers' word recognition and spelling skills (Moats, 2020). Additional practices that may increase students' reading skills include retrieval practice (Karpicke et al., 2014) and embodied cognition (Lindgren, 2014).

Retrieval Practice. Retrieval or recalling information without prompts or cues can be a powerful way to promote student learning (Karpicke et al., 2014; Leonard et al., 2020; Pashler et al., 2007). Retrieval-based learning is an effective learning strategy for elementary students (Karpicke et al., 2016; Lipko-Speed et al., 2014) and does not have to take the form of testing, as the act of retrieval alone improves knowledge transfer (Smith et al., 2016). Retrieval practice is most effective when it frequently occurs during the learning phase (Roediger & Karpicke, 2006), is somewhat effortful, and after some time has elapsed (Karpicke & Roediger, 2007).

Teachers should plan retrieval activities that provide an appropriate amount of challenge for students because low-success retrieval activities will not improve memory, particularly when feedback is withheld (Karpicke et al., 2014). On the other hand, when activities predict a high level of success, retrieving the information will be less beneficial. For example, when students read a word, immediately cover it, and then say it aloud, the information will remain in their working memory and cannot be retrieved (Smith et al., 2016).

To improve word reading for students with dyslexia, teachers can have students complete various retrieval practice activities. Students with dyslexia need immediate feedback during instruction (Bangert-Drowns et al., 1991; Collins & Cook, 2016) to confirm correct responses and fix errors (Karpicke & Roediger, 2008). Therefore, teachers can engage students in flashcard practice, response card practice, weekly quizzes, and technology-based practice tests (e.g., Quizlet, Plickers) or activities using other resources (e.g., manipulatives, personal whiteboards).

Embodied Cognition. Embodied cognition explains how the mind-body connection influences learning (Stolz, 2015) and instruction (Lindgren, 2014). The brain and body's sensorimotor systems are highly interconnected. Simply thinking of an object or flavor will trigger a simulation of a previous experience with those things (Barsalou, 2008; Glenberg & Gallese, 2012) and evoke sensorimotor responses in the brain (Pulvermüller, 2005). For instance, when individuals read an odor-related word like cinnamon, it activates the primary olfactory cortex in the brain (González et al., 2006). Also, thinking of an action word like "kick" activates the motor regions in the brain (Pulvermüller et al., 2005).

The more engaged a student's body is in a learning activity, the more likely they will remember the content taught (Johnson-Glenberg et al., 2016; Lindgren & Johnson-Glenberg, 2013). For instance, having students simulate story events using objects can improve reading comprehension (Glenberg et al., 2004). Glenberg (2008) discovered that acting out celestial trajectories representing the planets and stars uses body awareness and increases content learned (Plummer, 2009). Also, physical engagement in lessons significantly improves short-memory skills in students with special needs (Kosmas et al., 2018).

In terms of language, students store words as experience-related sensorimotor representations in the brain (Pulvermüller, 2005; Pulvermüller et al., 2005). Gesturing improves

phonological awareness (Moritz et al., 2013) and can help students memorize words more than reading or listening can (Engelkamp et al., 1994). Teachers can use gesturing as a learning tool, but students must perform the gestures themselves (Engelkamp et al., 1994) regularly (Macedonia & Knösche, 2011; Macedonia et al., 2011; Mayer et al., 2015).

Knowledge of Basic Language Constructs and Evidence-Based Practices

Studies have repeatedly shown that struggling readers, particularly those with phonological deficits, need intensive early intervention in word identification (Fletcher et al., 2018, 2021) no later than kindergarten (Rasinski, 2017), or they will likely remain poor readers in the fourth and ninth grades (McLaughlin et al., 2014). Because teaching reading to students with dyslexia requires a thorough understanding of basic language constructs and evidence-based practices (Meeks et al., 2016), teacher educators must possess this knowledge and successfully teach it to candidates. In addition, teacher educators must model how to teach basic reading to students with dyslexia systematically, sequentially, and explicitly (Spear-Swerling, 2019).

In most teacher preparation programs, teacher educators usually teach the five pillars of reading instruction (e.g., reading comprehension, fluency, phonics) identified by the NRP (2000) but do so by isolating each one instead of integrating them (Sayeski, 2019). This approach causes a disconnect between reading components and activities, teaches candidates that reading instruction is simply a matter of selecting activities from a menu of five areas (Sayeski, 2019), and creates knowledge gaps (Meeks et al., 2020). As a result, unknowing teachers may prioritize higher-level literacy skills like reading comprehension over foundational skills such as phonics (Moats, 2020).

Without a thorough understanding of basic language constructs, evidence-based practices, and dyslexia (Meeks et al., 2016), elementary teachers are likely to possess knowledge

gaps in morphology and complex phoneme counting (Binks-Cantrell et al., 2012). In addition, teachers are less likely to provide students with explicit phonological awareness (Swanson et al., 2012) and phonics instruction (Kent et al., 2017) and utilize evidence-based reading practices (Suarez et al., 2018). Furthermore, teachers may not know how to individualize basic reading instruction (Kent et al., 2012; Swanson & Vaughn, 2010), causing them to spend most of their reading block providing whole group instruction (Vaughn et al., 2020). Unfortunately, a one-size-fits-all instructional approach denies struggling readers with dyslexia the opportunity to apply newly learned skills within connected text (Swanson, 2008).

Knowledge of Response to Intervention (RTI)

In 2001, the Office of Special Education Programs (OSEP) and a group of learning disability advocates met to discuss potential changes to the Individuals with Disabilities Education Act (IDEA; Gartland & Strosnider, 2020; Preston et al., 2016). The topic of discussion that day centered around a new process where teachers would collect student performance data to identify academic weaknesses, implement evidence-based interventions, and conduct ongoing progress monitoring for data-based decision-making (Gresham, 2002). Following reauthorization of IDEA (2004), states began adopting a data-driven framework called RTI to identify struggling students needing targeted interventions and possibly special education services (Fuchs et al., 2010).

Most state RTI frameworks have three tiers (Grapin et al., 2019). Tier 1 provides evidence-based core instruction to all students in the general classroom and utilizes universal screening to identify students needing more intensive instruction or intervention. In Tier 2, students identified by universal screening as needing supplemental interventions receive general instruction plus more intensive support. Students who make limited or no progress move to Tier

3 to receive increasingly intensive and specialized interventions and more frequent progress monitoring (Fletcher & Vaughn, 2009).

RTI should provide early evidence-based reading interventions to students with dyslexia, as their reading success is strongly linked to the quality of instruction received. The best interventions are individualized based on students' needs and implemented with fidelity (Al Otaiba et al., 2019; Sanchez & O'Connor, 2015). However, a school's use of an RTI framework does not guarantee that teachers provide students with language-based, explicit, and systematic instruction (Moats, 2017). Thus, preservice and in-service teachers often have trouble identifying Tier 2 and Tier 3 reading programs and evidence-based reading practices and knowing how to use assessment data to modify or adapt students' reading instruction (Spear-Swerling & Cheesman, 2012). In addition, school psychologists also possess a limited understanding of RTI, including how to identify the most appropriate tier of instruction for readers (Vujnovic et al., 2014).

Knowledge of Dyslexia

There is presently a lack of consensus regarding what dyslexia is or is not. As a result, multiple conceptualizations of dyslexia exist (Elliott, 2020). For example, dyslexia is commonly viewed as a reading disability that causes weaknesses in decoding because of underlying phonological deficits (Perfetti et al., 2019). Dyslexia is also considered a condition that causes severe decoding weaknesses in a clinically derived subgroup of poor readers or a severe reading problem caused by cognitive deficits in working memory, processing speed, or attention (Elliott, 2020). To complicate matters, some individuals conceptualize dyslexia as a condition that causes treatment resistance for a small group of struggling readers (Fuchs et al., 2013). With no agreed-

upon definition or conception of dyslexia, teachers and teacher educators may not know what to believe about it (Worthy et al., 2016; Worthy et al., 2018).

How reading instruction is presented to preservice teachers profoundly influences their future experiences delivering reading instruction to students with dyslexia (Clark et al., 2013). Because of the confusion surrounding the concept of dyslexia (Elliott, 2020) and long-held myths (Worthy et al., 2018) that claim dyslexia causes individuals to see words backward or jump off the page (White et al., 2020), teacher educators frequently have misconceptions about it (Betts et al., 2019). Their lack of understanding makes it impossible to teach candidates the most effective ways to help struggling readers with significant phonological deficits (Meeks et al., 2016).

As newly hired elementary teachers facing the challenge of teaching reading to students with dyslexia, many report feeling unprepared to meet their students' needs (White et al., 2020). For example, fewer than 5% of new teachers know that dyslexia's core deficit is phonologically based (Washburn et al., 2017), and most believe it is impossible to identify students with dyslexia prior to third grade (Gonzalez, 2021). To increase teacher knowledge of dyslexia, the IDA has lobbied teacher preparation programs to modify their coursework to include recent research-based information on reading disabilities, including dyslexia (Washburn et al., 2017). The IDA has also published professional standards (IDA, 2018) that specify what teachers must know about the nature of reading disabilities and the characteristics of dyslexia.

Influences That May Contribute to Teachers' Knowledge and Action Gaps

According to Bandura (1977, 1986), personal, behavioral, and environmental influences can shape teachers' reading instruction, resulting in knowledge and action gaps. As previously described, inadequate teacher preparation may explain why elementary teachers of students with

dyslexia exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020) and dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020). Additional influences that may contribute to these gaps include the reading wars (Castles et al., 2018), socio-emotional climate (Darling-Hammond et al., 2020), occupational stress (Aloe et al., 2014), instructional models (Bean & Kern, 2018), and school leadership and support (Leithwood et al., 2004).

The Reading Wars

The decades-long debate over the best way to teach reading may contribute to elementary teachers' knowledge and action gaps relative to basic language constructs and dyslexia. The battle between reading philosophies, now known as the reading wars (Castles et al., 2018), has pitted two major reading organizations, the International Literacy Association (ILA) and the International Dyslexia Association (IDA), against one another. As a result, members of either or both organizations may be confused by their contrasting messages.

The Debate Over Dyslexia. Concerning reading instruction for students with dyslexia, in 2016, the ILA published a brief (ILA, 2016a) stating that there was no empirically proven method of teaching students with dyslexia. In response, the IDA (2016) issued a position statement proclaiming that interventions for students with dyslexia should focus on phonological coding. In a second response, the ILA (2016b) issued an addendum refuting the IDA's statement. With both organizations citing research to back their positions on dyslexia, educators who teach students with dyslexia will likely reject them and look elsewhere for guidance on how to best address their students' learning needs (Harmey, 2021).

The Debate Over Reading Approaches. For decades (Castles et al., 2018), the pendulum has swung between explicitly teaching letter-sound correspondences using a phonics

approach (Chall, 1967) and conceptualizing reading as a guessing game using a meaning-based approach (Clay, 1991; Goodman, 1967). Proponents of meaning-based approaches believe phonics and word reading skills are unnecessary (Goodman, 1967), which may be why meaning-based reading approaches are much less effective (Foorman et al., 2016; Kilpatrick, 2015; Seidenberg, 2017) than phonics approaches. Although meaning-based reading approaches are less effective (Foorman et al., 2016; Kilpatrick, 2015; Seidenberg, 2017) than phonics approaches, elementary teachers across the country regularly utilize them as their primary source of reading instruction (Spear-Swerling & Sternberg, 2018). Unfortunately, this puts students who need phonics instruction at a disadvantage.

Phonics Approaches. National reviews of reading instruction (e.g., NELP, 2008; NRP, 2000) found consensus around the importance of phonics during the early stages of reading development (Castles et al., 2018). However, public policy has not reflected this. There are multiple ways to teach phonics (e.g., synthetic, onset-rime), but researchers agree that explicit, systematic, synthetic, code-based instruction is most effective (Moats, 2017). Consequently, early childhood preservice teachers who tutor young readers using code-explicit instruction (Al Otaiba et al., 2012) have significantly improved their decoding skills and effectively utilized curriculum-based measures to inform their instruction (Peltier et al., 2020).

Meaning-Based Approaches. Whole language (WL) and other meaning-based approaches emphasize meaning and context over word analysis (Goodman, 1967). Teachers favoring these approaches believe meaning-making exchanges between teacher, student, and text are essential (Semington & Kerns, 2021) and that reading passages are the only suitable place to practice reading skills (Ehri, 2020). Furthermore, meaning-based advocates claim that decoding words impede the activation of meaning in the brain and instead promotes contextual guessing to

identify words in the text. Some teachers who possess a solid understanding of basic language constructs but prefer to use a meaning-based approach will avoid using their specialized knowledge when teaching basic reading to even the weakest readers, thereby creating an action gap (Arrow et al., 2019).

The three-cueing systems advocated by Goodman (1967) ask young readers to formulate hypotheses about the identity of words (Treiman, 2018). However, the Institute of Education Sciences (Foorman et al., 2016) discourages teachers from encouraging students to use guessing strategies to identify unfamiliar words because such methods do not apply to more complex texts. Nevertheless, teachers continue to utilize these practices when teaching reading (Spear-Swerling & Sternberg, 2018). For instance, readers are encouraged to use the following guessing strategy when they come across an unfamiliar word: (a) read the whole sentence, (b) cover up the word, (c) guess a word that might make sense, (d) uncover the first consonant letter(s) up to the first vowel, (e) make another guess, (f) uncover the whole word, (g) decide if the length of the written word matches the length of the spoken word, and (h) determine if the consonants in the written word and the sounds in the spoken word match (Hall & Cunningham, 2003).

Balanced Literacy (BL) is considered by many to be a happy medium between phonics and WL. Some individuals describe BL as a mixture of whole language and phonics consisting of read-alouds, guided reading, shared reading, independent reading, and word study (Robinson et al., 2016). Elementary teachers who use BL often use anchor charts, leveled books, classroom book libraries, letter cards, pocket charts, and Guided Reading (GR; Fountas & Pinnell, 1996). Chai et al. (2020) found that some teachers who utilized a BL approach taught phonemic awareness and phonics. However, 60% of kindergarten and 25% of first-grade teachers did not teach students to blend and segment sounds to form words.

In New Zealand, as many as 80% of fourth graders are less than proficient readers (Moats, 2017) because many teachers do not know how to teach foundational reading skills (Paige, 2018). One reason for the underperformance stems from New Zealand's adoption of a reading program that targets poor first and second-grade readers. Having originated in New Zealand (Clay, 1991), Reading Recovery (RR) teaches readers how to use multiple cueing systems, correct reading errors, and construct meaning while reading. The reading gains made by students receiving RR typically last one year (May et al., 2016), as roughly 23% of participating students receive additional remedial assistance due to a lack of progress (Chapman & Tunmer, 2016).

In 2000, the NRP recommended that elementary teachers provide struggling readers with explicit and systematic instruction in decoding and word identification. However, teachers have not heeded that advice. GR (Fountas & Pinnell, 1996), an element of the BL Framework, has become a staple in most elementary classrooms (Denton et al., 2014). GR encourages silent, independent reading using text that increases in complexity (Fountas & Pinnell, 2012). During small group lessons, students read for meaning using meaning cues from background knowledge, context, syntax, graphics, and sometimes sound-symbol relationships or using onsets and rimes (Wall, 2014). Researchers (Denton et al., 2014) report that students who receive explicit and systematic instruction in word-reading plus comprehension make significant gains in phonemic decoding compared to students who received only GR instruction.

In most elementary classrooms, leveled book libraries are often the primary tool for teaching students how to read (Spear-Swerling & Sternberg, 2018). Having originated in New Zealand, leveled texts were designed to accompany RR lessons (Clay, 1991) and are currently the centerpiece of GR (Fountas & Pinnell, 1996, 2008). Leveled texts are assigned a rank (level)

based on a difficulty scale such as A-Z that measures content, themes, ideas, text structure, and language and literary elements (Moats, 2020). However, leveling decisions are subjective because readability formulas do not apply to beginning texts (Moats, 2020).

Leveled text is almost impossible for the bottom 40% of readers to read because they have not acquired the requisite phonic decoding skills needed to do so (Cunningham et al., 2005). Thus, teachers often introduce phonic patterns too quickly for beginning readers who require multiple exposures to words to store them accurately in memory (Cunningham et al., 2002; Foorman et al., 2004). This practice leaves readers with little choice but to rely on memorization, pictures, and guesswork (Seidenberg, 2017) to read.

Structured Literacy Approach. Structured literacy (SL) is an umbrella term that describes evidence-based instructional elements used to teach language and literacy skills (Spear-Swerling, 2019). This multi-linguistic approach includes content and methods of instruction that differ from popular approaches used in today's schools. For example, SL focuses on the analysis and production of sounds, spellings for sounds and syllables, patterns and conventions of the writing system, meaningful parts of words, sentences, paragraphs, and discourse within longer texts (Moats, 2019a; Odegard, 2020). SL is frequently recommended for students with dyslexia (Berninger et al., 2006; IDA, 2017; Moats, 2019a) because the elements are research-based (NRP, 2000), target weaknesses in phonological skills (Moats, 2017), and improve spelling and reading accuracy, decoding, fluency, and comprehension (Vadasy et al., 2006).

Socio-Emotional Climate

Students require physical and psychological safety to learn because fear and anxiety inhibit learning (Darling-Hammond et al., 2020). The socio-emotional climate of a classroom is

essential in promoting student motivation and learning since the affective environment communicates a teacher's expectations and care for them (Rubie-Davies, 2006). The socio-emotional environment created by high-expectation teachers is more positive and caring than in classrooms of low and average expectation teachers (Rubie-Davies, 2007). A positive classroom environment increases student achievement (Allen et al., 2013). Creating a positive learning environment for struggling readers may help foster positive social and academic growth (Rubie-Davies & Peterson, 2011). To create caring environments for struggling readers, teachers should use flexible groupings (Rubie-Davies & Rosenthal, 2016), help students set appropriate learning goals, and provide meaningful tasks highlighting their effort and progress.

Teacher-Student Relationships. The affective quality of teacher-student relationships is vital for students with dyslexia (Roorda et al., 2011; Schonert-Reichl, 2017), particularly their academic achievement, confidence level, and social competence (Osher, 2018). Thus, positive teacher-student relationships influence teachers' instructional practices (Mikami et al., 2017) and even predict students' reading gains (Pianta et al., 2008). In addition, emotionally supportive teachers can increase student engagement and motivation in class (Ruzek et al., 2016) and decrease their own exhaustion (Corbin et al., 2019).

Teacher Expectations. Teachers generally set higher expectations for students they perceive to be more capable, which in turn causes students to perform at higher levels (Rosenthal & Jacobson, 1968). Moreover, teachers' expectations of their students influence their instructional practices (Wang et al., 2018) through the formation of schemata, or mental representations, which outline the characteristics and behaviors of high- and low-achieving students and how they should be taught (Gentrup et al., 2020). Teacher expectations can explain differences in student reading progress because they influence teachers' choice of instructional

practices (Rubie-Davies, 2006). Thus, teachers are likely to use practices that fulfilled their expectations (Rubie-Davies, 2007).

Teacher Enthusiasm. Enthusiasm is an inherent characteristic or quality (Kunter et al., 2008; Praetorius et al., 2017) that transfers from teacher to student (Keller et al., 2014). Effective instruction requires enthusiastic teachers (Brophy & Good, 1986) who deliver stimulating and motivating lessons to their students (Keller et al., 2016). Teacher enthusiasm can improve student learning (Lazarides et al., 2018) by increasing student interest (Frenzel et al., 2010; Ruzek et al., 2016) and engagement (Keller et al., 2014; Lazarides et al., 2019) and making learning enjoyable (Frenzel et al., 2018).

Teacher Self-Efficacy. Self-efficacy refers to an individual's belief that they can accomplish a specific task (Bandura, 1986) and may influence their choice of activities, persistence, effort, and academic achievement (Bandura, 1997). On the other hand, teacher self-efficacy is a judgment that teachers make about their ability to bring about increased student engagement and learning, particularly among students who are challenging to work with or appear unmotivated (Tschannen-Moran & Woolfolk Hoy, 2001). Teachers with high teacher self-efficacy believe they can increase student achievement by manipulating the environment and using positive and encouraging feedback (Bandura, 1997), especially for students with learning disabilities (Woodcock et al., 2019).

Studies (Zee & Koomen, 2016) have shown that highly efficacious educators are more likely to implement effective instructional practices, influencing how their students view their capabilities and approach future learning opportunities (Bandura, 1989). Thus, special education teachers' self-efficacy can influence the quality of their instruction. Hence, those with low self-

efficacy are more likely to believe unmotivated students are helpless due to their lack of ability, effort, or disability (Wong et al., 2017).

Occupational Stress

Teachers have become increasingly stressed over the last decade (Aloe et al., 2014), especially those who teach in schools with high numbers of special needs students (Flouri & Panourgia, 2014). Increased teacher stress and exhaustion can lead to burnout, which students can sense. Occupational stress hinders teacher-student connections, making it difficult to meet students' social-emotional needs and can contribute to an adverse classroom climate (Jennings & Greenberg, 2009). Consequently, students often perceive burned-out teachers as socially and emotionally incompetent (Oberle et al., 2020).

Shared Responsibility. One area of stress that can influence teachers' instruction involves having shared responsibilities for teaching students with disabilities. In the United States, general and special education teachers frequently share responsibility for educating students with disabilities through co-teaching (Dewey et al., 2017). Several co-teaching models exist (e.g., one-teach, one-observe, parallel teaching, and station; Solis et al., 2012). However, the most commonly used model is the one teach-one assist approach, with special education teachers taking a subordinate role (Scruggs et al., 2007). In co-teaching relationships, there is often no discussion about each teacher's role. Too often, general educators function as content experts (Mulholland & O'Connor, 2016), while special educators tend to the needs of students on their caseload. Special education teachers' roles are less precise than general educators' because they deliver specialized instruction to students with special needs (Pickl et al., 2016) instead of general education pedagogy.

Workload. Another central stress area, especially for special education teachers, is workload (Jennings & Greenberg, 2009). Having too many responsibilities may prevent special education teachers from individualizing instruction for their students (Billingsley & Bettini, 2017, 2019). For instance, unlike most teachers, special education teachers must be able to teach any content in any school setting or combination of settings. They must also be interventionists, address challenging behavior, and collaborate with teachers at different grade levels. Unlike other teachers, special educators spend almost half their day completing administrative and supervisory tasks (Vannest & Hagan-Burke, 2010), including managing paraprofessionals and case managing students. Unfortunately, these responsibilities leave special education teachers with little time to plan and deliver quality instruction (Bettini et al., 2015).

Accountability Practices. Within schools across the country, increased accountability for student academic performance increases teachers' stress levels (von der Embse et al., 2015). Roughly 30% of teachers experience clinically significant anxiety when their principals use student test scores to evaluate their teaching performance (Saeki et al., 2018). K-2 teachers are not immune to the effects of standardized testing as they feel the pressure of having their students pass various curriculum-based assessments such as the Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Kaminski & Good, 1996). Accountability policies may cause generalized stress within K-2 classrooms because teachers also work closely with administrators and upper elementary teachers who feel pressured by accountability policies.

Instructional Models

Most social learning (e.g., thought, emotions, human behaviors) is accomplished vicariously through observing others (Bandura, 1986). Thus, observing other teachers' behavior and the consequences experienced enables teachers to expand their knowledge and skills either

intentionally or inadvertently. Moreover, models can function as instructors, motivators, inhibitors, and emotion arousers (Bandura, 1986).

Literacy Professionals. Literacy professionals (e.g., reading specialists and coaches) can influence teachers' instructional reading practices in multiple ways. For example, they frequently meet with teachers to discuss literacy goals for struggling readers, share resources, lead professional learning experiences, collaborate with individual teachers, model new practices, administer assessments, and analyze data (Bean & Kern, 2018). However, coaching can only improve instructional practices when teachers are receptive to it (Atteberry & Bryk, 2011; Kretlow & Bartholomew, 2010). Thus, teachers who believe change is unnecessary and want to maintain their current level of autonomy often resist coaching efforts (Zimmerman, 2006).

Mentors. Teacher mentors can help novice teachers improve their instructional practices when school leaders support their efforts (Wiens et al., 2019). In traditional mentoring, mentors provide mentees with emotional support, resources, advice, and problem-solving assistance (Stanulis & Bell, 2017). In educative mentoring, mentors assist with complex issues, plan development and instruction, and connect theory to practice (Norman & Feiman-Nemser, 2005). Mentoring can result in better use of classroom time and higher confidence levels (Castanheira, 2016). However, some studies (Glazerman et al., 2010) have shown that mentoring does not affect instructional practice or student achievement.

School Leadership and Support

School leadership is second only to teaching in terms of impact on student learning (Leithwood et al., 2004). According to Choi et al. (2019), school leaders who understand students' learning needs are the key to the systemic transformation of educational practices for students with disabilities. As instructional leaders, principals may be unable to effectively

support struggling learners or their teachers because of knowledge gaps related to literacy content and pedagogy (Fletcher et al., 2014).

Effective instructional leaders promote teacher learning (Allensworth et al., 2009; Sperandio & Kong, 2018) by providing teachers with professional development (Opfer, 2016), high-quality resources, opportunities to engage in peer observations (Tschannen-Moran & Woolfolk Hoy, 2007), and control over their classrooms (Tschannen-Moran & Woolfolk Hoy, 2007). Furthermore, strong instructional leaders provide teachers with adequate planning time (Billingsley & Bettini, 2017), knowing that a lack of planning time contributes to emotional exhaustion (Bettini et al., 2020) and lower quality instruction (Wong et al., 2017). Despite these research findings, approximately 79% of special education teachers report having inadequate planning time (Fowler et al., 2019).

Professional Development. Well-trained elementary teachers provide intensive reading interventions, collect and analyze data, and adapt instruction to address students' changing needs (Lemons et al., 2016). Unsurprisingly, struggling readers make more substantial reading gains when assigned to teachers trained to deliver word-reading instruction (Brownell et al., 2017). Wijekumar et al. (2019) examined the professional development (PD) offerings compiled by district leaders from several school systems. They found that 60% of PD addressed state-level standards or changes in high-stakes assessments, 25% targeted special education services, and 15% involved textbook adoption or publisher training. Consequently, none of the PD options covered evidence-based reading practices. These findings may not be unusual, as PD programs are generally large and rely on coaches or small group facilitators with little knowledge of instruction or teacher training hired from outside the school district (Kennedy, 2016).

Elementary teachers benefit from PD that is hands-on and explicitly instructs teachers on how to apply foundational literacy knowledge in the classroom (Hindman et al., 2020) because studies (Englert et al., 2020; Peltier et al., 2020) have shown that this form of PD significantly increases teachers' content knowledge. Also, expert coaching following training can help teachers integrate their knowledge into classroom instruction (Ehri & Flugman, 2018; McMahan et al., 2019). Brownell et al. (2017) reported that teachers who received additional support following training (e.g., classroom observations) improved their instruction and spent more time engaged in evidence-based phonics instruction than teachers who received no additional support.

Curricular and Instructional Resources. Curricular resources can shape teachers' instructional practices (Jackson & Makarin, 2018), especially when special education teachers need structured curricula to meet their students' needs. When special education teachers do not have strong curricula, they are more inclined to utilize an ad hoc array of less relevant resources of lower quality (Siuty et al., 2018). Unfortunately, many teachers have no control over the curriculum and instructional practices they must use (Crowley, 2017) and may find that they conflict with their beliefs about effective instruction (Costigan, 2018).

In some districts, publishers of commercial reading programs control teacher education and require all early reading teachers to use the same curriculum and instructional methods (Wijekumar et al., 2019). In contrast, other districts provide their teachers with few instructional resources or oversight, leaving them to their own devices to locate curricula and materials they hope work for their students. Recent studies (Dewitz & Graves, 2021) revealed that 55% of teachers reported using teacher-made materials from the website Teachers Pay Teachers (TPT) as their primary source of reading curricula. Elementary teachers who want to use evidence-

based reading programs may have difficulty locating them because many publishing companies and authors claim their products are sequential, explicit, and research-based when they are not (Moats, 2019a).

Summary

Chapter Two discussed how Bandura's (1986) model of triadic reciprocal causation served as the framework through which internal and external influences were identified and examined relative to elementary teachers' experiences teaching reading to students with dyslexia. This study expanded Bandura's model (1977, 1986) because it examined the reciprocal relationships between teachers' personal, behavioral, and environmental factors related to instructional reading practices. Instead of examining reading instruction, previous studies used the model to investigate topics like self-efficacy (Pajares & Usher, 2008), behavior (Runions & Bak, 2015), math achievement (Tosto et al., 2016), and information and communications technology (Sundqvist & Eklund, 2021).

Based on the above literature, teachers exhibit knowledge and action gaps related to basic language constructs and dyslexia because of teacher preparation (Sayeski, 2019), philosophical debates over the best way to teach reading (Castles et al., 2018), and occupational stress (Aloe et al., 2014; Bettini et al., 2018; Bettini et al., 2020; Jennings & Greenberg, 2009). Other contributing factors include instructional leadership (Fletcher et al., 2014), access to high-quality resources (Crowley, 2017), professional development (Wijekumar et al., 2019), and teacher self-efficacy (Wong et al., 2017). The findings from this study may inform elementary teachers' instructional reading practices when teaching struggling readers with word-level deficits since they often use unproven literacy practices that limit student learning (Siegel & Mazabel, 2014). The findings from this study may also narrow the gap in the literature related to why teachers

make specific instructional decisions when teaching students with dyslexia how to read (Worthy et al., 2018) because there is currently a paucity of qualitative studies examining this topic (Gonzalez, 2021; Worthy et al., 2018).

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenology was to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. The problem was that many teachers of young readers exhibit knowledge and action gaps related to basic language constructs (Pittman et al., 2020) and dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020) that influence their instructional reading practices (Al Otaiba et al., 2018; Suarez et al., 2018). Conducting a phenomenological study may increase understanding of how internal influences (beliefs, occupational stress, professional knowledge) and external influences (social-emotional climate, curricular materials) shaped teachers' experiences when teaching students with dyslexia how to read (Bandura, 1986).

Chapter Three describes the study's phenomenological design, central and sub-questions, setting, participants, and the researcher's positionality. The chapter also discusses the study's interpretive framework, including the philosophical, ontological, epistemological, and axiological assumptions and the researcher's role. In addition, a procedural section describes obtaining permissions, the recruitment plan, data collection methods, analysis plans, and data synthesis. Later, a discussion of trustworthiness revealed how I achieved credibility, transferability, dependability, and confirmability when conducting the study. The chapter concludes with a discussion related to ethical considerations.

Research Design

Qualitative research seeks a holistic understanding of real-world social problems or phenomena that cannot easily be studied using quantitative approaches (Creswell & Poth, 2018; Moustakas, 1994). Qualitative researchers view experience and behavior as inseparable

(Moustakas, 1994) and therefore focus their attention on the richness of natural settings where individuals experience the problem (Creswell & Poth, 2018) to gain insight into their social behavior (Yin, 2016). Whereas quantitative research deals with a small set of variables that often fail to take into consideration contextual information, qualitative researchers collect, integrate, analyze, and present data from multiple sources such as interviews, observations, participant journaling, and document analysis (Creswell & Poth, 2018; Moustakas, 1994).

Qualitative research was appropriate for this study because it sought to understand elementary teachers' experiences teaching students with dyslexia how to read in their natural settings (Creswell & Poth, 2018). In addition, I acted as the key instrument by personally collecting data from individual interviews, document analysis, and participant journaling (Creswell & Poth, 2018). Thus, becoming immersed in the data helped me understand the phenomena by producing thick and rich descriptions of teachers' experiences and formulating accurate interpretations through triangulation (Bloomberg & Volpe, 2018).

Phenomenology began as a philosophical movement by German mathematician Edmund Husserl (1931). Husserl believed that the starting point for knowledge was the self's experience of phenomena that occur in consciousness when attending to an object and that knowledge based on intuition and essence preceded empirical knowledge (Husserl, 1931). Husserl was concerned that positivistic philosophical concepts drove most scientific disciplines, including the study of human phenomena (Vagle, 2018). He rejected the idea of removing human influence from studies. Husserl's (1931) ideas contrasted sharply with the natural attitude regarding perception, judgment, experience, and thought (Moustakas, 1994). Furthermore, he stood alone in his efforts to develop a philosophic system rooted in subjective openness because his views were considered radical at the time (Moustakas, 1994).

Phenomenology was an appropriate design for this study because it allowed me to understand everyday phenomena more deeply. It also allowed me to examine the shared meaning of a group of elementary teachers related to their lived experiences teaching reading to a specific student population. I used Moustakas' (1994) systematic data collection and analysis procedures to discover and report the essence of the teachers' experiences.

This phenomenological study used a transcendental design type because of its focus on elementary teachers' descriptions of their experiences teaching reading as they appear in their consciousness. I systematically engaged in the Epoché process by setting aside my prejudgments, beliefs, knowledge, and experiences of the phenomenon to be completely open and receptive to what the participants described as their experience of the phenomenon (Moustakas, 1994). I also used thick and rich descriptions to explain the teachers' shared meanings and identify the essence of their lived experiences (Moustakas, 1994).

Research Questions

As mentioned in Chapter One, the following central and sub-questions aligned with the study's problem and purpose. Alignment between the study's research questions, problem, and purpose explained the need for this phenomenological study. Bandura's (1977, 1986) model of triadic reciprocal causation framed the research questions, data collection and analysis processes, and the final discussion.

Central Research Question

What are the lived experiences of elementary teachers who teach students with dyslexia how to read?

Sub-Question 1

What internal influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Sub-Question 2

What external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Sub-Question 3

How do internal and external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Setting and Participants

Qualitative researchers collect data from sites where participants experience a phenomenon. In the field, they can talk directly to individuals and observe them in their natural environment (Creswell & Poth, 2018). As a result of the COVID pandemic and public health safety concerns, I was unable to go into the field to speak with and observe participants. Instead, all communications and data collection occurred over a digital platform or telephone.

Site

The internet is a contemporary recruitment tool researchers can utilize because it offers instant communication from a large geographical area (Allsworth, 2015). Since social media emerged on the internet, qualitative researchers have been provided a window into individuals' personal lives (McKenna et al., 2017). Facebook is the most widely used social networking site in the United States, with 70% of users logging in at least once a day and 45% doing so several times throughout the day (Duggan et al., 2015). Social media provides a means for qualitative researchers to recruit diverse groups of participants (Sloan & Quan-Haase, 2017).

I purposely selected participants from public and private teacher elementary Facebook groups across the United States. Recruiting participants from such a vast arena helped show whether participants experienced the phenomenon similarly. Participants were recruited from the following groups: *Dyslexia Support for Elementary Teachers*, *Dyslexia Help for Elementary Teachers*, *Second-Grade Teachers Support Group*, and *Succeeding in Second-Grade Teachers Group*. Facebook groups received pseudonyms to protect their identity, and participants received them once they provided written consent to join the study.

Dyslexia Support for Elementary Teachers is a private Facebook group targeting professional educators. The current membership of this group consists of approximately 1,000 classroom and special education teachers who strive to help their students develop strong reading skills. Created six years ago, group members must demonstrate kindness and respect others' privacy. In contrast, *Dyslexia Help for Elementary Teachers* is a public Facebook group that encourages members to reach out to one another for support. The group was created over five years ago and currently serves a membership of over 3,000 teachers. According to the group's rules, all members must demonstrate kindness and may under no condition use hate speech or bully others.

Second-Grade Teachers Support Group is a private Facebook group comprising over 44,000-second grade teachers. Created five years ago, group members posted almost 2,000 messages in the last month. The group's purpose is to provide a forum where teachers can ask questions and discuss all things related to teaching and education. According to the group's rules, confidentiality is a top priority. No student or parent information should be made public and sending private messages or collecting email addresses for personal gain is prohibited. Members

must also stick to educationally relevant topics related to second grade and treat others with kindness.

Succeeding in Second-Grade Teachers Group is a private Facebook group of almost 17,000 second grade teachers. The group's purpose is to provide teachers with help through idea sharing and encouragement. The group also provides members with a safe place to ask questions, collaborate, and share resources. Created four years ago, the group members posted roughly 150 messages in the last month. According to the group's rules, engaging in self-promotion and posting copyrighted materials is prohibited. Instead, members are encouraged to share resources and show kindness to one another.

Participants

I used the social media platform Facebook to recruit teachers employed at public elementary schools from across the United States. Eligible participants had to meet three criteria. First, they must have had at least one year of full-time teaching experience at the elementary level. Second, participants must have been employed full-time as licensed elementary teachers in one of the following three positions: public K-4 classroom teacher, special education teacher, or reading specialist. These positions were selected because teachers who hold them are more likely to teach basic reading skills. Finally, participants must have spent at least one 25-minute period a day teaching one or more students with dyslexia how to read.

Based on current statistics from the Institute of Education Sciences (IES, 2022), this study's participants were likely to be white (80.9 %), female (89.5 %), and range in age from 30-49. In addition, most participants were likely to have 15 years (46.4 %) of teaching experience and hold a master's degree (48.8 %). This study did not require participants to be of a particular

gender, race, or age as long as they had one full year of teaching experience at the elementary level. Nor were participants required to have earned more than a bachelor's degree.

Researcher Positionality

My personal beliefs and professional experiences served as the driving force behind my desire to conduct this transcendental phenomenology. As a former special educator who previously taught students with dyslexia how to read, my motivation for conducting this study came from observing teachers' frustration working with this population. Teachers either did not know how to teach reading to students with dyslexia because of knowledge gaps or could not use their reading knowledge to deliver evidence-based instruction because of external barriers. I also wanted to understand teachers' experiences working with this population so that I could present the findings to educators, administrators, parents, and researchers. Findings from this study may inform their instructional reading practices, leadership, parenting practices, and future research. The following section addresses the interpretive framework, my philosophical assumptions, and my role within the study's framework.

Interpretive Framework

The interpretive framework provides the lens through which philosophical assumptions can be applied when conducting a study (Creswell & Poth, 2018). When conducting research, individuals utilizing a scientific approach maintain a belief system grounded in post-positivism. Those who focus on research outcomes instead of antecedent conditions approach research from a pragmatic perspective. Constructivist researchers believe individuals construct subjective meanings about objects and things based on social interactions with others and from historical and cultural norms (Creswell & Poth, 2018). Constructivist researchers also realize that their background influences their interpretation of the data.

I viewed this study through a social constructivist lens (Creswell & Poth, 2018). Therefore, I asked participants open-ended questions to construct meanings of the phenomenon from their perceptions of situations created from interactions with others (e.g., principals, teachers, students) and historical and cultural norms (Creswell & Poth, 2018). I also positioned myself in the research to account for my previous teaching experiences and biases (Creswell & Poth, 2018).

Philosophical Assumptions

Philosophy refers to the use of abstract ideas and beliefs that inform one's research, and philosophical assumptions are stances taken by the researcher that provide direction for the study (Creswell & Poth, 2018). According to Creswell and Poth (2018), philosophical assumptions include deeply ingrained views about the kinds of problems that must be studied, what research questions to ask, and how to gather data. Thus, an individual's philosophical assumptions include their view of reality (ontology), how they know that reality (epistemology), the value-stance taken by them (axiology), and the procedures they use (methodology). Below, I discuss my positionality related to three philosophical assumptions: ontological, epistemological, and axiological. Sharing my stance on each assumption reveals the lens through which I viewed the world and this study.

Ontological Assumption

Ontological assumptions are individuals' beliefs about the nature of reality and its characteristics (Creswell & Poth, 2018). Qualitative researchers support the idea that multiple realities exist and intentionally study individuals so that they can report those realities. My ontological assumption is that reality can be viewed from multiple lenses. Therefore, I reported teachers' perspectives using multiple forms of evidence, used teachers' exact words, and

presented different perspectives (Creswell & Poth, 2018).

Epistemological Assumption

The epistemological assumption speaks to what knowledge is, how knowledge claims are rationalized, and the relationship between the researcher and the topic of research (Creswell & Poth, 2018). Qualitative research is subjective and based on the lived experiences of any number of people, which may or may not include experts. Thus, qualitative research tries to minimize the distance or objective separateness (Lincoln & Guba, 1985) between the researcher and participants. For this reason, I spent time collecting evidence from teachers to help me understand their views. As stated before, I took a social constructivist worldview where I sought to understand the world in which the teachers live and work by engaging them in deep discussions stemming from open-ended questions (Creswell & Poth, 2018).

Axiological Assumption

In qualitative research, the researcher intentionally makes their values and biases known to the reader (Moustakas, 1994). Thus, the axiological assumption describes the degree to which the researcher's values and biases are made clear in the study. The researcher brackets or identifies their positionality relative to the context and setting of the research. Using an axiological assumption, I acknowledged that the participants and I possess values and biases that shape the narrative (Creswell & Poth, 2018). As a former special education teacher, I put aside my biases and openly shared my experiences and views and those of the teachers.

Researcher's Role

My role as the human instrument (Moustakas, 1994) in this transcendental phenomenology was to collect data from teachers, analyze the data, interpret the data, and describe the teachers' shared experience of the phenomenon. As researcher, I did not hold a

position of power or authority over the participants, as they joined the study voluntarily and without coercion or pressure from me (Creswell & Poth, 2018).

As a former special education teacher who spent years teaching reading to students with dyslexia and was familiar with reading and dyslexia research, I possessed biases related to the instructional reading practices used with students with dyslexia. Specifically, I believed that phonics (NRP, 2000) and multilinguistic (IDA, 2018) reading approaches were the most appropriate way to teach students with dyslexia how to read. Because I had personal biases related to reading instruction, it was essential for me to put them aside each day through *Epoché* and bracketing (Moustakas, 1994)

Procedures

Before conducting this phenomenological study, I sought permission from public and private Facebook groups to use their membership to recruit teachers. Targeted group owners and administrators received an informal permission request through Facebook messenger. Thus, permissions from Facebook owners and administrators were compiled, recorded, and copied in Appendix E. Private Facebook group owners and administrators provided written consent (see Appendix F) before I was able to contact their membership.

Once I obtained permission to recruit participants from public and private Facebook groups, I sought permission to conduct the study from Liberty University's Institutional Review Board (IRB). After Liberty's IRB granted me permission to conduct the study, the approval form was filed (see Appendix A). This section describes the procedures I followed when seeking permissions and the plan I followed when soliciting participants. This section also contains the data collection and analysis plans for each data source and describes how the study achieved triangulation.

Permissions

Before conducting the study, I contacted all public and private Facebook group owners and administrators using the platform's messaging system to request permission to post a recruitment notice on their site (see Appendix C). A copy of one public Facebook group's message granting me permission to use their membership was filed in Appendix G. Then, I emailed interested private Facebook group owners and administrators a permission request form containing detailed information about the study and a permission letter requiring their written signature (Creswell & Poth, 2018). All signed permission letters were filed in Appendix F. Afterward, I sought permission to conduct the study from Liberty University's IRB (Creswell & Poth, 2018). Because this study utilized human participants, the IRB was required to review the research proposal for ethical and safety concerns. After IRB approval was secured, the approval letter was copied and filed (see Appendix A).

Recruitment Plan

A recruitment notice was posted on public and private Facebook groups' websites so members could learn about the study (see Appendix C). The recruitment post described the study's purpose, eligibility criteria, the required tasks, and the compensation participants would receive. The notice also informed members that they would be required to provide formal written consent to participate in the study. After a few weeks of reposting the recruitment notice on Facebook websites and only securing two participants, I contacted former colleagues and asked them to share the recruitment notice with interested teachers for whom they believed met the study criteria.

Teachers who were interested in participating in the study and believed they met the specified criteria outlined in the notice mentioned above were able to click a link that took them

to a brief eligibility screener (see Appendix J). The screener contained ten questions, including one requesting an email address for future communications. After completing the screener, teachers were prompted to submit it electronically. During the recruitment phase, I was contacted by two fourth-grade classroom teachers requesting to be part of the study. However, they were prohibited from doing so because eligibility criteria only allowed classroom teachers in grades K-3 to participate. With the need to recruit participants verbally and through email and requests from fourth-grade classroom teachers to join the study, I sought permission from the IRB to modify my study recruitment methods and eligibility criteria. The IRB granted me permission to make the changes. The approval letter can be found in Appendix B and the verbal recruitment form can be found in Appendix D.

After each eligible participant was identified, I emailed them an informed consent form (see Appendix H) and a link to a Google form labeled *Demographic Questionnaire* (see Appendix K). Only one teacher did not qualify for the study, and they were notified of this through email. After the questionnaire and consent forms were completed and returned, I emailed participants a log for journaling (see Appendix M) and instructions regarding how and where to return it. I emailed them information pertaining to document submission and requested preferable dates and times for a future interview.

Data Collection Plan

Data were collected using three methods: one-on-one, semi-structured interviews, document analysis, and participant journaling. Interviews were audio recorded, and I took notes using a protocol form. I stored all digital data in a password-protected file on a computer that was locked away when not in use.

Individual Interview Data Collection Approach

According to Moustakas (1994), the phenomenological interview is an informal and interactive process where open-ended comments and questions may recreate participants' experiences of a phenomenon. Furthermore, interviews help researchers understand the world from participants' points of view, discover the meanings of their experiences, and uncover their lived world (Creswell & Poth, 2018). The researcher must create a comfortable environment where participants can respond honestly and comprehensively to questions. Therefore, one-on-one interviews began with a social conversation between me and the participant to create a relaxed and trusting atmosphere (Moustakas, 1994).

The researcher is also responsible for creating broad interview questions that produce rich, substantive descriptions of participants' experiences of the phenomenon. According to Creswell and Poth (2018), the more open-ended the questioning is, the more likely a researcher will listen carefully to what the participant says. To ensure the interview questions were appropriate for this study, two Liberty University professors with public-school teaching experience reviewed them and provided feedback before I applied to Liberty's IRB.

Interviews took place remotely using Microsoft Teams and over the telephone. For remote interviews, I emailed each participant an invitation containing a link to join a meeting at a mutually agreed-upon time. Interviews were audio-recorded by Microsoft Teams' and manually using a hand-held recording device. For telephone interviews, I called participants at a number provided by them at a mutually agreed-upon time. Furthermore, I used an interview guide (see Appendix L) to take notes and recorded the calls using a laptop voice recorder and a hand-held audio recording device.

Individual Interview Questions

1. Please describe your educational background and your previous and current teaching positions. (Ice Breaker; SQ2)
2. Please describe your students with dyslexia. (SQ1)
3. Please describe how your experiences teaching students with dyslexia how to read differ from your experiences teaching typical readers. (SQ1 and SQ2)
4. Please walk me through a typical reading lesson with students with dyslexia. (SQ1 and SQ2)
5. What are your experiences with "typical literacy practices" inside and outside your classroom? (SQ2)
6. Describe your experiences teaching students with dyslexia how to "crack the code." (SQ2)
7. Tell me about your experiences having to use a particular reading program, method, or approach that conflicted with your professional training or personal beliefs about what struggling readers need to succeed. (SQ1 and SQ3)
8. Tell me about the experiences that most shaped your beliefs about what students with dyslexia need in terms of reading instruction to be successful. (SQ1 and SQ3)
9. Please describe your teacher preparation program and how your experiences prepared you to teach students with dyslexia. (SQ2 and SQ3)
10. What professional development experiences prepared you to teach reading to students with dyslexia? (SQ2 and SQ3)
11. Please describe how your experiences teaching reading to students with dyslexia have changed your knowledge of basic literacy constructs and dyslexia. (SQ1)

12. What have your experiences teaching students with dyslexia how to read convinced you are the most appropriate and effective instructional methods for this population? (SQ2 and SQ3)
13. How has occupational stress shaped your planning and delivery of reading instruction for students with dyslexia? (SQ1 and SQ2)
14. Please tell me about how your experiences of barriers and challenges have prevented you from providing effective reading instruction to students with dyslexia. (SQ1 and SQ2)
15. Please paint a picture of your experiences teaching reading to students with dyslexia in both pull-out and inclusive settings. (SQ2)
16. Recount how your experiences in the classroom environment have shaped your reading instruction for students with dyslexia. (SQ2 and SQ3)
17. Describe how influences from outside the classroom have shaped your experiences teaching students with dyslexia how to read. (SQ2 and SQ3)
18. Tell me about the social-emotional climate you have established within your classroom, including how it has shaped your experiences teaching students with dyslexia how to read. (SQ2)
19. Please tell me about the pictures of the documents you submitted for analysis. (SQ1 and SQ2)
20. What do the pictures reveal about your instructional reading practices when teaching students with dyslexia how to read? (SQ1 and SQ2)
21. What are five words that sum up your experiences teaching reading to students with dyslexia. (SQ1 and SQ2)

22. What else would you like to share about your experiences teaching students with dyslexia how to read? (SQ1, SQ2, and SQ3)

Question one is an icebreaker that created a relaxed and trusting atmosphere (Moustakas, 1994) because it got teachers talking about their previous educational and teaching experiences. It also addressed sub-question two because it asked participants to describe their educational background (Meeks et al., 2020; Moats, 2020). Question two addressed sub-question one, as it sought background information about students the teachers believed had dyslexia (external influence; Betts et al., 2019). The answers clarified whether this was true. Question three addressed sub-question one because it provided insight into how the internal influence of professional knowledge (Englert et al., 2020) shaped teachers' reading instruction. Questions four, five, and six addressed sub-question two by exploring how typical reading practices (Ciullo et al., 2019) shaped teachers' experiences. Questions seven and eight addressed sub-question one because they examined how the internal influence of beliefs (Wang et al., 2018) shaped teachers' experiences teaching reading.

Questions 9-10 addressed sub-question two because they examined how the external influences of professional education and training (Peltier et al., 2020) shaped teachers' experiences teaching reading. Questions 11-12 addressed sub-question one because they explored how the internal influences of teacher knowledge and beliefs (Gambrell, 2015; Gentrup et al., 2020) shaped teachers' instruction. Questions 13-14 addressed sub-questions one and two because they examined how the internal influence of occupational stress and the general influence of barriers and challenges (Jennings & Greenberg, 2009) shaped teachers' experiences teaching students with dyslexia how to read. Questions 15-17 addressed sub-question two because they explored how teaching assignments and location (external influences; Pickl et al.,

2016) shaped the teachers' experiences. Question 18 addressed sub-question two because it examined how the external influence of social-emotional climate (Rubie-Davies & Rosenthal, 2016) shaped teachers' experiences teaching students with dyslexia how to read.

Questions 19 and 20 addressed the documents and artifacts submitted for analysis (Merriam & Tisdell, 2016). Participants were provided a list of documents and artifacts to choose from when submitting photographs. Their explanation of why particular documents were selected indicated what they valued (Bowen, 2009; sub-question one) and regularly used (Jackson & Makarin, 2018; sub-question two). Thus, asking participants to describe how documents represented their instructional reading practices, personal beliefs, philosophies, knowledge (Arrow et al., 2019; sub-question one), and approaches (Foorman et al., 2016; Seidenberg, 2017; sub-question two) revealed important information about the phenomenon.

Question 21 addressed sub-questions one and two because the participants' five-word summaries included internal or external influences that might have shaped their experiences teaching reading (Bandura, 1986). Finally, Question 22 ended the interview by allowing participants to share anything else they felt was relevant to the discussion. Their responses addressed both sub-questions one and two.

Individual Interview Data Analysis Plan

The individual interview data analysis plan followed the steps outlined by Moustakas (1994). Before engaging in the data analysis process, I followed Moustakas' (1994) recommendation of Epoché, where I set aside my judgments and biases to view the phenomenon with fresh eyes. Once I put aside my preconceived ideas of the phenomenon, I reviewed the transcripts created by Microsoft Teams' transcription software for accuracy or manually transcribed interview recordings verbatim and emailed the transcripts to participants so that they

could check them for accuracy and clarity (Bloomberg & Volpe, 2018; Creswell & Poth, 2018). Participants were given five days to complete the member-checking process (Lincoln & Guba, 1985).

Next, I made the recommended changes to participants' interview transcripts and reviewed them a second and third time for accuracy and understanding. Reviewing the transcripts multiple times allowed me to become immersed in the details and gain a sense of the interview as a whole before breaking it into parts (Creswell & Poth, 2018). During the review process, I highlighted significant statements, sentences, and quotations and wrote notes or memos in the margins when appropriate (Moustakas, 1994). Memos are short phrases, ideas, or key concepts that occur to the researcher and give credibility to the data analysis process (Janesick, 2015).

I also engaged in horizontalization (Moustakas, 1994). During horizontalization, I assigned equal value to participants' statements (horizons) and removed irrelevant and repetitive ones. I also utilized highlighters to code statements and group them into meaning units, categories, or themes (Creswell & Poth, 2018). From the themes, textural descriptions of the participants' experiences emerged (Creswell & Poth, 2018). Textural descriptions included participants' feelings and verbatim examples (Moustakas, 1994).

After textural descriptions had been written, I used them to formulate structural descriptions of the teachers' experiences. Structural descriptions explained how the experience happened and allowed me to reflect on the setting and context in which the participants experienced the phenomenon (Creswell & Poth, 2018). Next, I integrated the textures and structures into a composite textural-structural description of the teachers' experience of the phenomenon (Moustakas, 1994). According to Creswell and Poth (2018), this description

represents the essence of the participants' experience and the culminating aspect of a phenomenological study. Finally, an audit trail documented the data analysis procedures outlined in this section for replication purposes.

Document Analysis Collection Approach

People frequently leave evidence of their behavior in the documents they utilize (Wildemuth, 2017). A document refers to a wide range of visual material (e.g., photographs, video, film; Merriam & Tisdell, 2016) that has not been modified or changed by the researcher (Bowen, 2009). Documentary evidence is written, oral, or visual (photographic) and includes cultural artifacts (Hodder, 1994). According to Bowen (2009), documents provide the researcher with data regarding the context within which participants operate and can be used to identify conditions that influence the study phenomena. Furthermore, documents show the context of data collected during interviews and can be used to verify findings or corroborate evidence from other sources. Because documents are also artifacts containing an intentional message (Wildemuth, 2017), participants submitted them for analysis.

Document analysis is a systematic procedure involving finding, selecting, appraising, and synthesizing data in printed and electronic documents (Bowen, 2009). It is often used with other research methods to triangulate, supplement, and corroborate findings across different data sets. Document analysis is an unobtrusive data collection method that offers a more accurate representation of a phenomenon than data collected through interviews and questionnaires (Hodder, 1994). It also allows researchers to access data that would typically require significant time and effort to collect (Merriam & Tisdell, 2016).

Document analysis was the second data collection method utilized in this study (Creswell & Poth, 2018). I asked participants to submit photographs of documents (including artifacts) for

analysis. Documentary evidence included images of the participants' instructional reading space, curricular and instructional materials, equipment, and other documents. The documents yielded information about internal and external influences that shaped teachers' experiences teaching students with dyslexia how to read (Bandura, 1986).

Photographs of documents were analyzed individually, but they were also used as a memory prompt for participants when asked to describe their use and importance when teaching students with dyslexia how to read. Images often hold layers of meaning, so having participants discuss the photographed objects revealed the value they had attached to them (Harper, 2002). The goal was to use the photographs to elicit participants' understanding of the photo and its place in their lifeworld (Radley, 2011).

Instructional Reading Space

Analysis of documents related to participants' instructional reading space addressed sub-question two because the images revealed information about the socioemotional climate within which participants work. For example, items like motivational posters, colorful rugs and mats, bookshelves full of resources, book libraries, high-quality resources, and technology indicated something different than an instructional space with scarce resources in a hallway. I used the documents to elicit information during interviews and to provide insights about information that answered sub-questions one and three.

Lesson Plans

Analysis of participants' lesson plans addressed sub-question two because the images revealed information about how teachers spent their reading block of time, the instructional methods utilized (e.g., meaning-based or phonics), whether the instruction was differentiated, explicit, or systematic, and which literacy elements received more attention. Lesson plans also

revealed participants' knowledge of basic language constructs, which addressed sub-question one. During interviews, I used lesson plans to elicit more specific information about how internal and external influences shaped participants' reading instruction, which addressed sub-question three.

Daily Schedules

Analysis of participants' daily schedules addressed sub-question two. Thus, schedules revealed information about the amount of time teachers dedicated to each reading group, their workload, teaching assignments, and shared responsibilities (e.g., co-teacher). Schedules were used during interviews to elicit more information about participants' beliefs and feelings regarding their classroom schedules, and the information garnered addressed sub-questions one and three.

Curricular Resources

Analysis of participants' curricular resources addressed sub-question two because images revealed teachers' preferred reading approaches (e.g., meaning-based, phonics, multi-linguistic) and programs (e.g., Reading Recovery). Curricular resources indicated how teachers prioritize their resources. Analyzing curricular resources such as teacher manuals, software programs, workbooks, and spelling and word lists addressed sub-question one because it yielded information about participants' knowledge of basic language constructs.

Instructional Materials

Analysis of participants' instructional reading materials addressed sub-question two because images of items such as reading games, completed student work, manipulatives, books, handouts, flashcards, and equipment showed the use of evidence-based instructional practices. Photographs of instructional materials elicited additional information about participants' beliefs,

expectations, motivations, and goals regarding instruction and how those internal influences affected their instruction and environment. This information addressed sub-questions one and three.

Other Documents

Other forms of documentation submitted by participants were analyzed to answer sub-question two. For instance, meeting minutes and agendas (team, leadership, faculty, department) revealed information about district or school-wide reading initiatives and training. Additionally, handouts from professional development training, mentors, and literacy professionals produced information about required and expected instructional reading practices and adopted reading programs. Finally, screenshots of district reading webpages showed initiatives, mission statements, philosophies, values, and required practices and programs. I used all relevant documents to elicit information about internal and external influences and how they shaped teachers' experiences teaching students with dyslexia how to read. This information addressed sub-questions one and three.

Document Analysis Data Analysis Plan

According to Neuman (2006), researchers who utilize document analysis must first clearly identify the phenomenon being examined and then link it to the phenomenon and the documents needed to study it. This study integrated data collected from document analysis, individual interviews, and participant journaling to yield valid conclusions (Wildemuth, 2017). The document analysis data analysis plan followed the methods outlined by Moustakas (1994).

After participants submitted documents for analysis, I engaged in Epoché by setting aside my assumptions and beliefs regarding the images placed before me and examined each document with a fresh perspective (Moustakas, 1994). To facilitate the process, I wrote daily in a reflective

journal to record my thoughts and ideas. Next, I scrutinized every document and assigned equal value to all statements made through the process of horizontalization. Thus, all irrelevant and repetitive statements were removed at that point, leaving behind the horizons (Moustakas, 1994). Recorded horizons were described in rich detail (Byrne et al., 2022) so that examples became general categories (Fairhurst & Putnam, 2019). In addition, overlapping codes were merged or divided to reflect emerging patterns.

After the documents were detailed, themes emerged (Byrne et al., 2022). Through thematic analysis, patterns of meaning in the data were identified, interpreted, and extracted (Connolly, 2003; Staller, 2015), creating textural descriptions of teachers' experiences with the phenomenon. Moreover, I integrated themes into a universal textual description of the participants' experience, created structural descriptions of the teachers' experiences, and combined them to form one unified statement of the essence of the lived experience (Moustakas, 1994).

Journal Prompts Data Collection Approach

Participant journaling was the third data collection method utilized during this study. According to van Manen (2016), keeping a journal may help participants reflect on essential aspects of their past and present life. Participant journaling allowed participants to express themselves comfortably and free from outside pressure. Furthermore, journaling allowed them a way to record their experiences of the phenomenon after engaging in reflective thinking. I emailed each participant a form that served as a log for their journaling. For five consecutive days, participants responded to three prompts (see Appendix M) that asked them to describe that day's experiences teaching reading. Once the week was over, and the teachers had completed the

task, they emailed the journals back to me (see Appendix O). The journals were stored in a password-protected file on a laptop computer.

Journal Prompts:

1. Please describe any personal influences (e.g., beliefs, attitudes, mindsets, goals, feelings, and knowledge) that shaped today's experiences teaching students with dyslexia how to read. (SQ1)
2. Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. (SQ2)
3. What else would you like to share about your experiences teaching students with dyslexia how to read? (SQ1 and SQ2)

Prompt one is an open-ended question that allowed participants to reflect upon how internal influences shaped their instructional experiences. This prompt related to sub-question one: "What internal influences shape elementary teachers' experiences teaching students with dyslexia how to read?" This prompt promoted self-reflection, which may have shaped teachers' beliefs and attitudes toward their students and either increased or decreased their self-efficacy and desire to obtain additional knowledge that could potentially improve their reading instruction (Bandura, 1986).

Prompt two is an open-ended question that allowed participants to reflect on how external influences shaped their instructional experiences. This prompt related to sub-question two: "What external influences shape elementary teachers' experiences teaching students with dyslexia how to read?" This question may have yielded important information about the teaching environment, inhibiting, or encouraging teachers' professional growth (Bandura, 1986).

Finally, prompt three was an open-ended question that allowed participants to discuss other experiences teaching reading to students with dyslexia. Allowing teachers who teach students with dyslexia how to read to share their experiences may have increased their self-confidence when addressing their students' literacy and language needs (Binks-Cantrell et al., 2012).

Journal Prompts Data Analysis Plan

The journal prompts data analysis plan followed the methods outlined by Moustakas (1994). After participants submitted their logs for analysis, I engaged in Epoché by setting aside my assumptions and beliefs regarding teachers' experiences. I also maintained a reflexive journal to record my thoughts and ideas to facilitate the process. When examining teachers' statements, I assigned equal value to each through horizontalization. After removing irrelevant and repetitive statements, only the horizons were left (Moustakas, 1994). I then recorded the horizons, grouped them into themes, and integrated them into a universal textual description of the teacher's experience (Moustakas, 1994). Afterward, I created structural descriptions of the teachers' experiences by combining textures and structures into one unified statement of the essence of the lived experience (Moustakas, 1994).

Data Synthesis

I utilized Moustakas' (1994) data analysis and synthesis procedures for this study. First, I described my experiences teaching beginning reading to students with dyslexia. Describing my experiences enabled me to practice Epoché by setting aside my personal experiences, beliefs, and biases to focus on the participants' experiences (Creswell & Poth, 2018; Moustakas, 1994).

Next, I read the participants' interview transcripts, documents, and journal entries multiple times (Moustakas, 1994). This review allowed me to become familiar with the entire

database (Creswell & Poth, 2018). As I read and reread the transcripts, I made notes in the margins. Writing notes aided my coding, reflection, summarization, and creation of an audit trail (Creswell & Poth, 2018). I also scoured the data for significant statements about how the participants experienced the phenomenon and wrote a detailed description of the participants, their instructional reading space, and their instructional reading practices.

Using the principle of horizontalization, I assigned equal value to each statement (Moustakas, 1994). To determine the invariant constituents, I tested each expression using two criteria: Does the expression contain a moment of the experience that is necessary and understandable? Is it possible to abstract and label the expression? When I answered yes to both questions, the statement was determined to be a horizon of the experience (Moustakas, 1994). I also eliminated all expressions that did not meet the requirements, overlapped, or repeated and continued making notes to capture emerging ideas, highlight relevant quotes, and notate patterns using summary statements (Creswell & Poth, 2018). The list of statements contained approximately 25-30 codes or categories that matched the text.

With ongoing data review, I combined categories into five to six meaning units or themes (Creswell & Poth, 2018). Themes are broad units of information that consist of several codes clustered together to form a common idea. I then validated the themes against the original transcripts and created a lengthy description of what the participants experienced with the phenomenon by integrating all the findings and re-examining the transcripts, thematic clusters, and themes (Moustakas, 1994). I also triangulated the data using multiple sources to corroborate the evidence and validate the study's findings (Creswell & Poth, 2018). The final description created was the textural description.

After creating the textural description, I described the experiences, notably the setting and context where the phenomenon occurred, and removed all redundant descriptions. What was left was what Moustakas (1994) refers to as the structural description. The individual structural description detailed how participants experienced the phenomenon by providing a vivid account of the underlying dynamics of the experience, the themes, and how feelings and thoughts connected to the participants' experiences. I became aware of the structures through imaginative variation, reflection, and analysis (Moustakas, 1994).

From the individual textural-structural descriptions, I developed a composite description of the meanings and essences of the experience representing the group of participants as a whole (Moustakas, 1994). The intuitive integration of the fundamental textural and structural descriptions was a long paragraph that explained what the participants experienced and how they experienced it (Moustakas, 1994). This paragraph was the essence of the experience and goal of the phenomenological study. To facilitate this process, I created a table that divided the phenomenon's essence into codes for significant statements, meaning units, textural descriptions, and structural descriptions (Creswell & Poth, 2018).

Trustworthiness

Trustworthiness in a study involves establishing credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). Establishing trustworthiness ensures that others view this study as legitimate and that the research findings are worthy of readers' attention (Lincoln & Guba, 1985). Furthermore, member checking guaranteed that participants' ideas were correctly represented (Bloomberg & Volpe, 2018).

Credibility

Credibility refers to the extent to which research findings accurately describe reality. Researchers establish credibility when participants' perceptions match the researcher's portrayal of them (Bloomberg & Volpe, 2018; Guba & Lincoln, 1989). In order to establish credibility, my existing biases were acknowledged up front and monitored throughout the study. Thus, I demonstrate openness and honesty by engaging in self-reflection and recorded my personal biases in a reflective journal.

According to Lincoln and Guba (1985), member checking is a powerful way to increase credibility, as it tests the findings and interpretations of the participants. Therefore, to prevent my personal biases from influencing how teachers' perspectives were portrayed (Bloomberg & Volpe, 2018), participants were asked to review all transcribed interviews for accuracy. Also, persistent triangulation, or cross-checking, corroborated the data collected from the interviews, documents, and journaling and established credibility (Lincoln & Guba, 1985).

Transferability

Transferability refers to the generalizability of inquiry (Bloomberg & Volpe, 2018). Thus, it is the fit or match between the research context and other contexts and provides an idea of the participants, their experiences, and the study context. According to Lincoln and Guba (1985), the researcher cannot know which sites the findings will transfer to. Therefore, my use of rich, thick, and deep descriptions of the context, background, data, and findings will allow readers to compare similar contexts and judge transferability (Lincoln & Guba, 1985). Using these descriptions and recorded notations, I recorded my thoughts and ideas in a reflexive journal. Journaling enables other researchers to conduct similar studies.

Dependability

Readers can judge the dependability of research (Lincoln & Guba, 1985) by examining the steps that a researcher follows when conducting it (Bloomberg & Volpe, 2018).

Dependability refers to the stability and consistency of data over time and enables the replication of findings (Lincoln & Guba, 1985). For this study, I established dependability by triangulating multiple data sources, describing in detail the data collection and analysis procedures utilized, maintaining clear notes, and creating an audit trail. I also maintained a reflexive journal to document daily logistics, methodological decisions, rationales, and personal insights (Lincoln & Guba, 1985).

Confirmability

According to Guba and Lincoln (1989), achieving confirmability requires credibility, transferability, and dependability. Confirmability verifies that the researcher's findings and interpretations are derived from the collected data because it requires them to demonstrate how they reached their conclusions (Bloomberg & Volpe, 2018). For this study, I made transparent how I reached my conclusions by identifying the trail of decisions made during the research process (Creswell & Poth, 2018). To increase confirmability, I described my daily interactions in a reflexive journal (Yin, 2018).

Ethical Considerations

While planning and designing a study, researchers need to consider ethical issues that might surface and plan how to address them (Creswell & Poth, 2018). Ethical considerations for this study included obtaining approval from Liberty University's IRB and permission to conduct the study from public and private Facebook groups. In addition, each participant signed a letter of consent that thoroughly explained the purpose of the study, that participation was voluntary, that participants could withdraw at any time, and what would happen if they participated. The

consent letter also outlined how participants or others could benefit from the study and how their personal information was protected. Finally, pseudonyms protected the identities of Facebook groups and participants once their consent forms were received.

During the data collection phase of the study, information obtained during individual interviews, document analysis, and participant journaling were kept confidential. Once interview data were collected, they were transcribed and carefully reviewed for accuracy and clarity. Asking participants to review the interview transcripts through member checking guaranteed data accuracy. For safety purposes, I stored transcripts and other digital documents (e.g., questionnaires, interview protocol forms, logs for participant journaling, submitted images for document analysis) in a password-protected file on a computer that was locked when not in use. Furthermore, paper documents (e.g., sticky notes used during data analysis) were stored in a folder within a locked filing cabinet when not in use. I will store all documents for three years, at which time they will either be deleted or destroyed.

Summary

Chapter Three explained the methods that I utilized to conduct this transcendental phenomenological study that sought to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. Phenomenology was an appropriate design for this study because I sought to discover the essence of participants' experiences and provide a systematic method for deriving knowledge (Moustakas, 1994). One central and three sub-questions guided the study. Data from interviews, document analysis, and participant journaling were collected, validated, and authenticated through triangulation (Creswell & Poth, 2018) after I put aside my personal biases and prior associations through Epoché (Moustakas, 1994).

During the data analysis phase, I created a textural description detailing what the participants experienced and a structural description of how the participants experienced the phenomenon. From the individual textural-structural descriptions, I developed a composite description of the meanings and essences of the experience representing the group of participants as a whole. To facilitate this process, I created a diagram dividing the phenomenon's essence into codes for significant statements, meaning units, textural descriptions, and structural descriptions (Creswell & Poth, 2018).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study is to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. Chapter Four lists demographic information about participants within a table and then briefly describes each one. This chapter also provides a table outlining the theme development. Moreover, I listed the themes, sub-themes, and in vivo codes derived from participant statements and described them in detail with accompanying quotes. Also included in Chapter Four is a description of outlier data and answers to the study's original research questions. Thus, themes and participant quotes highlighted the connections between the participants' lived experiences of the targeted phenomenon and the research questions that drives the study. Finally, a conclusion summarizes the study's main findings.

Participants

Initially, I attempted to recruit participants by posting a notice on public and private Facebook websites. The effort yielded two qualifying teachers who completed the study in full. Because Facebook recruiting only supplied two participants, I contacted former colleagues to solicit their help. Depending on the contact's preference, I emailed them my recruitment notification or a link to an eligibility screener. Contacts then shared the information or link with interested teachers who met the study's criteria. Snowball sampling netted 12 participants, bringing the total number to 14.

Based on information collected from eligibility screeners and later confirmed during data analysis, all participants had at least one year of teaching experience at the elementary level. In addition, every participant was a licensed teacher working full-time at a public elementary school

as a K-3 classroom teacher, special education teacher, or reading specialist. Furthermore, all of the participants taught basic reading to at least one student with a dyslexic profile for a minimum of 25 minutes a day. Because two fourth-grade teachers asked to participate in the study, I requested a modification from the IRB to expand the eligibility criteria to include fourth-grade teachers. The IRB granted the modification, and the two fourth-grade teachers became study participants.

Table 1 displays demographic information for each participant. All participants received a pseudonym to protect their identity. According to the data presented, participants taught anywhere from three to more than 30 years. Furthermore, the data revealed that all participants had earned at least a bachelor's degree, with ten having earned a master's degree or higher. Regarding job titles, six participants held the position of K-4 classroom teacher, one was a special education teacher, and seven were reading specialists. In terms of content taught, seven participants taught reading, two taught language arts, four participants taught all content areas, and one taught math and reading.

Table 1*Teacher Participants*

Teacher Participant *	State of Residence	Years Taught	Highest Degree Earned	Job Title	Content Area	Grade Level/s
Anita	Pennsylvania	30+	Bachelor's	Classroom Teacher	All Content	K
Bernadette	Virginia	11	Master's	Reading Specialist	Reading	K-4
Carolina	Pennsylvania	14	Master's	Classroom Teacher	All Content	K
Catt	Colorado	10	Bachelor's	Classroom Teacher	All Content	2
Chris	Texas	8	Master's	Classroom Teacher	All Content	2
Eden	Virginia	27	Master's	Reading Specialist	Reading	K 1 2 5
Elle	Virginia	23	Specialist	Reading Specialist	Reading	K-5
Henry	Virginia	3	Bachelor's	Special Education	Reading Math	1 2 4 5
Joan	Virginia	26	Master's	Reading Specialist	Reading	1-5
Justice	Virginia	15	Master's	Reading Specialist	Reading	1-2
Leigh	Virginia	24	Master's	Reading Specialist	Reading	K-3
Sharon	Virginia	20	Bachelor's	Classroom Teacher	Language Arts	4
Tina	Pennsylvania	19	Master's	Classroom Teacher	Language Arts	4
Wren	Virginia	11	Master's	Reading Specialist	Reading	K-5

*Pseudonyms

Anita

Veteran teacher Anita found a home in teaching: "I've always felt like that's my niche."

During her 16-year tenure as a kindergarten teacher, she has taught basic reading skills to several students suspected of having dyslexia. Having a niece with dyslexia and witnessing her struggles

has served as a reminder to get students like her the help they need as early as possible. In Anita's words, "I want to be able to help them, and I hope that I can do what needs to be done and make people aware that there are problems that need to be addressed and not let them slip through the cracks because that's what happened to my niece years ago."

Bernadette

Bernadette has 11 years of experience teaching elementary students. During student teaching for her undergraduate degree in elementary education, Bernadette applied for a teaching position in the county where she grew up. To her surprise, the district called the next day and offered her a job as a long-term substitute. The soon-to-be graduate was thrilled with the job offer because she had always wanted to give back to the community where she grew up. In the coming years, Bernadette would go on to teach upper elementary, switch schools a couple of times, and earn a master's degree in reading before settling in at her current school as a reading specialist. Bernadette is inspired by her students. She states, "Watching these students have difficulties, and not being able to feel success, I think, has made me want to find ways to help them be successful."

Carolina

After earning a bachelor's degree in education, Carolina spent half a year as a long-term second-grade substitute. She was offered a kindergarten position the following year and has held it for the last 14 years. Carolina returned to school after becoming a mother and earned a master's degree in curriculum and instruction. Carolina admits she knows very little about dyslexia and was surprised to learn that 1 in 5 children have it. When teaching reading to students she suspects have dyslexia, Carolina makes it a point to build them up by telling them they can do something and praising their successes. Teaching students with dyslexia provides her

with a source of motivation. She said, “Sometimes [students] motivate me as much as I motivate them.”

Catt

Catt is in her tenth year of teaching. After earning a bachelor’s degree in elementary education, she accepted a first-grade teaching position and remained there for three years. When it was time for a change, Catt took a position as a second-grade teacher in Colorado and has been there ever since. Catt describes her experiences teaching students with dyslexia how to read as “challenging.” However, she says, “It can also be very rewarding when you see that growth.” Having taught in a state considered a leader in dyslexia education and advocacy, Catt commented on what she observed there. She said, “When I taught in Texas, we had a teacher who specifically pulled out kids that were identified as dyslexic, and they actually gave a screener to find those students and target [them]. I could see a big difference.”

Chris

Chris has spent the last eight years teaching at the elementary level. After earning a bachelor’s degree in K-12 mild to moderate special education, she began her teaching career teaching in a preschool program that serves students with mild to moderate disabilities. While teaching students with special needs, Chris returned to school and earned a master’s degree in early childhood studies. Soon after, she accepted a position teaching general education preschool in a Title 1 school with many English as a Second Language students. This year, Chris transferred into a second-grade position at the same school. After reflecting on her teacher preparation coursework, she stated, “When I was graduating, they added a dyslexia course, so I was never formally trained in dyslexia. It’s so different now. Just the interventions and all that. I feel like, at the time, I was taught what was in style.”

Eden

Eden is a reading specialist with 27 years of teaching experience at the elementary level. She entered the teaching field when elementary positions were hard to come by. In fact, during her first interview following graduation, Eden was told that 200 other teachers were vying for the same position. Realizing that she had to get her “foot in the door” some other way, she accepted a position as a targeted assistant for a young man with a disability. After waiting three years, Eden obtained a position teaching first grade. Before long, she began taking classes in reading development and earned a master’s degree in reading education. Eden describes her experiences teaching students with dyslexia how to read as evolving: “You think you know it, you’ve got your master’s, you’ve had the classes, but that’s not the case. It’s just, you’re always learning.”

Elle

Elle is a veteran teacher with 23 years of teaching experience at the elementary and middle school levels. While teaching sixth and seventh-grade social studies and working on a master’s degree in middle education, Elle’s district eliminated her position. As a result, she changed her major to elementary education and transferred to a first-grade position. Over the next several years, Elle went on to teach second and third grades, earned a master’s degree in reading, and began working as a reading specialist at her current school. According to Elle, about 80% of her students have dyslexia, and working with them can be challenging. However, Elle quickly points out, “I love a challenge.”

Henry

Henry is relatively new to the teaching profession, but early on, he knew he would one day become a teacher. Henry explained that his mother is a director of elementary education, his father is a principal, his sister is a teacher, and his grandmother is a special education teacher.

Special education seemed like a good fit for Henry because, “Growing up, I always worked with the Special Olympics. I was always good with kids with disabilities, and I knew there would always be a need for it. It seemed practical.” After graduating with a bachelor’s degree in special education, Henry taught at a private school for students with autism and then took a job in the business field. Before long, he realized that he was not a good salesman and wanted something more stable. As a result, Henry applied for a special education resource position at an elementary school far from his hometown and was offered the job within an hour of interviewing for it. He has been there ever since.

Joan

Joan began her teaching career in the late 1990s as a fourth-grade teacher. Later, she taught third grade and then returned to fourth grade before accepting a position as a reading specialist at the same school. According to Joan, her children were pivotal in shaping her beliefs about dyslexia. “It was my own children, and seeing how they struggled, and how the school wasn't doing anything for them.” Her children’s challenges were the catalyst for her to get Orton Gillingham training, and in Joan’s words, “That was kind of the defining moment of, I've got to do something better. I've got to do better for my students and not just my own children.”

Justice

Justice is a New York native with 15 years of elementary teaching experience. After beginning her career in New York, she moved to Virginia and worked in local government for 12 years. Once her youngest child entered kindergarten, Justice decided the time was right to return to teaching. Not long after, she was offered a reading specialist position with the condition that she would return to school and get a master’s degree in reading. Justice has been a reading specialist ever since. She stated, “It's funny because I'm a reading specialist right now with the

same two girls I worked with and who mentored me back in 2016 when I started. Yeah. So, the band is back together. Yeah, that's what we say. The band is back together.”

Leigh

Leigh has been a teacher and reading specialist for 25 years but growing up with a mother as a teacher convinced her early on that teaching was not for her. Instead, she majored in child psychology. After a not-so-great internship, Leigh began rethinking her life plan and eventually decided to get her teaching license and a master’s degree in curriculum and instruction. Leigh has always been passionate about reading, so becoming a reading specialist was a natural fit for her. Leigh said the most beneficial thing she ever did in her teaching career was get Orton Gillingham training because “It made things make sense to me.”

Sharon

Sharon has been an elementary classroom teacher for 20 years, but she worked as a social worker and nursing home administrator before she entered the classroom. Sharon was part of the first cohort to graduate from the University of Virginia’s career switcher training program. Her first teaching position was in the same county where she grew up, and at the same elementary school she attended as a youngster. Sharon taught there for 12 years until the school closed and then went to another elementary school within the same county. It was there that she realized how much she loved teaching reading. After teaching virtually during the pandemic and loving it, Sharon eventually returned to the classroom where she currently teaches fourth-grade language arts all day.

Tina

Tina is in her nineteenth year of teaching. After earning a bachelor’s degree in education, she returned to college to earn a master’s degree with a concentration in literacy. Though she

now regrets not becoming a reading specialist, Tina has had many exciting experiences during her career. For example, after a few years of teaching, Tina felt called to teach overseas in Central Asia. Initially, she taught K-2 in one classroom, but after the school closed, Tina taught grades 3-4 in a neighboring country for two years. Whereas her previous students had been English speakers, these students spoke numerous languages. Fortunately, Tina was certified to teach English as a second language, which aided her during that time. After returning to the states, Tina began teaching fourth grade and now teaches language arts five periods a day.

Wren

Wren began her career as a middle school teacher. After completing a bachelor's degree in English education, she spent a few years teaching seventh-grade English and enjoyed aspects of it. Noticing her students' progress when receiving one-on-one and small-group instruction, she returned to school and earned a master's degree in reading. Wren spent the next six years teaching reading to students in grades 6-8 as a reading interventionist; however, her genuine desire was to connect with children from the beginning when they first showed reading problems because she knew it was challenging to remediate those weaknesses in eighth grade. Even though Wren is an elementary reading specialist, she states, "I do K-5, so I get a little bit of the 'almost' middle school experience and love it equally."

Results

Data were collected from individual interviews, journal writing, and document analysis to identify the essence of elementary teachers' lived experience teaching students with dyslexia how to read. Individual interviews were conducted online and over the telephone and recorded using Microsoft Teams software or a hand-held recording device. Microsoft Teams automatically transcribed recordings, whereas the researcher manually transcribed recordings from the hand-

held recording device. Participants journaled about their experiences teaching students with dyslexia how to read for five days and submitted their entries or logs for analysis. They also submitted photographs of their classroom and various documents and artifacts that they regularly use when teaching students with dyslexia how to read. All digital documents and recordings were stored on a password-protected laptop in a secure location.

After receiving the transcripts, logs, and photographs, the data was organized and analyzed manually (Saldaña, 2021). Throughout the data analysis process, themes were generated from clustering invariant constituents and then validated against each of the three data sources to corroborate the evidence and validate the findings. From this process, three themes and six sub-themes emerged. Afterward, the sub-themes were broken down into nine smaller themes. Table 2 lists the in vivo codes used to identify themes and sub-themes during the data analysis phase. The themes and sub-themes are also listed, representing the essence of the participant's experience of the phenomenon.

Table 2*Theme Development*

Theme	Sub-Theme	In Vivo Codes
The Science of Reading	Literacy Laws Approved List Required Training Reading Plans Instruction	VLA, scientifically proven methods, approved curricula, expectations, holding pattern, no curriculum, daunting task, reading academies, overwhelming, whatever we can get, not filling in the gaps, phonologically based, phonics, blending, segmenting, decoding, Orton Gillingham, tactile, whole-body
Barriers to Teaching Students with Dyslexia	Resources Dyslexia Knowledge Teacher Preparation Professional Development Self-Efficacy	decodables, away from leveled readers, Teachers Pay Teachers, piecemeal not that I recollect, trauma PD, not a topic that typically comes up, no formal training, mixing up letters, reversals, silly dyslexia thing, dyslexia coach, more competent, pretty much a rookie, still learning, hard to feel successful
The Pandemic and Dyslexia	Learning Loss Time Numbers and Help Behavior Personal Stress	nothing got done, sad, range of levels, think their child is dyslexic, missed a good foundation, juggling schedule, feel badly, four reading specialists for over 800 kids, 95 students and one reading specialist, so many identified, 10 groups a day trauma, isolation, defeatist attitude, separation anxiety stress doubles, no one there, different kind of stress, dig deep, tears

The Science of Reading

The science of reading is the first theme identified from the data, as multiple sources revealed it heavily influenced participants' experiences teaching reading to all students, especially those with dyslexia. The science of reading refers to the accumulation of reliable

evidence about how people learn to read and the best way to teach them (ILA, 2021). During an interview, Justice, a reading specialist, noted a change at her school. She stated, “Something is coming down from the state level. There is now a push to use the science of reading.” In response to the science of reading movement, states like Virginia and Colorado passed literacy laws (Colorado READ Act, 2019; VLA, 2022) outlining specific mandates that school districts must follow.

Literacy Laws

Virginia, Colorado, and Texas participants identified literacy laws (Colorado READ Act, 2019; TX HB3, 2019; VLA, 2022) as significant factors shaping their reading instruction. Elle, a veteran reading specialist, explains, “The Virginia Literacy Act (VLA, 2022) is meant to make sure that all students in kindergarten through third grade get direct instruction in literacy skills from highly qualified teachers and specialists using scientifically proven methods.” In addition to Elle, teachers like Eden, Leigh, Chris, Wren, and Sharon mentioned that they are already experiencing the effects of this new law. For example, they report having no reading curriculum because the state still needs to publish its list of approved programs. As a result, participants spend their free time hunting for resources they can piece together. Teachers also mentioned the state-mandated training they will soon be taking.

Approved List. Participants overwhelmingly referred to their state's effort to create a list of core reading programs based on the science of reading and how districts will only be allowed to adopt curricula found on that list. Because Virginia has yet to publish its list, schools nationwide lack a reading curriculum. Leigh, a reading specialist, described what it has been like: “Right now, it is very loosey-goosey. Everybody is kind of like piecing things together right now. We need some kind of cohesiveness. I've noticed a big difference in our students with their

reading over the past, well, since COVID.” A fourth-grade classroom teacher, Sharon, was concerned about not having a reading curriculum, especially for new teachers. She stated, “One of the things that bothers me is that we don't have a curriculum. What are [new teachers] going to do? Do they know what to do other than a list of SOLs [Standards of Learning] and good luck?”

Required Training. Participants residing in all four states have already or will soon complete coursework related to the science of reading and evidence-based reading practices. In Virginia, school districts are or will soon be offering a course called Language Essentials for Teachers of Reading and Spelling, also known as LETRS. Once trained, literacy leaders will train principals, reading coaches, reading specialists, and teachers. Justice is taking the year-long course and reported that it had increased her understanding of dyslexia. She stated, “I’m getting a better understanding through a class I’m taking. It’s called LETRS. It’s really all about the science of reading, and it comes up very [quickly], the whole concept of dyslexia.” In Leigh’s district, reading specialists like her will train teachers in LETRS. Leigh commented, “We have heard the reading specialists have to train teachers at their school, which I feel is a very daunting task. I feel classroom teachers will buy in better if there's someone more officially trained. It sounds overwhelming.”

Like Virginia, Texas K-3 teachers and specialists who teach early literacy must participate in a teacher literacy achievement academy that covers evidence-based practices based on the Science of Teaching Reading. Along the same lines, Colorado K-3 literacy teachers must complete a 45-hour training in the science of reading with systematic and explicit phonics instruction. According to Chris, the training is “mostly reading with integrated videos, and it’s like an online course but all self-led. I think, by 2024, you have to have taken it to continue teaching K-2.” Participants residing in Pennsylvania claimed to know nothing of state-level

changes related to literacy. Anita said, “There’s nothing that has come across at this point, but we are in a very small town. It’s a very rural town. We are consistently 10 years behind anything that’s happening in the big cities, and I’m not exaggerating.”

Reading Plans. In Virginia and Colorado, schools must develop reading plans for students with dyslexia who exhibit significant reading weaknesses. Catt, a second-grade teacher from Colorado, explained what happens when students in her school do not meet the reading benchmarks. She divulged the following information: “We use DIBELS (Dynamic Indicators of Basic Early Literacy Skills) to determine whether or not students need a reading plan. If they're not at a certain reading level for two consecutive quarters, then they'll [get a] reading plan. Then, we're required to give them interventions.”

In Virginia, reading specialists will soon begin developing reading plans for students at their schools. Joan, a seasoned reading specialist, believes her district should be proactive in providing reading specialists with the information and tools they will need to meet the increased demands. She remarked, “With the Virginia Literacy Act coming down the pike, we're less than two years from that being fully implemented. We're feeling knots in our stomachs because there's a lot in the Virginia Literacy Act. There's a lot of expectations.”

Instruction. Participant responses revealed a plethora of information about the instructional strategies they utilize when teaching students with dyslexia how to read. Nine participants said they use the phonemic awareness program called Heggerty daily with their students, with Eden specifying that it is an approved program that supports the science of reading. She described her reading instruction for kids with dyslexia in the following way, "I guess we use more manipulatives. We do, especially with first grade, a lot with the Elkonin boxes where I do it and then they do it. They practice segmenting the sounds and then blend

them together." Catt and Justice also provide their students with instruction in phonemic awareness. They report beginning their lessons by having their students tap, map, and spell the sounds within words.

Overall, the most common instructional methods utilized by participants included segmenting and blending sounds, spelling dictation, repetition, and multisensory. During our interview and after reading her journal submissions, it was evident how much Elle enjoys sharing what she believes are effective instructional interventions for her dyslexic students. A big fan of Phonics First, an Orton-Gillingham-based, multisensory reading program, Elle announced that her students trace letters with sand, playdough, and salt and sky write words three times. Bernadette, a reading specialist, also uses a multisensory approach, as she received Orton Gillingham training the previous summer and incorporates some of the strategies into her weekly lessons.

Barriers to Teaching Students with Dyslexia

A second theme, barriers, emerged from the data when participants discussed things that prevented them from providing quality reading instruction to their students with dyslexia. Most participants identified a lack of resources or inappropriate resources as a significant barrier to their instruction. Carolina commented: "I think we could do better. I feel like we have a lot of resources that we don't use. We haven't gotten anything new in a while. Our curriculum is probably 12 years old. Hopefully, that will change soon." Participants also voiced concern over how much they still do not know about dyslexia. According to Catt, "We have not had a program to find students, where as a teacher, you're trying to figure out what to do for the student. We're not trained to figure out which students have dyslexia."

Resources

Participants shared much data about resource usage throughout interviews, journal writings, and document submissions. Not having enough resources or not having appropriate resources were comments made frequently by participants. To remedy the situation, some participants purchased instructional materials from TPT. For example, Bernadette explained that she turned to TPT because she only sometimes has the necessary resources. She articulated, “I feel like we’re seeing progress with our [dyslexic] students, but I’m often feeling like we’re having to piecemeal from different programs to create our own. Do I dare say Teachers Pay Teachers?” According to Eden, for the last five years, K-2 teachers in her school have been required to use a reading program that progresses too quickly for students. Along the same lines, school leaders at Chris’ school provided her and the other K-2 teachers with incorrectly leveled readers to use with their dyslexic students. As a result, Chris sought resources from TPT. Another participant, Tina, was not shy about describing her use of TPT. She stated, “I use TPT a lot, and sometimes it’s not even that I need a particular resource. I just need an idea for how to set something up or how to word something.”

In a recent shift, Virginia’s state educational leaders have encouraged K-2 teachers to stop using leveled text with their students. Instead, they want beginning readers to use decodable text. Elle described the reason behind the change. She stated, “They’ve got to have foundational skills before you can hand a kid a regular book. At the K-2 level, they need to be in decodables until they have a solid understanding, and then you can get into those richer texts.” In some schools, teachers do not have access to decodable texts. Eden described how challenging it has been locating quality decodable readers, “We do have some decodables, but it’s hard to find

good decodable books. I'm finding it is personally a challenge to find it, and so we just try to get our hands on whatever we can."

Dyslexia Knowledge

Participants' knowledge of dyslexia was evident through their statements made during interviews and in their journal writings and submitted documents. In the eyes of a handful of the participants, students with dyslexia reversed their letters. For example, Tina said her students with dyslexia struggled to read and mixed up their letters. Anita, a kindergarten teacher, said a little boy had dyslexia because everything he did was upside down or backward. She remarked, "There's not a lot they're going to do in kindergarten. They're going to wait and see if it develops. They'll start doing some testing for dyslexia if the reversals are still there in second grade." Teacher preparation, professional development, and self-efficacy were sub-themes frequently discussed within the broader context of dyslexia knowledge.

Teacher Preparation. When asked to reflect on their teacher preparation and whether dyslexia was a topic of discussion, most participants reported that it either had not been discussed or was talked about briefly in general terms. Leigh explained: "Dyslexia was talked about, you know, the official definition of dyslexia, and it was brought up that you would have dyslexic students. There was not a heavy emphasis on strategies." Henry, a recent college graduate, had this to say: "There wasn't a lot of instruction in reading and no training in dyslexia." Tina had a similar response to Leigh and Henry. She said, "very vaguely. Like, here are some things to look out for. That type of thing." In Bernadette's master's degree program, there was no course in dyslexia. Instructors discussed the topic in literacy courses, but it encompassed all struggling readers, not those with phonological processing deficits.

Professional Development. Participants said their lack of dyslexia training influenced their reading instruction for kids with dyslexia. Only one participant claimed to have received training in dyslexia. Eden mentioned that, as child study chairperson, she attended a meeting on dyslexia offered by the district. She stated, “Just this past week, we had a meeting, and it really broke down dyslexia and what it [is]. It was just so beneficial. It’s something that I had, but I think all teachers would benefit from hearing.” A few teachers mentioned completing Virginia’s online dyslexia module but knew of no district or school-level professional development in dyslexia. Bernadette commented on the online module, “We did have training for that, but aside from the required training for VDOE (Virginia Department of Education) licensure, unfortunately, no.” Joan noted the same training: “The state requires that silly dyslexia thing. We have to do that. It’s awful.” According to Henry, “The dyslexia [module] was required. It’s been a little while, and I’m struggling to recall what that was.”

Self-Efficacy. Because most participants reported not receiving training or further education on dyslexia, they may not feel as efficacious in providing reading instruction to students with dyslexia. About half of the participants, when asked to describe their level of teacher self-efficacy when teaching students with dyslexia how to read, described themselves as still learning. For instance, Catt proclaimed, “I’m definitely still learning. I would love to be able to give them more and just know whether or not a student has dyslexia or whether we’re referring them to RTI for something completely different.” Chris had similar sentiments. She noted, “I think that, for my class, it’s been hard to feel as successful in reading instruction. I already know how to set stuff up, so it’s helpful for them, but I would say not as much as I could.” From Henry’s point of view, “I still consider myself pretty much a rookie.”

The Pandemic and Dyslexia

Another theme that participants mentioned repeatedly was the pandemic. The pandemic resulted in two years of missed in-person instruction for many students, causing significant learning loss for all students, especially those with dyslexia who were already behind. According to Chris, a second-grade teacher, “Three [of my] students are in school for the first time this year, and they are seven years old. They haven’t had formal instruction or a school setting. I have kids who still don’t know their letters.” Also, due to the pandemic, more students present with behavioral challenges that must be addressed. Unfortunately, schools have been unable to meet the increase in student demands.

Learning Loss

Following the pandemic, participants reported increased learning loss from students with dyslexia, particularly in foundational reading skills. According to Joan, “We definitely have more students that are identified. We have a lot more gaps than we had before.” Chris explained why there was so much learning loss. She stated, “A lot of our families did not participate in online learning, so the majority of these students did not have kindergarten.” Carolina, a kindergarten teacher, confirmed this, asserting, “Children are coming in without any formal schooling or preschool because of the pandemic.” According to Eden, parents cannot accept the idea that their child’s learning loss was a direct result of the pandemic. She said, “Everyone thinks their child is dyslexic because they’re behind, but when we look at the statistics for our school, you really see that decline, and a lot of it is our third graders who missed a really good foundation.”

Time. According to most participant statements, lack of time was an existing problem made worse by the pandemic, particularly when having to give students with dyslexia the explicit reading instruction they need. Henry, a third-year special education teacher who teaches

students with dyslexia how to read, commented, “It’s hard to fit everybody in.” Wren elaborated on that issue further by proclaiming, “Scheduling is a huge puzzle. You don’t want to take them out of reading or math, and you don’t want to take them out of resource class, gym, art, or music, and you can’t take them out of lunch.”

Based on participant data, lack of time influenced teacher-student relationships. Justice recounted a conversation she had with her coworkers about this issue. She remarked, “We were just saying that we don’t have enough time to build relationships. I don’t have time. I’m sorry that I can’t ask you how your weekend was. Moving right along, talk to me after.”

Numbers and Help. Several participants suggested an increase in the number of students needing reading support and a decrease in the number of staff members available to provide it was due to the pandemic. Leigh acknowledged the ‘high numbers and no help’ theme. She explained, “We have 95 students who are identified as needing intervention, and I am the only reading specialist. I’m making plans for all of these students, and sometimes they don’t get what they need because there’s no one to provide it.” Similarly, a fourth-grade teacher, Sharon, described the impact of ‘high numbers and no help’ on her four students with dyslexia. She reported, “Title 1 at our school is limited for fourth grade. We have so many identified kids that they are picking and choosing who can see a reading specialist. They see an aide, and that doesn’t happen consistently.”

Behavior

Participants cited student behavior multiple times as a problem created by the pandemic, especially when it took precious time away from students who wanted to learn. According to Leigh, the pandemic doubled her caseload, with the heaviest numbers coming from the second grade because they did not attend preschool. On top of that, she said, “They missed out on how

to socialize with other students, so they have a lot of problems dealing with other students.”

Henry, also cited student behavior as an issue in his classroom. He stated, “I’ve got a lot of behavioral problems. One kid comes in every day and hides under his desk. He won’t work, and it’s distracting. When the class is over, he’ll knock over anything he can on the way out.” To help students cope with underlying trauma causing their behavioral issues, Tina’s school arranged for a psychologist to come once a week to work with students. However nice that might be, Tina believes the psychologist could easily be there every day of the week.

Personal Stress

Stress was already an issue for many teachers before the pandemic. However, participant statements revealed that stress had become something different, something brutal. Sharon poignantly described her experience of stress post-COVID. She stated, “I think post-COVID is a different kind of stress. You really have to dig deep. There’s been a lot of tears this year and sitting in your car asking yourself why I am doing this.” Henry expressed what it is like for him when students do not make reading gains. He remarked, “I take it really hard when we don’t see the progress we’re wanting to see, and that’s something I think about all the time. It’s very stressful. You feel like it’s your fault.” Bernadette described the pressure she is under to get her students to pass the benchmark. She asserted, “I pour my heart and soul into what I do every single day for these kids. Whether the data show they’re moving forward or feeling success trying to meet the benchmark, you put a lot of pressure on yourself.”

Outlier Data and Findings

Data collected from interviews contained one outlier worthy of consideration. The outlier involved special education teachers and reading specialists using identical materials. This issue may have implications for further study.

Outlier Finding #1

When discussing barriers to instruction, Justice was the only participant to mention how materials can be problematic for students with dyslexia. Moreover, she expressed concern about special education teachers and reading specialists using the same materials when teaching students with dyslexia how to read. She felt strongly that special education teachers and reading specialists should use materials that differ from one another. Justice brought up a relevant point worthy of investigation. She stated,

There's got to be a difference in training somewhere. We should also be using different materials than what the special ed teacher is using. Just to say, well, now I'm going to pick up so and so because they've been identified [for special education] and I'll still be doing the same stuff [Justice] is doing, I'm going, what?

Research Question Responses

This transcendental phenomenology sought to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. The central question guiding this study was: “What are the lived experiences of elementary teachers who teach students with dyslexia how to read?” Three sub-questions looked more deeply into the phenomenon. Three major themes emerged: (1) the science of reading, (2) barriers to teaching students with dyslexia, and (3) the pandemic and dyslexia. These themes were the impetus for answering the research questions. Described below are the findings for each research question.

Central Research Question

What are the lived experiences of elementary teachers who teach students with dyslexia how to read?

Participants agreed that their experiences teaching students with dyslexia how to read was rewarding. Joan commented, “I think it’s very rewarding to see how they grow and change and how I can help them.” Participants also agreed that teaching this population of students can be challenging, as Sharon stated, “It can be challenging for sure.” Carolina describes one challenging aspect of teaching struggling readers: “My school district is in a low-income area where a lot of the parents are not educated. So, education is not always important to those students because it was not instilled in them when they were growing up.”

Despite the challenge, most participants viewed their experiences teaching dyslexic students how to read as a creative experience for them. According to Eden: “Sometimes it’s difficult to get in sync with the students, and you have to be creative.” Leigh said, “You know, sometimes you have to be creative with them to get to the learning.” Wren devised a creative way to help parents as their children sheltered at home during the pandemic. She explains, “We gave them [parents] the book *How to Teach Your Child to Read in 100 Easy Lessons*. We gave them a flash drive giving directions for how to do instruction at home. We had Zoom meetings available for them. We did everything in our power that we could do.”

Sub-Question One

What internal influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Elementary teachers were influenced most by their internal knowledge of foundational reading skills and dyslexia. Concerning reading skills, all participants recognized the importance of providing students with dyslexia instruction in phonemic awareness, particularly blending and segmenting sounds within words. Anita admitted, “We use a lot of phonics and phonological practice to teach them how to break words apart and blend them back together. Sharon added the

following, “First, we do some sight words. We talk about the sounds. We’ve been working on chunking and decoding, looking at the beginning sounds, segmenting it and putting it back together. They use the whiteboard [and] some Elkonin boxes.”

Regarding knowledge of dyslexia, Joan’s comments showed that she understood the characteristics of dyslexia. She said: “All of them struggle with various parts of reading. They just can't decode the words. They are usually pretty intelligent. They struggle with fluency. They have to sound out every word. A lot of them can't spell at all.” In contrast, the statements made by five participants made clear their belief in the myth that dyslexia causes people to reverse letters when reading and writing. For instance, Catt stated, “I will think he has it down, but the next day when we go back, he’s reading letters in a different order.” Anita showed her understanding of dyslexia when she stated, “Some of the kids do better than others. Some of them still put backwards letters because they have trouble [seeing it] in their mind. They can see it, but then they’ll put it down backwards.”

Sub-Question Two

What external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Most participants identified changes at the state level as the most significant external influence that shaped their reading instruction for students with dyslexia. Specifically, recent literacy laws (Colorado READ Act, 2019; VLA, 2022) that promote the science of reading and evidence-based instructional practices changed what the participants teach and how they should teach it. Elle conveyed her frustration over changes her district made in response to the new literacy law (VLA, 2022). She remarked, “A lot of districts are jumping on every bandwagon.

They're expecting us to implement things that people haven't been trained in. These people are coming to me as an expert, but some of them I haven't been trained in."

Student learning loss was the second most identified external influence shaping teachers' reading instruction because more students were found eligible for Title 1 reading services and special education. With more students to serve, participants often cannot meet with every student needing specialized reading instruction, nor can they give every student they do see the time needed to make substantial reading gains. Justice describes how the external influence of high student numbers prevents her from working with students with dyslexia and how being unable to give her students and coworkers what they need causes her to feel stress. She asserted: "We have four reading specialists for over 800 kids. I see ten groups every day. I don't have time to turn around and do anything. I already can't see all the kids that need me. It stresses me out."

Sub-Question Three

How do internal and external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

The findings from the study revealed multiple internal and external influences. However, they also identified how internal and external influences interact reciprocally to shape human behavior (Bandura, 1977, 1986), or in this case, teachers' reading instruction for students with dyslexia. For example, when teachers' knowledge of basic language constructs and evidence-based instructional reading practices (personal or internal factors) was extensive, they were more likely to deliver high-quality instruction (behavior) to students with dyslexia.

In another example, when teachers believed (personal or internal factor) dyslexia causes individuals to read and write using letter reversals, they utilized instructional methods (behavior) that did not address students' specific weaknesses or were not evidence-based. When more

students with dyslexia failed to pass the literacy benchmarks (environmental or external influence), teachers had to develop additional individualized reading plans and spend less time with (behavior) their other students.

Summary

The data presented in this chapter revealed that elementary teachers were influenced by various internal and external factors when teaching students with dyslexia how to read. A significant finding was that the majority of teachers experienced major shifts in their literacy instruction for kids with dyslexia because of recent literacy laws that promote the science of reading. For example, legislation (Colorado READ Act, 2019; TX HB3, 2019; VLA, 2022) now requires teachers to complete coursework in the science of reading and evidence-based instructional practices, use state-approved reading curricula, and create reading plans for all K-3 students who do not meet the reading benchmarks.

Another significant finding was that elementary teachers experienced barriers that prevented them from providing effective reading instruction to students with dyslexia. Some of those barriers included instructional resources and knowledge about dyslexia. Thus, teachers reported having to piecemeal curricular sources to create their own and purchase materials off TPT. Furthermore, teachers disclosed not having access to information about dyslexia during their teacher preparation coursework and school or districtwide professional development. The last significant finding was related to the pandemic. The pandemic's effects resonated strongly with most teachers, presenting challenges such as learning loss, behavioral difficulties, and personal stress. In the end, data revealed that participants believed teaching students with dyslexia how to read was a rewarding, challenging, and creative experience. The findings from this chapter will be discussed further in chapter five.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenology is to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. Chapter Five provides an in-depth interpretation of the findings discussed in the last chapter. It also contains implications for the findings in terms of policy and practice. In addition, theoretical and empirical implications and limitations and delimitations are explored. Finally, the chapter provides a series of recommendations for future research.

Discussion

This study explored the lived experiences of elementary teachers who teach students with dyslexia how to read. After analyzing the data from interviews, participant journaling, and document analysis, the data gleaned from 14 participants resulted in three themes: the science of reading, barriers to teach students with dyslexia, and the pandemic and dyslexia. This section discusses the study's findings relative to the identified themes and supports the interpretation of those findings with empirical and theoretical literature from Chapter Two. The discussion includes an interpretation of findings, implications for policy or practice, and theoretical and empirical implications. It also includes the study's limitations and delimitations and recommendations for future research.

Interpretation of Findings

This section briefly summarizes the thematic findings from Chapter Four and provides a series of interpretations based on the findings. From data collected through individual interviews, participant journaling, and document analysis, three primary themes emerged: the science of reading, barriers to teaching students with dyslexia, and the pandemic and dyslexia. The themes

align with Bandura's model of triadic reciprocal causation and have been successfully applied to reading instruction.

Summary of Thematic Findings

The thematic findings of the current research study provided insight into the lived experiences of elementary teachers who teach students with dyslexia how to read, along with the internal and external influences that shaped their experiences. Based on the respondents' statements, teachers are in transition, teaching is challenging, and teachers are resilient. Below are three interpretations that explain the experiences of teachers who teach students with dyslexia how to read.

Teachers are in Transition. The first interpretation of the study's findings is that teachers are in a transitional period relative to their literacy instruction. Today, a third of American students do not read proficiently (NCES, 2019), most university preparation programs are not teaching the science of reading (Meeks et al., 2016), and teachers' literacy practices are not evidence-based (Spear-Swerling & Sternberg, 2018). In response, states have passed legislation mandating universities and school districts to provide preservice and in-service teachers with education and training in the science of reading and evidence-based instructional reading practices. Furthermore, in some states, educational leaders are deciding what reading curricula teachers can and cannot use and mandating that school districts develop individualized reading plans for students who do not meet literacy benchmarks. The transition to new literacy curricula and practices is an external influence (Bandura, 1977, 1986), and overall, its effects have been dramatic and unsettling for many of the teachers in this study.

Most teachers had grown accustomed to using meaning-based reading approaches based on the three-cueing systems as their primary form of reading instruction, confirming previous

findings (Spear-Swerling & Sternberg, 2018). However, states like Mississippi and Arkansas (Literacy-Based Promotion Act, 2018; Right to Read Act, 2021) are now prohibiting meaning-based curricula and methodologies like the three-cueing systems because reading science does not support them. In three states where teachers in this study live, state leaders have not explicitly banned three-cueing. However, they require teachers to use evidence-based reading curricula and instructional methods, which essentially prohibits the method's use. Consequently, veteran teachers who have only used meaning-based approaches during their careers find the changes most difficult.

Teachers who have completed state-mandated training in the science of reading and evidence-based reading practices have a deeper understanding of what students with dyslexia require to become proficient readers than teachers who have not undergone the training. Nevertheless, teachers have knowledge gaps in understanding the science of reading and evidence-based instructional reading practices. For example, some teachers advocate using the science of reading but unknowingly utilize a BL approach that includes assessing student reading progress using running records based on the three-cueing systems. On the other hand, some teachers demonstrate an action gap by continuing to implement GR and refusing to surrender their leveled readers. Seasoned teachers are particularly skeptical about jumping on a new literacy bandwagon because of deeply entrenched beliefs and philosophies about reading instruction.

Teaching is Challenging. The second interpretation of the study's findings is that teachers believe teaching reading to students with dyslexia is challenging. According to Bandura (1977, 1986), beliefs are a personal factor that shapes a teacher's reading instruction. The number of poor readers with dyslexia has increased dramatically in the last few years, and many

teachers believe they are unprepared to meet their needs. Whether there are too many reading levels in a class to differentiate every student's instruction, too many poor readers and too few specialists available to provide targeted reading instruction, unmanageable behavioral issues that encroach on reading instruction, unrealistic expectations about students passing literacy benchmarks, not enough of the right kind of resources, or knowledge gaps relative to reading instruction and dyslexia, the challenges that teachers face when teaching students with dyslexia how to read are significant. As a consequence of these challenges, teachers are experiencing higher than normal stress levels, confirming research that showed teachers have become increasingly stressed in the last ten years (Aloe et al., 2014), especially those who teach in schools with high numbers of special needs students (Flouri & Panourgia, 2014).

Most of the teachers in this study believe their principals support them. However, they do not believe their principals alleviate the challenges they are facing. As instructional leaders, principals are not providing teachers with high-quality and appropriate PD related to literacy or dyslexia, which corroborate earlier research that found the same (Allensworth et al., 2009; Opfer, 2016). Thus, only one teacher out of 14 was invited to attend a workshop on dyslexia, and that was because she was a child study chairperson. Principals are also not working with district leaders to obtain appropriate instructional reading resources and training on how to use them for teachers with dyslexic students.

Teachers are Resilient. The third interpretation of the study's findings is that teachers are resilient when faced with challenges. Resiliency is a personal factor (Bandura, 1977, 1986) that can influence teachers' behavior: reading instruction. Teachers feel pressure to perform their best while their beliefs and philosophies about reading instruction are under attack. They have too many students with dyslexia to meet their needs effectively but not enough appropriate

resources to make that happen. Despite these challenges, teachers strive to make a difference in the lives of students with dyslexia.

Most of the teachers in this study do not have the necessary instructional reading resources to meet their students' needs. Many teachers, especially new ones, rely on adopted core reading programs to plan and deliver whole-group and small-group reading instruction to their students. However, it is not uncommon for special education teachers and reading specialists to use the same reading programs as classroom teachers when providing targeted interventions to students with dyslexia. New teachers who were taught to utilize a BL approach or received little instruction on teaching reading are lost. For example, the newest teacher in this study received training in a specialized reading program designed for students with dyslexia, and had he not been given this program to use; it would have been detrimental to his students because no other reading programs are available to him and he cannot recall much in the way of reading instruction from his teacher preparation program.

Because teachers are resilient, they will not stand by and wait for school and district leaders to provide them with reading resources. Instead, they have taken matters into their own hands and sought out print materials from sources outside the school. A majority of teachers utilize reading curricula and print materials purchased with their own money from TPT. This finding corroborates research (Dewitz & Graves, 2021) that found 55% of teachers reported using TPT as their primary source of reading curricula.

Many teachers who only used a meaning-based approach when teaching students with dyslexia how to read now include phonemic awareness activities in their lessons because curricula like Heggerty and LETRS training or its equivalent have taught them that phonemic awareness is essential for their students with dyslexia (Boyer & Ehri, 2011; NRP, 2000). As a

result, they have managed to locate and use an assortment of manipulatives to teach students with dyslexia how to blend and segment phonemes. Teachers predominantly use magnetic letters and letter tiles to teach reading, which is a positive finding since earlier research (NRP, 2000) found that instructing students how to segment words into phonemes using letter tiles improves word and nonword reading and spelling (Boyer & Ehri, 2011; Ehri et al., 2001). Teachers are also using Elkonin sound boxes to teach blending and segmenting sounds to students with dyslexia, which is an effective strategy for students with dyslexia since they have trouble manipulating spoken language (IDA, 2018; Shaywitz & Shaywitz, 2020).

Five teachers from this study believe the myth that dyslexia causes a person to read or write letters and words backward, which confirms other researchers' finding that elementary teachers exhibit knowledge and action gaps related to dyslexia (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020). Even though some teachers know they have knowledge gaps relative to dyslexia and are already struggling to meet the everyday demands of their job, they have taken it upon themselves to sign up for courses and workshops outside of work to learn how to teach code-based reading programs like Orton-Gillingham. Through training and coursework, many teachers have gained confidence and can stand taller, knowing they make a difference in the lives of their students with dyslexia.

When teachers sit in their cars crying and attempt to conjure up the will to step back into the classroom because they do not think they can make it another day, some driving force must be at hand. Teachers' resiliency comes from personal influences (Bandura, 1977, 1986) like motivation, and that source of motivation originates from a few different sources. For instance, some teachers' love of reading pushes them to help their dyslexic students, as they want nothing more than to instill within them a love of reading and learning. For other teachers, teaching

students with dyslexia provides them with a strong sense of purpose or stirs up memories of watching loved ones struggle learning to read.

Implications for Policy or Practice

The literature from Chapter Two and the study's findings have implications for higher education, local and state policymakers, and teachers. Thus, it is crucial that the individuals in power and who make policy remove the barriers preventing teachers from providing high-quality reading instruction to students with dyslexia. It is also vital that elementary teachers who teach students with dyslexia connect what was taught during their pre-service or in-service training and what occurs in their classrooms, particularly with students with phonological deficits.

Implications for Policy

Participants shared a great deal of information about the influences that shape their experiences teaching reading to students with dyslexia. Regarding their teacher preparation, most participants noted that if they had received any information about dyslexia, it was the definition and a notification that one day they would have students with dyslexia in their class. With roughly 20% of students having dyslexia (Shaywitz & Shaywitz, 2020), institutions of higher learning must provide pre-service teachers with applied coursework in literacy instruction for students with dyslexia. Furthermore, teachers at all levels must possess the knowledge and tools to meet their dyslexic students' needs; that responsibility lies with higher education.

The findings from this study can be used by state-level educational leaders when making policy decisions related to literacy laws. Thus, teachers are the most critical stakeholders in school-related changes outside students. Nevertheless, Virginia's teachers are in limbo without a reading curriculum and will remain so until the state finishes compiling a list of approved core reading curricula. This holding pattern comes when most students have significant reading gaps.

Not only does the lack of a reading curriculum cause undue stress for teachers already at their emotional and physical limit, but it compromises the quality of instruction for students with dyslexia when their teachers must piece together resources or create their own. Without a structured reading program containing a scope, sequence, or pacing guide, it creates an unstable situation for all teachers, particularly new teachers who rely heavily on adopted reading series.

Coordinating and carrying out state-mandated changes in literacy has been a challenge for district and school leaders. For example, leaders in a Virginia school district require reading specialists to train teachers in their school how to use newly purchased reading programs and assessment tools, some of which are unfamiliar. They are also handing out reading materials to teachers without first providing them with training on how to use them in general or with fidelity. In another district, leaders are prohibiting teachers from using reading materials for which they paid tens of thousands of dollars but have yet to purchase replacements.

This study may help district and school leaders make a well-thought-out plan for making the necessary transitions mandated by their state-level leaders and inspire them to communicate with teachers, coordinate resource changes, and provide training to teachers so they can use new resources with confidence and fidelity. Also, district literacy leaders should conduct workshops on how to implement newly purchased reading programs based on the science of reading and evidence-based reading practices and hire reading consultants to provide LETRS training to K-2 teachers and specialists, as reading specialists are only just learning the material and are stretched to the limit with responsibilities like developing individualized reading plans for their school's struggling readers.

Implications for Practice

The findings from this study have implications for school leaders and teachers. First,

school leaders can use this research to plan professional development for their teachers. The data from this study supports other research (Wijekumar et al., 2019) that found schools rarely provide teachers with professional development in evidence-based reading practices. In states that do not have new literacy laws, school leaders should consider offering training in basic language constructs and evidence-based instructional reading practices. Furthermore, all districts should offer workshops on dyslexia that emphasize early identification and intense intervention beginning in first grade and evidence-based instruction that addresses their phonological weaknesses.

Professional development is critical, as several participants reported having a low sense of teacher self-efficacy teaching reading to this population because of their lack of training and understanding of dyslexia. School leaders should consider sharing this study and other reading research with their teachers at weekly staff or grade-level meetings and begin a dialogue about issues relevant to their teachers and students. The participants who knew the most about dyslexia and evidence-based reading instruction had taken it upon themselves to seek additional coursework outside of work. Thus, they did not rely on schools as their only information source. If school leaders modeled and communicated the expectation that teachers must keep current in their area of instruction, then teachers might see themselves as knowledgeable professionals.

School leaders can also use this research when allocating resources to teachers. The data revealed that teachers need more time to meet their job responsibilities because of the extra demands placed on them, the higher-than-normal number of students needing specialized reading help, a lack of support personnel, and a lack of resources. Principals should do whatever they can to ensure teachers have the resources to do their jobs effectively. Teachers should not have to

decide which students will receive their support and which will not, nor should they be responsible for managing upwards of 95 struggling readers.

Teachers can use these findings to understand the broader context of what is taking place at the state level and how the pandemic has shaped education for elementary teachers nationwide. In addition, the data may inspire teachers experiencing similar circumstances to join and voice their concerns to educational leaders at all levels. Also, the findings may inform teachers about the importance of providing students with dyslexia daily phonemic awareness and phonics instruction that involves blending and segmenting sounds, building words, using whole body movement or embodied cognition, and using various instructional resources like Elkonin boxes, letter tiles, and decodable text.

Theoretical and Empirical Implications

This section discusses the study's theoretical and empirical implications. Bandura's model of triadic reciprocal causation (Bandura, 1977, 1986) successfully served as a framework to identify what and how internal and external influences shape the experiences of elementary teachers' who teach reading to students with dyslexia. Furthermore, the findings from this study add to the literature on dyslexia and have implications for future research in the areas of professional development, resources, instructional reading methods, and self-efficacy.

Theoretical Implications

Bandura's model of triadic reciprocal causation (Bandura, 1977, 1986) successfully served as a framework to identify internal and external influences that shape the reading instruction of elementary teachers who teach students with dyslexia how to read. The findings revealed that two internal factors (Bandura, 1977, 1986) shaped elementary teachers' reading instruction: occupational stress and lack of knowledge. Furthermore, the data also revealed that

two environmental or external factors influenced teachers' instruction most: state-level factors and the pandemic, particularly learning loss. Because the model of triadic reciprocal causation (Bandura, 1977, 1986) was an appropriate framework for this study, it may be a viable option for other phenomenological studies that examine teachers' experiences working with diverse student populations like English language learners or students with various disabilities.

The triadic model (Bandura, 1977, 1986) also showed how internal and external influences shape teachers' reading instruction. Using the findings of this study as an example, Bandura (2006) posited that external or environmental factors, such as requiring K-3 literacy teachers to participate in training on the science of reading and evidence-based reading practices, personally influenced teachers by increasing their internal knowledge of reading instruction and dyslexia. In another example, the teachers' knowledge of reading instruction (personal or internal factor) influenced their (behaviors) grouping of students, differentiating instruction, and utilizing evidence-based instructional methodologies and resources.

Additionally, the reciprocal nature of environmental, behavioral, and personal influences (Bandura, 2006) showed that students' learning loss (environmental factor) from two years of missed instruction led to teachers (behavior) adjusting the time they met with groups, increasing the size of their groups, or deciding not to meet with some students as often or at all. As a result of teachers' behaviors, they experienced a range of negative feelings, increased stress, and the belief that they were not meeting their students' needs (internal factors).

Empirical Implications

The findings from this study add to the literature on dyslexia. Specifically, it adds to the dyslexia research addressing reading instruction and the factors that shape teachers' experiences teaching reading to young students with dyslexia. This study is unique because it is qualitative,

and most research on dyslexia is quantitative. Of the existing qualitative studies on dyslexia, none of them seek to understand elementary teachers' experiences teaching reading.

The findings related to professional development have implications for further research. All but one participant reported that they had not previously received professional development or training on dyslexia. A couple of participants had received Orton Gillingham training offered by the state, and some of the Virginia teachers mentioned completing the state's online module on dyslexia required for licensing. These data support other research (Gonzalez, 2021; Washburn et al., 2017; White et al., 2020) that found elementary teachers often exhibit knowledge and action gaps related to dyslexia that influence their instructional reading practices (Al Otaiba et al., 2018; Suarez et al., 2018), making them less able to intervene appropriately (Worthy et al., 2016; Worthy et al., 2018).

The findings related to professional development in basic language constructs and evidence-based reading practices also have implications for further research. The study findings revealed that none of the three participants from Pennsylvania had received professional development on reading-related topics, nor had most of the teachers from Virginia who were waiting to take the state-mandated LETRS training. In contrast, participants from Colorado and Texas had previously received state-mandated professional development on the science of reading and evidence-based reading practices. These data support Pittman et al. (2020) research that found elementary teachers exhibit knowledge and action gaps related to basic language constructs.

One trend occurring in education is that schools are moving away from using leveled text as their primary tool for teaching students basic reading. Findings from this study were mixed in terms of whether teachers used leveled text to teach beginning reading. While most teachers

reported using a combination of leveled and decodable text, one participant reported that, in her district, teachers are only allowed to use decodable text until students reach a certain level. In contrast, a second participant shared that she was unwilling to throw out her leveled books because that would be like throwing the baby out with the bathwater. This finding somewhat substantiates the finding from Spear-Swerling and Sternberg (2018) that, in most elementary classrooms, leveled book libraries were the primary tool for teaching students how to read.

This trend implies that publishing companies must align their products to account for current trends in states that embrace the science of reading and evidence-based instructional practices if they want to continue selling their products there. Thus, publishers should produce far more decodable books and make them easily accessible for teachers. The alternative is that teachers will continue to create their text and try to align those materials to their reading curricula. Furthermore, research has shown that special educators without access to high-quality reading curricula chose other resources indiscriminately, often of lower quality and unrelated to what was taught (Siuty et al., 2018), which could be problematic for students with dyslexia who need evidence-based instructional materials.

Relative to instructional reading methods utilized by participants when teaching students with dyslexia how to read, most teachers reported spending part of their small group lessons using GR with leveled text. As previously mentioned, GR is a meaning-based approach that uses three meaning cues to determine unknown words (Wall, 2014) and is less effective than teaching phonics (Foorman et al., 2016; Kilpatrick, 2015; Seidenberg, 2017). The data from this study support prior research that found that teachers across the country widely used GR (Denton et al., 2014). However, given the changes at the state level in Virginia, Colorado, and Texas, participants supplemented their GR instruction with phonemic awareness activities and some

phonics instruction with decodable text when available. Participants likely used a BL approach by combining meaning-based and phonics approaches. BL is a mixture of WL and phonics: read-alouds, GR, shared reading, independent reading, and word study (Robinson et al., 2016). The data from this study supports the research of Chai et al. (2020), who found that some teachers who utilized a BL approach taught phonemic awareness and phonics.

The findings on teacher self-efficacy showed that roughly half the participants believed they did not know enough about dyslexia or the treatment of dyslexia to teach students with dyslexia how to read effectively. Even though the three teachers with the least experience held this belief, veteran teachers also questioned their abilities. This finding corroborates earlier research that educators with high teacher self-efficacy will likely utilize effective instructional practices (Bandura, 1989; Zee & Koomen, 2016). Furthermore, the participant in his third year of teaching described having no prior education or training in reading instruction or dyslexia and considered himself a rookie. This finding confirms that newly hired elementary teachers felt unprepared to meet the needs of students with dyslexia (White et al., 2020).

Limitations and Delimitations

This study has several limitations worth noting. First, participants resided in four states, most of whom lived in Virginia. As a result, data was more representative of Virginia's teachers and less so of teachers living in the other three states. Also, within the sample of Virginia teachers, almost half of them taught in the same rural county. Therefore, the data may reflect more of what teachers in a rural country of Virginia experienced teaching students with dyslexia versus what teachers residing in cities or more affluent counties experienced.

Another limitation identified concerns the time of year the study took place. The IRB approved my study in December, and once it became apparent that Facebook was not a viable

option for recruitment, I utilized snowball sampling. Unfortunately, my recruitment efforts began as teachers prepared to leave for winter break. Whereas some teachers preferred to participate in an interview during their vacation, others were traveling and unavailable. Also, because teachers' schools were closed to staff and students during the break, teachers could not submit photographs or engage in journal writing. Furthermore, once teachers returned to school, many were incredibly busy, which may have limited the quantity and quality of data submitted.

A third limitation of the study was the demographic makeup of the participants. Thus, all participants were public elementary teachers, which excluded the participation of private elementary school teachers and public and private school teachers in grades 5-12. Additionally, there was only one male participant in the study, and even though the majority of elementary teachers in America are women (IES, 2022), with additional men, the data may have yielded different findings. In addition, most participants were reading specialists, and their job responsibilities differed greatly from that of special education teachers and classroom teachers. Therefore, more of the data is representative of what reading specialists experienced.

A final demographic limitation involved allowing two fourth-grade teachers to participate in the study. Even though I had hoped that including teachers from an intermediate grade would yield important information, it produced less informative information because they primarily taught reading whole group or spent little time personally teaching their dyslexic students. One teacher had a special education staff member push into the general education classroom and deliver the small group reading instruction to the students with dyslexia.

A fourth limitation was that I could not obtain school permission to observe participants teaching reading to students with dyslexia. Therefore, the data was limited to teacher descriptions during interviews and within their journal writing. Had I been able to go into the

classroom to observe participants teaching students with dyslexia how to read, I would have witnessed first-hand the influences that shaped their reading instruction. Also, the findings might have been thicker and richer.

A final limitation of the study came from the participants themselves. Moreover, two participants were reluctant to share information with me. For example, the teachers provided brief, one or two-sentence responses during interviews. In response, I asked the teachers additional questions that required them to elaborate further. Fortunately, the participants became more relaxed as we talked. Regarding photograph submissions, I asked the participants to submit additional photographs in a few instances. The data yielded might have been more detailed if the participants had been more open to sharing information with me.

Several delimitations defined the scope and focus of the study. The first delimitation was that this was a qualitative research study. A qualitative study was selected because I wanted to collect data from multiple sources and become immersed in it to understand the phenomena (Creswell & Poth, 2018; Moustakas, 1994). A second delimitation was that this was a phenomenology. I chose phenomenology as my study design because I wanted to understand the influences that shaped the experiences of a group of elementary teachers who taught reading to students with dyslexia. A third delimitation was that this study is a transcendental phenomenology. This type of phenomenology was selected because it allowed me to study the phenomenon of dyslexia and discover the essence of teachers' experiences (Moustakas, 1994).

A fourth delimitation of the study was that participants must have been elementary teachers employed as K-4 classroom teachers, special education teachers, or reading specialists. I selected those positions because, within an elementary school, the teachers holding those positions were the ones most likely to teach basic reading to students with dyslexia. A fifth

delimitation was that participants were required to be employed full-time to be exposed to as many external influences as possible within the school environment and from district and state-level individuals and policies. A sixth delimitation was that participants had to have at least one year of previous teaching experience at the elementary level. Prior teaching was an essential criterion for participants to meet because they needed at least one year of experience to compare their current experiences and accurately discuss the school's history and culture.

A final delimitation was that all participants must have taught basic reading to at least one student with dyslexia for at least one 25-minute period a day. The reason why teachers were required to teach at least one student with dyslexia instead of some other number was that few students have a dyslexia label, and I predicted that some of the participants would only be able to identify one or two students with a dyslexia profile. In addition, teachers must have spent at least one 25-minute period a day teaching reading to students with dyslexia because that was an adequate amount of time to deliver a small group reading lesson to one or more students and to get to know their needs well enough to describe them to others.

Recommendations for Future Research

One recommendation for further study is to conduct a quasi-experimental study to investigate whether K-3 students attending schools utilizing the science of reading and evidence-based reading practices are making more robust reading gains than students attending schools where teachers use typical literacy practices. A second recommendation for further study would be to examine individualized reading plans' impact on student reading performance. Thus, researchers can conduct a longitudinal study that follows students who have received individualized reading plans to see if, over time, their reading gap closes and to what degree.

An outlier identified in this study was that one participant felt special education teachers and reading specialists should receive different training and use different instructional reading materials with their shared students. Therefore, a final recommendation is to conduct an experimental study to determine if students who receive reading instruction from a special education teacher and a reading specialist who use the same instructional materials perform better in reading than students whose teachers use different materials.

Conclusion

The purpose of this transcendental phenomenology was to understand the lived experiences of elementary teachers who teach students with dyslexia how to read. Using Bandura's (1977, 1986) model of triadic reciprocal causation as a framework helped me identify influences that shaped teachers' experiences, while utilizing a transcendental phenomenological (Moustakas, 1994) design enabled me to understand the phenomenon experienced by elementary teachers (Creswell & Poth, 2018). Data were collected through individual interviews, participant journaling, and document analysis. Once collected, data were analyzed and triangulated. An understanding of elementary teachers' lived experiences came from three themes and 15 sub-themes.

Most teachers reported that literacy laws based on the science of reading impacted their instruction of students with dyslexia, especially in Virginia. However, participants from Pennsylvania were the exception, as they reported that they had yet to experience state-directed changes relative to their literacy instruction. Teachers residing in Texas and Colorado experienced some of the same changes as Virginia's teachers, but they were not as extensive, as Virginia's new legislation is more comprehensive.

Teachers also reported that the pandemic caused a major upset in their jobs because of students' learning loss, challenging behaviors, and little time and support to manage them effectively. Teachers felt increased stress dealing with more students needing specialized reading instruction without the needed resources. Most of the participants knew they could provide higher quality instruction to their students if they had more time and support, appropriate instructional resources, and for some, more knowledge about dyslexia.

Limitations of this transcendental phenomenological study included having data more representative of Virginia's teachers, recruiting teachers during the winter break when teachers were very busy, the demographic makeup of the participants caused a lack of diversity, the inability to obtain data through observation, and reluctant participants. In the future, to examine the impact of literacy laws, researchers may want to consider investigating whether K-3 students attending schools that utilize instructional resources and methodologies based on the science of reading and evidence-based reading practices are making stronger reading gains than students attending schools where teachers use typical literacy practices. Researchers may also want to investigate whether individualized reading plans close reading gaps over time and if students receiving reading instruction from a special education teacher and a reading specialist who use the same instructional materials perform better in reading than students whose teachers use different materials.

References

- Allen, J., Gregory, A., Mikami, A., Lun, J., Hamre, B., & Pianta, R. (2013). Observations of effective teacher–student interactions in secondary school classrooms: Predicting student achievement with the classroom assessment scoring system-secondary. *School Psychology Review*, 42(1), 76-98. <https://doi.org/10.1080/02796015.2013.12087492>
- Allensworth, E., Ponisciak, S., & Mazzeo, C. (2009). The schools teachers leave: teacher mobility in Chicago public schools. *Consortium on Chicago School Research*.
<https://files.eric.ed.gov/fulltext/ED505882.pdf>
- Allsworth, J. E. (2015). Invited commentary: Recruiting for epidemiologic studies using social media. *American Journal of Epidemiology*, 181(10), 747-749.
<https://doi.org/10.1093/aje/kwv007>
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26(1), 101-126.
<https://doi.org/10.1007/s10648-013-9244-0>
- Al Otaiba, S., Baker, K., Lan, P., Allor, J., Rivas, B., Yovanoff, P., & Kamata, A. (2019). Elementary teacher’s knowledge of response to intervention implementation: A preliminary factor analysis. *Annals of Dyslexia*, 69(1), 34-53.
<https://doi.org/10.1007/s11881-018-00171-5>
- Al Otaiba, S., Lake, V. E., Greulich, L., Folsom, J. S., & Guidry, L. (2012). Preparing beginning reading teachers: An experimental comparison of initial early literacy field experiences. *Reading and Writing*, 25(1), 109-129. <https://doi.org/10.1007/s11145-010-9250-2>
- Al Otaiba, S., Rouse, A. G., & Baker, K. (2018). Elementary grade intervention approaches to

treat specific learning disabilities, including dyslexia. *Language, Speech, and Hearing Services in Schools*, 49(4), 829-842.

https://doi.org/10.1044/2018_LSHSS-DYSLC-18-0022

Al Otaiba, S., & Torgesen, J. (2007). Effects from intensive standardized kindergarten and first-grade interventions for the prevention of reading difficulties. In S. R. Jimerson, M. K. Burns, & A. M. VanDerheyden (Eds.), *Handbook of response to intervention* (pp. 212-222). Springer. https://doi.org/10.1007/978-0-387-49053-3_15

Arrow, A. W., Braid, C., & Chapman, J. W. (2019). Explicit linguistic knowledge is necessary, but not sufficient, for the provision of explicit early literacy instruction. *Annals of Dyslexia*, 69, 99-113. <https://doi.org/10.1007/s11881-018-00168-0>

Atteberry, A., & Bryk, A. S. (2011). Analyzing teacher participation in literacy coaching activities. *The Elementary School Journal*, 112(2), 356-382.
<https://doi.org/10.1086/661994>

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

<https://archive.org/details/sociallearningth0000band>

Bandura, A. (1986). *Social foundations of thought and action: A cognitive social theory*. Prentice-Hall. <https://www.pearson.com/en-us.html>

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development: Six theories of child development* (Vol. 6, pp. 1-60). JAI Press.
<https://www.uky.edu/~eushe2/Bandura/Bandura1989ACD.pdf>

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
<https://www.proquest.com/docview/218661518>

Bandura, A. (2005). The evolution of social cognitive theory. In K. G. Smith & M. A. Hitt

- (Eds.), *Great minds in management*. (pp. 9-35). Oxford University Press.
- <http://www.uky.edu/~eushe2/BanduraPubs/Bandura2005.pdf>
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164-180. <https://doi.org/10.1111/j.1745-6916.2006.00011.x>
- Bangert-Drowns, R. L., Kulik, J. A., & Kulik, C. L. C. (1991). Effects of frequent classroom testing. *The Journal of Educational Research*, 85(2), 89-99.
- <https://doi.org/10.3102/00346543061002213>
- Barsalou, L. W. (2008). Grounded cognition. *Annual Review of Psychology*, 59(1), 617-645.
- http://barsaloulab.org/Online_Articles/2008-Barsalou-ARP-grounded_cognition.pdf
- Bean, R. M., & Kern, D. (2018). Multiple roles of specialized literacy professionals: The ILA 2017 standards. *The Reading Teacher*, 71(5), 615-621. <https://doi.org/10.1002/trtr.1671>
- Beck, I. L., & Beck, M. E. (2013). *Making sense of phonics: The hows and whys*. Guilford Publications. www.guilford.com
- Berninger, V., Abbott, R., Thomson, J., Wagner, R., Swanson, H. L., & Wijsman, E. (2006). Modeling developmental phonological core deficits within a working-memory architecture in children and adults with developmental dyslexia. *Scientific Studies in Reading*, 10, 165-198. https://doi.org/10.1207/s1532799xssr1002_3
- Bettini, E. A., Cheyney, K., Wang, J., & Leko, C. (2015). Job design: An administrator's guide to supporting and retaining special educators. *Intervention in School and Clinic*, 50(4), 221-225. <https://doi.org/10.1177/1053451214532346>
- Bettini, E. A., Cumming, M. M., Brunsting, N. C., McKenna, J. W., Cooper Schneider, C., Muller, R., & Peyton, D. (2020). Administrators' roles: Providing special educators with opportunities to learn and enact effective reading practices for students with

- EBD. *Beyond Behavior*, 29(1), 52-61. <https://doi.org/10.1177/1074295620904024>
- Bettini, E. A., Gurel, S., Park, Y., Leite, W., & McLeskey, J. (2019). Principals' qualifications in special education and students with and at risk for disabilities' reading achievement growth in kindergarten. *Exceptionality*, 27(1), 18-31.
<https://doi.org/10.1080/09362835.2017.1351367>
- Bettini, E. A., Jones, N. D., Brownell, M. T., Conroy, M. A., & Leite, W. L. (2018). Relationships between novice teachers' social resources and workload manageability. *The Journal of Special Education*, 52(2), 113-126.
<https://doi.org/10.1177/0022466918775432>
- Bettini, E. A., Jones, N. D., Brownell, M. T., Conroy, M. A., Park, Y., Leite, W. L., Crockett, J., & Benedict, A. (2017). Workload manageability among novice special and general educators: Relationships with emotional exhaustion and career intentions. *Remedial and Special Education*, 38(4), 246-256. <https://doi.org/10.1177/0741932517708327>
- Betts, K., Miller, M., Tokuhamma-Espinosa, T., Shewokis, P., Anderson, A., Borja, C., Galoyan, T., Delaney, B., Eigenauer, J., & Dekker, S. (2019). *International report: Neuromyths and evidence-based practices in higher education*. Online Learning Consortium.
<https://files.eric.ed.gov/fulltext/ED599002.pdf>
- Billingsley, B. S., & Bettini, E. (2017). Improving special education teacher quality and effectiveness. In J. M. Kauffman, D. P. Hallahan, P. C. Pullen (Eds.), *Handbook of special education*. Routledge. <https://www.routledge.com>
- Billingsley, B. S., & Bettini, E. (2019). Special education teacher attrition and retention: A review of the literature. *Review of Educational Research*, 89(5), 697-744.
<https://doi.org/10.3102/0034654319862495>

- Binks-Cantrell, E., Washburn, E. K., Joshi, R. M., & Hougen, M. (2012). Peter effect in the preparation of reading teachers. *Scientific Studies of Reading, 16*(6), 526-536.
<https://doi.org/10.1080/10888438.2011.60143>
- Bloomberg, L. D., & Volpe, M. (2018). *Completing your qualitative dissertation: A road map from beginning to end*. SAGE. <https://us.sagepub.com/>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 27-40. <https://doi.org/10.3316/QRJ0902027>
- Bowers, P. N., Kirby, J. R., & Deacon, S. H. (2010). The effects of morphological instruction on literacy skills: A systematic review of the literature. *Review of Educational Research, 80*(2), 144-179. <https://doi.org/10.3102/0034654309359353>
- Boyer, N., & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading, 15*(5), 440-470. <https://doi.org/10.1080/10888438.2010.520778>
- Bratsch-Hines, M. E., Vernon-Feagans, L., Varghese, C., & Garwood, J. (2017). Child skills and teacher qualifications: Associations with elementary classroom teachers' reading instruction for struggling readers. *Learning Disabilities Research & Practice, 32*(4), 270-283. <https://doi.org/10.1111/ldrp.12136>
- Brophy, J., & Good, T. L. (1986). Teacher behavior and student achievement. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 328-375). Macmillan.
<https://doi.org/10.1037/0003-066X.41.10.1069>
- Brownell, M., Kiely, M. T., Haager, D., Boardman, A., Corbett, N., Algina, J., Dingle, M. P., & Urbach, J. (2017). Literacy learning cohorts: Content-focused approach to improving special education teachers' reading instruction. *Exceptional Children, 83*(2), 143-164.

<https://doi.org/10.1177/0014402916671517>

Buckingham, J., Wheldall, R., & Wheldall, K. (2019). Systematic and explicit phonics instruction: A scientific, evidence-based approach to teaching the alphabetic principle. In R. Cox, S. Feez & L. Beveridge (Eds.), *The alphabetic principle and beyond* (pp. 49-67). Primary English Teaching Association Australia.

<https://www.researchgate.net>

Byrne, Z. S., Cave, K. A., & Raymer, S. D. (2022). Using a generalizable photo-coding methodology for assessing organizational cultural artifacts. *Journal of Business and Psychology*, 37, 797-811. <https://doi.org/10.1007/s10869-021-09773-0>

Carlisle, J. F., & Kearns, D. M. (2017). Learning to read morphologically complex words. In K. Cain, D. L. Compton, & R. K. Parrila (Eds.), *Theories of reading development* (pp. 191-214). John Benjamins Publishing.

<https://benjamins.com/catalog/swll.15.11car>

Carrion-Castillo, A., Franke, B., & Fisher, S. E. (2013). Molecular genetics of dyslexia: An overview. *Dyslexia*, 19(4), 214-240. <https://doi.org/10.1002/dys.1464>

Cassar, M., Treiman, R., Moats, L., Pollo, T. C., & Kessler, B. (2005). How do the spellings of children with dyslexia compare with those of non-dyslexic children? *Reading and Writing*, 18, 27-49 <https://doi.org/10.1007/s11145-004-2345-x>

Castanheira, P. (2016). *Mentoring for educators' professional learning and development: A meta-synthesis of IJMCE volumes 1-4*. International Journal of Mentoring and Coaching in Education.

<https://cris.brighton.ac.uk/ws/portalfiles/portal/454256/Author+accepted+manuscript.pdf>

Castiglioni-Spalten, M. L., & Ehri, L. C. (2003). Phonemic awareness instruction: Contribution

- of articulatory segmentation to novice beginners' reading and spelling. *Scientific Studies of Reading*, 7(1), 25-52. https://doi.org/10.1207/S1532799XSSR0701_03
- Castles, A., & Coltheart, M. (2004). Is there a causal link from phonological awareness to success in learning to read? *Cognition*, 91(1), 77-111. [https://doi.org/10.1016/S0010-0277\(03\)00164-1](https://doi.org/10.1016/S0010-0277(03)00164-1)
- Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest*, 19(1), 5-51. <https://doi.org/10.1177/1529100618772271>
- Chai, H., Elston, A., & Kramer, T. (2020). Focus on Literacy Needs: Partnering to Support Balanced Literacy Instruction. *Reading Improvement*, 57(3), 117-130. <https://www.ingentaconnect.com/>
- Chall, J. (1967). *Learning to read: The great debate*. McGraw-Hill. <https://www.mheducation.com/>
- Chapman, J. W., & Tunmer, W. E. (2016). Is reading recovery an effective intervention for students with reading difficulties? A critique of the i3 scale-up study. *Reading Psychology*, 37(7), 1025-1042. <https://doi.org/10.1080/02702711.2016.1157538>
- Choi, J. H., McCart, A. B., Hicks, T. A., & Sailor, W. (2019). An analysis of mediating effects of school leadership on MTSS implementation. *The Journal of Special Education*, 53(1), 15-27. <https://doi.org/10.1177/0022466918804815>
- 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. <https://doi.org/10.1177/0731948718806654>
- Clark, S. K., Jones, C. D., Reutzell, D. R., & Andreasen, L. (2013). An examination of the

influences of a teacher preparation program on beginning teachers' reading instruction. *Literacy Research and Instruction*, 52(2), 87-105.

<https://doi.org/10.1080/19388071.2012.754520>

Clay, M. (1991). *Becoming literate: The construction of inner control*. Taylor & Francis.

<https://www.taylorfrancis.com/>

Collins, L. W., & Cook, L. (2016). *Never say never: The appropriate and inappropriate use of praise and feedback for students with learning and behavioral disabilities*. Instructional Practices with and without Empirical Validity. Emerald Group Publishing Limited.

<https://doi.org/10.1108/S0735-004X20160000029007>

Colorado Reading to Ensure Academic Development Act [Colorado READ Act]. (2019).

<https://www.cde.state.co.us/coloradoliteracy>

Connolly, M. (2003). Qualitative analysis: A teaching tool for social work research. *Qualitative Social Work*, 2(1), 103–112. <https://doi.org/10.1177/1473325003002001282>

Cook, V., & Ryan, D. (Eds.). (2016). *The Routledge handbook of the English writing system*. Routledge. <https://www.taylorfrancis.com/>

Corbin, C. M., Alamos, P., Lowenstein, A. E., Downer, J. T., & Brown, J. L. (2019). The role of teacher-student relationships in predicting teachers' personal accomplishment and emotional exhaustion. *Journal of School Psychology*, 77, 1-12.

<https://doi.org/10.1016/j.jsp.2019.10.001>

Costigan, A. (2018). "I'm not teaching English, I'm teaching something else!": How new teachers create curriculum under mandates of educational reform. *Educational Studies*, 54(2), 198-228. <https://doi.org/10.1080/00131946.2017.1379809>

Coyne, M. D., & Koriakin, T. A. (2017). What do beginning special educators need to know

- about intensive reading interventions? *Teaching Exceptional Children*, 49(4), 239-248.
<https://doi.org/10.1177/0040059916688648>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches*. SAGE. <https://us.sagepub.com/>
- Crowley, C. B. (2017). Professional development as product implementation training. *Teaching and Teacher Education*, 67, 477-486. <https://doi.org/10.1016/j.tate.2017.07.015>
- Cunningham, A. E., Perry, K. E., Stanovich, K. E., & Share, D. L. (2002). Orthographic learning during reading: Examining the role of self-teaching. *Journal of Experimental Child Psychology*, 82(3), 185-199. [https://doi.org/10.1016/S0022-0965\(02\)00008-5](https://doi.org/10.1016/S0022-0965(02)00008-5)
- Cunningham, J. W., Spadoccia, S. A., Erickson, K. A., Koppenhaver, D. A., Sturm, J. M., & Yoder, D. E. (2005). Investigating the instructional supportiveness of leveled texts. *Reading Research Quarterly*, 40(4), 410-427. <https://doi.org/10.1598/RRQ.40.4.2>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97-140. <https://doi.org/10.1080/10888691.2018.1537791>
- Deacon, S. H., Tong, X., & Francis, K. (2017). The relationship of morphological analysis and morphological decoding to reading comprehension. *Journal of Research in Reading*, 40(1), 1-16. <https://doi.org/10.1111/1467-9817.12056>
- Dehaene, S., & Cohen, L. (2011). The unique role of the visual word form area in reading. *Trends in Cognitive Sciences*, 15(6), 254-262.
<https://doi.org/10.1016/j.tics.2011.04.003>
- Denton, C. A., Fletcher, J. M., Taylor, W. P., Barth, A. E., & Vaughn, S. (2014). An

- experimental evaluation of guided reading and explicit interventions for primary-grade students at-risk for reading difficulties. *Journal of Research on Educational Effectiveness*, 7(3), 268-293. <https://doi.org/10.1080/19345747.2014.906010>
- Dewey, J., Sindelar, P. T., Bettini, E., Boe, E. E., Rosenberg, M. S., & Leko, C. (2017). Explaining the decline in special education teacher employment from 2005 to 2012. *Exceptional Children*, 83(3), 315-329. <https://doi.org/10.1177/0014402916684620>
- Dewitz, P., & Graves, M. F. (2021). The science of reading: Four forces that modified, distorted, or ignored the research finding on reading comprehension. *Reading Research Quarterly*, 56, S131-S144. <https://doi.org/10.1002/rrq.389>
- D'Mello, A. M., & Gabrieli, J. D. (2018). Cognitive neuroscience of dyslexia. *Language, Speech, and Hearing Services in Schools*, 49(4), 798-809. https://doi.org/10.1044/2018_LSHSS-DYSLC-18-0020
- Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). Social media update 2014. *Pew Research Center*, 19, 1-2. <https://www.pewresearch.org>
- Durán, L., & Hikida, M. (2022). Making sense of reading's forever wars. *Phi Delta Kappan*, 103(8), 14-19.
- Ehri, L. C. (1997). Sight word learning in normal readers and dyslexics. In B. A. Blachman (Ed.), *Foundations of reading acquisition and dyslexia: Implications for early intervention* (pp. 163-189). Lawrence Erlbaum Associates Publishers. <https://psycnet.apa.org/record/1997-09197-008>
- Ehri, L. C. (1998). Grapheme-phoneme knowledge is essential to learning to read words in English. In J. L. Metsala & L. C. Ehri (Eds.), *Word recognition in beginning literacy* (pp.

- 3-40). Lawrence Erlbaum Associates Publishers. <https://psycnet.apa.org/record/1998-07737-001>
- Ehri, L. C. (1999). Phases of development in learning to read words. In J. Oakhill & R. Beard (Eds.), *Reading development and the teaching of reading: A psychological perspective* (pp. 79-108). Blackwell Science. <https://doi.org/10.1111/j.1467-9817.1995.tb00077.x>
- Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading*, 9(2), 167-188. https://doi.org/10.1207/s1532799xssr0902_4
- Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 18(1), 5-21. <https://doi.org/10.1080/10888438.2013.819356>
- Ehri, L. C. (2017). Orthographic mapping and literacy development revisited. In K. Cain, D. L. Compton, & R. K. Parrila (Eds.), *Theories of reading development* (pp.169-190). John Benjamins Publishing. <https://www.jbeplatform.com/content/books/9789027265647-swll.15.08ehr>
- Ehri, L. C. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, 55, S45-S60. <https://doi.org/10.1002/rrq.334>
- Ehri, L. C., Deffner, N. D., & Wilce, L. S. (1984). Pictorial mnemonics for phonics. *Journal of Educational Psychology*, 75(5), 880-893. <https://doi.org/10.1037/0022-0663.76.5.880>
- Ehri, L. C., & Flugman, B. (2018). Mentoring teachers in systematic phonics instruction: Effectiveness of an intensive year-long program for kindergarten through 3rd grade teachers and their students. *Reading and Writing*, 31(2), 425-456. <https://doi.org/10.1007/s11145-017-9792-7>
- Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T.

- (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36(3), 250-287. <https://doi.org/10.1598/RRQ.36.3.2>
- Ehri, L. C., Satlow, E., & Gaskins, I. (2009). Grapho-phonemic enrichment strengthens keyword analogy instruction for struggling young readers. *Reading & Writing Quarterly*, 25(2-3), 162-191. <https://doi.org/10.1080/10573560802683549>
- Elkonin, D. B. (1973). USSR in J. Downing (Ed.), *Comparative reading* (pp. 551-579).
- Elliott, J. G. (2020). It's time to be scientific about dyslexia. *Reading Research Quarterly*, 55, S61-S75. <https://doi.org/10.1002/rrq.333>
- Elliott, J. G., & Grigorenko, E. L. (2014). *The dyslexia debate*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139017824>
- Engelkamp, J., Zimmer, H. D., Mohr, G., & Sellen, O. (1994). Memory of self-performed tasks: Self-performing during recognition. *Memory & Cognition*, 22(1), 34-39. <https://doi.org/10.3758/BF03202759>
- Englert, C. S., Mariage, T. V., Truckenmiller, A. J., Brehmer, J., Hicks, K., & Chamberlain, C. (2020). Preparing special education preservice teachers to teach phonics to struggling readers: Reducing the gap between expert and novice performance. *Teacher Education and Special Education*, 43(3), 235-256. <https://doi.org/10.1177/0888406419863365>
- Fairhurst, G. T., & Putnam, L. L. (2019). An integrative methodology for organizational oppositions: Aligning grounded theory and discourse analysis. *Organizational Research Methods*, 22(4), 917-940. <https://doi.org/10.1177/1094428118776771>
- Fallon, K. A., & Katz, L. A. (2020). Structured literacy intervention for students with dyslexia: Focus on growing morphological skills. *Language, Speech, and Hearing Services in*

- Schools*, 51, 336-344. https://doi.org/10.1044/2019_LSHSS-19-00019
- Ferrer, E., Shaywitz, B. A., Holahan, J. M., Marchione, K. E., Michaels, R., & Shaywitz, S. E. (2015). Achievement gap in reading is present as early as first grade and persists through adolescence. *The Journal of Pediatrics*, 167(5), 1121-1125. <https://doi.org/10.1016/j.jpeds.2015.07.045>
- Fletcher, J. M., Francis, D. J., Foorman, B. R., & Schatschneider, C. (2021). Early detection of dyslexia risk: Development of brief, teacher-administered screens. *Learning Disability Quarterly*, 44(3), 145-157. <https://doi.org/10.1177/0731948720931870>
- Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2018). *Learning disabilities: From identification to intervention*. Guilford Publications. <https://www.guilford.com/>
- Fletcher, J. M., Stuebing, K. K., Morris, R. D., & Lyon, G. R. (2014). Classification and definition of learning disabilities: A hybrid model. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 33–50). The Guilford Press. <https://www.guilford.com/>
- Fletcher, J. M., & Vaughn, S. (2009). Response to intervention: Preventing and remediating academic difficulties. *Child Development Perspectives*, 3(1), 30-37. <https://doi.org/10.1111/j.1750-8606.2008.00072.x>
- Flouri, E., & Panourgia, C. (2014). Negative automatic thoughts and emotional and behavioural problems in adolescence. *Child and Adolescent Mental Health*, 19(1), 46-51. <https://doi.org/10.1111/camh.12004>
- Foorman, B., Beyler, N., Borradaile, K., Coyne, M., Denton, C., Dimino, J., Furgeson, J., Hayes, L., Henke, J., Justice, L., Keating, B., Lewis, W., Sattar, S., Streke, A., Wagner, R., &

- Wissel, S. (2016). *Foundational skills to support reading for understanding in kindergarten through 3rd grade* (NCEE 2016-4008). Institute of Education Sciences (IES).
https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/wwc_foundationalreading_070516.pdf
- Foorman, B. R., Francis, D. J., Davidson, K. C., Harm, M. W., & Griffin, J. (2004). Variability in text features in six grade 1 basal reading programs. *Scientific Studies of Reading*, 8(2), 167-197. https://doi.org/10.1207/s1532799xssr0802_4
- Fountas, I. C., & Pinnell, G. S. (1996). *Guided reading: Good first teaching for all children*. Heinemann. <https://www.heinemann.com>
- Fountas, I. C., & Pinnell, G. S. (2008). *Leveled literacy intervention*. Heinemann.
<https://www.heinemann.com/>
- Fountas, I. C., & Pinnell, G. S. (2012). Guided reading: The romance and the reality. *The Reading Teacher*, 66(4), 268-284. <https://doi.org/10.1002/TRTR.01123>
- Fowler, S. A., Coleman, M. R. B., & Bogdan, W. K. (2019). The state of the special education profession survey report. *TEACHING Exceptional Children*, 52(1), 8-29.
<https://doi.org/10.1177/0040059919875703>
- Frenzel, A. C., Becker-Kurz, B., Pekrun, R., Goetz, T., & Lüdtke, O. (2018). Emotion transmission in the classroom revisited: A reciprocal effects model of teacher and student enjoyment. *Journal of Educational Psychology*, 110(5), 628.
<https://doi.org/10.1037/edu0000228>
- Frenzel, A. C., Goetz, T., Pekrun, R., & Watt, H. M. (2010). Development of mathematics

- interest in adolescence: Influences of gender, family, and school context. *Journal of Research on Adolescence*, 20(2), 507-537. <https://doi.org/10.1111/j.1532-7795.2010.00645.x>
- Fuchs, D., Fuchs, L. S., & Stecker, P. M. (2010). The “blurring” of special education in a new continuum of general education placements and services. *Exceptional Children*, 76(3), 301-323. <https://doi.org/10.1177/001440291007600304>
- Fuchs, L. S., Fuchs, D., & Compton, D. L. (2013). Intervention effects for students with comorbid forms of learning disability: Understanding the needs of non-responders. *Journal of Learning Disabilities*, 46(6), 534-548. <https://doi.org/10.1177/0022219412468889>
- Galuschka, K., Ise, E., Krick, K., & Schulte-Körne, G. (2014). Effectiveness of treatment approaches for children and adolescents with reading disabilities: A meta-analysis of randomized controlled trials. *PloS one*, 9(2), e89900. <https://doi.org/10.1371/journal.pone.0089900>
- Gambrell, L. B. (2015). Getting students hooked on the reading habit. *The Reading Teacher*, 69(3), 259-263. <https://doi.org/10.1002/trtr.1423>
- Gartland, D., & Strosnider, R. (2020). The use of response to intervention to inform special education eligibility decisions for students with specific learning disabilities. *Learning Disability Quarterly*, 43(4), 195-200. <https://doi.org/10.1177/0731948720949964>
- Gearin, B., Petscher, Y., Stanley, C., Nelson, N. J., & Fien, H. (2021). Document analysis of state dyslexia legislation suggests likely heterogeneous effects on student and school outcomes. *Learning Disability Quarterly*, 0(00), 1-13. <https://doi.org/10.1177/0731948721991549>

- Gearin, B., Turtura, J., Kame'enui, E. J., Nelson, N. J., & Fien, H. (2020). A multiple streams analysis of recent changes to state-level dyslexia education law. *Educational Policy*, 34(7), 1036-1068. <https://doi.org/10.1177/0895904818807328>
- Gentrup, S., Lorenz, G., Kristen, C., & Kogan, I. (2020). Self-fulfilling prophecies in the classroom: Teacher expectations, teacher feedback and student achievement. *Learning and Instruction*, 66, 101-296. <https://doi.org/10.1016/j.learninstruc.2019.101296>
- Gentry, J. R., & Ouellette, G. (2019). *Brain words: How the science of reading informs teaching*. Stenhouse Publishers. <https://www.stenhouse.com/>
- Georgiou, G. K., Torppa, M., Manolitsis, G., Lyytinen, H., & Parrila, R. (2012). Longitudinal predictors of reading and spelling across languages varying in orthographic consistency. *Reading and Writing*, 25(2), 321-346. <https://doi.org/10.1007/s11145-010-9271-x>
- Gillingham, A., & Stillman, B. W. (1997). *Remedial work for reading, spelling and penmanship*. Educators Publishing Service. <https://www.exodusbooks.com/educators-publishing-service/38/>
- Gillis, M. B. (2017). How RTI supports early identification of students with different reading profiles. *Perspectives on Language and Literacy*, 43(3), 41-45. <https://dyslexiaida.org/perspectives/>
- Glazerman, S., Isenberg, E., Dolfen, S., Bleeker, M., Johnson, A., Grider, M., & Jacobus, M. (2010). *Impacts of comprehensive teacher induction: Final results from a randomized controlled study* (NCEE 2010-4027). National Center for Education Evaluation and Regional Assistance. <https://files.eric.ed.gov/fulltext/ED565837.pdf>
- Glenberg, A. M. (2008). Embodiment for education. In P. Calvo & A. Gomila (Eds.), *Handbook*

of cognitive science (pp. 355-372). Elsevier.

<https://doi.org/10.1016/B978-0-08-046616-3.00018-9>

Glenberg, A. M., & Gallese, V. (2012). Action-based language: A theory of language acquisition, comprehension, and production. *Cortex*, 48(7), 905-922.

<https://doi.org/10.1016/j.cortex.2011.04.010>

Glenberg, A. M., Gutierrez, T., Levin, J. R., Japuntich, S., & Kaschak, M. P. (2004). Activity and imagined activity can enhance young children's reading comprehension. *Journal of Educational Psychology*, 96(3), 424. <https://doi.org/10.1037/0022-0663.96.3.424>

González, J., Barros-Loscertales, A., Pulvermüller, F., Meseguer, V., Sanjuán, A., Belloch, V., & Ávila, C. (2006). Reading cinnamon activates olfactory brain regions. *Neuroimage*, 32(2), 906-912. <https://doi.org/10.1016/j.neuroimage.2006.03.037>

Gonzalez, M. (2021). Dyslexia knowledge, perceived preparedness, and professional development needs of in-service educators. *Annals of Dyslexia*, 71(3), 547-567. <https://doi.org/10.1007/s11881-021-00235-z>

Goodman, K. S. (1967). Reading: A psycholinguistic guessing game. *Literacy Research and Instruction*, 6(4), 126-135. <https://doi.org/10.1080/19388076709556976>

Goodwin, A. P., & Ahn, S. (2010). A meta-analysis of morphological interventions: Effects on literacy achievement of children with literacy difficulties. *Annals of Dyslexia*, 60(2), 183-208. <https://doi.org/10.1007/s11881-010-0041-x>

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>

Grapin, S. L., Waldron, N., & Joyce-Beaulieu, D. (2019). Longitudinal effects of RtI implementation on reading achievement outcomes. *Psychology in the Schools*, 56(2),

242-254. <https://doi.org/10.1002/pits.22222>

Gresham, F. M. (2002). Responsiveness to intervention: An alternative approach to the identification of learning disabilities. In R. Bradley, L. Danielson, & D. P. Hallahan (Eds.), *Identification of learning disabilities: Research to practice* (pp. 467-519). Erlbaum.

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.110.2048&rep=rep1&type=pdf>

Grusec, J. E. (1994). Social learning theory and developmental psychology: The legacies of Robert R. Sears and Albert Bandura. In R. D. Parke, P. A. Ornstein, J. J. Rieser, & C. Zahn-Waxler (Eds.), *A century of developmental psychology* (pp. 473-497). American Psychological Association. <https://doi.org/10.1037/10155-016>

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage.

<https://us.sagepub.com/>

Hall, D. P., & Cunningham, P. M. (2003). *The Administrator's Guide to the Four Blocks*. Four Blocks. <https://www.carsondellosa.com/contact-us/>

Hanford, E. (2018, September 10). Hard words: Why aren't kids being taught to read? APM Reports. <https://www.apmreports.org/episode/2018/09/10/hard-words-why-american-kids-arent-being-taught-to-read>

Harmey, S. (2021). Perspectives on dealing with reading difficulties. *Education*, 49(1), 52-62. <https://doi.org/10.1080/03004279.2020.1824702>

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*, 17(1), 13-26. <https://doi.org/10.1080/14725860220137345>

Heilmann, J. J., Moyle, M. J., & Rueden, A. M. (2018). Using alphabet knowledge to track the emergent literacy skills of children in Head Start. *Topics in Early Childhood Special*

- Education*, 38(2), 118-128. <https://doi.org/10.1177/0271121418766636>
- Henry, M. K. (1998). Structured, sequential, multisensory teaching: The Orton legacy. *Annals of Dyslexia*, 48(1), 1-26. <https://doi.org/10.1007/s11881-998-0002-9>
- Hindman, A. H., Morrison, F. J., Connor, C. M., & Connor, J. A. (2020). Bringing the science of reading to preservice elementary teachers: Tools that bridge research and practice. *Reading Research Quarterly*, 55, S197-S206. <https://doi.org/10.1002/rrq.345>
- Hodder, I. (1994). The interpretation of documents and material culture. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 393-402). Sage.
<https://us.sagepub.com>
- Hulme, C., Bowyer-Crane, C., Carroll, J. M., Duff, F. J., & Snowling, M. J. (2012). The causal role of phoneme awareness and letter-sound knowledge in learning to read: Combining intervention studies with mediation analyses. *Psychological Science*, 23(6), 572-577.
<https://doi.org/10.1177/0956797611435921>
- Hulme, C., & Snowling, M. J. (2016). Reading disorders and dyslexia. *Current Opinion in Pediatrics*, 28(6), 731. <https://doi.org/10.1097/MOP.0000000000000411>
- Husserl, E. (1931). *Méditations cartésiennes: introduction à la phénoménologie*.
<https://archive.org/details/husserl-e.-meditaciones-cartesianasocr-epl-fs-1931-2022/page/5/mode/2up>
- Individuals with Disabilities Education Improvement Act [IDEA], 20 U.S.C. § 1414 (2004).
<https://www.congress.gov/bill/108th-congress/house-bill/1350>
- Institute of Education Sciences [IES]. (2022). *Characteristics of 2020-21 public and private k-12 school teachers in the United States*. <https://nces.ed.gov/pubs2022/2022113.pdf>
- International Dyslexia Association. (2002). *Definition of dyslexia*.

<https://dyslexiaida.org/?s=definition>

International Dyslexia Association. (2016). *IDA urges ILA to review and clarify key points in dyslexia research advisory*. <https://dyslexiaida.org/ida-urges-ila-to-review-and-clarify-key-points-in-dyslexia-research-advisory/>

International Dyslexia Association. (2017). *Effective reading instruction*.

<https://dyslexiaida.org/effective-readinginstruction/>

International Dyslexia Association. (2018). *Knowledge and Practice Standards for Teachers of Reading*. <https://app.box.com/s/21gdk2k1p3bnagdfz1xy0v98j5ytl1wk>

International Literacy Association. (2016a). *Dyslexia* [Research advisory].

https://www.literacyworldwide.org/docs/default-source/where-we-stand/ila-dyslexia-research-advisory.pdf?sfvrsn=411ba18e_6

International Literacy Association. (2016b). *Dyslexia: A response to the International Dyslexia Association* [Research Advisory Addendum].

https://www.literacyworldwide.org/docs/default-source/where-we-stand/ila-dyslexia-research-advisory-addendum.pdf?sfvrsn=85bca08e_4

International Literacy Association. (2021). Science of reading. In *Literacy glossary*.

<https://www.literacyworldwide.org/get-resources/literacy-glossary>

Jackson, K., & Makarin, A. (2018). Can online off-the-shelf lessons improve student outcomes?

Evidence from a field experiment. *American Economic Journal: Economic Policy*, 10(3), 226-54. <https://doi.org/10.1257/pol.20170211>

Janesick, V. J. (2015). *“Stretching” exercises for qualitative researchers*. Sage.

<https://us.sagepub.com>

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and

- emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491-525. <https://doi.org/10.3102/0034654308325693>
- Johnson-Glenberg, M. C., Megowan-Romanowicz, C., Birchfield, D. A., & Savio-Ramos, C. (2016). Effects of embodied learning and digital platform on the retention of physics content: Centripetal force. *Frontiers in Psychology*, 7, 1819. <https://doi.org/10.3389/fpsyg.2016.01819>
- Jones, A. C., Wardlow, L., Pan, S. C., Zepeda, C., Heyman, G. D., Dunlosky, J., & Rickard, T. C. (2016). Beyond the rainbow: Retrieval practice leads to better spelling than rainbow writing. *Educational Psychology Review*, 28, 385-400. <https://doi.org/10.1007/s10648-015-9330-6>
- Jones, C. D., Clark, S. K., & Reutzel, D. (2013). Enhancing alphabet knowledge instruction: Research implications and practical strategies for early childhood educators. *Early Childhood Education Journal*, 41(2), 81-89. <https://doi.org/10.1007/s10643-012-0534-9>
- Jones, C. D., & Reutzel, D. R. (2012). Enhanced alphabet knowledge instruction: Exploring a change of frequency, focus, and distributed cycles of review. *Reading Psychology*, 33(5), 448-464. <https://doi.org/10.1080/02702711.2010.545260>
- Joshi, R. M. (2019). The componential model of reading (CMR): Implications for assessment and instruction of literacy problems. In D. A. Kilpatrick, R. M. Joshi, & R. K. Wagner (Eds.), *Reading development and difficulties: Bridging the gap between research and practice*. Springer. https://doi.org/10.1007/978-3-030-26550-2_1
- 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>

- Joshi, R. M., Treiman, R., Carreker, S., & Moats, L. C. (2008). How words cast their spell. *American Educator*, 32(4), 6-16.
<https://www.aft.org/sites/default/files/periodicals/joshi.pdf>
- Justice, L. M., Pence, K., Bowles, R. B., & Wiggins, A. (2006). An investigation of four hypotheses concerning the order by which 4-year-old children learn the alphabet letters. *Early Childhood Research Quarterly*, 21(3), 374-389.
<https://doi.org/10.1016/j.ecresq.2006.07.010>
- Kaminski, R. A., & Good, R. H. (1996). Toward a technology for assessing basic early literacy skills. *School Psychology Review*, 25(2), 215-227.
<https://doi.org/10.1080/02796015.1996.12085812>
- Kang, J. G., Lee, S. H., Park, E. J., & Leem, H. S. (2016). Event-related potential patterns reflect reversed hemispheric activity during visual attention processing in children with dyslexia: A preliminary study. *Clinical Psychopharmacology and Neuroscience*, 14(1), 33.
<https://doi.org/10.9758/cpn.2016.14.1.33>
- Karpicke, J. D., Blunt, J. R., & Smith, M. A. (2016). Retrieval-based learning: Positive effects of retrieval practice in elementary school children. *Frontiers in Psychology*, 7, 350.
<https://doi.org/10.3389/fpsyg.2016.00350>
- Karpicke, J. D., Blunt, J. R., Smith, M. A., & Karpicke, S. S. (2014). Retrieval-based learning: The need for guided retrieval in elementary school children. *Journal of Applied Research in Memory and Cognition*, 3(3), 198-206. <https://doi.org/10.1016/j.jarmac.2014.07.008>
- Karpicke, J. D., & Roediger, H. L. (2007). Repeated retrieval during learning is the key to long-term retention. *Journal of Memory and Language*, 57(2), 151-162.
<https://doi.org/10.1016/j.jml.2006.09.004>

- Karpicke, J. D., & Roediger, H. L. (2008). The critical importance of retrieval for learning. *Science*, 319(5865), 966-968. <https://doi.org/10.1126/science.1152408>
- Keesey, S., Konrad, M., & Joseph, L. M. (2015). Word boxes improve phonemic awareness, letter–sound correspondences, and spelling skills of at-risk kindergartners. *Remedial and Special Education*, 36(3), 167-180. <https://doi.org/10.1177/0741932514543927>
- Keller, M. M., Goetz, T., Becker, E. S., Morger, V., & Hensley, L. (2014). Feeling and showing: A new conceptualization of dispositional teacher enthusiasm and its relation to students' interest. *Learning and Instruction*, 33, 29-38.
<https://doi.org/10.1016/j.learninstruc.2014.03.001>
- Keller, M. M., Hoy, A. W., Goetz, T., & Frenzel, A. C. (2016). Teacher enthusiasm: Reviewing and redefining a complex construct. *Educational Psychology Review*, 28(4), 743-769.
<https://doi.org/10.1007/s10648-015-9354-y>
- Kennedy, M. M. (2016). How does professional development improve teaching? *Review of Educational Research*, 86(4), 945-980. <https://doi.org/10.3102/0034654315626800>
- Kent, S. C., Wanzek, J., & Al Otaiba, S. (2012). Print reading in general education kindergarten classrooms: What does it look like for students at-risk for reading difficulties? *Learning Disabilities Research & Practice*, 27(2), 56-65. <https://doi.org/10.1111/j.1540-5826.2012.00351.x>
- Kent, S. C., Wanzek, J., & Al Otaiba, S. (2017). Reading instruction for fourth-grade struggling readers and the relation to student outcomes. *Reading & Writing Quarterly*, 33(5), 395-411. <https://doi.org/10.1080/10573569.2016.1216342>
- Kilpatrick, D. A. (2015). *A practical framework for understanding and assessing reading skills:*

Essentials of assessing, preventing, and overcoming reading difficulties. Wiley.

<https://www.wiley.com/en-us>

Kilpatrick, D. A., Joshi, R. M., & Wagner, R. K. (2019). *Reading development and difficulties.*

Springer. <https://doi.org/10.1007/978-3-030-26550-2>

Kirby, J. R., & Bowers, P. N. (2017). Morphological instruction and literacy. *Theories of*

Reading Development, 15, 437. <https://doi.org/10.1075/swll.15.24kir>

Kosmas, P., Ioannou, A., & Retalis, S. (2018). Moving bodies to moving minds: A study of the use of motion-based games in special education. *TechTrends*, 62(6), 594-601.

<https://doi.org/10.1007/s11528-018-0294-5>

Kretlow, A. G., & Bartholomew, C. C. (2010). Using coaching to improve the fidelity of evidence-based practices: A review of studies. *Teacher Education and Special*

Education, 33(4), 279-299. <https://doi.org/10.1177/0888406410371643>

Kuerten, A. B., Mota, M. B., & Segaert, K. (2020). Developmental dyslexia: A condensed review of literature. *Ilha do Desterro*, 72, 249-270. [https://doi.org/10.5007/2175-](https://doi.org/10.5007/2175-8026.2019v72n3p249)

[8026.2019v72n3p249](https://doi.org/10.5007/2175-8026.2019v72n3p249)

Kunter, M., Tsai, Y. M., Klusmann, U., Brunner, M., Krauss, S., & Baumert, J. (2008). Students' and mathematics teachers' perceptions of teacher enthusiasm and instruction. *Learning*

and Instruction, 18(5), 468-482. <https://doi.org/10.1016/j.learninstruc.2008.06.008>

Lane, H. B., Pullen, P. C., Hudson, R. F., & Konold, T. R. (2009). Identifying essential

instructional components of literacy tutoring for struggling beginning readers. *Literacy*

Research and Instruction, 48(4), 277-297. <https://doi.org/10.1080/19388070902875173>

Langer, N., Peysakhovich, B., Zuk, J., Drott, M., Sliva, D. D., Smith, S., Becker, B., Grant,

P. E., & Gaab, N. (2017). White matter alterations in infants at risk for developmental

- dyslexia. *Cerebral Cortex*, 27(2), 1027-1036. <https://doi.org/10.1093/cercor/bhv281>
- Lazarides, R., Buchholz, J., & Rubach, C. (2018). Teacher enthusiasm and self-efficacy, student-perceived mastery goal orientation, and student motivation in mathematics classrooms. *Teaching and Teacher Education*, 69, 1-10. <https://doi.org/10.1016/j.tate.2017.08.017>
- Lazarides, R., Gaspard, H., & Dicke, A. L. (2019). Dynamics of classroom motivation: Teacher enthusiasm and the development of math interest and teacher support. *Learning and Instruction*, 60, 126-137. <https://doi.org/10.1016/j.learninstruc.2018.01.012>
- Leithwood, K., Seashore, K., Anderson, S., & Wahlstrom, K. (2004). Review of research: How leadership influences student learning. Center for Applied Research and Educational Improvement. <https://conservancy.umn.edu/bitstream/handle/11299/2035/?sequence=1>
- Lemons, C. J., Otaiba, S. A., Conway, S. J., & Mellado De La Cruz, V. (2016). Improving professional development to enhance reading outcomes for students in special education. *New Directions for Child and Adolescent Development*, 154, 87-104. <https://doi.org/10.1002/cad.20177>
- Leonard, L. B., Deevy, P., Karpicke, J. D., Christ, S. L., & Kueser, J. B. (2020). After initial retrieval practice, more retrieval produces better retention than more study in the word learning of children with developmental language disorder. *Journal of Speech, Language, and Hearing Research*, 63(8), 2763-2776. https://doi.org/10.1044/2020_JSLHR-20-00105
- Liberman, I. Y. (1973). Segmentation of the spoken word and reading acquisition. *Bulletin of the Orton Society*, 23, 65-77. <https://www.jstor.org/stable/23769540>
- Lincoln, Y., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage. <https://archive.org/details/naturalisticinqu00linc>

- Lindgren, R. (2014). Getting into the cue: Embracing technology-facilitated body movements as a starting point for learning. In V. R. Lee (Ed.), *Learning technologies and the body* (pp. 51-66). Routledge. <https://doi.org/10.4324/9781315772639>
- Lindgren, R., & Johnson-Glenberg, M. (2013). Emboldened by embodiment: Six precepts for research on embodied learning and mixed reality. *Educational Researcher*, 42(8), 445-452. <https://doi.org/10.3102/0013189X13511661>
- Lipko-Speed, A., Dunlosky, J., & Rawson, K. A. (2014). Does testing with feedback help grade-school children learn key concepts in science? *Journal of Applied Research in Memory and Cognition*, 3(3), 171-176. <https://doi.org/10.1016/j.jarmac.2014.04.002>
- Literacy-Based Promotion Act. (2018). <https://legiscan.com/MS/text/SB2347/id/818137>
- Lonigan, C. J., Phillips, B. M., Schatschneider, C., Steacy, L. M., Terry, N. P., & Wagner, R. K. (2020). How the science of reading informs 21st-century education. *Reading research quarterly*, 55, S267-S282.
- Lovett, M. W., Lacerenza, L., Borden, S. L., Frijters, J. C., Steinbach, K. A., & De Palma, M. (2000). Components of effective remediation for developmental reading disabilities: Combining phonological and strategy-based instruction to improve outcomes. *Journal of Educational Psychology*, 92(2), 263. <https://doi.org/10.1037/0022-0663.92.2.263>
- Macedonia, M., & Knösche, T. R. (2011). Body in mind: How gestures empower foreign language learning. *Mind, Brain, and Education*, 5(4), 196-211. <https://doi.org/10.1111/j.1751-228X.2011.01129.x>
- Macedonia, M., Müller, K., & Friederici, A. D. (2011). The impact of iconic gestures on foreign language word learning and its neural substrate. *Human Brain Mapping*, 32(6), 982-998. <https://doi.org/10.1002/hbm.21084>

- Mathes, P. G., Denton, C. A., Fletcher, J. M., Anthony, J. L., Francis, D. J., & Schatschneider, C. (2005). An evaluation of two reading interventions derived from diverse models. *Reading Research Quarterly*, 40(2), 148-183. <https://doi.org/10.1598/RRQ.40.2.2>
- May, H., Sirinides, P. M., Gray, A., & Goldsworthy, H. (2016). *Reading Recovery: An evaluation of the four-year i3 scale-up*. Consortium of Policy Research in Education. https://repository.upenn.edu/cpre_researchreports
- Mayer, K. M., Yildiz, I. B., Macedonia, M., & von Kriegstein, K. (2015). Visual and motor cortices differentially support the translation of foreign language words. *Current Biology*, 25(4), 530-535. <https://doi.org/10.1016/j.cub.2014.11.068>
- McCarthy, P. A. (2008). Using sound boxes systematically to develop phonemic awareness. *The Reading Teacher*, 62(4), 346-349. <https://doi.org/10.1598/RT.62.4.7>
- McKenna, B., Myers, M. D., & Newman, M. (2017). Social media in qualitative research: Challenges and recommendations. *Information and Organization*, 27(2), 87-99. <https://doi.org/10.1016/j.infoandorg.2017.03.001>
- McLaughlin, M. J., Speirs, K. E., & Shenassa, E. D. (2014). Reading disability and adult attained education and income: Evidence from a 30-year longitudinal study of a population-based sample. *Journal of Learning Disabilities*, 47(4), 374-386. <https://doi.org/10.1177/0022219412458323>
- McMahan, K. M., Oslund, E. L., & Odegard, T. N. (2019). Characterizing the knowledge of educators receiving training in systematic literacy instruction. *Annals of Dyslexia*, 69(1), 21-33. <https://doi.org/10.1007/s11881-018-00174-2>
- Meeks, L., Madelaine, A., & Stephenson, J. (2020). New teachers talk about their preparation to teach early literacy. *Australian Journal of Learning Difficulties*, 25(2), 161-181.

<https://doi.org/10.1080/19404158.2020.1792520>

Meeks, L., Stephenson, J., Kemp, C., & Madelaine, A. (2016). How well prepared are pre-service teachers to teach early reading? A systematic review of the literature. *Australian Journal of Learning Difficulties*, 21(2), 69-98.

<https://doi.org/10.1080/19404158.2017.1287103>

Mikami, A. Y., Ruzek, E. A., Hafen, C. A., Gregory, A., & Allen, J. P. (2017). Perceptions of relatedness with classroom peers promote adolescents' behavioral engagement and achievement in secondary school. *Journal of Youth and Adolescence*, 46(11), 2341-2354.

<https://doi.org/10.1007/s10964-017-0724-2>

Miles, K. P., Rubin, G. B., & Gonzalez-Frey, S. (2018). Rethinking sight words. *The Reading Teacher*, 71(6), 715-726. <https://doi.org/10.1002/trtr.1658>

Miller, S. J., Noell, G. H., McIver, E. C., & Lark, C. R. (2017). Cross-modality generalization in reading and spelling instruction. *School Psychology Review*, 46(4), 408-425.

<https://doi.org/10.17105/SPR-2017-0077.V46-4>

Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and Implementation*. Jossey Bass. <https://www.wiley.com/learn/jossey-bass/>

Moats, L. C. (2005). How spelling supports reading. *American Educator*, 6(42), 12-22,

<https://dyslexiaida.org/perspectives/>

Moats, L. C. (2017). Can prevailing approaches to reading instruction accomplish the goals of RTI? *Perspectives on Language and Literacy*, 43, 15-22.

<https://dyslexiaida.org/perspectives/>

Moats, L. (2019a). Structured literacy: Effective instruction for students with dyslexia and

- related reading difficulties. *Perspectives on Language and Literacy*, 9-11.
<https://dyslexiaida.org/perspectives/>
- Moats, L. (2019b). Teaching spelling: An opportunity to unveil the logic of language. *Perspectives on Language and Literacy*, 45, 17-20. <https://dyslexiaida.org/perspectives/>
- Moats, L. (2020). Teaching reading “is” rocket science: What expert teachers of reading should know and be able to do. *American Educator*, 44(2), 44-39.
<https://files.eric.ed.gov/fulltext/EJ1260264.pdf>
- Morgan, W. P. (1896). A case of congenital word blindness. *British Medical Journal*, 2(1871), 1378. <https://doi.org/10.1136/bmj.2.1871.1378>
- Moritz, C., Yampolsky, S., Papadelis, G., Thomson, J., & Wolf, M. (2013). Links between early rhythm skills, musical training, and phonological awareness. *Reading and Writing*, 26(5), 739-769. <https://doi.org/10.1007/s11145-012-9389-0>
- Moustakas, C. (1994). *Phenomenological research methods*. Sage. <https://us.sagepub.com/>
- Mulholland, M., & O'Connor, U. (2016). Collaborative classroom practice for inclusion: Perspectives of classroom teachers and learning support/resource teachers. *International Journal of Inclusive Education*, 20(10), 1070-1083.
<https://doi.org/10.1080/13603116.2016.1145266>
- Nagy, W. E., Carlisle, J. F., & Goodwin, A. P. (2014). Morphological knowledge and literacy acquisition. *Journal of Learning Disabilities*, 47(1), 3-12.
<https://doi.org/10.1177/0022219413509967>
- National Center for Education Statistics [NCES]. (2019). *The nation's report card: NAEP report card: 2019 NAEP reading assessment*.
<https://www.nationsreportcard.gov/highlights/reading/2019/>

National Early Literacy Panel [NELP]. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. National Institute for Literacy.

<https://lincs.ed.gov/publications/pdf/NELPReport09.pdf>

National Reading Panel [NRP]. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Pub. No. 00-4754). U.S. Government Printing Office.

<https://www.nichd.nih.gov/publications/pubs/nrp/smallbook>

Neuman, L. (2006). Social research methods. Prentice Hall. <https://www.pearson.com/en-us.html>

Norman, P. J., & Feiman-Nemser, S. (2005). Mind activity in teaching and mentoring. *Teaching and Teacher Education*, 21(6), 679-697. <https://doi.org/10.1016/j.tate.2005.05.006>

Oakhill, J., Cain, K., & Elbro, C. (2019). Reading comprehension and reading comprehension difficulties. In *reading development and difficulties* (pp. 83-115). Springer.

https://doi.org/10.1007/978-3-030-26550-2_5

Oberle, E., Gist, A., Cooray, M. S., & Pinto, J. B. (2020). Do students notice stress in teachers? Associations between classroom teacher burnout and students' perceptions of teacher social-emotional competence. *Psychology in the Schools*, 57(11), 1741-1756.

<https://doi.org/10.1002/pits.22432>

Odegard, T. N. (2020). Structured literacy versus neuropsychological/cognitive approaches.

Perspectives on Language and Literacy, 13-15. <https://dyslexiada.org/perspectives/>

Opfer, D. (2016). *Conditions and practices associated with teacher professional development and its impact on instruction in TALIS 2013* (OECD Education Working papers, No.

138). OECD Publishing. <https://doi.org/10.1787/5jlss4r0lrg5-en>

Orton, S. T. (1937). *Reading, writing and speech problems in children*. W. W. Norton &

- Company, Inc. <https://archive.org/details/in.ernet.dli.2015.18258/page/n3/mode/2up>
- Orton, S. T. (1963). Specific reading disability-Strephosymbolia. *Bulletin of the Orton Society*, 9-17. <http://www.jstor.org/stable/23769472>
- Osher, D. (2018). Trauma and learning policy initiative (TLPI): Trauma-sensitive schools descriptive study. *American Institute for Research*. <https://www.air.org/>
- Ouellette, G., & Sénéchal, M. (2008). Pathways to literacy: A study of invented spelling and its role in learning to read. *Child Development*, 79(4), 899-913. <https://doi.org/10.1111/j.1467-8624.2008.01166.x>
- Ouellette, G., & Sénéchal, M. (2017). Invented spelling in kindergarten as a predictor of reading and spelling in Grade 1: A new pathway to literacy, or just the same road, less known? *Developmental psychology*, 53(1), 77-88. <https://doi.org/10.1037/dev0000179>
- Ouellette, G., Sénéchal, M., & Haley, A. (2013). Guiding children's invented spellings: A gateway into literacy learning. *The Journal of Experimental Education*, 81(2), 261-279. <https://doi.org/10.1080/00220973.2012.699903>
- Paige, D. D. (2018). Reading recovery© won't fix poor core tier-one reading instruction. *Reading Psychology*, 39(5), 492-497. <https://doi.org/10.1080/02702711.2018.1465554>
- Pajares, F., & Usher, E. L. (2008). Self-efficacy, motivation, and achievement in school from the perspective of reciprocal determinism. *Advances in Motivation and Achievement*, 15, 391-423. [https://doi.org/10.1016/S0749-7423\(08\)15012-9](https://doi.org/10.1016/S0749-7423(08)15012-9)
- Pashler, H., Rohrer, D., Cepeda, N. J., & Carpenter, S. K. (2007). Enhancing learning and retarding forgetting: Choices and consequences. *Psychonomic Bulletin & Review*, 14(2), 187-193. <https://doi.org/10.3758/BF03194050>
- Pearson, P. D., & Hiebert, E. H. (2010). National reports in literacy: Building a scientific base

for practice and policy. *Educational Researcher*, 39(4), 286-294.

<https://doi.org/10.3102/0013189X10370205>

Peltier, T. K., Washburn, E. K., Pulos, J. M., & Peltier, C. (2020). Measuring special education preservice teachers' knowledge, reflective ability, and tutored student outcomes on foundational literacy skills. *Insights into Learning Disabilities*, 17(1), 1-33.

<https://files.eric.ed.gov/fulltext/EJ1258312.pdf>

Perfetti, C., Pugh, K., & Verhoeven, L. (2019). Developmental dyslexia across languages and writing systems: The big picture. *Developmental Dyslexia Across Languages and Writing Systems*, 441. <https://doi.org/10.1017/9781108553377>

Pianta, R. C., Belsky, J., Vandergrift, N., Houts, R., & Morrison, F. J. (2008). Classroom effects on children's achievement trajectories in elementary school. *American Educational Research Journal*, 45(2), 365-397. <https://doi.org/10.3102/0002831207308230>

Piasta, S. B. (2014). Moving to assessment-guided differentiated instruction to support young children's alphabet knowledge. *The Reading Teacher*, 68(3), 202-211.

<https://doi.org/10.1002/trtr.1316>

Piasta, S. B., Connor, C. M., Fishman, B. J., & Morrison, F. J. (2009). Teachers' knowledge of literacy concepts, classroom practices, and student reading growth. *Scientific Studies of Reading*, 13(3), 224-248. <https://doi.org/10.1080/10888430902851364>

Piasta, S. B., Logan, J. A., Thomas, L. J., Zettler-Greeley, C. M., Bailet, L. L., & Lewis, K. (2021). Implementation of a small-group emergent literacy intervention by preschool teachers and community aides. *Early Childhood Research Quarterly*, 54, 31-43.

<https://doi.org/10.1016/j.ecresq.2020.08.002>

Piasta, S. B., & Wagner, R. K. (2010). Developing early literacy skills: A meta-analysis of

- alphabet learning and instruction. *Reading Research Quarterly*, 45(1), 8-38.
<https://doi.org/10.1598/RRQ.45.1.2>
- Pickl, G., Holzinger, A., & Kopp-Sixt, S. (2016). The special education teacher between the priorities of inclusion and specialisation. *International Journal of Inclusive Education*, 20(8), 828-843. <https://doi.org/10.1080/13603116.2015.1115559>
- Pinto, G., Bigozzi, L., Vezzani, C., & Tarchi, C. (2017). Emergent literacy and reading acquisition: a longitudinal study from kindergarten to primary school. *European Journal of Psychology of Education*, 32(4), 571-587. <https://doi.org/10.1007/s10212-016-0314-9>
- Pittman, R. T., Zhang, S., Binks-Cantrell, E., Hudson, A., & Joshi, R. M. (2020). Teachers' knowledge about language constructs related to literacy skills and student achievement in low socio-economic status schools. *Dyslexia*, 26, 200-219.
<https://doi.org/10.1002/dys.1628>
- Plummer, J. D. (2009). Early elementary students' development of astronomy concepts in the planetarium. *Journal of Research in Science Teaching*, 46(2), 192-209.
<https://doi.org/10.1002/tea.20280>
- Praetorius, A. K., Lauermann, F., Klassen, R. M., Dickhäuser, O., Janke, S., & Dresel, M. (2017). Longitudinal relations between teaching-related motivations and student-reported teaching quality. *Teaching and Teacher Education*, 65, 241-254.
<https://doi.org/10.1016/j.tate.2017.03.023>
- Preston, A. I., Wood, C. L., & Stecker, P. M. (2016). Response to intervention: Where it came from and where it's going. *Preventing School Failure: Alternative Education for Children and Youth*, 60(3), 173-182. <https://doi.org/10.1080/1045988X.2015.1065399>
- Pullen, P. C., & Lane, H. B. (2014). Teacher-directed decoding practice with manipulative letters

- and word reading skill development of struggling first grade students. *Exceptionality*, 22(1), 1-16. <https://doi.org/10.1080/09362835.2014.865952>
- Pulvermüller, F. (2005). Brain mechanisms linking language and action. *Nature Reviews Neuroscience*, 6(7), 576-582. <https://doi.org/10.1038/nrn1706>
- Pulvermüller, F., Shtyrov, Y., & Ilmoniemi, R. (2005). Brain signatures of meaning access in action word recognition. *Journal of Cognitive Neuroscience*, 17(6), 884-892. <https://doi.org/10.1162/0898929054021111>
- Puzio, K., Colby, G. T., & Algeo-Nichols, D. (2020). Differentiated Literacy instruction: Boondoggle or best practice? *Review of Educational Research*, 90(4), 459-498. <https://doi.org/10.3102/0034654320933536>
- Radley, A. (2011). Image and imagination. In P. Reavey (Ed.), *Visual methods in psychology: Using and interpreting images in qualitative research* (pp. 17-28). Routledge. <https://www.routledge.com>
- Rasinski, T. V. (2017). Readers who struggle: Why many struggle and a modest proposal for improving their reading. *The Reading Teacher*, 70(5), 519-524. <https://doi.org/10.1002/trtr.1533>
- Rastle, K. (2019). The place of morphology in learning to read in English. *Cortex*, 116, 45-54. <https://doi.org/10.1016/j.cortex.2018.02.008>
- Research Excellence and Advancements for Dyslexia Act [READ Act]. (2016). <https://www.congress.gov/bill/114th-congress/house-bill/3033/text>
- Right to Read Act. (2021). <https://www.arkleg.state.ar.us/Acts/FTPDocument?path=%2FACTS%2F2021R%2FPublic%2F&file=606.pdf&ddBienniumSession=2021%2F2021R>

- Roberts, T. A., Vadasy, P. F., & Sanders, E. A. (2018). Preschoolers' alphabet learning: Letter name and sound instruction, cognitive processes, and English proficiency. *Early Childhood Research Quarterly, 44*, 257-274. <https://doi.org/10.1016/j.ecresq.2018.04.011>
- Robinson, L., Lambert, M. C., Towner, J., & Caros, J. (2016). A comparison of direct instruction and balanced literacy: An evaluative comparison for a pacific northwest rural school district. *Reading Improvement, 53*(4), 147-164.
<https://www.projectinnovation.com/reading-improvement.html>
- Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research, 81*(4), 493-529.
<https://www.jstor.org/stable/41408670>
- Roediger, H. L., & Karpicke, J. D. (2006). Test-enhanced learning: Taking memory tests improves long-term retention. *Psychological Science, 17*(3), 249-255.
<https://doi.org/10.1111/j.1467-9280.2006.01693.x>
- Rosenthal, R., & Jacobson, L. (1968). Pygmalion in the classroom. *The Urban Review, 3*(1), 16-20. <https://doi.org/10.1007/BF02322211>
- Rubie-Davies, C. M. (2006). Teacher expectations and student self-perceptions: Exploring relationships. *Psychology in the Schools, 43*(5), 537-552.
<https://doi.org/10.1002/pits.20169>
- Rubie-Davies, C. M. (2007). Classroom interactions: Exploring the practices of high-and low-expectation teachers. *British Journal of Educational Psychology, 77*(2), 289-306.
<https://doi.org/10.1348/000709906X101601>
- Rubie-Davies, C. M., & Peterson, E. R. (2011). Teacher expectations and beliefs: Influences on

the socioemotional climate. In C. M. Rubie-Davies (Ed.), *Educational Psychology: Concepts, research, and challenges*. Routledge.

<https://doi.org/10.4324/9780203838884>

Rubie-Davies, C. M., & Rosenthal, R. (2016). Intervening in teachers' expectations: A random effects meta-analytic approach to examining the effectiveness of an intervention. *Learning and Individual Differences*, 50, 83-92.

<https://doi.org/10.1016/j.lindif.2016.07.014>

Runions, K. C., & Bak, M. (2015). Online moral disengagement, cyberbullying, and cyber-aggression. *Cyberpsychology, Behavior, and Social Networking*, 18(7), 400-405.

<https://doi.org/10.1089/cyber.2014.0670>

Ruzek, E. A., Hafen, C. A., Allen, J. P., Gregory, A., Mikami, A. Y., & Pianta, R. C. (2016). How teacher emotional support motivates students: The mediating roles of perceived peer relatedness, autonomy support, and competence. *Learning and Instruction*, 42, 95-103.

<https://doi.org/10.1016/j.learninstruc.2016.01.004>

Sadoski, M., & Paivio, A. (2001). *Imagery and text: A dual coding theory of reading and writing*. Lawrence Erlbaum Associates. <https://www.taylorfrancis.com>

Saeki, E., Segool, N., Pendergast, L., & von der Embse, N. (2018). The influence of test-based accountability policies on early elementary teachers: School climate, environmental stress, and teacher stress. *Psychology in the Schools*, 55(4), 391-403.

<https://doi.org/10.1002/pits.22112>

Saldaña, J. (2021). *The coding manual for qualitative researchers*. SAGE.

<https://us.sagepub.com/>

Sanchez, V. M., & O'Connor, R. E. (2015). Building tier 3 intervention for long-term slow

- growers in grades 3–4: A pilot study. *Learning Disabilities Research & Practice*, 30(4), 171-181. <https://doi.org/10.1111/ldrp.12085>
- Sargiani, R. D. A., Ehri, L. C., & Maluf, M. R. (2018). Orthographic mapping instruction to facilitate reading and spelling in Brazilian emergent readers. *Applied Psycholinguistics*, 39(6), 1405-1437. <https://doi.org/10.1017/S0142716418000371>
- Sargiani, R. D. A., Ehri, L. C., & Maluf, M. R. (2022). Teaching beginners to decode consonant-vowel syllables using grapheme-phoneme subunits facilitates reading and spelling as compared with teaching whole-syllable decoding. *Reading Research Quarterly*, 57(2), 629-648. <https://doi.org/10.1002/rrq.432>
- Sayeski, K. L. (2019). Integrating structured literacy within teacher preparation. *Perspectives on Language and Literacy*, 37-42. <https://dyslexiaida.org/perspectives/>
- Scanlon, D. M., Anderson, K. L., & Sweeney, J. M. (2016). *Early intervention for reading difficulties: The interactive strategies approach*. Guilford Publications.
<https://www.guilford.com/>
- Schatschneider, C., Fletcher, J. M., Francis, D. J., Carlson, C. D., & Foorman, B. R. (2004). Kindergarten prediction of reading skills: A longitudinal comparative analysis. *Journal of Educational Psychology*, 96(2), 265-282. <https://doi.org/10.1037/0022-0663.96.2.265>
- Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. *The Future of Children*, 27(1), 137-155. <https://www.jstor.org/stable/44219025>
- Scruggs, T. E., Mastropieri, M.A., & McDuffie, K.A., (2007). Co-teaching in inclusive classrooms: A metasynthesis of qualitative research. *Exceptional Children*, 73, 203-222. <https://doi.org/10.1177/001440290707300401>

- Seidenberg, M. (2017). *Language at the speed of sight: How we read, why so many can't, and what can be done about it*. Basic Books. <http://www.basicbooks.com/@BasicBooks>
- Semingson, P., & Kerns, W. (2021). Where is the evidence? Looking back to Jeanne Chall and enduring debates about the science of reading. *Reading Research Quarterly*, 56(S1), S157-S169. <https://doi.org/10.1002/rrq.405>
- Share, D. L. (1995). Phonological recoding and self-teaching: Sine qua non of reading acquisition. *Cognition*, 55(2), 151-218. [https://doi.org/10.1016/0010-0277\(94\)00645-2](https://doi.org/10.1016/0010-0277(94)00645-2)
- Share, D. L. (2021). Common misconceptions about the phonological deficit theory of dyslexia. *Brain Sciences*, 11(11), 1-13. <https://doi.org/10.3390/brainsci11111510>
- Shaywitz, B. A., & Shaywitz, S. E. (2020). The American experience: Towards a 21st century definition of dyslexia. *Oxford Review of Education*, 46(4), 454-471. <https://doi.org/10.1080/03054985.2020.1793545>
- Shaywitz, S. E. (2003). *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. Vintage. <https://knopfdoubleday.com/imprint/vintage/>
- Shmidman, A., & Ehri, L. (2010). Embedded picture mnemonics to learn letters. *Scientific Studies of Reading*, 14(2), 159-182. <https://doi.org/10.1080/10888430903117492>
- Siegel, L. S., & Mazabel, S. (2014). Basic cognitive processes and reading disabilities. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (2nd ed., p. 527). Guilford Press. <https://psycnet.apa.org/record/2013-16874-011>
- Simos, P. G., Fletcher, J. M., Bergman, E., Breier, J. I., Foorman, B. R., Castillo, E. M., Davis, R. N., Fitzgerald, M., & Papanicolaou, A. C. (2002). Dyslexia-specific brain activation profile becomes normal following successful remedial training. *Neurology*, 58(8), 1203-1213. <https://doi.org/10.1212/WNL.58.8.1203>

- Siuty, M. B., Leko, M. M., & Knackstedt, K. M. (2018). Unraveling the role of curriculum in teacher decision making. *Teacher Education and Special Education*, 41(1), 39-57.
<https://doi.org/10.1177/0888406416683230>
- Sloan, L., & Quan-Haase, A. (2017). *The sage handbook of social media research methods*. SAGE. <https://us.sagepub.com>
- Smith, M. A., Blunt, J. R., Whiffen, J. W., & Karpicke, J. D. (2016). Does providing prompts during retrieval practice improve learning? *Applied Cognitive Psychology*, 30(4), 544-553. <https://doi.org/10.1002/acp.3227>
- Snow, C. E., & Matthews, T. J. (2016). Reading and language in the early grades. *The Future of Children*, 26(2), 57-74. <http://www.jstor.org/stable/43940581>
- Snowling, M. J. (2001). From language to reading and dyslexia. *Dyslexia*, 7(1), 37-46.
<https://doi.org/10.1002/dys.185>
- Solheim, O. J., Frijters, J. C., Lundetræ, K., & Uppstad, P. H. (2018). Effectiveness of an early reading intervention in a semi-transparent orthography: A group randomised controlled trial. *Learning and Instruction*, 58, 65-79.
<https://doi.org/10.1016/j.learninstruc.2018.05.004>
- Solis, M., Vaughn, S., Swanson, E., & Mcculley, L. (2012). Collaborative models of instruction: The empirical foundations of inclusion and co-teaching. *Psychology in the Schools*, 49(5), 498-510. <https://doi.org/10.1002/pits.21606>
- Spear-Swerling, L. (2019). Structured literacy and typical literacy practices: Understanding differences to create instructional opportunities. *Teaching Exceptional Children*, 51(3), 201-211. <https://doi.org/10.1177/0040059917750160>
- Spear-Swerling, L., & Cheesman, E. (2012). Teachers' knowledge base for implementing

- response-to-intervention models in reading. *Reading and Writing*, 25(7), 1691-1723.
<https://doi.org/10.1007/s11145-011-9338-3>
- Spear-Swerling, L., & Sternberg, R. J. (2018). *Off track: When poor readers become “learning disabled”*. Routledge. <https://doi.org/10.4324/9780429498589>
- Sperandio, J., & Kong, P. A. (2018). Forging professional learning communities: the role of external agency. *International Journal of Leadership in Education*, 21(1), 80-94.
<https://doi.org/10.1080/13603124.2016.1182646>
- Staller, K. (2015). Qualitative analysis: The art of building bridging relationships. *Qualitative Social Work* 14(2), 145–153. <https://doi.org/10.1177/1473325015571210>
- Stanulis, R. N., & Bell, J. (2017). Beginning teachers improve with attentive and targeted mentoring. *Kappa Delta Pi Record*, 53(2), 59-65.
<https://doi.org/10.1080/00228958.2017.1299543>
- Stein, J. F. (2018). Does dyslexia exist? *Language, Cognition and Neuroscience*, 33(3), 313-320.
<https://doi.org/10.1080/23273798.2017.1325509>
- Stolz, S. A. (2015). Embodied learning. *Educational Philosophy and Theory*, 47(5), 474-487.
<https://doi.org/10.1080/00131857.2013.879694>
- Strang, T. M., & Piasta, S. B. (2016). Socioeconomic differences in code-focused emergent literacy skills. *Reading and Writing*, 29(7), 1337-1362. <https://doi.org/10.1007/s11145-016-9639-7>
- Suarez, N., Sanchez, C. R., Jimenez, J. E., & Anguera, M. T. (2018). Is reading instruction evidence-based? Analyzing teaching practices using T-patterns. *Frontiers in Psychology*, 9(7), 1-12. <https://doi.org/10.3389/fpsyg.2018.00007>

- Sunde, K., Furnes, B., & Lundetræ, K. (2020). Does introducing the letters faster boost the development of children's letter knowledge, word reading and spelling in the first year of school? *Scientific Studies of Reading*, 24(2), 141-158.
<https://doi.org/10.1080/10888438.2019.1615491>
- Sundqvist, K., & Eklund, G. (2021). Home economic teachers' ICT use in Finland seen from a lens of reciprocal determinism. *International Journal of Home Economics*, 14(2), 116-130. <https://search.informit.org/doi/abs/10.3316/informit.319102598204251>
- 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., Solis, M., Ciullo, S., & McKenna, J. (2012). Special education teachers' perceptions and instructional practices in response to intervention implementation. *Learning Disability Quarterly*, 35, 115–126. <https://doi.org/10.1177/0731948711432510>
- 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, 481-492. <https://doi.org/10.1002/pits.2084>
- Templeton, S. (2020). Stages, phases, repertoires, and waves: Learning to spell and read words. *The Reading Teacher*, 74(3), 315-323. <https://doi.org/10.1002/trtr.1951>
- Texas House Bill 3. (2019). <https://legiscan.com/TX/bill/HB3/2019>
- Torgesen, J. K. (2000). Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research & Practice*, 15(1), 55-64. https://doi.org/10.1207/SLDRP1501_6
- Torppa, M., Poikkeus, A. M., Laakso, M. L., Eklund, K., & Lyytinen, H. (2006). Predicting

- delayed letter knowledge development and its relation to grade 1 reading achievement among children with and without familial risk for dyslexia. *Developmental Psychology*, 42(6), 1128. <https://doi.org/10.1037/0012-1649.42.6.1128>
- Tosto, M. G., Asbury, K., Mazzocco, M. M., Petrill, S. A., & Kovas, Y. (2016). From classroom environment to mathematics achievement: The mediating role of self-perceived ability and subject interest. *Learning and Individual Differences*, 50, 260-269. <https://doi.org/10.1016/j.lindif.2016.07.009>
- Treiman, R. (1985). Phonemic analysis, spelling, and reading. *New Directions for Child Development*, 27, 5-18. <https://doi.org/10.1002/cd.23219852703>
- Treiman, R. (2017). Learning to spell words: Findings, theories, and issues. *Scientific Studies of Reading*, 21, 265–276. <https://doi.org/10.1080/10888438.2017.1296449>
- Treiman, R. (2018). Teaching and learning spelling. *Child Development Perspectives*, 12(4), 235-239. <https://doi.org/10.1111/cdep.12292>
- Treiman, R., & Kessler, B. (2013). Learning to use an alphabetic writing system. *Language Learning and Development*, 9(4), 317-330. <https://doi.org/10.1080/15475441.2013.812016>
- Treiman, R., & Kessler, B. (2014). *How children learn to write words*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199907977.001.0001>
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, 23(6),

- 944-956. <https://doi.org/10.1016/j.tate.2006.05.003>
- Vadasy, P. F., Sanders, E. A., & Peyton, J. A. (2006). Paraeducator-supplemented instruction in structural analysis with text reading practice for second and third graders at risk for reading problems. *Remedial and Special Education*, 27(6), 365-378.
<https://doi.org/10.1177/07419325060270060601>
- Vagle, M. D. (2018). *Crafting phenomenological research*. Routledge.
<https://www.routledge.com>
- van Manen, M. (2016). *Researching lived experience: Human science for an action sensitive pedagogy*. Routledge. <https://doi.org/10.4324/9781315421056>
- Vannest, K. J., & Hagan-Burke, S. (2010). Teacher time use in special education. *Remedial and Special Education*, 31(2), 126-142. <https://doi.org/10.1177/0741932508327459>
- Vaughn, S., Capin, P., Scammacca, N., Roberts, G., Cirino, P., & Fletcher, J. M. (2020). The critical role of word reading as a predictor of response to intervention. *Journal of Learning Disabilities*, 53(6), 415-427. <https://doi.org/10.1177/0022219419891412>
- Virginia Literacy Act. (2022, April 11). <https://legiscan.com/VA/bill/HB319/2022>
- Volpe, R. J., Burns, M. K., DuBois, M., & Zaslofsky, A. F. (2011). Computer-assisted tutoring: Teaching letter sounds to kindergarten students using incremental rehearsal. *Psychology in the Schools*, 48(4), 332-342. <https://doi.org/10.1002/pits.20557>
- von der Embse, N. P., Schultz, B. K., & Draughn, J. D. (2015). Readyng students to test: The influence of fear and efficacy appeals on anxiety and test performance. *School Psychology International*, 36(6), 620-637. <https://doi.org/10.1177/0143034315609094>
- Vujnovic, R. K., Fabiano, G. A., Morris, K. L., Norman, K., Hallmark, C., & Hartley, C. (2014). Examining school psychologists' and teachers' application of approaches within a

response to intervention framework. *Exceptionality*, 22(3), 129-140.

<https://doi.org/10.1080/09362835.2013.865530>

Wall, H. (2014). When guided reading isn't working: Strategies for effective instruction. *Journal of Language and Literacy Education*, 10(2), 135-140.

<https://files.eric.ed.gov/fulltext/EJ1048740.pdf>

Wang, S., Rubie-Davies, C. M., & Meissel, K. (2018). A systematic review of the teacher expectation literature over the past 30 years. *Educational Research and*

Evaluation, 24(3-5), 124-179. <https://doi.org/10.1080/13803611.2018.1548798>

Wanzek, J., Wexler, J., Vaughn, S., & Ciullo, S. (2010). Reading interventions for struggling readers in the upper elementary grades: A synthesis of 20 years of research. *Reading &*

Writing, 23, 889-912. <https://doi.org/10.1007/s11145-009-9179-5>

Washburn, E. K., Binks-Cantrell, E. S., Joshi, R., Martin-Chang, S., & Arrow, A. (2016a).

Preservice teacher knowledge of basic language constructs in Canada, England, New

Zealand, and the USA. *Annals of Dyslexia*, 66(1), 7-26. [https://doi.org/10.1007/s11881-](https://doi.org/10.1007/s11881-015-0115-x)

[015-0115-x](https://doi.org/10.1007/s11881-015-0115-x)

Washburn, E. K., Mulcahy, C. A., Joshi, R. M., & Binks-Cantrell, E. (2016b). Teacher

knowledge of dyslexia. *Perspectives on Language and Literacy*, 42(4), 1-13.

<https://dyslexiaida.org/perspectives/>

Washburn, E. K., Mulcahy, C. A., Musante, G., & Joshi, R. (2017). Novice teachers'

knowledge of reading-related disabilities and dyslexia. *Learning Disabilities: A*

Contemporary Journal, 15(2), 169-191. <https://files.eric.ed.gov/fulltext/EJ1160653.pdf>

Weiser, B. L. (2013). Ameliorating reading disabilities early: Examining an effective encoding

and decoding prevention instruction model. *Learning Disability Quarterly*, 36(3), 161-

177. <https://doi.org/10.1177/0731948712450017>

Weiser, B. L., & Mathes, P. (2011). Using encoding instruction to improve the reading and spelling performances of elementary students at risk for literacy difficulties: A best-evidence synthesis. *Review of Educational Research*, 81(2), 170-200.

<https://doi.org/10.3102/0034654310396719>

White, J., Mather, N., & Kirkpatrick, J. (2020). Preservice educators' and noneducators' knowledge and perceptions of responsibility about dyslexia. *Dyslexia*, 26, 220-242.

<https://doi.org/10.1002/dys.1653>

Wiens, P. D., Chou, A., Vallett, D., & Beck, J. S. (2019). New teacher mentoring and teacher retention: Examining the peer assistance and review program. *Educational Research: Theory and Practice*, 30(2), 103-110. <https://files.eric.ed.gov/fulltext/EJ1248416.pdf>

Wijekumar, K., Beerwinkle, A. L., Harris, K. R., & Graham, S. (2019). Etiology of teacher knowledge and instructional skills for literacy at the upper elementary grades. *Annals of Dyslexia*, 69, 5-20. <https://doi.org/10.1007/s11881-018-00170-6>

Wildemuth, B. (2017). *Applications of social research methods to questions in information and library sciences*. Libraries Unlimited. <https://www.abc-clio.com>

Wilson, B. A. (1988). *Wilson reading system*. Wilson Language Training Corporation.

<https://www.wilsonlanguage.com/programs/wilson-reading-system/>

Wong, V. W., Ruble, L. A., Yu, Y., & McGrew, J. H. (2017). Too stressed to teach? Teaching quality, student engagement, and IEP outcomes. *Exceptional Children*, 83(4), 412-427.

<https://doi.org/10.1177/0014402917690729>

Woodcock, S., Hitches, E., & Jones, G. (2019). It's not you, it's me: Teachers' self-efficacy and attributional beliefs towards students with specific learning difficulties. *International*

- Journal of Educational Research*, 97, 107-118. <https://doi.org/10.1016/j.jer.2019.07.007>
- Worthy, J., DeJulio, S., Svrcek, N., Villarreal, D. A., Derbyshire, C., LeeKeenan, K., Wiebe, M. T., Lammert, C., Rubin, J. C., & Salmerón, C. (2016). Teachers' understandings, perspectives, and experiences of dyslexia. *Literacy Research: Theory, Method, and Practice*, 65(1), 436-453. <https://doi.org/10.1177/2381336916661529>
- Worthy, J., Lammert, C., Long, S. L., Salmerón, C., & Godfrey, V. (2018). "What if we were committed to giving every individual the services and opportunities they need?" teacher educators' understandings, perspectives, and practices surrounding dyslexia. *Research in the Teaching of English*, 53(2), 125-148. <https://www.jstor.org/stable/26802729>
- Yin, R. K. (2016). *Qualitative research from start to finish*. Guilford. <https://www.guilford.com>
- Yin, R. K. (2018). *Case study research and applications*. Sage. <https://www.jstor.org/stable/23279888>
- Youman, M., & Mather, N. (2018). Dyslexia laws in the USA: A 2018 update. *Perspectives on Language and Literacy*, 44(2), 37-41. <https://www.proquest.com/docview/2082576564>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being. *Review of Educational Research*, 86, 981-1015. <https://doi.org/10.3102/0034654315626801>
- Zimmerman, J. (2006). Why some teachers resist change and what principals can do about it. *Nassp Bulletin*, 90(3), 238-249. <https://doi.org/10.1177/0192636506291521>

Appendix A: IRB Approval Letter

LIBERTY UNIVERSITY

INSTITUTIONAL REVIEW BOARD

December 7, 2022

Erin Bower
Sharon Farrell

Re: IRB Exemption - IRB-FY22-23-419 Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology

Dear Erin Bower, Sharon Farrell,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(ii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording). Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available

without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP

Administrative Chair of Institutional Research

Research Ethics Office

Appendix B: IRB Modified Study Approval Letter**LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

January 25, 2023

Erin Bower
Sharon Farrell

Re: Modification - IRB-FY22-23-419 Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology

Dear Erin Bower, Sharon Farrell,

The Liberty University Institutional Review Board (IRB) has rendered the decision below for IRB-FY22-23-419 Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology.

Decision: Exempt - Limited IRB

Your request to revise your participant criteria, recruit acquaintances by email and phone, and use snowball sampling has been approved. Thank you for submitting your revised study documents for our review and documentation. Your revised, stamped consent form and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study in Cayuse IRB. Your stamped consent form should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document should be made available without alteration.

Thank you for complying with the IRB's requirements for making changes to your approved study. Please do not hesitate to contact us with any questions.

We wish you well as you continue with your research.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

Appendix C: Facebook Recruitment Posting

Teacher Volunteers Needed for Dyslexia Study. Compensation Provided: I am conducting research as part of the requirements for a Doctor of Philosophy in special education at Liberty University. The purpose of my study is to understand the experiences of elementary teachers who teach students with dyslexia how to read.

To participate, you must meet the following criteria. Participants must:

- Have one year of full-time elementary teaching experience.
- Teach full-time in a public elementary school.
- Be a licensed elementary teacher in one of the following positions: K-3 classroom teacher, special education teacher, or reading specialist.
- Spend at least one 25-minute period a day teaching beginning reading to students with documented weaknesses in word recognition, decoding, and spelling due to phonological deficits but have at least average language comprehension.

****Students who meet the criteria for dyslexia do not need a dyslexia label or have to receive special education services.**

Eligible participants will be asked to commit approximately 2 hours to the following tasks:

- Complete a demographic questionnaire (3-5 minutes)
- Submit (identity protected) pictures of their instructional reading space (e.g., table, bookshelves, rug, board), and curricular and instructional documents and materials used regularly during reading instruction for students with dyslexia (20 minutes)
- Briefly respond to three journal prompts about one's experiences teaching reading to students with dyslexia for five consecutive days (5-minutes each day)
- Participate in a 60-minute interview (remotely or over the phone) that will be audio recorded
- Review their own interview transcripts for accuracy purposes (10-minutes)

Participation is voluntary and participants can withdraw at any time. Pseudonyms will be used to protect all identities. Participants will be compensated for their time with a \$125.00 gift card to a place of their choosing.

If you would like to participate and believe you meet the criteria listed above, please click the link below. You will be taken to an eligibility survey. If you meet the necessary criteria, I will email you a short demographic questionnaire to complete and an informed consent form to fill out and email back to me. Further instructions will be provided.

Thank you! Erin Bower

Link to Eligibility Survey



Appendix D: Verbal Recruitment Form

Hello Potential Participant,

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Doctor of Philosophy in special education. The purpose of this research is to understand the internal and external influences that shape elementary teachers' experiences when teaching students with dyslexia how to read, and if you meet my participant criteria and are interested, I would like to invite you to join my study.

Participants must have at least one year of full-time teaching experience in an elementary school. They must also be currently employed full-time as a licensed teacher in a public elementary school in one of the following positions: K-4 classroom teacher, special education teacher, or reading specialist. Finally, they must spend at least one 25-minute period a day teaching beginning reading to students with documented weaknesses in word recognition, spelling, and written language due to phonological deficits but have at least average language comprehension.

Participants, if willing, will be asked to complete a demographic questionnaire, submit (identity protected) pictures of their instructional reading space and curricular and instructional documents and materials used regularly during reading instruction for students with dyslexia, briefly respond to three journal prompts about one's experiences teaching reading to students with dyslexia for five consecutive days, participate in a 60-minute interview (remotely or over the phone) that will be audio recorded, and review their own interview transcripts for accuracy purposes. It should take approximately two hours to complete the procedures listed. Names and other identifying information will be requested as part of this study, but the information will remain confidential.

Would you like to participate?

[Yes] Great, could I get your email address so I can send you the link to an eligibility screener?

[No] I understand. Thank you for your time and have a good day.

A consent document will be emailed to you if you qualify for the study. The consent document contains additional information about my research. After you have read the consent form, please type your name and the date on it and email it to me at [REDACTED]. Doing so will indicate that you have read the consent information and would like to take part in the study. Participants will be compensated for their time with a \$125.00 gift card to a place of their choosing.

Thank you for your time. Do you have any questions?

Appendix E: Permission Request 1

August 2, 2022

[REDACTED]

Group Administrator

Dear [REDACTED],

As a graduate student in the School of Education at Liberty University, Erin Bower is conducting research as a part of the requirements for a Doctor of Philosophy degree. The title of her research project is *Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology*, and the purpose of this research is to understand the internal and external influences that shape elementary teachers' experiences when teaching students with dyslexia how to read.

I am writing to you on behalf of Erin Bower to request your permission to utilize the membership of [REDACTED] to recruit participants for her research. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, participants are welcome to discontinue participation at any time, and participants' identities will be protected using pseudonyms. Participants will be asked to complete a short demographic questionnaire, discuss their teaching experiences in either a virtual or phone interview, briefly write about their teaching experiences over one week, share examples of teaching documents, and review the transcripts. Participants will also be compensated for their time. The collected data will be analyzed and used to answer the following research questions:

- What are the lived experiences of elementary teachers who teach students with dyslexia how to read?
- What internal and external influences shape elementary teachers' experiences teaching students with dyslexia to read?
- How do internal and external influences shape elementary teachers' experiences teaching students with dyslexia how to read?

Thank you for considering my request. If you choose to grant permission, please respond with a signed statement by email to [REDACTED]. A permission letter document is attached for your convenience.

Sincerely,
Dr. Sharon B. Farrell

Adjunct Professor
 Qualitative Dissertation Chair/Research Methodologist
School of Education
(732) 887-7943
LIBERTY UNIVERSITY
Training Champions for Christ since 1971

Appendix E: Permission Request 2

August 7, 2022

[REDACTED]
[REDACTED], Group Administrator

Dear [REDACTED],

As a graduate student in the School of Education at Liberty University, I am conducting research as a part of the requirements for a Doctor of Philosophy degree. The title of my research project is *Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology* and the purpose of this research is to understand the internal and external influences that shape elementary teachers' experiences when teaching students with dyslexia how to read.

I am requesting your permission to utilize the membership of [REDACTED] to recruit participants for my research. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and participants are welcome to discontinue participation at any time. Participants will be asked to complete a brief questionnaire (3-minutes) to determine their eligibility for the study. If eligible, they will be asked to complete a brief demographic questionnaire (5-minutes) and schedule a virtual 60-minute interview over a mutually agreed upon digital platform or over the telephone. Participants will also be asked to submit (non-identifiable) images of their instructional reading space, curricular and instructional materials, and other relevant reading documents of their choosing used to teach students with dyslexia (20-minutes). Finally, participants will be asked to briefly write about their experiences teaching students with dyslexia how to read for five days (5-10 minutes each day). Collected data will be analyzed and used to answer the following research questions:

- What are the lived experiences of elementary teachers who teach students with dyslexia how to read?
- What internal and external influences shape elementary teachers' experiences teaching students with dyslexia to read?
- How do internal and external influences shape elementary teachers' experiences teaching students with dyslexia to read?

Thank you for considering my request. If you choose to grant permission, please sign the attached permission letter and email it to [REDACTED]

Sincerely,

Erin Bower
Doctoral Candidate
Liberty University

Appendix E: Permission Request 3

August 7, 2022

[REDACTED]

Dear [REDACTED],

As a graduate student in the School of Education at Liberty University, I am conducting research as a part of the requirements for a Doctor of Philosophy degree. The title of my research project is *Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology* and the purpose of this research is to understand the internal and external influences that shape elementary teachers' experiences when teaching students with dyslexia how to read.

I am requesting your permission to utilize the membership of [REDACTED] to recruit participants for my research. Participants will be presented with informed consent information prior to participating. Taking part in this study is completely voluntary, and teachers are welcome to discontinue participation at any time. Participants will be asked to complete a brief questionnaire (3 minutes) to determine their eligibility for the study. If eligible, they will be asked to complete a brief demographic questionnaire (3-5 minutes) and schedule a virtual 60-minute interview over a mutually agreed upon digital platform or over the telephone. Participants will also be asked to submit (non-identifiable) images of their instructional reading space (e.g., table, bookshelves, board), curricular and instructional materials, and other relevant reading documents of their choosing used to teach students with dyslexia (20 minutes). Finally, participants will be asked to briefly write about their experiences teaching students with dyslexia how to read (5 minutes each day for five consecutive days). Collected data will be analyzed and used to answer the following research questions:

- What are the lived experiences of elementary teachers who teach students with dyslexia how to read?
- What internal and external influences shape elementary teachers' experiences teaching students with dyslexia to read?
- How do internal and external influences shape elementary teachers' experiences teaching students with dyslexia to read?

Thank you for considering my request. If you choose to grant permission, please sign the attached permission letter and email it to [REDACTED]

Sincerely,

Erin Bower
 Doctoral Candidate
 Liberty University

Appendix F: Permission Letter 1

[REDACTED]
Group Administrator
[REDACTED]

Dear Ms. Bower,

After careful review of your research proposal entitled *Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology*, I have decided to grant you permission to contact members of [REDACTED] and invite them to participate in your study.

Please check the box below.

X ☐ I grant permission for Erin Bower to contact members of [REDACTED] to invite them to participate in her research study.

Sincerely,

[REDACTED]
Official's Name

Administrator
Official's Title

[REDACTED]
Official's Organization

Appendix F: Permission Letter 2

August 7, 2022

[REDACTED]
Group Administrator
[REDACTED]

Dear Ms. Bower,

After careful review of your research proposal entitled *Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology*, I have decided to grant you permission to contact members of [REDACTED] and invite them to participate in your study.

Please check the box below.

☒ I grant permission for Erin Bower to contact members of [REDACTED] to invite them to participate in her research study.

Sincerely,

[REDACTED]
Admin
Official's Title

[REDACTED]
Official's Organization

Appendix F: Permission Letter 3

August 7, 2022

[REDACTED]
Group Owner
[REDACTED]

Dear Ms. Bower,

After careful review of your research proposal entitled *Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia How to Read: A Transcendental Phenomenology*, I have decided to grant you permission to contact members of [REDACTED] and invite them to participate in your study.

Please check the box below.

☒ I grant permission for Erin Bower to contact members of [REDACTED] to invite them to participate in her research study.

Sincerely,

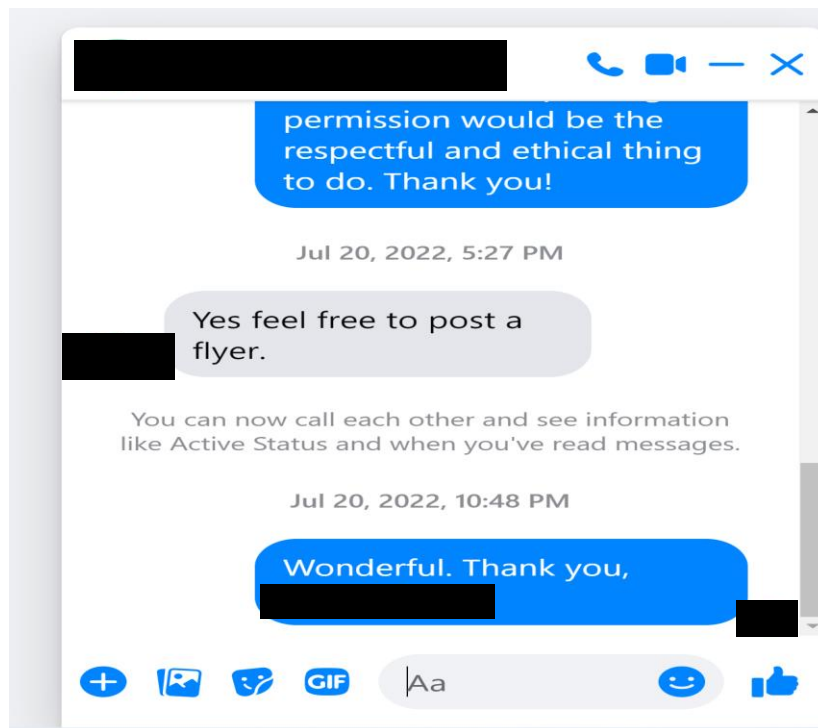
[REDACTED]

Group Owner

Official's Title

[REDACTED]
Official's Organization

Appendix G: Public Group Messenger Permission



Appendix H: Original Participant Consent Form

Consent Form

Understanding the Lived Experiences of Elementary Teachers Who Teach Students with Dyslexia
How to Read: A Transcendental Phenomenology

Erin Bower,
Doctoral Candidate for the School of Education
Liberty University

You are invited to participate in a research study. To participate, you must have at least one year of full-time teaching experience in an elementary school. You must also be currently employed full-time as a licensed teacher in a public elementary school in one of the following positions: public K-3 classroom teacher, special education teacher, or reading specialist. Finally, you must spend at least one 25-minute period a day teaching beginning reading to students with documented weaknesses in word recognition, spelling, and written language due to phonological deficits but have at least average language comprehension. Students who meet the criteria for dyslexia do not need a dyslexia label or receive special education services.

Taking part in this research project is voluntary. Please take time to read this entire form and ask questions before deciding whether to take part in this research.

Background Information: The purpose of the study is to understand how internal and external influences shape elementary teachers' experiences teaching students with dyslexia how to read. Internal influences include personal factors such as teachers' beliefs and expectations, while external influences include environmental and behavioral factors such as curricular and instructional resources and school leadership.

Procedures: If you agree to be in this study, I will ask you to do the following things:

1. Complete a demographic questionnaire (3-5 minutes).
2. Submit (identity protected) pictures of your instructional reading space and curricular and instructional materials used regularly during reading instruction for students with dyslexia (e.g., reading lesson plans, programs, manuals, software programs, charts, hands-on materials, books; 20 minutes).
3. Respond to three journal prompts about your experiences teaching reading to students with dyslexia for five consecutive days and email them to me (5 minutes each day).
4. Participate in a 60-minute interview (remotely or over the phone) that will be audio recorded.
5. Review transcripts for accuracy (10 minutes).

Benefits of Being in the Study: Participants may become more self-aware of their instructional reading practices and knowledge about basic language constructs and dyslexia.

Risks of Being in the Study: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Liberty University
IRB-FY22-23-419
Approved on 12-7-2022

Confidentiality The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to them. The following safeguards will be in place:

- Participant names will be replaced with pseudonyms.
- Interviews will be conducted either remotely or over the telephone (upon request) where others will not easily overhear the conversation.
- Data will be stored on a password locked computer. After three years, all electronic records will be deleted.
- Interviews will be audio recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

Compensation: Participants will be compensated for participating in this study. Each participant will receive a \$125.00 gift card to a place of their choosing at the end of the study.

Voluntary Participation: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time.

How to Withdraw: If you choose to withdraw from the study, please contact the researcher at the email address included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contact Information: The researcher conducting this study is Erin Bower. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Sharon Farrell at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515; our phone number is 434-592-5530; our email is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Statement of Consent: By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record me as part of my participation in this study.

Printed Subject Name

Signature & Date

Appendix I: Modified Participant Consent Form

Consent Form

Understanding the Lived Experiences of Elementary Teachers Who Teach Students with
Dyslexia How to Read: A Transcendental Phenomenology

Erin Bower,
Doctoral Candidate for the School of Education
Liberty University

You are invited to participate in a research study. To participate, you must have at least one year of full-time teaching experience in an elementary school. You must also be currently employed full-time as a licensed teacher in a public elementary school in one of the following positions: public K-4 classroom teacher, special education teacher, or reading specialist. Finally, you must spend at least one 25-minute period a day teaching beginning reading to students with documented weaknesses in word recognition, spelling, and written language due to phonological deficits but have at least average language comprehension. Students who meet the criteria for dyslexia do not need a dyslexia label or receive special education services.

Taking part in this research project is voluntary. Please take time to read this entire form and ask questions before deciding whether to take part in this research.

Background Information: The purpose of the study is to understand how internal and external influences shape elementary teachers' experiences teaching students with dyslexia how to read. Internal influences include personal factors such as teachers' beliefs and expectations, while external influences include environmental and behavioral factors such as curricular and instructional resources and school leadership.

Procedures: If you agree to be in this study, I will ask you to do the following things:

1. Complete a demographic questionnaire (3-5 minutes).
2. Submit (identity protected) pictures of your instructional reading space and curricular and instructional materials used regularly during reading instruction for students with dyslexia (e.g., reading lesson plans, programs, manuals, software programs, charts, hands-on materials, books; 20 minutes).
3. Respond to three journal prompts about your experiences teaching reading to students with dyslexia for five consecutive days and email them to me (5 minutes each day).
4. Participate in a 60-minute interview (remotely or over the phone) that will be audio recorded.
5. Review transcripts for accuracy (10 minutes).

Benefits of Being in the Study: Participants may become more self-aware of their instructional reading practices and knowledge about basic language constructs and dyslexia.

Risks of Being in the Study: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Confidentiality The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to them. The following safeguards will be in place:

- Participant names will be replaced with pseudonyms.
- Interviews will be conducted either remotely or over the telephone (upon request) where others will not easily overhear the conversation.
- Data will be stored on a password locked computer. After three years, all electronic records will be deleted.
- Interviews will be audio recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

Compensation: Participants will be compensated for participating in this study. Each participant will receive a \$125.00 gift card to a place of their choosing at the end of the study.

Voluntary Participation: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time

How to Withdraw: If you choose to withdraw from the study, please contact the researcher at the email address included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contact Information: The researcher conducting this study is Erin Bower. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Sharon Farrell at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515; our phone number is 434-592-5530; our email is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Statement of Consent: By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you

have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record me as part of my participation in this study.

Printed Subject Name

Signature & Date

Appendix J: Eligibility Screener

Your Name

1. Do you have at least one year of full-time teaching experience at the elementary level?
 - a. Yes
 - b. No

2. Are you currently employed as a full-time, licensed elementary teacher in one of the following positions: K-4 classroom teacher, special education teacher, or reading specialist?
 - a. Yes
 - b. No

3. Please describe your current teaching position.

4. Do you teach basic reading to struggling readers with weaknesses in word recognition, decoding, and spelling but have average or above average language comprehension and academic achievement in all other subjects?
 - a. Yes
 - b. No

5. Please describe your students with the above characteristics.

6. How often do you teach reading to struggling readers with the characteristics described above?
 - a. Daily
 - b. 2 times a week
 - c. 3 times a week
 - d. 4 times a week
 - e. Every day

7. How many minutes do you spend teaching basic reading skills to struggling readers with the characteristics described above?

- a. Less than 30 minutes
- b. More than 30 minutes

8. Do you teach basic reading skills to struggling readers with the characteristics described above one-on-one, in a small group, or whole group?

- a. One-on-one
- b. Small group
- c. Whole group
- d. Other

9. Please describe how you group your struggling readers for reading instruction.

10. If you meet the criteria to participate in the study, I will need an email address to send documents like a demographic questionnaire and informed consent form and set up a day and time for an interview. Where would you like all communications to be sent to?

Appendix K: Demographic Questionnaire

Your Name

1. Job Title: _____

2. Gender _____

3. Current Grade Level(s) Taught: K 1 2 3 4 5

4. Average Class Size _____

5. Average Reading Group Size _____

6. Number of Years Teaching at Current Grade Level(s) _____

7. Total Number of Years Teaching _____

8. Degree(s) Earned:

9. License(s) Held:

10. Previous Grade Level(s) and/or Subject(s) Taught:

11. Current School District, School, City, and State:

12. Where would you like a \$125.00 gift card to?

13. How would you like to receive your gift card? If by mail, please provide an address.

Appendix L: Teacher Interview Protocol

Participant #: _____ Date: _____ Time: _____

School: _____

Semi-Structured Interview Questions:

1. Please describe your educational background and your previous and current teaching positions. (Ice Breaker; SQ2)
2. Please describe your students with dyslexia. (SQ1)
3. Please describe how your experiences teaching students with dyslexia how to read differ from your experiences teaching typical readers. (SQ1 and SQ2)
4. Please walk me through a typical reading lesson with students with dyslexia. (SQ1 and SQ2)
5. What are your experiences with "typical literacy practices" inside and outside your classroom? (SQ2)
6. Describe your experiences teaching students with dyslexia how to "crack the code." (SQ2)
7. Tell me about your experiences having to use a particular reading program, method, or approach that conflicted with your professional training or personal beliefs about what struggling readers need to succeed. (SQ1 and SQ3)
8. Tell me about the experiences that most shaped your beliefs about what students with dyslexia need in terms of reading instruction to be successful. (SQ1 and SQ3)
9. Please describe your teacher preparation program and how your experiences prepared you to teach students with dyslexia. (SQ2 and SQ3)

10. What professional development experiences prepared you to teach reading to students with dyslexia? (SQ2 and SQ3)
11. Please describe how your experiences teaching reading to students with dyslexia have changed your knowledge of basic literacy constructs and dyslexia. (SQ1)
12. What have your experiences teaching students with dyslexia how to read convinced you are the most appropriate and effective instructional methods for this population? (SQ2 and SQ3)
13. How has occupational stress shaped your planning and delivery of reading instruction for students with dyslexia? (SQ1 and SQ2)
14. Please tell me about how your experiences of barriers and challenges have prevented you from providing effective reading instruction to students with dyslexia. (SQ1 and SQ2)
15. Please paint a picture of your experiences teaching reading to students with dyslexia in both pull-out and inclusive settings. (SQ2)
16. Recount how your experiences in the classroom environment have shaped your reading instruction for students with dyslexia. (SQ2 and SQ3)
17. Describe how influences from outside the classroom have shaped your experiences teaching students with dyslexia how to read. (SQ2 and SQ3)
18. Tell me about the social-emotional climate you have established within your classroom, including how it has shaped your experiences teaching students with dyslexia how to read. (SQ2)
19. Please tell me about the pictures of the documents you submitted for analysis. (SQ1 and SQ2)

20. What do the pictures reveal about your instructional reading practices when teaching students with dyslexia how to read? (SQ1 and SQ2)
21. What are five words that sum up your experiences teaching reading to students with dyslexia. (SQ1 and SQ2)
22. What else would you like to share about your experiences teaching students with dyslexia how to read? (SQ1, SQ2, and SQ3)

Appendix M: Participant Journal Forms

Participant Journal Form	
Day 1 Directions: Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions. Prompt 1: Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read. Prompt 2: Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. Prompt 3: What else would you like to share about today's experiences teaching students with dyslexia how to read?	Date: _____
Day 2 Directions: Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions. Prompt 1: Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read. Prompt 2: Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. Prompt 3: What else would you like to share about today's experiences teaching students with dyslexia how to read?	Date: _____

Day 3**Date:** _____**Directions:**

Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions.

Prompt 1:

Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 2:

Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 3:

What else would you like to share about today's experiences teaching students with dyslexia how to read?

Day 4**Date:** _____**Directions:**

Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions.

Prompt 1:

Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 2:

Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 3:

What else would you like to share about today's experiences teaching students with dyslexia how to read?

Day 5**Date:** _____

Directions:

Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions.

Prompt 1:

Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 2:

Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 3:

What else would you like to share about today's experiences teaching students with dyslexia how to read?

Appendix N: Journal Prompts

Prompt 1:

Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 2:

Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read.

Prompt 3:

What else would you like to share about today's experiences teaching students with dyslexia how to read?

Appendix O: Sample Journal Entries

Day 2	Date: 1/5/2023
Directions: Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions.	
Prompt 1: Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read. <i>I felt that students needed to take it slow from the break so we began by reviewing some of our sounds and writing the letters. (Encoding and decoding) I also know that students need hands-on tools to help them learn. We used Pop-Its to "Pop" each sound in a word.</i>	
Prompt 2: Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. <i>Many students were being pulled out for Access Testing for state testing of our ELL students. This was distracting. Some of my students were disappointed they didn't get to go, while others were upset they had to leave the classroom even though we had clear reasoning and a classroom discussion surrounding this beforehand.</i>	
Prompt 3: What else would you like to share about today's experiences teaching students with dyslexia how to read? <i>Our special education teacher reached out to me and agreed that further testing needs to begin for one of my students who hasn't been showing growth. This student has been pulled out for multiple groups a day and has a very supportive family. The students in her group have been showing significant progress while she has not. This is encouraging for me, but also disappointing because I want nothing more than to catch her up.</i>	

Participant Journal Form	
Day 1	Date: January 9, 2023
Directions: Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions.	
Prompt 1: Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read. <i>I am the mother of a son who has dyslexia but has learned to compensate and does very well with his academics. I feel strongly that my students can be successful if given direct instruction with the methods I know how to implement. Today 1st grade worked on some phonological awareness activities, and then worked with our Phonics first cards. We did the 3-part drill, which helps students practice reading, writing and blending the letters that represent each morpheme.</i>	
Prompt 2: Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. <i>"A" is having a very hard time with her spelling and word recognition due to her speech issues. This is exacerbated by her missing front teeth. We worked on using our sound wall with our individual mirrors today. We had a lot of fun working on the difference between the formation of R and L. Then we practiced tapping out words with those skills.</i>	
Prompt 3: What else would you like to share about today's experiences teaching students with dyslexia how to read? <i>We had a very fun and successful day. I love making the work into fun activities and sharing the experiences I had with speech, as well as stories about my own son's journey to fluent reading.</i>	

Day 3	Date: Jan 4, 2023
Directions: Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions.	
Prompt 1: Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read. <i>Today I felt more confident that the strategies were working. We used a game warm up to review reading words with blends. The students were averaging 95% accuracy. Most are automatically recognizing the blend and using successive blending when looking at the beginning of the word.</i>	
Prompt 2: Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. <i>I continued to use the suggested progression from the Sonday System for teaching blends and focus on only a couple of blends at a time. To help focus on hearing and writing each sound, we used paint trays as elkonin boxes—saying the word, splitting it apart and putting a chip down for each sound, then writing the sounds for each part and using magnet wands to scoop the sounds up as we read. Students needed more guided practice with this, so we will continue to use this method. They are having a hard time splitting the phonemes apart. Tomorrow I plan to look in my Heggerty manual and find a week that explicitly works on segmenting with blends.</i>	
Prompt 3: What else would you like to share about today's experiences teaching students with dyslexia how to read? <i>I am feeling more confident in my student abilities to read words with beginning blends. They also are verbalizing how the digraphs are different than blends, so I'm glad they are noticing the difference.</i>	

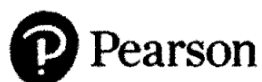
Day 2	Date: January 5, 2023
Directions: Please reflect on the instructional reading practices you used today with your student(s) with dyslexia and then answer the following questions. <i>Heggerty Bridge the Gap: sounding and blending 4 phonemes activities</i> <i>High Frequency Words: Count the sounds; draw a line for each sound; write each sound on the line, which letters represent heart sound? Blend the word; erase and rewrite</i> <i>Phonics Mapping: I do, We do, You do: Focus: sh/, th/, /ch/ (shop, thud, lash, rich, much); say it, tap it, map it, spell it.</i> <i>Word Chain: using magnetic letters – building words (shop, ship, chip, chop, chop)</i> <i>Decodable Text: prior to reading, TSW read the All-In-One sheet with words and sentences taken from the text; discuss vocabulary; TSW read the text independently.</i>	
Prompt 1: Please describe any personal influences (e.g., beliefs, attitudes, expectations, feelings, knowledge) that shaped today's experiences teaching students with dyslexia how to read. <i>Students use Elkonin boxes to map words. They repeat my word; tap out the sounds and make lines for each sound; write the letter for each sound in the word; write the letters in the boxes; then blend the sounds and say the word. I believe explicit phonics instruction is needed to build a solid foundation for reading.</i>	
Prompt 2: Please describe any environmental influences (e.g., curricula, students, other teachers, administration, policies) that shaped today's experiences teaching students with dyslexia how to read. <i>The decodable materials we use are very scripted and easy to follow. The students seem to enjoy the materials and activities. Lessons are modified to include other activities such as letter recognition and sound review.</i>	
Prompt 3: What else would you like to share about today's experiences teaching students with dyslexia how to read? <i>One of the students has speech issues which causes him to hear certain sounds incorrectly, which in turn affects his ability to build words correctly. He was dismissed from speech services in first grade.</i>	

Appendix P: Audit Trail

07/18	Completed application for Permission with Pearson
07/25	Pearson emailed me acknowledging their receipt of my application
12/7	Received permission from the IRB to conduct my study
12/8	Posted recruitment notice on three Facebook sites
12/9	Reached out to former colleague and asked her to share recruitment notice with teachers
12/9	Reached out to friend and asked her to share recruitment notice with teachers
12/9	Reached out to former colleague and asked her to share recruitment notice with teachers
12/21	Interview with Eden
12/21	Interview with Bernadette
12/21	Interview with Justice
12/23	Interview with Joan
12/23	Emailed school district requesting permission to send recruitment notice to principals
12/29	Interview with Leigh
1/2	Emailed Pearson inquiring about permission letter
1/3	Interview with Chris
1/3	Interview with Catt
1/6	Emailed transcript to Chris
1/7	Interview with Anita
1/7	Emailed transcripts to Catt
1/8	Emailed transcripts to Joan
1/8	Emailed transcripts to Bernadette
1/8	Emailed transcripts to Anita

1/9	Emailed transcripts to Leigh
1/9	Emailed transcripts to Eden
1/10	Emailed transcripts to Justice
1/11	Interview with Tina
1/12	Interview with Elle
1/14	Emailed transcripts to Tina
1/14	Interview with Carolina
1/14	Applied for modification with the IRB
1/15	Interview with Wren
1/16	Emailed transcripts to Wren
1/16	Interview with Henry
1/17	Emailed transcripts to Henry
1/17	Interview with Sharon
1/18	Emailed transcripts to Sharon
1/19	Emailed transcript to Carolina
1/20	Emailed transcripts to Elle
2/1	Completed second application for Pearson
2/2	Received email from Pearson. Letter should be sent tomorrow.

Appendix Q: Permission to Use and Modify Figures 1 and 2



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221 River St,
Hoboken, NJ 07030, USA
T +1 201 236 700
E info@pearson.com
W pearson.com

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Permissions, Global

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ago)

to me

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