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Effective Teaching Practices for Phonemic Awareness and Phonics in Small Group Reading Instruction

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**Effective Teaching Practices for Phonemic Awareness and Phonics in Small Group
Reading Instruction**

By

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CHAPTER ONE

Introduction

Statistics show the need for effective reading instruction is urgent. According to the Minnesota Department of Education, (2022), only 51.1% of students met standards in reading as measured by the statewide reading assessments (Minnesota Report Card). Additionally, Minnesota's top three largest school districts have less than 60% of students meeting standards in reading as measured by the statewide reading assessments (MDE, 2022). Within these three largest school districts, Anoka-Hennepin Public School District led with 54.9% of students meeting standards, Minneapolis Public Schools was at 42.4%, and Saint Paul Public Schools was at 34.8% (MDE, 2022). According to the data of these three school districts, only 44% of students are reading at grade level.

As an elementary school teacher for the past 10 years in predominantly primary grades, I have seen the importance of teaching students to read. When looking at the above statistics, there is a need for continued improvement in reading instruction. An action needed to address this concern is for teacher professional development around effective reading instruction. The questions that will guide this research are as follows:
How do K-1 teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?

Throughout my career in teaching reading to primary students, I have instructed students in two ways; whole group and small group reading instruction. In my teaching experience, whole group instruction is the core reading instruction that is taught to the whole class and based on the grade level standards. Small group instruction is differentiated instruction for a smaller group of students based on their instructional

needs determined through the use of assessments (Al Otabia, 2011). As I have engaged in ongoing professional development in reading instructional practices for primary students, I learned that small group reading instruction is the key to helping students learn how to read. Furthermore, research shows that student reading achievement is increased when a teacher provides differentiated small group reading instruction (Puzio et al., 2020).

From highlighted statistics on the percentage of students who are currently at grade level for reading, I determine instruction that has a strong focus on reading instruction in kindergarten through 1st grades as paramount in increasing the percentage of students performing at grade level. Once I have answered these questions that focus on small group instruction centering around phonemic awareness and phonics, I will create a professional development course for elementary teachers to help guide their future reading instruction.

In this chapter, I will show you the journey I went on in professional life that helped me form this research question. These experiences helped create the rationale for choosing this focus for my capstone project. The provided context will provide the foundation of my knowledge and passion I have for differentiated small group reading instruction with a strong focus on phonemic awareness and phonics.

Professional Experience

When I began my journey as a primary instructor, I was instructed that reading instruction would be a significant portion of what would be taught. I did not completely understand the many levels of reading instruction. I certainly did not understand the

wide-range of reading abilities within a classroom and the depth of content knowledge and application that is necessary to be an effective teacher for all students.

Theory into Practice

My experience at the university instructed me in theory and some of the instructional practices for teaching reading at the primary level. In practice, this only touched the surface of what it felt like to teach reading with students in front of you. Many of the strategies involved cueing students to look at the picture to try to figure out the word or make guesses by looking only at the first letter in the word. However, during my first years of teaching I was ill equipped to teach reading effectively to my students and felt unprepared in the beginning of my teaching career.

I leaned into the resources provided by the district and from other experienced teachers while I began to teach reading to kindergarten students. I learned how to assess students, use that data to guide my instruction, and implement those decisions in real time. I used the curriculum provided by the district even when I was becoming aware that the lessons and methods did not meet the literary needs of my kindergarten students.

I grew more experienced through relying on best practices that were implemented by colleagues along with searching for and employing evidence-based strategies based on the current reading research of this time. When it came to teaching struggling readers, I had to do extensive research to find strategies that would work for my students that still struggled with reading, even when I applied these best practices and evidence-based strategies. The data from my kindergarten students showed growth although I expected the data to show more aggressive growth. I thought, believed, and was told I was doing

the right thing yet I knew something was missing in my own learning and the instruction I was providing for my students.

Revelation

The district I work for shifted the way we had been teaching reading during the 2022-2023 academic year. At first, this was an astounding shock. I had been teaching reading in a way that I thought, believed, and told was the correct way to teach reading to our students. The district, in the fall of 2022, declared that the best practices and strategies of the past were not effective for our students. Reading instruction will now be based on brain research and the science of how students learn to read. The district now stated that our reading instruction will be based on the science of how students learn how to read. Instruction in the younger grades, specifically kindergarten through second grade will be focusing on phonemic awareness and phonics. Prior to fall of 2022, instruction was based on having students try to read the words by using pictures or other cues.

I assumed that the district-provided curriculum included evidence-based practices based in science. I was disappointed, angry, and appalled by the realization that the teaching practices in the district mandated curriculum was not based on founded brain research. I became frustrated at myself for not analyzing my instruction to kindergarten students more deeply for I knew something was not fully correct with these evidence based strategies.

My colleagues and I discussed the unpreparedness we felt with this shift to increasing phonemic awareness and phonics in our reading instruction for we had been guided strongly in teaching the workshop model. We also felt disappointment in not focusing more on why a percentage of our students' did not meet expected standards for

reading development. I began to question this new information that was being given on reading instruction for I have been directed to teach reading with fidelity according to the workshop model for a decade.

Consultation

I decided to consult one of the teachers I trusted most with reading instruction. She explained her understanding of the science of reading and how important this shift was in meeting students' needs. I decided to move forward after discussing and expressing my concerns with this shift in instruction. I learned all I could about this shift in teaching reading that was new to me and practiced using it with students.

Through the explicit and systematic instruction that was embedded into lessons with this new district-mandated curriculum, the students were able to learn the routines of the lessons and started to feel success as they began to learn phonemic awareness. Students were eager to engage with the different modalities of learning phonemic awareness and phonics. In each lesson, they would engage with the content in different ways such as oral practice producing letter sounds with a focus on mouth movements, writing the high frequency words, and using manipulative letters to spell and read words. Each lesson contained text that used words that were connected to prior components in the lesson. I noticed that with the implementation of this new curriculum, my kindergartners were able to see themselves as readers. I was given an opportunity for a new position at my school before I was able to complete the first quarter with my kindergarten students which gave me insights into what the teachers and students across grade levels were doing with this new curriculum.

Learning Lead

I took a new position starting in January, 2023 within the district and school and became a Learning Lead at my school. Part of my responsibility as Learning Lead is to deliver professional development for teachers at my site. Professional development was to be strongly focused on reading instruction that embraced the science of reading. My role as the primary facilitator of professional development is to deliver research and evidence-based instructional practices to the teachers at my school. I was driven to make sure professional development emboldened teachers in their practices so they did not feel the unpreparedness that I felt in the beginning of my teaching career.

Rationale

These two major changes this school year, which included a shift of a stronger focus on phonemic awareness and phonics during reading instruction along with my new role as an educator, have led to me desiring more clarity around the science of reading instruction, especially small group instruction with phonemic awareness and phonics. I want to research and understand how to deliver effective small group reading instruction in kindergarten through first grade. I also need to ensure I am not blindly following a curriculum but to truly understand how students learn to read for I wrongly assumed in the past that what I was using for instruction was based on research. I need to have the information and research to support effective small group reading instruction. I want to share this knowledge with teachers so that they may make use of it in their classroom to effectively teach students how to read. The new Minnesota reading statute states that “students must receive evidence-based instruction that is proven to effectively teach children to read” (READ Act, 2023, Subdivision 1). Educational systems need to provide

training to teachers to teach reading effectively so that student's unique and diverse needs are met in an effective and efficient way.

Framework for Reading Instruction

I understand that for teachers to teach students how to read, they must be provided with a framework for small group reading instruction. That framework includes phonemic awareness and phonics that is based upon the science of reading research. It is my intent in this Capstone to review the research around effective small group reading instruction for phonemic awareness and phonics to create a professional development for kindergarten and first grade teachers that includes best practices for effective small group instruction that will increase student reading proficiency.

Context

Our reading statistics are grim at my elementary school. In 2022, 14% of students were meeting standards in reading as measured by the Minnesota Comprehensive Assessments (MDE, 2023). We decided to focus on effective small group reading instruction throughout the 2023-2024 academic school year as a result of this data.

We have teachers with a wide range of experience at my school; some have been teachers twenty five years and others are beginning their second year of teaching. For almost all of the teachers, this change to more explicit and systematic teaching in phonemic awareness and phonics is new to their practice. Many felt that they were not provided with enough guidance to implement this type of instruction in a small group format. Several of the teachers have asked for more support and guidance in how to effectively teach phonemic awareness and phonics in small groups.

Conclusion

My professional experiences as a primary elementary teacher have guided me on the path to explore effective small group reading instruction in phonemic awareness and phonics. My current experience as a learning lead has shown me that other teachers would benefit from a research based professional development on best practice for effectively teaching phonemic awareness and phonics in small groups. I cannot alter the reading instruction that I delivered in the past but I can take steps to ensure I am delivering effective reading instruction that is based in research to increase students reading proficiency.

I want to make sure as an educational professional that I am not only relying on the resources provided to me but I am taking the time to do my own research to ensure that the teaching strategies I am using are backed by research and science. My hope is that this capstone project, the subsequent research and proposed professional development will provide and empower teachers to effectively teach small group reading. This will in turn lead to student reading growth across the primary grades. The question that remains at the forefront of this endeavor is *How do K-1 teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?*

Subsequent Chapters

I will answer this question in the upcoming chapters. In Chapter Two, I will present, analyze, and elaborate on the existing research regarding effective small group reading instruction in phonemic awareness and phonics. This will focus on small group reading instruction within the Response to Intervention model, the use of assessments to

make data driven decisions, and best practices for effectively teaching phonemic awareness and phonics.

Chapter Three will be a detailed description of the professional development project including a description of the audience, the context and the rationale for the project. Lastly, Chapter Four will reflect on this capstone project, including the research findings, implications and limitations of this project, and any future recommendations based on this project.

CHAPTER TWO

Literature Review

Introduction

Differentiated small group reading instruction has been found to increase student literacy achievement and should be considered an evidence-based practice (Puzio et al., 2020). Puzio et al. (2020) noted that a metaanalysis of differentiated small group reading instruction “shows that student literacy achievement increased when teachers were supported to differentiate their literacy instruction” (p. 484). To support teachers to differentiate small group instruction, an examination of the research on Response to Intervention (RTI), use of reading assessments, and phonemic awareness and phonics instruction is necessary. The purpose of this chapter is to examine and synthesize the most current research in order to answer the question, *How do Kindergarten-First grade teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?*

This chapter will begin by examining RTI and where small reading groups fit within the RTI model. The next section will explore the research around the use of assessments to make data driven decisions for guiding instruction for small reading groups. Lastly, the current research on best practices for effective teaching phonemic awareness and phonics will be discussed. This research will be the basis for creating a professional development session to support teachers in understanding and using best practices for phonemic awareness and phonics in small group reading instruction. The goal will be to ultimately increase students' reading proficiency.

Response to Intervention

It is imperative to understand the RTI framework that is in place in schools across the United States. When seeking to answer the research question, *How do K-One teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* a better understanding of RTI is necessary. This next section will explain the RTI framework, as well as what tier small group reading instruction in the general education classroom fits into.

RTI is a multi-tiered system approach for the early identification and support of students who are struggling with academic or behavioral needs (National Center for Learning Disabilities Inc., 2023). This multi-tiered system is used for early intervention and prevention of academic difficulties in reading, writing, or math and for social-emotional needs (Fletcher & Vaughn, 2006). For the purpose of this capstone, the focus will be reading instruction within the RTI model.

In the RTI model, all students are screened for reading problems and those at risk are assessed more often through progress monitoring (Fletcher & Vaughn, 2009). RTI consists of three tiers: Tier One is core instructional interventions, Tier Two is targeted group interventions, and Tier Three is intensive individual interventions (Fletcher & Vaughn, 2009).

RTI Reading Instruction

Reading instruction is often provided within the RTI framework for the early identification and support of students who may have reading difficulties. The first step in this process is using a universal reading screener in a norm-referenced or

criterion-referenced assessment given to all students (Fletcher & Vaughn, 2009). Those students who are shown to be at-risk on the universal screener are assessed more frequently using progress monitoring measures (Fletcher & Vaughn, 2009). Often, screeners are delivered to all students three times during the school year (Moats & Tolman, 2019). Universal screeners and progress monitoring for at-risk students help to provide insight into if a student may need additional instruction in Tier Two or Tier Three to make academic reading progress.

In a process known as data-based decision making, data gathered from the universal screeners and the progress monitoring will then be used to inform instruction at all three tiers in the RTI model (Filderman & Toate, 2017; Sharp et al., 2016). This data can show whether a student is making adequate progress to meet their reading goals (Fletcher & Vaughn, 2009, Sharp et al., 2016). If a student is not making adequate progress, the data can be used to make instructional decisions such as modifying or intensifying an intervention (Sharp et al., 2016). Data-based decisions entails educators analyzing data to guide instruction and making decisions based on documented data to help guide student reading intervention and tier placement (Sharp et al., 2016). Assessments and using data to inform instruction will be explained in greater detail in subtopic two of this chapter. The next section will explain the tiers within the RTI framework and what interventions are typically used in each setting.

Reading Tiers of Instruction

The RTI model is a system for schools used to identify students who may be at-risk for reading difficulties and to provide interventions for these identified students (Fletcher & Vaughn, 2009; Moats & Tolman, 2019). Students identified as at-risk through

the use of a universal screener are provided with interventions that start in the general education setting and increase in intensity depending on the progress of the student (Fletcher & Vaughn, 2009; Moats & Tolman, 2019). The RTI model consists of three tiers with each tier increasing in intensity and duration as a student moves up through the tiers (Fletcher & Vaughn, 2009). RTI begins with Tier One, which is instruction that is provided to all students and can be whole or small group instruction (Fletcher & Vaughn, 2009). Eighty percent of students will make progress with Tier One instruction (Fletcher & Vaughn, 2009). If a student does not show expected growth with Tier One instruction, they will receive Tier Two instruction in addition to the Tier One instruction they are already being provided (Florida State University, 2023). About 15 percent of students will need the targeted small group instruction that is provided in Tier Two of the RTI model (Fletcher & Vaughn, 2009). Tier Three is the last tier within the RTI model and it is reserved for students who are not making progress with Tier One and Tier Two instruction (Fletcher & Vaughn, 2009). Tier Three provides students with intensive individual interventions and about five percent of students will need this type of instruction to make progress (Fletcher & Vaughn, 2009). Each of the three tiers of the RTI model will be discussed in the next sections.

Tier One. The RTI model begins with Tier One which is provided to all students by the general education teacher and can be whole class instruction and small group differentiated instruction. In Tier One, an effective comprehensive core reading program is used for instruction which means the reading program is scientifically based in research (Al Otaiba et al., 2011; Florida State University, 2023). Another component of Tier One reading instruction is that teachers use assessments to determine instructional

needs to differentiate and individualize instruction for students (Al Otaiba et al., 2011). Small group reading instruction falls within Tier One differentiation and is provided to all students with instruction from the general education teacher. Within the RTI model, 80% of students receiving Tier One instruction should achieve grade level proficiency (Fletcher & Vaughn, 2009; Al Otaiba et al., 2011).

Tier Two. Tier two interventions are more individualized, provide more opportunities for feedback and response, and the student's progress is assessed more often (Al Otaiba et al., 2011). Students that are not making adequate progress with Tier One instruction will receive more focused and specialized instruction in a small group setting in Tier Two of the RTI model (Florida State University, 2023). Tier Two provides students with targeted small group interventions that are focused on a specific area of reading difficulty such as phonemic awareness or phonics (Fletcher & Vaughn, 2009; Florida State University, 2023). Instruction decisions are made based on progress monitoring data (Florida State University, 2023; Moats & Tolman, 2019). For students that are not making progress within the Tier One and Two frameworks, the next level of instruction (Tier Three) is added.

Tier Three. Tier Three in RTI, is intensive individualized instruction for about five percent of students that are not making proficient reading progress (Fletcher & Vaughn, 2009). Students receiving Tier Three instruction still receive Tier One instruction but will receive more time in explicit and systematic instruction to make proficient reading progress (Al Otaiba et al., 2011).

Tier One Small Group Reading Instruction

This capstone will focus on tier one differentiated small group reading instruction. Effective reading instruction for early detection and prevention of reading difficulties is important for student reading proficiency. This remains true for all the tiers of instruction within the RTI model. While small group instruction is one part of tier one instruction it has been associated with stronger reading growth for both struggling and achieving students (Al Otaiba et al., 2011). Understanding that small group reading instruction is part of tier one of the RTI model then leads to the next important step in understanding effective small group instruction - using differentiated data to inform instruction.

The RTI model provides data informed instruction for all students based on student assessment data that is differentiated (Al Otaiba et al., 2011; Fletcher & Vaughn, 2009; Gersten et al., 2008;). The following section will explore how to use the assessments including the universal screener and progress monitoring to inform and differentiate reading instruction by creating flexible small student groups based on the student's instructional needs and skills.

Using Assessments to Guide Small Group Instruction

In order to provide differentiated small group reading instruction, there needs to be a basis on which to form the small groups. This is where student assessments come in. There are three types of assessments that can be used to determine the needs of students for small group reading instruction. These types of assessments are: universal screeners, diagnostic surveys, and progress monitoring. Understanding each of these and the role they play in student instruction is critical for using these assessments to determine small

group instruction. The following section will discuss the types of assessments that can be used and how they can be used to differentiate instruction for students.

Universal Screener

Universal screeners are given to all students three times a year and are designed to identify students who are at-risk for reading difficulties (Moats & Tolman, 2019).

Screening tests are the first line of defense in identification of students who may be at risk for reading difficulties (Florida Center for Reading Research [FCRR] & Florida Department of Education, 2022; Moats & Tolman, 2019). These assessments are designed to indicate students with mild, moderate, and severe risk in basic reading skills (Moats & Tolman, 2019). Screeners predict how likely a student will pass a high-stakes outcome test given at the end of a school year and because of this, the screener helps identify students who may need supplemental instruction in order to make progress in reading (Fletcher & Vaughn, 2009; Florida Center for Reading Research [FCRR] & Florida Department of Education, 2022, Moats & Tolman, 2019). Universal screeners use a benchmark score to predict passing on the end of year outcome assessments (Moats & Tolman, 2019). The benchmark score is set between the 40th and 20th percentile, giving students who score in this percentile a 50% chance of passing the end of the year outcome assessment (Moats & Tolman, 2019).

For kindergarten and first grade students, screening tests should be a battery of initial assessments that will measure simple skills and help to understand students' areas of strengths and needs (Moats & Tolman, 2019; Smith et al. 2022). Beginning reading screening tests will often assess the following skills: letter names, phoneme segmentation, grapheme-phoneme correspondence, word reading, nonsense word

reading, and spelling and phonetic spelling accuracy (Moats & Tolman, 2019). From these various assessments it can be determined a student's area of strength and an area that is in need of more instruction. For example, a student may be proficient in phoneme segmentation but is below proficiency in naming letters.

Initial Screening Assessment

Screening assessments are the first step in beginning to plan for differentiated instruction by identifying students with mild, moderate, or severe risk in reading skills (FCRR & Florida Department of Education, 2022; Moats & Tolman, 2019). This information can be used to make differentiated instructional decisions and determine who may need intensified instructional support (Florida State University, 2023; Moats & Tolman, 2019). The screener can serve as a starting point for determining small group instruction by providing information about which students will need more intensive instruction. Students who are screened and determined to be most at-risk in their reading skills will serve as the first point for a small group (Florida State University, 2023; Moats & Tolman, 2019). In addition, students with moderate, mild and no risk can be the next piece in planning small groups.

The universal screener gives vital information for identifying the possible instructional needs of students including students who are in need of intensive instruction (Moats & Tolman, 2019). It is the first data point of many that should be considered when planning for differentiated small group reading instruction (Moats & Tolman, 2019). The next sections will explain two additional data points, progress monitoring and diagnostic surveys, to use for determining small reading group instruction.

Diagnostic Surveys

Diagnostic surveys can be defined in two different ways: First, it is the use of informal or standardized assessments that can provide more detailed information about a student's knowledge or skill to help with more specific instructional planning (Moats & Tolman, 2019). Second, it is used by professionals such as doctors, psychologists, or psychiatrists to classify a condition or disorder according to the already established diagnostic criteria (Moats & Tolman, 2019). The focus of this section will be on the former, diagnostic surveys as a tool for providing more detailed information about a student's knowledge or skill.

Diagnostic surveys are often administered only to students who are identified as at-risk for reading problems because they give more detailed information about a specific academic skill (Moat & Tolman, 2019). This detailed information allows for a teacher to more specifically plan instruction according to the specific needs identified in the diagnostic survey. The diagnostic survey will provide a teacher with information they may not be able to determine through progress monitoring and observation (FCRR & Florida Department of Education, 2022). Diagnostics can reveal in more detail a student's skill in a specific reading area such as phonological skills, decoding and word reading, and spelling skills (Moats & Tolman, 2019). In small group instruction, a diagnostic survey would be able to tell the more specific information about the student's academic needs, thus allowing the teacher to plan instruction for the group accordingly.

While a diagnostic survey will give more in-depth knowledge about a student's reading skills it will not necessarily tell you if a student is learning the critical reading skills that are being taught (FCRR & Florida Department of Education, 2022).

Diagnostics are usually given if the student does not meet grade level benchmark on the universal screener (Mesmer & Mesmer, 2008). They can take more time to administer since separate assessments are used to determine phonological skill, letter naming, letter sounds, decoding and spelling (Mesmer & Mesmer, 2008; Moats and Tolman, 2019). For more detailed information about a student's reading progress, teachers will want to utilize progress monitoring.

Progress Monitoring

Progress monitoring is an important component of RTI and effective reading instruction because it frequently monitors a student's progress to let the teacher know if the student is making adequate progress with the current instruction (FCRR & Florida Department of Education, 2022; Moats & Tolman, 2019). Progress monitoring assessments are formative assessments meaning they occur during the learning process to help the teacher make instructional decisions (Moats & Tolman, 2019). The assessments are brief, given frequently, and measure a specific goal such as number of words read per minute (Moats & Tolman, 2019). Based on the progress monitoring assessments teachers can decide whether to continue instruction or modify instruction (FCRR & Florida Department of Education, 2022.).

Progress monitoring assessments can help to determine how to differentiate instruction for small groups and how small groups can be formed (FCRR & Florida Department of Education, 2022; Moats, 2020). While screening assessments will point out where the reading instruction can begin, progress monitoring tells whether the instruction is working for the students. (Moats & Tolman, 2019). Progress monitoring is to be used on any student that the screener has determined needs an intervention

(Fiderman & Toste, 2017; Moats & Tolman, 2019). Progress monitoring is an essential component to use for forming small reading groups and because this will be used within all the tiers of the RTI model (Moats, 2020). While an instructional approach may work for four out of the five students in a small group, there is one student not showing adequate progress with the instruction given in the group (Moats & Tolman, 2019). With this knowledge, the teacher can make a decision about how best to instruct this student since the current approach is not working (Moats & Tolman, 2019).

What makes progress monitoring so valuable is that a teacher is able to make instructional decisions in real time. Progress monitoring, if done frequently, will let the teacher know if an instructional approach is not working and they can change or modify the instruction to accelerate the student's learning (FCRR & Florida Department of Education, 2022, Moats & Tolman, 2019).

Data Informed Small Group Instruction

Differentiated small group reading instruction shows stronger reading growth for students, including struggling readers (Al Otaiba et al., 2011). Studies are increasingly showing that using assessment data to inform reading instruction is resulting in stronger literacy outcomes for students (Al Otaiba et al. 2011; Connor, Morrison, Fishman, et al., 2007; Connor, Morrison, et al., 2009). Teachers that use assessment data to provide individualized small group instruction have students show stronger growth in their literacy skills (Al Otaiba et al., 2011).

Using assessment data to form and instruct small groups is an important component of effective small group reading instruction. Screeners will give a place to begin small reading group instruction. Diagnostic surveys will provide additional

information to support or change instruction based on a student's specific skill set.

Progress monitoring is the key to knowing if the instruction is effective and for who, and if not effective, it provides timely information to make instructional decisions to increase students' reading proficiency.

The next key component for effective small reading group instruction is to understand the best practices and most effective teaching strategies for teaching students phonemic awareness and phonics. The next section will focus on the most effective strategies for teaching phonemic awareness and phonics and where to begin instruction based on student assessment data. Within the section the progression for teaching phonemic awareness will be explained and explored as well as using Ehri's Alphabetic Phases to guide phonics instruction.

Effective Instruction in Phonemic Awareness and Phonics

There are two words that sum up research based instructional strategies that show the most compelling support: explicit and systematic instruction (Brady et al., 2011; Ehri, 2020; Ehri, 2022; Florida Center for Reading Research [FCRR] & Florida Department of Education, 2022; Moats, 2020; National Reading Panel [NRP], 2000). Past and current meta analysis of reading research in phonemic awareness and phonics instruction has shown that students demonstrate increasing reading growth with instruction in both explicit and systematic ways (Brady et al., 2011; Ehri, 2020; Ehri, 2022; FCRR, 2022; Moats, 2020; NRP, 2000). Systematic and explicit instruction are the overarching framework for best practices in effective small group reading instruction. In this section, explicit and systematic instruction will be defined and explained in phonemic awareness and phonics reading instruction. It will also explore how phonemic awareness and

phonics learning progressions are used to make instructional decisions for students and best practices within these learning progressions.

Explicit Instruction

Explicit instruction is creating a learning goal that is clearly defined for the students and using clear and direct language to teach the skills or concepts step by step (FCRR & Florida Department of Education, 2022; Moats & Tolman, 2019). Often the I Do, We Do, You Do routine is used in explicit instruction; I Do: the teacher explains and models skills and the student watches, We Do: teacher and student practice the new skill together, and You Do: student practices the skill independently while teacher monitors (FCRR & Florida Department of Education, 2022; Moats & Tolman, 2019).

Explicit instruction in phonemic awareness and phonics instruction will give students clear explanations of the phoneme-grapheme or orthographic pattern that is being taught (Brady, 2011; Moats & Tolman, 2019). Explicit instruction uses clear and direct language to teach letter-sound relationships and is a part of systematic phonics instruction (FCRR & Florida Department of Education, 2022; NRP, 2000).

Systematic Instruction

Systematic instruction teaches skills and concepts in a logical sequence that builds on a student's previously learned skills or concepts, and "moves from simple to complex" (FCRR & Florida Department of Education, 2022, Features of Effective Instruction Overview section). Systematic instruction ensures that students already have the prerequisite skill or knowledge that is needed to learn a new skill or concept that is being taught (FCRR & Florida Department of Education, 2022).

Systematic instruction in phonics has sequential lessons that are explicitly taught and typically start with regular spelling patterns with first introducing consonants and regular vowels with high frequency words at the same time (Brady, 2011; NRP, 2000). Patterns are added to lessons in a way that builds on the patterns that students have already learned (Brady, 2011). Students read connected text which provides practice using the patterns and high frequency words that they have been taught (Brady, 2011; NRP, 2000). It can be taught on the grapheme phoneme level or the syllable level (Brady, 2011).

Explicit and systematic instruction are the two main components of effective small group reading instruction. The next sections will explore what this looks like in phonemic awareness and phonics instructions and what specific strategies teachers can use to increase reading proficiency.

Phonemic Awareness

Phonemic Awareness is the ability to hear and manipulate phonemes in spoken words (Lindsey, 2022; NRP, 2000). A phoneme is the smallest unit of sound in a language (Lindsey, 2022). Phonemic awareness is a level within phonological awareness. Phonological Awareness is the awareness of all parts of oral language including large parts (words and syllables) or smaller parts (onsets, rimes, and phonemes) (Moats & Tolman, 2019; Lindsey, 2022).

Phonemic awareness is a critical skill for readers to be able to map a sound to spelling a word (Moats & Tolman, 2019; Lindsey, 2022). After a thorough meta-analysis of the research related to instruction in phonemic awareness, the National Reading Panel (2000) reported that teaching students phonemic awareness does help them learn to read

and spell. This report confirmed that phonemic awareness instruction is a “key component that can contribute significantly to the effectiveness of beginning reading and spelling instruction” (NRP, 2000, p 2-6).

Phonemic awareness includes the ability to identify individual sounds in words, blend and segment words, and change sounds to make new words (Moats, 2022). With 26 letters in the alphabet, 44 phonemes, and 80-120 spellings/graphemes for phonemes, phonemic awareness is the first reference point for letters (Moats, 2022). A grapheme is a letter or combination of letters that represent a phoneme. Phonemic awareness may come naturally to some students but for most it must be taught through explicit and systematic instruction (Lindsey, 2022; Moats, 2022; Moats & Tolman, 2019, NRP, 2000).

Effective instruction for Phonemic Awareness. Effective instruction for phonemic awareness begins with teaching these skills explicitly and systematically using the developmental progression (Ehri, 2022, Lindsey, 2022; Moats, 2022; Moats & Tolman, 2019, NRP, 2000). Top reading researcher and author, Louisa C. Moats (2022), has created a table (Table 1) that outlines the progression of phonological and phonemic skills and tasks that match each of these skills. Using a phonemic awareness assessment can help to determine where a student is at in their phonemic awareness development and then be instructed accordingly.

Table 1:

Progression of phoneme awareness development, with sample tasks

Phase of Learning	Phonological or Phonemic Skill	Sample Tasks
Before formal reading instruction	Responsiveness to rhyme and alliteration during word play	Playing with and reciting rhyme and alliteration (words beginning with the same sound)
	Rhyme recognition, odd word out; production of learned rhymes or recognition of changes that don't belong	Which two words rhyme? <i>pear, feel, chair</i> <i>Teddy bear, teddy bear, turn around,</i> <i>Teddy bear, teddy bear, touch the _____.</i>
	Clapping, counting syllables	<i>dog (1), tiger (2), elephant (3), hippopotamus (5)</i>
	Matching words with the same first sound	Do <i>mother</i> and <i>milk</i> start with the same sound? Yes or no?
Beginning reading instruction	Blending first sound with the rest of the word	What word? <i>th – umb; f – ist; sh – in; l – eg</i>
	Segmenting and pronouncing the first sound of a word	Say the first sound in <i>shoe (/sh/)</i> ; <i>smile (/s/)</i> ; <i>valentine (/v/)</i> .
	Segmenting and pronouncing the final sound in a one-syllable word	Say the last sound in <i>bus (/s/)</i> ; say the last sound in <i>wish (/sh/)</i>
	Syllable deletion	Say <i>turnip</i> . Say it again but don't say <i>tur</i> .
	Blending 2-3 phonemes	Listen, /m/ /ee/. What word? /v/ /a/ /n/. What word? /sh/ /o/ /p/. What word?
	Separating (segmenting) 2-3 phonemes [no blends]	Say a word. Say each sound in the word as you move a chip for each sound: <i>sh – e, m – a – n, l – e – g</i> .
Later in Year 1 reading and spelling instruction	Phoneme segmentation up to 3-4 phonemes, including blends	Say the separate phonemes while you hold up a finger for each sound: <i>b – a – ck</i> <i>ch – ee – se</i> <i>c – l – ou – d</i>
	Phoneme substitution to build new words—simple syllables with no blends	Change the /j/ in <i>cage</i> to /n/. Change the /ā/ in <i>cane</i> to /ō/.
	Extract and pronounce beginning, final, and medial phonemes from one-syllable words	Say the last sound in <i>milk</i> . Say the vowel sound in <i>rope</i> .
Year 2 and 3 of reading and spelling instruction (advanced skill)	Sound deletion, initial and final position	Say <i>meat</i> . Say it again without the /m/. Say <i>safe</i> . Say it again without the /ff/.
	Sound substitution in words with 5-6 phonemes	Listen. What sound have I changed? <i>Shrink, shrank; square, squire</i>
	Sound deletion, initial position, including blends	Say <i>prank</i> . Now say it again without the /p/
	Sound deletion, medial and final blend position.	Say <i>snail</i> . Say it again without /n/. Say <i>smoke</i> . Say it again without /m/. Say <i>fork</i> . Say it again without the /k/.
	Phoneme reversal	Say <i>safe</i> . Say the last sound first and the first sound last. (face) Say <i>slack</i> . Say the last sound first and the first sound last. (class)
	Phoneme chaining	In a series of words that change only one sound at a time, use colored blocks to show addition, deletion, substitution, and re-sequencing of sounds from one word to the next.

Note. For each phase of learning there are the progressions of phonological or phonemic skills listed with sample tasks to match each skill. From “How Children Learn to Read: Toward Evidence-Aligned Lesson Planning,” by Lousia Cook Moats, 2022, Tools for Improving Reading, Washington D.C.: World Bank Group p.28

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Although phonemic awareness is being able to hear and manipulate the smallest sounds in language instruction, it should begin with oral instruction and quickly move to including work with letters (Lindsey, 2022). It has been shown that the most effective instruction in phonemic awareness was when students were taught to manipulate phonemes with letters (Ehri, 2022, NRP, 2000). Additionally, children have been shown to learn grapheme phoneme relationships better when using letter picture mnemonics. Letter picture mnemonics is a picture where the object is in the shape of a letter, for example an O in the shape of an owl (Ehri, 2020).

One of the easiest ways to have students begin to detect phonemes is to have them pay attention to their mouth position and when it moves to another position (Ehri, 2020). Each mouth movement will represent a phoneme in a word (Ehri, 2020). Having students use mirrors and explicitly teaching and modeling the mouth movements will help students detect different phonemes as well as add a multisensory approach to the teaching (Ehri, 2020, Moats & Tolman, 2019).

Two important phonemic awareness skills that support students in learning to decode and spell words are blending and segmenting (Ehri, 2022; Lindsey, 2022; NRP, 2000). Blending involves blending sounds to read or say words such as r/a/n which then becomes ran. Segmenting is breaking down the phonemes in words so ran becomes r/a/n. Having students move tokens as they pronounce each phoneme has helped to support segmentation (Ehri, 2020). Even more promising was having students pay attention to

their mouth movements. Moving picture cards of the mouth movement while segmenting letters has shown to help improve their ability to read words (Ehri, 2020). Again, while phonemic awareness is primarily an oral task, teaching has been more effective with students when using letters (Ehri, 2022; Moats & Tolman, 2019; Lindsey, 2022; NRP, 2000).

An additional important finding of the National Reading Panel (2000) was that instruction in phonemic awareness was most effective when done in small groups. The best practices for teaching phonemic awareness can all be completed in a small group setting and using the table provided and assessment data instruction can be tailored directly to the student's need. Phonemic awareness instruction does not need to be a lengthy process to be effective and can be 5 minutes within a small group reading lesson (Lindsey, 2022; Moats, 2022; Moats & Tolman, 2019; NRP, 2000).

Phonemic awareness will be one part of effective small group reading instruction and should be taught along with phonics. As students begin to learn phonemic awareness using letters, they are also receiving instruction in phonics. The next section will discuss Ehri's (2020) Phase Theory for learning to read words, how to use the theory to inform instruction, and what are the best practices to use within each phase.

Phonics

Phonics is the instruction that teaches students the system of phoneme-grapheme correspondences and how to use them to decode words (Ehri, 2020, Moats & Tolman, 2019). Phonics is another foundational skill for reading and is what allows students to decode and encode words. Decoding is using letter (graphemes) and sound (phonemes) relationships to blend sounds together to read words (Lindsey, 2022; Ehri, 2022).

Encoding/spelling is using the sound (phonemes) and the letter/letters (graphemes) they represent to spell words (Ehri, 2020).

Decoding and encoding allows students to read and spell words. This process allows students to store words they have read before in a process called orthographic mapping (Ehri, 2014, 2022). Orthographic mapping can be defined as “the formation of letter-sound connection to bond the spellings, pronunciation, and meaning of specific words in memory” (Ehri, 2014, p. 5). Orthographic mapping allows for students to read and spell words from memory (Ehri, 2014). The mapping process happens when graphemes are connected to phonemes when reading words (Ehri, 2022). This bonds the grapheme to the phoneme in the student's memory (Ehri, 2022). Once this is done a few times the word is retained in the student’s memory and the next time they see it they will be able to remember it and read it from sight (Ehri, 2020). Orthographic mapping allows students to read by sight (Ehri, 2014, 2022).

Alphabetic Phases

The theory of word reading development is a process that happens in four overlapping stages and is called Ehri’s Phases of Word-Reading Development (Ehri, 2014, 2020, 2022). There are four phases of word reading: Pre-alphabetic, Early Alphabetic, Later Alphabetic, and Consolidated Alphabetic (Ehri, 2014, 2020). Students will use different types of knowledge to read and spell words which will cause overlap across the phases (Ehri, 2020). The student’s phase is therefore determined by the type they most commonly use (Ehri, 2020).

Pre-alphabetic. In this phase students may not know letter shapes, names, or sounds (Ehri, 2014, 2020, 2022). If they read their own name or environmental print their

understanding is based on remembering visual cues (Ehri, 2014, 2020, 2022). They lack phonemic awareness and do not use letter sound relationships to read words (Ehri, 2014, 2020, 2022).

Effective instruction in letter shapes, names, and sounds is needed to move students to the next phase (Ehri, 2022). These students will need instruction in phonemic awareness to detect phonemes and begin to understand phoneme-grapheme relations (Ehri, 2022). Having students use mirrors to watch their mouth as they pronounce each consecutive phoneme will help them to separate phonemes (Ehri, 2022).

Partial Alphabetic. Students in this phase know most of their letter shapes and names, and have some phonemic awareness. (Ehri, 2014, 2020, 2022). They can use this knowledge to read and write but cannot decode new words (Ehri, 2014, 2020, 2022).

Effective instruction in phonemic segmentation will help them to connect phonemes to graphemes in spelling (Ehri, 2022). Teaching of grapheme/phoneme relationships and having them segment words into their respective phonemes while representing them with graphemes will help to move students to the next phase (Ehri, 2022). Teaching students how to decode words by blending graphemes into blended phonemes will help to form a word (Ehri, 2022). Using decodable books for students to read words and practice decoding will help to build student's sight word knowledge and help to move them to the next phase (Ehri, 2022).

Full Alphabetic. Students in this phase know all the major grapheme phoneme relations and can decode to read new words (Ehri, 2014, 2022). They have complete phonemic awareness for blending and segmenting (Ehri, 2014). They are able to use the

grapheme phoneme connections in words to store them in memory and read and spell the words by sight (Ehri, 2014, 2020).

Instruction for students in this phase will have them continue to practice reading text to have their sight word memory grow (Ehri, 2022). Teachers should practice continued instruction in grapheme/phoneme connections that focus on position based consonants (Moats, 2022). For example, using short and long vowels, vowel teams, past tense and plural, and decoding longer words will aid growth in this phase (Moats, 2022).

Consolidated Alphabetic. In this phase, students know the multi-letter grapheme/phoneme connections and can use this knowledge to read words (Ehri, 2014, 2020, 2022). Students are able to use their knowledge of consolidated grapheme/phoneme units to break words down to onset rime units, syllabic units, and morphemic units and use this knowledge to read words (Ehri, 2022). Students have a large bank of words they can read by sight stored in memory (Ehri, 2020, 2022). Most students are in second or third grade when they reach the consolidated alphabetic phase (Moats & Tolman, 2019).

Effective instruction in this phase focuses on explicit instruction like reading words using onset-rime, syllabic, and morphemic units (Ehri, 2020). Instruction may be more focused on word study: describing relationships between word meaning, structure, use and origins (Moats, 2022). Lessons can focus more on reading fluency and comprehension strategies (Moats, 2022).

A review of the literature on reading instruction in phonemic awareness and phonics shows that explicit and systematic instruction are the keys to effective instruction. The best practices for teaching phonemic awareness and phonics in small

groups all have the characteristics of being explicit and systematic. The research also provides a researched based framework, Ehri's Phase of Word-Reading Development (2014), in which to instruct students and the best practices to use within each of these phases. Assessing students to find out which phase they are currently in and providing explicit and systematic instruction within each phase will provide effective reading instruction.

Considerations for English Language Learners

The skills involved in letter-name knowledge, letter-sound knowledge, and phonics decoding are the same across languages with an alphabetic based orthography (Kilpatrick, 2015). English Language Learners (ELL) need the same skills as students whose first language is English to be successful readers (Kilpatrick, 2015). However, there must be additional support for ELLs to build their language skills (Kilpatrick, 2015). It has been shown that a student's phonemic awareness and phonics development in their first language can be a predictor of their success with phonemic awareness and phonics development in their second language (Kilpatrick, 2015).

Conclusion

After a review of literature to answer the question, *How do Kindergarten-First Grade teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* This chapter showed where small group reading instruction begins within Tier One of the RTI model but grows in intensity when moving to Tier 2 or Tier 3 instruction. The next section shows the importance of using an universal screener, a diagnostic survey, and progress monitoring to make data driven decisions about forming small groups, providing

groups with instruction, and assessing the effectiveness of the instruction. The last section discussed the importance of providing explicit and systematic instruction in phonemic awareness and phonics. In addition, this section examined Ehri's Phase Theory for Word Reading and discussed the importance of direct instruction at the student's current phase of word reading so they are able to gain knowledge to move to the phase.

The next chapter will use the research to create a professional development plan for teachers that will give them the research and tools needed to use best practices in phonemic awareness and phonics to increase student reading proficiency. Research has shown that when teachers receive support about how to differentiate and what best practices to use, they can improve their small group reading instruction (Puzio et. al., 2020). When teachers improve their small group reading instruction the student reading achievement increases (Puzio et al., 2020). This capstone project is intended to give teachers the support they need to improve small group reading instruction in phonemic awareness and phonics so that they are able to increase reading proficiency for their students.

CHAPTER THREE

Project Description

As my district shifted to using research and evidence-based strategies for effectively teaching reading foundational skills, it was important to understand and read the research that was available for teaching reading. For this reason I choose to research the question *How do K-1 teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* For my capstone project, I will be designing four professional development (PD) 50-minute sessions for kindergarten and first grade teachers. This will be designed to help them understand the research behind the best practices for effectively teaching phonemic awareness and phonics, to explain and model these best practices, and to create a plan for using these strategies with students. This chapter will explain in detail about the school setting and staff that will be participating in the PD. I will explain how I used Aguilar and Cohen's (2022) Transformative Professional Development framework to design the PD.

Setting and Audience

This capstone project is designed for kindergarten - first grade teachers in an elementary school in Saint Paul, Minnesota. The elementary school supports grades pre-K through fifth grade and with an enrollment of 504 students for the 2022 - 2023 school year. The district data management system, BOLT, breaks the student population down by race, English language learners, free/reduced lunch, and special education. According to BOLT (personal communication, June, 2023), 55% of students identify as Asian, 19% as Black, 11% as Hispanic, 9% as more than one race, 6% as white, and 0%

as American Indian. English language learners make up 48% of the student population and 19% of the total students enrolled receive special education services. 90% of the students are eligible for free or reduced lunch.

The participants will be the general education teachers for the kindergarten and first grade rooms. For the 2023-2024 school year, there are four kindergarten teachers and four first-grade teachers. Two of the four kindergarten teachers have been teaching in elementary for over 20 years, one has been teaching for seven years, and the other for three years. In first grade, two of the teachers have been teaching between five to seven years, and the other two teachers have taught for two years.

In the 2022-2023 school year, there were 81 students enrolled in kindergarten and 73 students in first grade. According to the universal screener for early reading skills used at this school, in spring of 2023 only 18.8% of kindergarten students and 22.2% of 1st graders would be reading at the grade level benchmark level at the end of the year (personal communication, May, 2023). This most recent data points to the importance of a PD session that will focus on best practices for early reading skills.

Rationale

According to Fastbridge, the district's universal screener and progress monitoring data system, only 20.4% of kindergarten and first grade students were on track to reach grade level early reading skills by the end of the school year (personal communication, May, 2023). It is by looking at this data that one can see the need for a PD session that focuses on best practices for effectively teaching phonemic awareness and phonics for small group reading instruction.

The district has made a recent shift to explicitly teaching reading skills, specifically with phonemic awareness and phonics. While the district has provided a curriculum to support whole group instruction in these skills, many teachers have felt that they have had little direction or training for how to teach these skills in differentiated small reading groups. Teachers in kindergarten and first grade have not felt that they have the knowledge or skills to successfully teach students in small groups in these areas. Some of the teachers have shared that they are not interested in making this change. Other teachers have said that they do not necessarily understand the reason behind this shift.

My hope is that by providing teachers with a PD session using the transformative professional development framework created by Aguilar and Cohen (2022), that teachers will feel empowered to make changes to their current practices with small group reading instruction. Aguilar and Cohen's PD framework is built on the premise that people will make changes in their practices through exploration of behaviors, beliefs, and ways of being (Aguilar & Cohen, 2022). I will use this framework to help explain the reason and science behind this shift and provide teachers with time and support to look at their current student data and make instructional decisions that allow them to plan with their current students in mind. Also, providing teachers with the tools and resources to plan and implement these best practices in their own classrooms.

In the next section, I will describe how I designed this PD using Aguilar and Cohen's transformative professional development framework using their seven principles of adult learning to help teachers feel empowered to make changes in their small group instructional practices for phonemic awareness and phonics.

Project Description

In my position as learning lead in my elementary school I am responsible for delivering PD to teachers. More specifically, I am tasked with delivering job embedded professional development (JEPD) with the grade level teams as active participants. Grade level teams consist of the general education teachers for the grade and can also include a special education teacher or english language teacher. JEPD is professional development that is done during the course of the school day. For this elementary school, JEPD is twice a week for 50 minute sessions. During this time the students are meeting with their specialist teacher while their grade level teachers are meeting as a team.

Project Sessions

For JEPD I plan to design a four session PD that uses the research around best practices for effective teaching of phonemic awareness and phonics in small groups. The sessions are segmented as follows:

- a. Session 1: RTI and Reading Assessments
- b. Session 2: Data Driven Decision Making for Small Groups
- c. Session 3: Best Practices for Phonemic Awareness
- d. Sessions 4: Best Practices for Phonics

Session One. RTI and Reading Assessment will begin with a brief overview of RTI and the different types of reading assessments. Participants will be able to explain the different tiers of instruction within the RTI model and how small group reading instruction fits within the tiers of instruction. Participants will understand the different types of reading assessments (universal screener, diagnostic surveys, and progress

monitoring), their role in RTI, and the important part they play in reading instruction. The participants will then be given the opportunity to use this information and the reading assessments provided by the district to create an assessment schedule for their students.

Session Two. In this session, Data Driven Decision Making for Small Groups, participants will understand how to use the assessment data to form small differentiated instruction groups. Participants will understand how to use the data to make instructional decisions for each group. During this session, teachers will use the assessment data they collected based on the assessment plan they created in session one to create small groups and begin to plan instruction for these students.

Session Three. In Best Practices for Phonemic Awareness, participants will understand the importance of explicitly and systematically teaching phonemic awareness. Participants will explore the different best practices for teaching phonemic awareness in small groups. Participants will understand the progression of learning and teaching phonemic awareness and how to use data to inform phonemic awareness instruction. Teachers will be provided with time to use this knowledge to plan phonemic awareness instruction for students groups.

Session Four. In Best Practices for Phonics participants will understand the importance of explicitly and systematically teaching phonics. Participants will explore the different best practices for teaching phonics in small groups. Participants will understand the progression Ehri's (2014) Phase Theory for Word Reading and how to use this phase theory and data to make instructional decisions for students. Teachers will be provided with time to use this knowledge to plan phonics instruction for students groups.

Project Framework

Aguilar and Cohen's (2022) Transformative Professional Development views participants as active learners that will explore behaviors, beliefs, and ways of being in order to create a change in practice. PD sessions are a place to cultivate self awareness, social awareness, community development, and collective and individual empowerment (Aguilar & Cohen, 2022). For these PD sessions, I will use the seven principles of adult learning to intentionally create content that will be engaging and effective for adult learning (Aguilar & Cohen, 2022).

Principles of Adult Learning

I will focus specifically on Aguilar and Cohen's (2022) seven principles of adult learning to design this professional development. These principles understand that you can't make people learn but you can set up the right conditions to make people want to learn (Aguilar & Cohen, 2002). The seven principles of adult learning (Aguilar & Cohen, 2022, p. 126):

1. Adults must feel safe to learn.
2. Adults come to learning experiences with histories.
3. Adults need to know why we have to learn something.
4. Adults want agency in learning.
5. Adults need practice to internalize learning.
6. Adults have a problem-centered approach to learning.
7. Adults want to learn.

In the next section, I will explain each of the principles as well as my PD session design within these principles.

Adults Must Feel Safe to Learn. One important way for adults to feel they are in a safe environment for learning is to create and have norms or community agreements (Aguilar & Cohen, 2022). These can be created by the team you are working with or a set can be provided depending on the relationship and time for the PD (Aguilar & Cohen, 2022).

As the learning lead at the elementary school where I will be providing this PD I have the privilege of working with the kindergarten and first grade level teams throughout the school year. One of the first tasks that we complete at the beginning of the year is to create team norms. These are created together as a team with each person able to offer input and then the norms are decided on by the group. The norms that teams have created are added to each agenda so they remain an important part of creating a safe environment for learning.

Once the norms are created the second part is making sure they are upheld in the learning environment (Aguilar & Cohen, 2022). Having the norms listed at the beginning of the agenda lets them easily be referred back to and reminds the team of the norms they created. If norms aren't being followed it can cause a breakdown in creating a safe space for learning (Aguilar & Cohen, 2022). It is important to make sure these are upheld by pointing out if there is a breakdown and referring back to the norms (Aguilar & Cohen, 2022). During JEPD, if I notice a team needs to have the norms referred to during a couple of the meetings, I take time at the beginning of the following meeting to revisit the norms. This helps to see if the team is still in agreement with all the norms or wants to remove or add any and to recreate a safe environment for learning.

Adults Come to Learning Experiences with Histories. Adults have already had many different learning experiences and come to a PD session with those experiences. When these experiences are acknowledged, it creates respect between the learners and facilitators (Aguilar & Cohen, 2022). For this PD, I will be introducing a shift to a different way of teaching small group reading. Many of the teachers will have experience in teaching small group reading, some of the teachers with many years of experience. It is important that I recognize this and make space for it during the PD session.

In this PD session, I plan to do this by having the teachers reflect on their experiences in teaching small groups and having them share specific strategies that were effective or strategies they tried that felt ineffective. Hopefully, this will help them make connections to what they did in the past when teaching phonemic awareness and phonics and how they can still use this and update their current practices. This will help to honor the knowledge the teachers already bring to the table plus make space to help embrace a different approach to teaching these skills.

Adults Need to Know Why We Have to Learn Something. Many adults need to know why they are learning something and will commit to learning when the objectives meet their personal and professional needs (Aguilar & Cohen, 2022). The objectives should be communicated to the adult learners by including them on the agenda, in an introduction activity, or having learners make connections between the content and their own experiences (Aguilar & Cohen, 2022).

For this PD session, I plan to include the objectives in the agenda and on the slide for each of the four sessions. I will be creating an introduction activity to be done during the first session of the PD that will cover all the objectives and then review the objectives

that will be focused on at each session. Articulating the why/objectives of the session will help to prevent resistance and create space for new ideas, build connections to the content, and build trust in the facilitator (Aguilar & Cohen, 2022).

Adults Want Agency in Learning. Adult learners want to have some control over their own learning and to feel empowered to make some decisions (Aguilar & Cohen, 2022). Adults will get more out of a learning situation if they have some autonomy to make decisions (Aguilar & Cohen, 2022). Offering adult learners choice in a PD session gives adults control over their own learning (Aguilar & Cohen, 2022).

In designing this PD, I plan to offer choices in each of the sessions to give teachers control of their learning and decisions for applying this new learning in their own classroom. The ways in which I plan to offer choice in the sessions are by sharing with a partner, writing, or quietly thinking. The first session is about reading assessments and creating a plan for assessments. Teachers will be given a timeframe to choose when to give these assessments and then create a plan for assessments that works for their schedule. The next session will involve looking at data. I will provide choice by giving teachers options for viewing the data and how to interpret that data. Other options for choice will be how to utilize and organize their classroom data, for example, using templates, alternative technology or writing on paper. Lastly, one task for the last two sessions is to create a lesson plan on phonemic awareness and phonics for a small group of students. Letting teachers pick the group of students for these lessons and create their own lesson plans in a format that works for them will help to give them autonomy over how they use the new learnings from these sessions. By creating choices in each PD

session, I hope to honor each teacher's sense of autonomy and empower them to use the new learnings to make effective learning decisions for their students.

Adults Need Practice to Internalize Learning. Adults need ongoing professional development that includes applying the new knowledge in order for them to internalize the learning (Aguilar & Cohen, 2022). Center for Public Education (2013) stated that time in PD is not enough, a significant portion of time must be “dedicated to supporting teachers during the implementation stage” (p.15).

Although this PD is four 50 minute sessions in length, it is a continuation of PD that has already been provided by the district in the science of reading, whole group reading instruction, and data driven decision making. This PD was designed specifically for small group reading instruction in phonemic awareness and phonics because this was the area that most teachers communicated was missing from the district provided PDs. This PD is already part of an ongoing PD that will continue throughout the school year.

Each PD session will include time for the teachers to engage with the new learning and use it when making decisions and plans for their own students. The plan is that the new learning will be about 15 minutes of the session with about 25 minutes for the teachers to engage or plan. They may use this time to make an assessment plan, use data to create small groups, use data to create an instructional plan, or use newly learned best practices to create lesson plans.

Additionally, teachers will get ongoing support in the form of modeling, coaching, and feedback for implantation of these new best practices. I plan to offer teachers opportunities to be observed and model using these strategies with a small group of students. Teachers may prefer I coach them before or while they are teaching a small

group of students. They will have the option of having me observe them teaching using the strategies and providing them with honest feedback. Giving teachers ongoing support during implementation will help them to internalize these new learnings.

Adults Have a Problem-Centered Approach to Learning. Adults learners are more willing to learn new skills if they think it will help to solve a problem (Aguilar & Cohen, 2022). When a PD focuses on solving a problem, adult learners will engage with the content more deeply (Aguilar and Cohen, 2022).

If we look at the reading statistics from this school in which only 20.4% of kindergarten and first grade students will be reading at grade level at the end of the year, it is clear that there is a problem. Showing teachers the data and seeing that there is a problem is the first step. What this PD plan does is offer a solution to this problem that is based in research on the science of reading and using strategies that help students learn to read. It is important that when I design this PD I don't only focus on the problem but instead state the problem and focus on the solution. This PD will give teachers the strategies to increase students' reading proficiency by providing resources and time to create lessons to implement the best practices for teaching phonemic awareness and phonics. We have the problem and now teachers can engage with the solution in a meaningful way.

Adults Want to Learn. Aguilar and Cohen (2022) state that adults want to learn and with the right conditions will engage in learning. Part of the facilitators job is to view each adult as wanting to learn and to create the right environment for learning (Aguilar and Cohen, 2022).

As I design this PD, it is my job as facilitator to create the right conditions for adults to engage in the new learnings. Part of doing this is to see every adult as a person who wants to learn. The other part of this is to follow these seven principles of adult learning and incorporate them into planning and delivering this PD. If done correctly, teachers will have the knowledge, resources, and know-how to effectively teach phonemic awareness and phonics to differentiated small reading groups.

Timeline

The idea for this capstone project came to me when I decided to return to Hamline to finish my Master's course work. As I was delivering the district-provided PD to support the new shift in curriculum and explain the science of reading research I realized that there was a component missing in the PD. While the district PD covered the phonemic awareness and phonics in whole group instruction, there was little instruction in instructing our youngest learners, primarily kindergarten and first grade. I decided in spring that I wanted to have my own researched knowledge base on instructing phonemic awareness and phonics in small groups. I wanted to use this knowledge to create a PD for kindergarten and first grade teachers to share this knowledge and give them resources and tools to use these best practices in the classroom.

The project will be completed in December 2023. While JEPD is offered throughout the school year, the delivery of this PD may need to wait until the fall of 2024. However, there is an urgent need to get our kindergarten and first grade students to read at grade level by the end of each school year. As a result, I may be able to deliver this PD in Spring 2024. Ongoing support for implementation of the new practices in this PD will be provided throughout the school year.

Assessment

The first intended outcome of this capstone project is a change in teacher practice when teaching phonemic awareness and phonics in small groups. The second intended outcome of this capstone project is an increase in student reading proficiency as a result of this change. To measure the intended outcomes of the PD I will be using Aguilar and Cohen's ways of assessing impact strategies.

Aguilar and Cohen (2022) list five ways to measure the impact of a PD: "participants' responses, participant's learning, organizational change, participants' application of the new knowledge or skill, and student learning outcomes" (p.42). For this capstone project, I will focus on collecting data around participants' learning, participants' application of the new knowledge or skill, and student learning outcomes. Data will be collected using participant surveys, classroom observations of small groups, and student reading data from the universal screener and progressing monitoring.

Participants surveys will be feedback surveys to be given at the end of the PD. Aguilar and Cohen (2022) suggested collecting quantitative and qualitative data. For quantitative I will create a survey with a 1-5 Likert scale (1=strongly disagree and 5=strongly agree). The statements will include: This PD met the intended outcomes listed. This PD gave me the knowledge and resources to teach phonemic awareness and phonics to small groups. This PD provided different opportunities for learning the material. For gathering qualitative feedback I will ask teachers to answer the following open ended questions. What is one new learning you would like to implement right away? What is something you would like more information about before trying it in the classroom?

What are some additional resources, tools, or help you would like from me to implement this in the classroom?

For assessing the impact of participants' application of the new knowledge, I plan to do walkthroughs, coaching, and observation. It is important that these are seen as means of additional support for teachers and not seen as an evaluation on their teaching. This practice of continued support not only helps me to assess the impact of the PD but helps support implementation of the new skill. When teachers are supported during implementation of a new skill or knowledge this leads to change in their teaching practices (Center for Public Education, 2013).

Lastly, I will assess the impact of this project by looking at students' outcomes. Specifically, kindergarten and first grade students' scores on the universal screener and progress monitoring. I will be able to compare the scores of their reading growth throughout the year and compare scores across years. There are many variables that could contribute to growth in these reading scores so I will not be able to say that this capstone project directly caused an increase in student reading proficiency. An increase in student reading achievement is a step in the right direction and could suggest a possible correlation. An increase in reading growth is a win for the teachers and the students.

Conclusion

Chapter three describes the major aspects for the development of my capstone project. I describe the school and the teachers to provide details about the setting and the audience of this capstone project. The framework I am using to design the professional development was described to give additional context to the capstone project. Lastly, I

included ways in which I plan to collect data and evaluate whether the PD had an impact by changing teacher practice and student outcomes.

I will use chapter four to reflect on what I have learned as a researcher, writer, and learner when answering the question, *How do Kindergarten-First grade teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* I will speak to any possible implications of this project or possibilities for further research. Lastly, I will reflect on how this project has benefited me as an educator and how it can benefit educators in the future.

CHAPTER FOUR

Reflection

Introduction

I will use this last chapter to reflect on my learnings as I created my Capstone project that answers the question: *How do Kindergarten-First grade teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* Specifically, I will speak to what the Capstone process has taught me as a researcher, writer, and learner and how it has helped me grow in my current position. I will highlight the important learnings from the literature review. I will speak to any implications of the project or possibilities for further research. Lastly, I will speak to how this project can benefit educators now and in the future.

Capstone Process

I began the process of researching and creating a professional development for teaching reading to kindergarten and first graders because the district I work for shifted the way we had been teaching reading during the 2022-2023 academic year. In the fall of 2022, the district declared that the best practices and strategies of the past were not effective for our students. Reading instruction would now be based on brain research and the science of how students learn to read. Instruction in the younger grades, specifically kindergarten through first grade, would be focusing on phonemic awareness and phonics. Prior to fall of 2022, instruction was based on having students try to read the words by using pictures or other cues.

I had assumed that the practices that we were using to teach reading were based in research and science. As a result, I wanted to see the research and science behind the new strategies that we were going to be using to teach reading. It was this Capstone project that allowed me that pathway. I was able to research, read, and write about these instructional strategies for teaching phonemic awareness and phonics to kindergarten and first grade students. I was able to create a PD for teachers that explains these practices and how to use them in differentiated small group instruction which allowed me to not only learn for myself but to pass on what I learned to others in the profession and for the benefit of students.

The Capstone process was a humbling experience that helped me to grow and to see myself as a researcher, writer, and an adult learner. The research part of the capstone process came naturally to me. I like to find and read articles and books that help to grow my knowledge both personally and professionally. The type of research required for my capstone project allowed me to really hone my research skills by narrowing my search to the specific topic of teaching phonemic awareness and phonics to kindergarten and first grade students. By doing this type of research I was able to explore this topic in more depth.

Writing has always been difficult for me. I find it challenging to get my thoughts on paper in a coherent way that will make sense to others. It is hard for me to sit down and keep at a task for a long period of time. This part of the process was quite a challenge for me while at the same time being a tremendous opportunity for growth. The way the capstone classes are set up let me see each chapter as its own paper which eased the sense of overwhelm. Feedback from peers and professors showed me how to enhance and grow

my writing. With each completed chapter, I felt a huge sense of accomplishment.

Completing this Capstone has shown me that while writing may be a challenge for me, it is something that I can indeed do with the willpower to do the work and grow from the feedback and support of others.

I have always considered myself a lifelong learner, but this Capstone project has expanded my learning in ways I did not think possible. I learned how to do academic research and how to narrow down my topic to find specific resources that answered my research question. The next step in this process was taking all this information and synthesizing it in an understandable way for different readers. This helped me to grow in my academic writing and language skills. Putting this learning into a practice helped me in my current position as Learning Lead to create a PD to pass this information in an understandable and accessible way for teachers to begin utilizing with their students. I was able to learn about ways to engage adult learners and put these new learnings into practice.

The capstone process has expanded my learning in a way that will benefit me by expanding on skills I already have and learning new skills. Answering the research question, *How do Kindergarten-First grade teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* has allowed me to grow professionally in this specific area of teaching reading. But the whole process has taught me how to do academic research on a specific topic, synthesizing this research into writing, and to share and communicate the research in a way that can be utilized in the classroom by teachers. This type of learning is learning that I will be able to use through all areas of my career.

Major Learnings From the Literature Review

While the literature review provided a lot of important information that was relevant to effective small group instruction in phonemic awareness and phonics, there were some major learnings that drove the Capstone project. First, was the importance of differentiated small group reading instruction that, when provided within tier one of the RTI model, has been associated with stronger reading growth for both struggling and achieving students (Al Otaiba et al., 2011). Furthermore, the use of assessments as part of the RTI model can identify students at-risk for reading difficulties and can be provided with interventions that start in the general education classroom (Fletcher & Vaughn, 2009; Moats & Tolman, 2019).

The assessments not only help in identifying students at-risk for reading difficulties but screening assessments are the first step in beginning to plan for differentiated instruction by identifying students with mild, moderate, or severe risk in reading skills (FCRR & Florida Department of Education, 2022; Moats & Tolman, 2019). The two other reading assessments that are important for differentiated small group reading instruction are: diagnostic surveys and progress monitoring. Diagnostics can reveal in more detail a student's skill in a specific reading area such as phonological skills, decoding and word reading, and spelling skills (Moats & Tolman, 2019). Progress monitoring will let the teacher know if an instructional approach is not working and they can change or modify the instruction to accelerate the student's learning (FCRR & Florida Department of Education, 2022, Moats & Tolman, 2019). Knowing the use of these assessments and the data they provide helps in understanding how to create and instruct differentiated small reading groups.

One of the most important learnings from this literature review was the use of explicit and systematic instruction for teaching phonemic awareness and phonics. Explicit and systematic instruction for phonemic awareness and phonics had the most compelling support. Past and current meta analysis of reading research in phonemic awareness and phonics instruction has shown that students demonstrate increasing reading growth with instruction in both explicit and systematic ways (Brady et al., 2011; Ehri, 2020; Ehri, 2022; FCRR, 2022; Moats, 2020; NRP, 2000). It is explicit and systematic instruction that guides the use of the best practices for teaching phonemic awareness and phonics in small groups reading instruction within this Capstone project.

Implications

The research in the capstone and the project that resulted from this search show the importance of small group reading instruction that is based in science and research. The hope is that as the district moves forward in research driven whole group instruction, it will also provide research based small group instruction especially for our littlest learners. As this project shows, there must be more than just a curriculum purchased and handed to the teachers to begin implementation. This needs to be backed by extensive PD for teachers that is based in the practice of using data to make instructional decisions.

The Minnesota READ Act (2023) already shows that policy in the state of Minnesota is headed in the direction of using a curriculum that is based in the science of reading to teach students how to read. Not only that, but this act is requiring the training of teachers who will implement this curriculum in their classrooms (READ act, 2023). This capstone project not only supports the district reading curriculum shift but supports the shift the state is making in its reading instruction for students.

Limitations and Future Research

One of the main limitations of the Capstone project and the research within was the narrowness of the subject matter. The purpose of this was to be able to explore and better understand teaching phonemic awareness and phonics in differentiated small groups for kindergarten and first grade students, specifically in tier one of the RTI model. The RTI model is a system for schools used to identify students who may be at-risk for reading difficulties and to provide interventions for these identified students at all three tiers of instruction (Fletcher & Vaughn, 2009; Moats & Tolman, 2019). Therefore, further research could focus on teaching phonemic awareness and phonics within tier two and tier three of the RTI model. This research could even be expanded to teaching phonemic awareness and phonics in second grade and above.

An additional limitation would be my positionality as a white woman who grew up in a middle class suburb. I did have reading difficulties and often wondered if I was taught using a curriculum based in the science of reading if I would have had these same difficulties. It is because of my background I can not truly understand the experiences of students of color, different genders, or different language backgrounds. While the research used for this capstone project was of high quality and backed by evidence within each study it is worth noting that most of the research was completed by white women with most of the students having English as their first language. Hopefully, an awareness of this limitation will help in viewing this capstone project through a multicultural lens.

Future research could be to look at the teaching of phonemic awareness and phonics through a multicultural lens. Perhaps looking at student growth in these areas by race, gender, socio-economic status, and home-language and see if the growth using these

strategies appears the same across these different student populations. If there is a difference, further research would need to be done to see the reason behind this discrepancy.

Conclusion

This chapter four is a reflection of my Capstone project to answer the research question, *How do Kindergarten-First grade teachers use best practices in phonemic awareness and phonics to develop effective small group reading instruction that will increase students reading proficiency?* I describe how the capstone process was a humbling experience that helped me to grow both professionally and personally. I highlighted the important learnings from the literature review that contributed to this project. Additionally, I describe any implications the project will have on the profession with hope to focus on evidence based phonemic awareness and phonics practices in small group instruction. Lastly, I speak to limitations of this capstone project and the research behind and address further research that could address these limitations. My hope is that this project will provide teachers with the knowledge of evidence based practices they need to use when teaching phonemic awareness and phonics to kindergarten and first grade students. And with this knowledge to help reading achievement grow throughout the grades.

REFERENCES

- Aguilar, E., & Cohen, L. (2022). *The PD book*. John Wiley & Sons, Inc.
- Al Otaiba, S., Connor, C. M., Folsom, J. S., Greulich, L., & Meadows, J. (2011). Assessment data-informed guidance to individualized kindergarten reading instruction: Findings from a cluster-randomized control field trial. *The Elementary School Journal*, *111*(4), 535-560.
<https://doi.org/https://doi-org.ezproxy.hamline.edu/10.1086/659031>
- Brady, S. A., Braze, D., & Fowler, C. A. (2011). *Explaining individual differences in reading: Theory and evidence*. Psychology Press.
- Center for Public Education & Allison Gulamhussein. (2013) *Teaching the teachers: Effective professional development in an era of high stakes accountability*. The Center for Public Education.
https://www.academia.edu/28440314/Teaching_Effective_Professional_Development_in_an_Era_of_High_Stakes_Accountability_READ_THE_REPORT_Center_for_Public_Education
- 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. (2020). The science of learning to read words: A case for systematic phonics instruction. *Reading Research Quarterly*, *55*(S1), S45-S60.
<https://doi.org/10.1002/rrq.334>

Ehri, L. C. (2022). What teachers need to know and do to teach letter-sounds, phonemic awareness, word reading, and phonics. *Reading Teacher*, 76(1), 53-61.

<https://doi.org/10.1002/trtr.2095>

Equipped for Reading Success (2022). The past test. <https://thepasttest.com/>

Filderman, M. J., & Tosta, J. R. (2017). Decisions, decisions, decisions: Using data to make instructional decisions for struggling readers. *Teaching Exceptional Children*, 50(3), 130-40.

<https://doi.org/10.1177/0040059917740701>

Fletcher JM, Vaughn S. (2009) Response to intervention: Preventing and remediating academic difficulties. *Child Dev Perspect*. 3(1):30-37. doi:

10.1111/j.1750-8606.2008.00072.x. PMID: 21765862; PMCID: PMC3137487.

Florida Center for Reading Research and Florida Department of Education. (2022).

Assessments to inform instruction overview.

<https://fcrr.org/sites/g/files/upcbnu2836/files/media/projects/essentials-for-reading-success/Assessments%20to%20Inform%20Instruction%20Overview.pdf>

Florida Center for Reading Research and Florida Department of Education (2002).

Features of effective instruction overview.

<https://fcrr.org/sites/g/files/upcbnu2836/files/media/projects/essentials-for-reading-success/Features%20of%20Effective%20Instruction%20Overview.pdf>

Florida State University. (2023) *Differentiated instruction.*

<https://fcrr.org/reading-success/differentiated-instruction>

Florida State University. (2023) *Response to intervention overview.*

<https://fcrr.org/reading-success/intervention>

- Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. John Wiley & Sons, Inc.
- Lindsey, J. B. (2022). *Reading above the fray: Reliable, research-based routines for developing decoding skills*. Scholastic Inc.
- Mesmer, E. M., & Mesmer, H. A. E. (2008). Response to intervention (RTI): What teachers of reading need to know. *The Reading Teacher*, 62(4), 280-290.
<https://doi.org/10.1598/RT.62.4.1>
- Minnesota Department of Education. (2022). *Minnesota report card* [data set]. Minnesota Department of Education
https://rc.education.mn.gov/#mySchool/orgId--999999000000__groupType--district_p--3
- Minnesota Department of Education. (2023). Read act. Minnesota Department of Education. <https://education.mn.gov/MDE/dse/READ/>
- Moats, Louisa C. (2020). *Teaching reading is rocket science, 2020: What expert teachers of reading should know and be able to do*. American Federation of Teachers and Center for Development and Learning.
<https://www.aft.org/sites/default/files/moats.pdf>
- Moats, Louisa Cook. (2022) *How children learn to read: Toward evidence-aligned lesson planning (English)*. *Tools for Improving Reading*. Washington, D.C. : World Bank Group.
<http://documents.worldbank.org/curated/en/099620103312232824/P1742520c2213e0a00a7410990dbb0a2daa>
- Moats, L. C., & Tolman, C. A. (2019). *LETRS (3rd ed.)*. Voyager Sopris Learning, Inc.

National Reading Panel. (2000) *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction*. Washington, DC: U.S. Government Printing Office.

Puzio, K., Colby, G. T., & Algeo-Nichols, D. (2020). Differentiated literacy instruction: Boondoggle or best practice? *Review of Educational Research*, 90(4), 459– 498.

National Center for Learning Disabilities, Inc. (2023). *What is RTI?*

<http://www.rtinetwork.org/learn/what/whatisrti>

READ Act, Minn. Stat. § 120B.12 (2023).

<https://www.revisor.mn.gov/statutes/cite/120B.12>

Sharp, K., Sanders, K., Noltemeyer, A., Hoffman, J. L., & Boone, W. J. (2016). The relationship between RTI implementation and reading achievement: A school-level analysis. *Preventing School Failure*, 60(2), 152-160.

<https://doi.org/10.1080/1045988X.2015.1063038>