A DESCRIPTIVE STUDY OF IMPLEMENTING TIERED SYSTEMATIC PHONICS INTERVENTION THROUGH THE COLORADO READ ACT

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A DESCRIPTIVE STUDY OF
IMPLEMENTING TIERED SYSTEMATIC PHONICS
INTERVENTION THROUGH THE COLORADO READ ACT

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A capstone submitted in partial fulfillment of the
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To my wife who encouraged and guided me through this paper. Thank you to my Capstone Committee who helped a rough outline into a workable paper. Special thanks to my students, whose remarkable efforts to become better readers inspired this research.
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CHAPTER ONE

Introduction

No child in America is illiterate. This is not to say there are no students who possess little to no functional literacy skills or phonemic awareness. Rather, it is the word illiterate itself that has fallen out of favor. Like so many callous terms before it, it has been replaced by kinder, more analytical language. In our current data-driven school system, teachers and evaluators far prefer to talk about reading grade levels and lexiles. Teachers monitor the lexile-scores of texts and determine if a student is reading at grade level, above grade level, or below grade level.

“Below grade level” is a common term one hears at an Individual Education Plan (IEP) meeting. As a special education teacher who has served as both a self-contained classroom instructor and a resource-room interventionist, I hear it in nearly every student transfer meeting I lead. Sometimes reading levels are described in broad, unquantifiable terms: they are "way below grade level." They might "read like a kindergartner."

Depending on the previous team and school, the student might be described in more analytical terms. We may view a report detailing their reading level according to a Developmental Reading Assessment (DRA) score. Unsurprisingly, the DRA score reliably places the student below grade level.

When I start to evaluate my students in reading, it is common for me to find that these “below grade level” third, fourth, and fifth grade students are unable to accurately decode more than one short vowel sound or read simple one-syllable consonant-vowel-consonant (CVC) words with more than 10% accuracy. In my professional experience,
this describes a substantial majority of students who transfer into my caseload. They are below grade level, but in a less charitable era they would likely be described as illiterate. I do not mourn the loss of such harsh labels, but I am concerned about a sense of urgency lost. Students who demonstrate significant deficits in phonemic awareness and/or phonological processing continue to receive inconsistent interventions throughout many schools districts. While there has been an increase in Common Core literacy programs designed to boost overall reading scores, targeted systematic phonics interventions continue to be inconsistent or even frowned upon.

**Capstone Question**

This capstone focuses on setting out a blueprint for districts to follow to implement effective phonics interventions. My research is guided by one essential question: How might I aid schools and districts in implementing district-wide systematic phonics intervention, both instructionally and organizationally? Drawing from both my personal experience and academic research, I believe it critical for schools to prioritize systematic phonics as an indispensable intervention for a certain category of struggling reader. This paper sets out to be a descriptive study for a school improvement plan involving tiered reading interventions.

On the instructional level, this paper seeks to find the pedagogical elements that research shows is necessary in phonics instruction. Any proposal needs to include research based best practices for the proposed intervention. On an organizational level, this paper will address the best ways for schools to implement these interventions on a logistical level. There must be standardized ways for students to be identified for
services. Intervention and support must be structured and look the same across different schools and grade levels.

In the second chapter of this paper, I will review the available research on the efficacy of systematic phonics interventions. The chapter will also review schools and districts that have successfully implemented phonics interventions. The intent is to find commonalities in instructional routines and in the logistics of implementation. The goal is to find the essential elements that need to be present in implementing school-wide systematic phonics interventions.

The third chapter will review the methodology involved in developing the school improvement plan. Chapter four will synthesize the information in chapter two and the methodologies detailed in chapter three to detail the improvement plan. This improvement plan will detail the process in which students are identified, treated, and how progress is monitored. The final chapter will reflect on the steps for the future.

Rationale

Students with low literacy skills exist within the margins of school districts across the country, and are well represented in special education programs and Title 1 schools. Some may describe them as dyslexic, and many unquestionably are. Yet dyslexia is a diagnosis that often eludes students in areas of high-poverty, as such a diagnosis requires outside evaluation. Schools are increasingly developing systems to evaluate student reading levels and identify students who are below grade level standards. However, there
is often not a standardized system within a district where students with significant reading processing disorders and deficits are identified. Initial special education testing often successfully identifies these skill deficits, but often these evaluations come years too late. This leads to the common occurrence of functionally illiterate students who make it to the third grade without ever having received phonics reading intervention.

There are issues of jurisdiction and leadership. Are these students the sole province of the special education department, general education teachers, or another department entirely? Who coordinates such efforts? Are these efforts consistent across schools in the district? In the answer to these questions, I find there are often discrepancies between the district plan as described by administrators and the practices of individual teachers.

My interest in this topic comes from a reality I have long since accepted: a majority of my students will come to my program in need of intensive literacy intervention. However, it is time to question the inevitability of this arrangement. As a special education teacher, teaching phonics feel like a natural part of my job. However, I do not accept that students should only receive phonics interventions if they have an IEP. This Capstone posits that systematic phonics interventions will not only help students who consistently struggle to develop basic reading skills. Phonics interventions, when properly coordinated, can play a major role in alleviating the status quo of students routinely making it to higher grade levels without functional reading skills.

It is not a dearth of resources but a lack of coordination and dedication to phonics base interventions that prevents full implementation. In some districts, there are resources but no coordination. On the first day in my previous district in Arizona, I asked my
principal what phonics intervention the district follows. He told me that he believed there was “a kit” somewhere. After some searching, a discovered a box of curriculum and materials from the Lindamood-Bell literacy program in its original wrapping.

Fortunately, I had been at least informally trained in the Lindamood-Bell techniques from my wife, who had worked for the company as a teacher. I had also been trained in various other programs through my work in previous districts.

Like most teachers, I did not have the time to wonder who bought this $1500 dollar kit, when they bought it, or why it was collecting dust in a storage room. I was simply happy to have it. Yet when I attended IEP meetings for my students who graduated onto less-restrictive programs, I was met with blank stares as to whether they were also using the Lindamood-Bell program. Some special education teachers were using a different programs entirely, while others seemed to have no structured phonics intervention at all. When I asked about the district-wide plan, I got entirely different answers depending on whether I was asking a principal, a curriculum coordinator, or a special education director. To this day, I am still not entirely certain if the Lindamood-Bell kit was intended as a stand-alone resource for my school, a special education intervention, or a program to be followed district-wide by general education and special education teachers alike.

Other districts have coordination, but no resources allocated to phonics intervention. In Denver, where I currently teach, all students are tested as part of state-wide law called the READ Act. All students are tested and reading levels are inputted into a state-wide database. It is mandated that any student below grade level has an IEP-like READ plan developed to ensure that their progress is monitored and recorded into
the database. In this sense, there is considerable accountability, data, and coordination in reading intervention. Yet, phonics-based interventions do not exist as a district initiative. Students who lack basic decoding skills are placed into the same intervention system with students who simply failed to adequately answer comprehension questions.

This paper will focus specifically on implementing phonics based interventions for students with significant deficits in phonological awareness, phonics, and fluency. A review of literature in chapter two will demonstrates that phonics interventions are necessary, effective, yet rare. This capstone seeks to create a comprehensive phonics intervention system beginning with early district-wide identification of students with these deficits. This proposal will develop the diagnostic tools and data keeping to ensure progress is measured. The focus is less on creating a phonics curriculum from scratch—there are many excellent programs already in existence, some of which are highlighted in chapter two—but creating a systematic process in which students are identified, grouped, and monitored to ensure that phonics interventions are implemented consistently with fidelity.

**Overview**

Phonics interventions remain somewhat controversial to this day, which is part of the reason they are not often prioritized. My review of literature does not seek to objectively answer the long debate between phonics and whole language approaches that continue to this day. However, the review seeks to review peer-reviewed studies measuring the efficacy of phonics based interventions. This paper openly advocates the
development of phonics interventions. It is essentially that any proposals are based on scientific research rather than intuition.

The review of literature will review the success and/or lack of success in phonics interventions. It will also review the logistics behind this implementation. It seeks to answers a variety of questions. What are the most effective ways to coordinate standardized, district-wide phonics interventions? How do you ensure that the interventions are consistently followed by both general education teachers and special education teachers? What gains did they see? This paper will study districts that have been successful in this endeavor and the results they have achieved as compared to school districts of similar demographics. The paper will focus on not just what these districts do, but how they ensure consistency between many different schools and departments. Using this information, I will develop a comprehensive proposal and tools that can properly identify and treat students in need of phonics intervention.

The specific elements of phonic intervention my research will focus on will be on the following questions: How and when are students identified as having specific needs in regards to phonics interventions? Who is responsible for identifying students? Once students are identified, who is responsible for coordinating and teaching phonics interventions? What programs and interventions are being utilized? How is progress monitored?

My intention is find commonalities in the successes and the shortcomings of various approaches. In successful districts there are procedures and systems in place that must bridge the gap between theory and practice. Through this, I plan to find a working template of how school districts successfully coordinate phonics intervention plans. A
focus on coordinated efforts ensures that teachers feel supported and trained in phonics interventions. It allows parents a sense of security. They would not have to fear that their child will lose out on research-based reading interventions simply because they moved schools or switched teachers. Policy makers will have a far easier time monitoring the effectiveness of reading interventions if they are monitoring a consistent program. It is easier to make changes and improvements to a closely followed system rather than a loose patchwork of interventions.
Overview

In the previous chapter, a lack of formal commitment to phonics-focused interventions was discussed. This paper focuses on the role phonics based interventions can play in serving the needs of a school's lowest readers. This chapter reviews the previous research into the effectiveness of phonics interventions. Studies will be reviewed with an emphasis on student growth results following the intervention and the logistics of putting such initiatives into place. This chapter seeks to find commonalities in instruction and in logistical implementation. These findings will guide the proposal outlined in the final three chapters.

No Child Left Behind and Evaluation

With the passage of No Child Left Behind (NCLB) came a dramatic increase in the attention paid to low reading scores in predominantly low-income, urban areas. Testing such as DIBELS and Wide Range Achievement Test (WRAT) became widespread across the country and the data was stark (Mercer 2000). It became quickly apparent that there was a persistent lack of achievement amongst students who struggle in basic literacy.

Nationwide, NCLB data show that 20% of students are not reading at grade level by the end of fourth grade. Of that 20%, nearly half of those students lack the basic reading skills necessary for decoding (Pannella 2013). A study by Cihon (2008), found
that these issues with reading tend to persist throughout a student's academic career. 75% of students who test in the bottom tenth percentile for reading by the end first grade remain so by the end of 9th grade. While low-scoring readers can come from a wide variety of backgrounds and struggle for a variety of reasons, test results unambiguously show a wide gap in the reading achievement between well-to-do suburban districts and lower income urban and rural districts.

NCLB and the glut of research that followed led to an increase in attention to, and funding for, basic reading programs. Research from Teale (2008) found that since 2002, over 4 billion dollars was spent on remedial reading programs. National standards directed school districts to focus on the "Big Five" elements of basic reading: phonological processing, phonemic awareness, phonics, fluency, and reading comprehension. This focus was backed up by research into why students struggle with developing reading skills. Reviews of DIBELS data show that students in the bottom tenth percentile are significantly below grade level scores in all five of the reading components.

Despite this in-flow of money, problems persist. NCLB reforms make the reading data more readily available and more consistent, but it does not inherently lead improved intervention. In interviews with school districts by Teale (2008), hundreds of teachers report that they do not know precisely what to do with the DIBELS data they collect. The study found that schools lacked "program coherence" in their approach to teaching foundational literacy. In 2003, there were no integrated professional development programs in place in the two districts studied. The study found a notable lack of cohesion between classrooms and schools.
Effective Literacy Intervention

The persistent achievement gap in literacy and the continued underachievement of low-scoring 1st graders may lead one to believe there is little consensus on effective interventions for struggling readers. However, a review of research demonstrates what most practicing teachers already know: consistent, research-driven interventions yield highly positive results. All the studies have much in common. They all identified poorly performing students through testing that was already in place through NCLB. They all provided consistent interventions focused on the fundamental "Big 5" of literacy development, particularly focusing on phonics and fluency. These systematic phonics-based interventions yielded significantly positive results for the students involved.

In the year 2000, shortly before the passage of NCLB, the National Reading Panel released the meta-analytic report *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading*. The panel reviewed 38 independently conducted studies involving over 7000 students. The studies involved students from a variety of ethnic and socio-economic backgrounds. The studies also included typically developing readers as well as English language learners, at-risk readers, and students with diagnosed learning disabilities. In 35 of the studies reviewed, students receiving systematic phonics interventions demonstrated higher-level skills in isolated word decoding, reading pseudowords, spelling, and fluency and compared to the students in the control groups. The positive benefits were most pronounced in students in first and second grade.
Since this report, numerous studies have continued to find benefits in phonics instruction. In Perkins, Cooter (2013) the Memphis School of Professional Psychology led a team of graduate students to train Memphis Public Schools teachers in a structured reading intervention for first through third grade students who scored lowest on DIBELS assessments. All students in the study qualified for free and reduced lunch. Depending on the level of need, students were pulled into groups for 1.5 to 3 hours a day by both general education teachers and special education teachers. Teachers were provided with six hours of professional development in the Corrective Reading/Decoding phonics program and received daily consultation to review data. The intervention focused on sound and visual phonics in which individual phonemes were taught in a strategic order. Students were taught hand signals and visual cues to represent specific phonemes. The program sought to develop phonological processing by having a strong auditory component to lessons. Students were told to make a variety of signals upon hearing key phonemes in word segments.

The other major component to the intervention was the importance of keeping data daily. Teachers had a guided system of keeping data, and would only move onto the next lesson when student groups were showing 80%-100% proficiency in new phonemes. Data were reviewed daily by graduate student monitors in order to determine the pacing of the intervention. Teachers reported that this system made more strategic use of data than their previous efforts. By the end of the six month intervention, the intervention group demonstrated significantly more gains in the follow-up DIBELS assessment than their control group peers. Students showed noteworthy gains in phonics, fluency, vocabulary, phonological awareness, and comprehension by eight to ten points on
average. While these numbers were significantly higher than the control group, the students receiving the intervention still made substantially fewer reading gains than did the students who were in the upper 50th percentile of the reading test to begin with. In other words, the intervention did not level the playing field, but did result in noteworthy gains that the control group did not demonstrate. Adoption of the interventions which could be implemented for $50-$100 dollars per school and only requires 6 hours of staff training.

Other studies have sought to examine the benefits of implemented data-driven interventions in low-income urban schools. In Paranten, Siegel (2013) interventions around the developing phonemic awareness (detecting sound structures in spoken language) and in phonemic decoding (detecting the correspondence of letters to sounds) were evaluated as effective when implemented in the Vancouver BC public schools system. Research has shown that students with low reading scores are significantly slower in naming objects and manipulating several pieces of information at once. This is relevant to reading in that decoding sounds requires the efficient retrieval of linguistic and perceptual information. To develop these skills in struggling readers, the Vancouver schools—in coordination with the University of British Columbia—developed an intervention designed to build working memory skills. Students were provided with tasks such as CLOZE sentences in which they were required to fill in missing words based on context, such as "The moon shines in the [blank]."

The university team worked with the Vancouver BC school district to identify 140 children from 30 different schools below the 25th percentile on the Wide-Range Achievement Test (WRAT). These children came from a wide variety of ELL and
socioeconomic backgrounds. The study involved a first grade group and a seventh grade group. Of the students selected, 140 were designated at-risk and 20 were considered borderline at-risk.

The school district adopted the Firm Foundations and Reading 44 literacy program which incorporates developing rhyming skills, segmenting words, blending sounds, matching sounds with letters, as well as working memory tasks involving building and manipulating vocabulary. Students worked in groups of four or less for 20 minutes a day, three to four times a week. Ultimately, the results were similar to other studies. Students who were not at risk as early as first grade continued to score substantially higher on annual reading assessments than either the at-risk or borderline group with the intervention. However, the average at-risk and borderline first grader improved by four to eight percentage points respectively.

The seventh grade group consisted of students who had not demonstrated reading progress in several years. As a district, 22% of first grade students tested in the at-risk in reading, whereas only 6% still tested at-risk by the 7th grade. The students who remained at-risk in 7th grade likely experience more significant reading issues. Nevertheless, the average 7th grader in the intervention improved by 5 percentage points, many moving from the at-risk designation to the borderline.

Many students in need of phonics interventions can be deemed "language minority (LM). Interventions addressing these needs were reviewed in Vadasy, Sanders (2012). Language minority refers to students who, for a variety of reasons--English Language Learners, students from a low-socioeconomic background--have not been exposed to the developmentally appropriate level of spoken and written language. As
previously mentioned, studies show that this population is particularly vulnerable to lower levels of overall literacy achievement later in life.

In an 18-week intervention implemented by the Seattle school district, paraeducators in ten urban schools were trained to work with students who were in the bottom 50% of their class on state mandated tests. Students received instruction focusing on phonics and phonological processing. By the end of the intervention, like the previously referenced studies, the students in the intervention group continued to score significantly lower on further reading assessments than their peers in the upper 50th percentile. However, the students in the intervention group significantly outperformed the control group consisting of other LM students. The students in the intervention group experienced noteworthy gains in spelling, word reading, and comprehension.

Two years later, the results were largely positive and the intervention group continued to demonstrate higher reading achievement than the control group as second graders. As kindergartners, the average student in both the intervention and control group were, on average, 10 standard score points below grade level peers on the WRAT reading assessment. As second graders, the average control group student remained ten standard score points below, while the average intervention group student was three standard score points below grade level. The results indicated that a relatively short, targeted early intervention yields positive results years later. The study concludes that more could be done to heighten these positive effects if there were greater coordination with classroom teachers and with paraeducators teaching the intervention.
The Role of Technology

In an era in which technology is playing an ever increasing role in the public school system, it seems obvious it would be utilized in literacy intervention. At present, the data are mixed as to the efficacy of digital intervention. Recent analytic studies by Comaskey, Savage, Abrami (2009) have shown that students who received support through a variety of online programs demonstrated measurable improvement in reading scores. One program, the online intervention tool ABACADABRA, is one such program that has been studied for effectiveness. ABACADABRA combines synthetic phonics with more standard rhyme-pattern based instruction. This allows students to improve phonological processing through rhyme schemes but also helps students break words into individual phonemes. The program also involves constant evaluation on letter-sound knowledge, reading fluency, and “word attack” skills. It then structures pacing of instruction based on achievement in daily evaluations. 144 students using the program in the Montreal school district and found that those students consistently showed improvement in DIBELS scores.

Researchers speculate that the intervention was more effective than most because students used the program on a consistent schedule every day. Moreover, the programs ability to evaluate and the tight focus of instruction allowed more deliberate pacing of instruction. In essence, the studies confirm the conventional wisdom amongst teachers regarding use of technology. In order to be effective, the use of technology must be structured similar to classroom instruction. Technology has the potential to be a potent
force in phonics intervention, but not if it is done in a haphazard manner.

**Phonics Intervention in Secondary**

Fundamental literacy skills are typically associated with grades K-2. As a result, there tends to be a view that phonics invention is solely for elementary students. Nevertheless, research into phonics interventions in the secondary level have shown similarly positive results as to those done in the primary level. Edwards (2009) focused on a seven week targeted phonics intervention in a district in rural Michigan. The intervention studied was able to improve the average student's reading scores by one and half grade levels. After reviewing the school's MEAP and CAT reading test data, administrative staff noted that there was a group of students persistently underachieving in reading assessment despite reading invention classes focusing on note-taking and reading comprehension skills. Through further assessment, they found these students lacked basic decoding skills.

Students received small group phonics instruction three times a week, focusing primarily on affixes and breaking words into syllable parts. The highest achieving group members gained as much as three grade levels. By the end of the year, students reported increased confidence in reading. Many reported that they were reading for enjoyment for the first time in their life.

In Mercer (2000) a district in rural Florida was similarly able to increase reading scores in their secondary students. Of the students in the study, 80% were on free or
reduced lunch and all of the students were diagnosed with a learning disability. The students ranged in reading ability from a mid-2nd grade level to primer level. The group starting out at the 1st/2nd grade level made the most substantial gains, improving by three grade levels on average in six months of daily intervention. In fact, this group made more progress in six months than the primer group made in 25 months. Nevertheless, the primer group gained on average two grade levels or above.

These studies show that phonics-based interventions are both feasible and effective with secondary students. Students do not "age out" of needing this type of instruction, and improved phonics skills often lead to increased appreciation and enjoyment of reading.

**Dyslexia, Learning Disabilities, and the Role of Special Education**

Reading problems are only exacerbated by the prevalence of dyslexia. Dyslexia is typically defined as slow, inaccurate reading despite remedial interventions and frequent exposure. People with dyslexia often show impairment in executive functioning such as monitoring errors, maintaining focus, and in working memory (Horowitz 2012). Research by Goswami (2014) founds that in addition to the generally known struggles with phonics, dyslexics regularly demonstrate low auditory processing skills which makes it difficult to perceive rhythmic stress patterns. Often there are subtle differences in speech detected as early as age two. They demonstrate difficulties detecting syllable stress; a skills which requires prosodic patterning skills dyslexics often score low on. These weaknesses are particularly salient as early elementary whole-class reading instruction
typically relies heavily on rhyming patterns which requires phonological processing skills dyslexics often lack.

A study by Deacon (2012) examined dyslexia's impact on testing. Students with dyslexia or other reading learning disabilities test poorly on the basic indicators of proficient reading. They lack skills in rapid naming of letters (i.e. lexical assess) and sequencing letters into correct phonological segmentation. Whereas a typically developing reader can view five words per second, a student with reading learning disabilities views less than one. A typical student learns 3000 new words per year, a typical student with disabilities learns less than 800.

Only 22% to 25% of dyslexics are within normal range of reading level by adulthood. This population is typically referred to as compensated dyslexics in that they have developed compensatory skills that allow them to read with college-level proficiency. They have generally received specific interventions that have enabled them to overcome their early reading difficulties. However, many students in lower socioeconomic backgrounds often lack a diagnosis of dyslexia, which requires independent medical evaluation. This makes the role of a special education team even more vital. According to Olinghouse (2006) evaluations and assessments need to be designed to monitor small changes and be "free of floor and ceiling effects." Data must be kept frequently and the data must monitor individual reading components as well as broad based comprehension assessments. Without this, it often appears that SPED students are not making progress and otherwise beneficial interventions may be removed due to seeming ineffectiveness.
**School-Wide Implementation**

The research reviewed is fairly unanimous and it tends to adhere to conventional wisdom. While nuances varied in the individual programs, they all largely followed the same structure. The conclusions drawn from the articles reviewed are quite similar to the findings of the National Reading Panel's 2000 report. Targeted, small-group phonics intervention is effective in raising achievement if:

a. The intervention is consistent and long-term.

b. Data is meticulously taken.

c. The intervention teaches systematic rather than non-systematic phonics. In other words, the program follows a strategic, research-based curriculum in determining pacing and introduction of new phonemes.

d. The program contains elements of the "Big 5" literacy strategies (phonological awareness, phonemic awareness, phonics, fluency, and reading comprehension).

All the studies reviewed in this chapter found significant reading gains as a result of these interventions. As stated before, this is hardly a surprising fact. The greater surprise is one other factor these studies have in common. Namely, the researchers evaluated the efficacy of phonics interventions that they helped to implement, rather than evaluating phonics interventions already in place. This shows that despite an influx of data available from NCLB, schools still struggle to have structured phonics interventions in place.

Liben (2008) highlights the Harlem Family Academy, which serves a predominantly low-SES population, 90% of whom are on the free lunch program. Its
founders believed that with community engagement and services the students of Family Academy could demonstrate high achievement. Despite this noble intent, in 1994 it ranked dead last in New York City for reading scores.

This led the school leadership to prioritize basic literacy. The school implemented a three-tiered program of phonological intervention, systematic phonics, and structured/controlled readings. Phonological intervention centered on sound manipulation in spoken language. Students worked on "stringing" words. For example, a teacher might ask students to add the "m" sound to "at." This specifically addresses working memory and phonological processing skills found to be lacking in struggling readers.

Systematic phonics focused on sound-symbol relationships introduced in a purposefully sequenced manner. The intervention also focused on the importance of choice, independent reading time. Students could choose from a variety of books. Often, students with the lowest reading levels gravitated towards controlled/leveled phonics books, but overtime built the necessary skills to read more high-interest books.

These interventions were standardized in grades K-2 for all students. Students who were consistently struggling received support in small groups. After four years of this intervention, the school's reading scores had improved by 530%, putting them in the top third of NYC reading scores. It is worth noting that Family Academy is an independent charter school and thus more nimble in structural changes than large urban districts.

A similar initiative on a grander scale was implemented in the Memphis public schools. Perkins (2009) reviewed initiatives in Memphis, similar to the previously
mentioned Memphis study. As mentioned earlier in this chapter, Memphis was found to have to fragmented, disjointed response to low literacy achievement in their district. In 2004, they partnered with the University of Memphis to develop Urban Literacy Academies. This involved university professors leading 150 hours of professional development for 144 teachers and administrators from 24 elementary schools. The goal was to develop "deep expertise in scientifically-based reading research in every classroom." To do this, the Academies sought to create a Classroom Action Plan for literacy development that is consistently implemented across individual classrooms and schools. Teachers in the academy met with literacy coaches on a weekly basis. This involved observations, consultation, and joint analysis of individual student data.

Observers returned to the schools one year after the program had ended. They found many of the systematic changes made through the Academy were still in place even after the weekly check-ins and classes had ended. The observers saw an increase of small-group pull-out of 17%. They saw 25% increase in phonological processing and phonemic awareness instruction in classrooms. All of the schools involved in the academies saw improved scores on state-wide assessments.

Both of these examples show that strategic phonics intervention can be woven into the structure of school districts. However, it is not enough to simply have a plan on paper. It requires substantial investment in professional development. There needs to be clear leadership from administrative staff. In the case of Memphis, Universities need to be directly involved so that teachers actively involved in instruction are utilizing the latest in reading development research.
Phonics Criticism

Despite these documented successes, the effectiveness of systematic phonics interventions is not universally agreed upon. Garan (2001) reviewed the methodology of the National Reading Panel's 2000 study. Garan argues that 38 studies, many of which involved fewer than 40 students, is not nearly comprehensive enough to warrant wholesale adoption of phonics programs. The article criticizes many of the studies in the panel report which used isolated subcategories such as word reading and pseudoword reading to measure progress rather than using only authentic reading assessments. An authentic reading assessment involves more naturalistic reading coupled with discussion and comprehension questions. The rationale of this criticism is that authentic real-life reading does not involve reading lists of words; using isolated word reading skills as a benchmark of reading success is ultimately meaningless and only inflates success rates.

Garan also is concerned that the report did not properly account for typically developing readers. Therefore, the benefits of systematic phonics intervention should not be generalized to all students. Ehri and Stahl (2001) reject this criticism, stating that 23 of the studies involved typically developing readers in both the control and treatment groups. Moreover, the studies all involved fluency and comprehension as part of their program evaluation. Reading words in isolation was only one aspect of the study.

Regardless of the specifics of the 16 year old National Reading Panel report, Garan voices a common critique of the phonics based programs. Whole language
programs teach reading in a way that is both authentic and naturalistic. Teaching phonics extensively in isolation places significant emphasis on the basic mechanics of reading. The research does not necessarily contradict Garan's claim that the benefits of systematic phonics intervention should not be generalized to all students. That level of intervention is not required for all students. Nevertheless, this does not change the reality that millions of students lack the basic skills to engage in authentic reading. It is possible to target students in a systematic way to ensure that students who require such interventions receive them.

**READ Act**

In an effort to identify and serve students demonstrating significant reading difficulties, the Colorado legislature passed the Colorado Reading to Ensure Academic Development Act [READ act] in 2012. The Colorado Board of Education's website describes the goals and structure of the READ Act as such:

The READ Act focuses on K-3 literacy development, literacy assessment, and individual READ plans for students reading below grade level. The READ Act differs from the Colorado Basic Literacy Act (CBLA) by focusing on students identified as having a significant reading deficiency as determined by the State Board of Education, delineating requirements for parent communication, and providing funding to support intervention. Districts and schools will also be held
accountable for student progress in the Performance Frameworks and be expected to address requirements in their Unified Improvement Plans.

This legislation adds layers of accountability in regard to services and progress monitoring. Every teacher in Colorado must, throughout the year, assess all students grades K-3 with one of ten state-approved reading assessments. A READ plan is developed for students who score poorly on these assessments. These READ plans include a diagnostic of the reading skill deficiencies, goals, progress monitoring, and evidence-based interventions addressing phonics, vocabulary development, oral reading skills, fluency, and reading comprehension. Districts and teachers are responsible for designing these plans, implementing them, involving parents, and holding annual meetings. Schools are encouraged, but not required, to include older students in this program as well. The READ act ensures that all students with reading skill deficiencies are identified and receive research-based interventions. READ plans make it required that students have their progress monitored.

This process ensures that students below grade level receive additional reading instruction. However, this process, as it currently stands, does not guarantee students receive phonics interventions but rather "evidence-based reading instructional programming" of which phonics intervention is a possibility. In other words, the READ act may encourage phonics interventions, but it does not mandate or implement them in schools. That is the job of individual schools and districts. Currently, the policy for Denver Public Schools is for all students on READ plans to receive instruction in the Guided Reading Plus (GRP) curriculum.
The Guided Reading Plus (GRP), according to the district's curricular website is a "diagnostic intervention for struggling readers at the emergent, early, and transitional levels." Students are placed in groups of no more than five and follow a specific reading routine. The teacher starts the session with a phonics review in which a "teacher provides explicit and systematic phonics instruction to help children learn how words work." Following that, the teacher conducts a book orientation in which students examine books features such as illustrations, review unfamiliar vocabulary, and are guided by teachers to look for both familiar and unfamiliar words. Following this, students engage in independent reading of the text with frequent support from a teacher. Students and teachers then discuss the book through various comprehension questions.

Phonics instruction is only featured in five minutes of the thirty minute instructional routine, with an additional five minutes being optional every other day. Furthermore, since GRP is a routine that revolves around teacher chosen texts, phonemes are not introduced in an organized and structured manner as common with phonics programs. The previous day's sounds are not systematically reviewed. The model is based on the notion that frequent and varied exposure is sufficient for students to master phonics.

The Leveled Literacy Intervention (LLI) detailed in Pinnell and Fountas (2009) is a program by the Heinemann educational company which uses the Guided Reading Plus model and is currently adopted by Denver Public Schools as the sole reading intervention for students on READ plans. On a fundamental level, LLI is designed with the three pillars of literacy in mind. In their manual When Readers Struggle: Teaching That Works, this is described this as a stool with the three legs representing word work, writing, and
independent reading. The model states that students need a balanced exposure to literacy. No individual "stool leg" should receive a disproportionate emphasis. The analogy being that if you focus on one stool leg at the expense of the others, the stool—a child's literacy development—will collapse or at least be dangerously uneven. This paper will argue that certain students are ill-suited to such a philosophy.

Collapsing the Stool and Embracing the Triage

There is something inherently pleasing about the notion of balance. The balanced literacy stool is a potent analogy because its premise seems self-evident. Without balance, things collapse. No one would wish that on a child's reading skills. Yet what is true of pub furnishings is not necessarily true of literacy development. The stool analogy sets up a framework in which any emphasis of a single element of literacy is against the GRP model. This type of thinking is needlessly restricting. It ignores the fact that no one model of teaching literacy is equipped to serve the diverse needs of all students.

This is not a criticism of the GRP model, but an acknowledgment of its limitations. The curricular model as it stands is ill-equipped to serve students with dyslexia and other significant impairments with phonemic awareness. As discussed in the previous studies, students in phonics interventions only began to show notable gains with sustained, consistent effort devoted to specific phonics goals.

Critique and Next Steps

This Capstone and the proposals therein will focus on the READ act and its implementation in Denver Public Schools specifically. In many important ways, the
READ act addresses serious concerns about struggling readers. It places accountability and data recording on the forefront; all students who are significantly behind in literacy development are now identified and have goals and research-based services. The READ act is thorough in its bureaucracy but far vaguer in the practicalities of implementation.

The READ plans are modeled after IEPs with their use of goals, progress monitoring, and yearly meetings. However, the READ plans differ from IEPs in one critical aspect: funding. Special education teachers are hired to develop and implement IEPs. Roughly speaking, the number of a IEPs a school has determines the number of special education staff a school has on hand. READ plans, by contrast, are the responsibility of general education teachers. Schools are responsible for reporting data to the Colorado Department of Education, but no additional funding, resources, or personnel are provided for schools to develop and implement READ plans.

In practice, when the sizable percentage of any given classroom is on a READ plan, it has the potential to simply add layers of paperwork to a reality that most urban classroom teachers were already aware of—that an alarming majority of their students are below grade level in reading. This paper plans to work within these realities of the READ Act to create a template of implementing school-wide phonics interventions. For the purpose of this capstone, the READ Act and READ plans will be viewed as neither hindrance nor panacea. While there is room for legislative improvement in the act, particularly in the realm of resource funding, this paper focuses on the benefits of the legislation and proposes methods for effective intervention of school-wide phonics interventions. The READ Act ensures that students are identified and progress must be
monitored. This addresses some of the issues discussed in the first chapter of this paper of students remaining unidentified. However, one should not assume that READ Act requirements means that students are necessarily receiving consistent interventions. They must be designed and implemented entirely on district-by-district basis. This Capstone intends to serve as a proposal of how a school can design phonics interventions in accordance with the READ act.
CHAPTER THREE

Methodology

Overview

The research reviewed in the previous chapter documented the effectiveness of phonics instruction. This was found both in the comprehensive meta-analytic report released by the National Reading Panel in 2000, but also the subsequent studies reviewed in the chapter. The research finds that phonics instruction must be systematic and, in addition to phonics, interventions must include elements of fluency, phonological processing, phonemic awareness and comprehension. The chapter also identified the Colorado READ act as an effective system for identifying and documenting struggling readers. This chapter seeks to detail the methodologies I will implement in order to fulfill my stated capstone goal of implementing school-wide systematic phonics interventions. The goal is therefore to make systematic phonics intervention an essential part of the READ act.

Descriptive Study

The following chapters seek to lay out a descriptive study of a school improvement plan. According to Dudovskiy (2016), descriptive studies are "aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without..."
employing this method.” The main purposes of descriptive studies are to describe, explain, and validate research findings. The process that Dudovsky describes refers to the business world, but these methodologies can easily be applied to a school improvement plan. The research in chapter two shows that there are copious data to support a more structured adoption of systematic phonics interventions. Yet schools continue to not implement this research into daily practice. I plan to create a school improvement plan which brings this research into the forefront.

I will first need to develop a system in which students are identified for the appropriate level of phonics intervention. This will require a standardized assessment that assesses individual literacy components. A scoring system will need to be developed so that schools have a system in which to reliably assign students different levels of intervention. The assessment will have to be one of the ten approved assessments for the READ act.

Following this, the improvement plan will have to detail routines, resources, and lesson templates to be followed for intervention. To work effectively as part of a descriptive study, these elements will have to be derived from the available research on systematic phonics interventions. This will include assessments and data keeping for instructors to utilize. I will also need to develop activities that practitioners can easily use in their instruction. The ultimate goal is to create a thorough proposal that an individual school can adopt to change the overall structure of its reading intervention.
Audience

My proposal would work within the READ act structure, but seek to implement school-wide/district-wide phonics intervention as an integral part of the READ act. As it currently stands, the READ act identifies students in need of additional reading support based on a series of state mandated tests. The tests are administered at least twice a year, and schools can choose between one of ten state approved tests. Students below a certain threshold on these tests are mandated to receive a READ plan.

My proposal, as detailed in the following two chapters, is to create a tiered intervention system for the READ act, rather than a system of universal system of GRP intervention. The intervention systems proposed are intended for students who demonstrate, through multiple evaluations, significant impairment in the "Big Five" literacy benchmarks.

This is not a rejection of GRP’s emphasis on balance. The students who qualify for this level of intervention would, by design, not be a majority of students placed on a READ plan. It would be a designed specifically for the students whose needs are not being met through the GRP curriculum. Students would be identified in initial testing and/or through continued lack of gains made through GRP. If students are demonstrating significant impairment in basic decoding, and showing evidence of disorders such as dyslexia, developing this skill must be a priority.

Networks of Support

Like any proposal involving systematic changes, I need to primarily concern myself with how to "sell" these ideas to both administration and teachers. For
administrators, it is important that the proposal works within the autonomy individual schools possess. That is why it is important to demonstrate that this improvement plan is a part of the READ act. Schools are under tremendous pressure to show that they are complying with the statewide requirements of the law. Any proposal that seeks to replace the READ act will immediately be dismissed as infeasible. Conversely, any proposal that improves a school's ability to apply the READ act will be looked at favorably. Schools will be able to make the case that by adopting systematic phonics interventions, they are more thoroughly implementing the intent of the READ act. By using research and a thorough improvement plan, administrators can become advocates of systematic phonics.

It is important to both teachers and administrators that this proposal is not designed as opposition to the GRP model. Administrators have invested considerable funds and resources to implementing GRP interventions. Teachers and reading interventionalists have spent years being trained in the GRP curricular model. Not only have they worked hard to become proficient in this intervention, they have doubtless experienced noteworthy student growth through this intervention. All parties would be reluctant to simply scrap a program that seems effective.

In order to develop support, teachers will need to see that this proposal is designed to support the students who, despite GRP intervention, are not making progress. Teachers and interventionalists need to demonstrate progress on individual READ plans and IEPs. In my experience, teachers are open to new ideas when they are described as research-based strategies to help support their most vulnerable students.

I have tried to develop this proposal through the lens of my personal growth as a teacher. As I have developed this plan, I have strengthened my understanding of the
READ act. I have also stopped relegating my own phonics intervention to the privacy of my intervention room. This has meant becoming more of an advocate and not just a practitioner. I have more actively engaged my colleagues about the benefits of systematic phonics instruction. I was surprised by how many viewed phonics instruction as a relic from the past, associated primarily with Eisenhower-era Dick and Jane books and dunce caps. I have networked with the various literacy leaders in my school who were admirably open to reviewing the available research. Most critically, I have consistently invited administrators into my room and detailed the work I am doing with students. This has allowed me to be involved in critical discussions about the future of literacy invention at my school.

Goals and Purpose

This improvement plan seeks to create a working map for schools to follow to systematically implement phonics interventions as a fundamental and guaranteed service that a school provides. As it is, phonics interventions are either haphazardly applied (if a teacher independently decides to implement them), or not considered a priority in improving literacy. The research shows that this is not an effective model for supporting students with phonemic awareness issues. The goals of this proposal is to outline a system to institute phonics intervention as a necessary and required part of the READ act.

Students who qualify for such an intervention would have to be, at least initially, a select group. Students would have to demonstrate skills significantly below grade level. Data will demonstrate that the low reading ability is due to problems with phonemic decoding skills. Not every student who struggles with reading requires phonics
intervention. Phonics interventions are time and resource intensive, so the students who qualify have demonstrate significant need. Given the staffing and resource reality of urban schools, this means some students who might benefit from phonics intervention will not receive them. However, it is important that schools implement interventions with fidelity. If the interventions prove widely successful, the hope is that greater resources are eventually allocated.
CHAPTER FOUR
Descriptive Study Proposal

Overview

The research reviewed shows a clear need for schools to adopt targeted phonics interventions to improve student reading skills. The READ Act already requires that students be assessed every year and receive documented intervention through a READ plan. This chapter outlines how to work within that framework to provide tiered phonics interventions for all qualifying students. It begins with outlining how students will be assessed and identified as requiring intervention. Following identification, this proposal outlines the structure, routines, data keeping and resources required in daily instruction. Finally, the proposal will outline how progress will be measured to evaluate the overall efficacy of the program.

This proposal lays out a systematic process in which READ plan students test into a phonics intervention and receive guaranteed structured supports that are consistently monitored. Data is kept every day and formal evaluation occurs weekly. Students test out of the intervention when they show measured progress in assessments focusing on the "Big Five" literacy skills. The goal of this proposal is to lay out a system that schools can easily follow. This includes materials, data monitoring, and assessments to use in practice. Broadly, it seeks to build in phonics interventions as fundamental component of the READ act.
Setting

The interventions proposed would be a collaboration between special education and general education. Phonics interventions will take place outside of a whole-class group structure and requires additional instructors beyond the classroom teacher. Many students qualifying for phonics intervention will likely either have an IEP or should be monitored for potential need.

Students who qualify for such an intervention will receive daily services largely outside of the classroom for up to 30 minute sessions. For students on an IEP, these services will be provided by the special education staff. This is not entirely dissimilar to services already provided by special education staff. However, through this proposal, special education staff are guaranteed consistent supplies and curriculum. It also provides special education teachers a clear phonics framework to follow. At present, some special education teachers may have enough autonomy to phonics interventions, but they are either creating or funding their own supplies and curriculum.

These interventions would not be limited to students with a current IEP. In fact, part of the purpose of the proposal is to create IEP-like guaranteed services for identified students. Schools will need to reconfigure the working schedule of teaching assistance staff so that they serve as instructors. They would receive formal training on the various routines and systems. Reading support staff would serve as instructors as well as trainers. Each instructor would have a small caseload of qualifying students. Students would be grouped based on reading level and groups should not exceed four whenever feasible. Students will receive supports throughout the school year until they demonstrate through assessment that they have met the proficiency benchmarks.
Elements of Curriculum

The proposed focus on phonics interventions stems directly from the literature reviewed in the previous chapter. Student reading needs are best met utilizing procedures and curriculum that focuses on the "Big Five" of phonics: phonological processing, phonemic awareness, fluency, and reading comprehension. A critical first step is to make certain that all students are properly identified and serviced accordingly.

As noted in Mercer (2000), roughly half of students below grade level in reading lack basic decoding skills. When this was parsed even further in, it was found through DIBELS testing that students in the bottom tenth percentile of reading scores demonstrated significant deficits in each component of the "Big Five." This research shows that it is critical that students with these needs are reliably identified. This proposal recommends that schools utilize the STAR Early Literacy Assessment (currently one of the approved assessments in the READ Act). This comprehensive assessment includes segments in all five reading components and the results can be analyzed to view of a student's overall reading performance as well as his/her performance in the various literacy components in isolation.

Analyzing this data and grouping students accordingly is critical to meeting their reading needs. The data show that roughly half of students with reading difficulties—and nearly all the lowest readers--struggle "Big Five" components; interventions must specifically address this. Therefore, test results will be analyzed and all students in need of intervention will be placed in three groups: Guided Reading Plus, phonics intervention, and pre-reading intervention. The Guided Reading (GRP) is for students who are below
grade level in reading but show basic proficiency in phonics, fluency, and phonological awareness. These students demonstrate that their struggle with reading is not primarily due to a lack of proficiency in basic reading skills.

The phonics intervention group will focus primarily on phonics and fluency with additional work on phonological processing and phonemic awareness. This will be the most comprehensive and varied of the three groups. This group is for students whose lack of decoding skills are greatly impacting their reading ability. However, the data will show that they have the basic letter recognition and phonological skills to begin intensive phonics intervention.

The pre-reading intervention group is for students whose test data show a fundamental lack of letter recognition skills and score particularly low in measures of phonological processing. As found in Vadasy and Sanders (2012), many of these students could be deemed language minority students in need of targeted intervention in developing basic vocabulary and sequencing sounds. Moreover, Paraetan and Siegel (2013) found that students in this group demonstrate deficits in working memory such as naming objects. The pre-reading intervention group works specifically on developing these skills along with basic phonics skills such letter/sound recognition. The research above shows that students receiving such a targeted intervention routinely outperform control groups.

A key to both of the phonics group and pre-reading group is data keeping and methodical pacing. Like in Perkins and Cooter (2013), the instructors will keep data daily and proceed only when proficiency is demonstrated. Lessons will be structured to include thorough review and new concepts introduced slowly and methodically. As the reviewed
studies find, students with phonics deficits need frequent, repetitive exposure to begin demonstrating mastery.

**Identification**

The READ Act already stipulates that all K-3 students in Colorado receive a reading evaluation at least twice a year (once at the beginning and once at the end). As previously stated, this proposal recommends districts adopting the Star Literacy and Early Literacy assessment. The Star ELA is currently one of the ten diagnostic assessments approved by the Colorado Department of Education in assessing students for the READ act. It is, at present, the only approved assessment that contains components in oral language, phonemic awareness, phonics, fluency, vocabulary, and fluency. The data from the Star ELA can be used for more than simply determining whether a student is below grade level enough to warrant a READ plan. In this proposal, the data will be parsed further to examine the individual diagnostic components of reading and place them in three intervention tracks.

The Star ELA assessment is time and resource intensive and schools need to plan accordingly. The assessment must be given individually and can take up to thirty minutes per student. It is worth noting that most of the approved READ act assessments are in this format. This individual approach has several drawbacks. It utilizes numerous staff members (designated reading specialists and trained para professionals) and the testing window can take over a month. However, it is necessary in order to get a complete understanding of the needs of individual students. In comparison, a multiple choice reading comprehension test gives an instructor very little insight into why a student
underperformed. The READ act stipulates that all students K-3 must be tested. This makes the individual testing more logistically possible. However, teachers in higher grades should use their own formative assessments to recommend students for more formal testing based on persistent underperformance in reading.

Qualifying students in first through fifth grade will be placed into three different intervention tracks based on their score. Appendix A shows the flow chart staff members will use to determine the intervention track based on scores of the subtests. The specific scoring is normed for various grade levels and is detailed in the flow chart. If a student performs adequately in the phonological processing, letter recognition, and phonics subtests but scores poorly on fluency and reading comprehension subtests the student will be placed in a GRP intervention group. These are students whose deficits in reading are not primarily due to a lack of competence in basic decoding. The GRP curriculum is designed to develop various reading comprehension strategies.

It is worth noting that these students are not necessarily at grade level in regard to phonics skills and they may score below standards on the phonics subtests. GRP has phonics and fluency components and is designed to support these students. The phonics intervention track is reserved for students who data show lack the fundamental gateway decoding skills required to read for any meaningful level of independent comprehension. By design, phonics interventions are less holistic than GRP, and should be reserved only for students who require such intensive, targeted instruction.

Students who do qualify for phonics interventions are placed in two tracks: pre-reading intervention and phonics intervention. Phonics revolves around sound-spelling relationships and itself requires certain gateway skills to access. Students need to have
certain baseline oral phoneme blending and isolation skills as well as letter/sound recognition skills in order to begin even rudimentary phonics instruction (such as reading and manipulating consonant-vowel phonemes). The pre-reading intervention is designed for students who data show lack those skills. The intervention focuses on oral phonological processing and phonemic awareness skills as well as letter/sound recognition. The pre-reading group is designed to be the smallest group in terms of raw number of students enrolled and shortest intervention in duration. The intervention is designed to be a month-long intervention or shorter.

The phonics intervention track is the most comprehensive. Students qualifying will have demonstrated a significant impairment in decoding skills. The intervention is designed as a year-long intervention with the understanding that results are dependent on a long-term commitment to phonics intervention. As noted in Mercer (2000), a plurality of students made up to three years of reading progress through intervention, but only with the average student receiving daily phonics instruction of up to thirty minutes for six months or more. As schools adopt this plan, it is essential that phonics intervention is viewed as a sustained commitment.

**Pre-Reading Intervention**

While phonics based interventions are designed for students with significant deficits in reading ability, it should not be assumed that all students possess the necessary skills to immediately begin a phonics intervention program. Even the most remedial phonics instruction requires students to have basic letter/sound association skills and an ability to discriminate differences in speech sounds. Similar to how phonics is a
necessary skill for reading comprehension, phonological and phonemic awareness are necessary skills to access phonics. To address this need, the first tier of intervention is focused on pre-reading skill. Of the three reading intervention tiers, the pre-reading is the most narrowly focused and is designed to be a two-to-four week intervention based on weekly assessments.

Students with dyslexia demonstrate low auditory processing skills which results in, among other things, difficulty in detecting syllable stress patterns and rhyme schemes. Problems with working memory also makes learning consonant and short vowel sounds particularly difficult. The pre-reading intervention is primarily concerned with two main objectives: improving a student's phonological processing skills, and teaching letter-sound correspondence.

The pre-reading program significantly focuses on auditory skills. Appendix B details the elements and routines involved in the intervention. More than half of each session will focus on activities designed to teach auditory syllable segmentation, phoneme substitution, and identifying and creating rhyme schemes. Students will become proficient at verbally identifying the changing phoneme in, for example, word chains such as *bad* and *bat*.

The other major component to instruction is learning the alphabet and consonant sounds. Through a variety of daily drills and activities—many of which can be found in the activity bank—students must learn the names and corresponding sounds of the alphabet. They must demonstrate proficiency in independently identifying correct sounds in writing as well as listening to the sounds and naming the proper letter. This is to
prepare students for the most basic elements of phonics: the ability to blend individual consonant sounds to create Consonant-Vowel and Vowel-Consonant sounds.

The weekly assessments focus syllable segmentation and letter/sound identification (see Appendix B for more information). As stated above, the pre-reading intervention is intended to be a month-long intervention at most. Given the intensity and daily time commitment of the intervention, along with its narrowness in scope, the expectation is that the vast majority of students are prepared to move into the phonics track by the fourth week. If a student is not demonstrating progress through the four weeks of intervention, an IEP and/or READ team meeting should be called to discuss individualized intervention possibilities. If less than 90% of students are not demonstrating proficiency after a month of pre-reading intervention, it is more likely that the programming itself is in need of audit and improvements.

**Effective Phonics Programing**

When a student demonstrates proficiency in the pre-reading benchmarks, they should immediately be placed in the phonics intervention track. This paper does not seek to create a comprehensive phonics program, as many quality, research-backed programs already exist. A commitment to phonics intervention does not require a rigid commitment to one particular program. However, any program that a school invests in should meet certain criteria. The effective programs addressed in the literature review contained:

A. Routines that address the "Big Five" of literacy development, with a particular focus on phonics, phonemic awareness, and fluency.

B. A prescribed scope and sequence in teaching phonemes, digraphs, affixes, etc.
C. Lessons that are designed to be taught daily.

D. The curriculum is driven by research and itself been determined effective by research.

There are many programs that fit these criteria, and schools should experiment with which programs best meet the needs of students and instructors in a given setting. One specific example of such a program is the *Sonday System* through the Winsor Learning company. Its website states:

"The[Sonday] system is an Orton-Gillingham based, systematic, explicit, sequential, and cumulative multisensory language instruction program which cements student learning into long-term memory. The system is easy for instructors to use and contains: a check for knowledge, 5 Pre-Reading and 36 Reading levels, mastery checks, and templates for creating personal learning plans...Concepts addressed are Phonological Awareness, Phonemic Awareness, Consonant and Vowel Sounds, Vowel Pairs, Consonant Blends and Digraphs, R Controlled Vowels, Vowel Consonant-e, Compound Words, Non-Phonetic Words, Spelling, Rules for English Language, Reading/Writing Fluency, Vocabulary, and Comprehension."

The program contains a daily lesson plan structure involving distinct segments involving phonics, fluency, and phonological processing. The curriculum contains regular assessments and progress tracking guides for individual students. The program has been reviewed in seven states by the National Center for Learning Disabilities and the International Dyslexia Association and both organizations recommend the system as
effective and research-based [full disclosure: I participated in a three-month training program for the Sonday System and have been teaching the curriculum for four years].

The Sonday System, while effective, is not necessarily unique amongst phonics programs, and this Capstone proposal is not specifically tied to it. The example is merely to show the fairly rigorous standards a program should adhere to in order for schools to consider adopting a particular program. Phonics workbooks, games, and manipulatives can be purchased at nearly any big box store in the country. While these activities can be effective, they are not in themselves a suitable phonics program. Schools should not make the mistake of substituting miscellaneous phonics resources and materials for a comprehensive, research-driven curriculum.

**Phonics Intervention: Routines and Structures**

As mentioned, the phonics intervention must revolve around the elements of phonological processing, phonemic awareness, phonics, fluency, and reading comprehension, with heavy emphasis on phonics and fluency. Appendix C details the objectives and tasks required in teaching these literacy elements. For example, students need to practice phonological skills such as rhyming words, segmenting words into their component sound and deleting sounds from words. The components in Appendix C serves as a checklist of sorts to ensure that programming addresses the intervention components research recommends.

Appendix C also included a sample lesson template for instruction. The template shows that a lesson needs to dedicate time to phonological practice as well as review of sounds, words, and sight words. New sounds and skills should be introduced
methodically through a scope and sequence. Time also must be allotted each day for students to practice reading appropriately leveled texts. During this time, students can practice timed fluency passages as well as more casual, naturalistic reading. This part of the lesson is also critical in engaging students in reading comprehension discussions and writing prompts. The structure is somewhat malleable as needed—some days may require more phonics practice, while others may feature more significant reading comprehension components—but the overall structure provides a framework for the various literature components to be addressed.

Appendix C shows an example of an activity bank that schools can maintain for teachers. The list shows specific examples of activities to supplement and enliven the intervention period that require few resources. The list in Appendix C is not intended to be a comprehensive list, but it provides examples of simple activities with little prep time required. All teachers should have access to a resource bank that is accessible through Google Drive or other cloud based services. Teachers would have access to the list and the ability to add their own ideas and successful activities to the list. This allows schools to pool their teachers' wealth of experiences into an easily accessible resource bank.

**Tracking Progress and Exit Criteria**

Regular progress monitoring is essential for effective intervention. On purely instructional grounds, regular assessment is critical in measuring mastery and determining appropriate pacing. It allows teachers to measure their own effectiveness and make necessarily changes and improvements to instruction as necessary. On a larger programmatic level, rigorous data is critical in proving the effectiveness of such a time
and resource heavy intervention. When schools invest heavily into phonics based intervention, the intervention must maintain thorough data to prove that it is, in fact, significantly increasing student reading achievement. Regular data keeping therefore helps ensure the longevity of a school district's commitment to this type of support.

Data will be maintained by the phonics instructor and delivered to the appropriate teachers and administrators. Appendix D shows how progress data will be recorded and monitored. Students will be assessed weekly whenever possible. The monitoring sheets allow teachers to track a student's proficiency on different levels of word lists, typically twenty words at a time. Beyond a raw score of correct words, the progress monitoring form parses the data further by having teachers record mistake information to monitor which particular phonemes and digraphs students consistently demonstrate master of or read incorrectly. Moreover, the assessment word lists should include both sight words and words that can be properly decoded.

Students will also spell word lists of phonetically similar, although not identical, words. The reading and spelling components allow an instructor to view specific elements of a student's decoding process. For example, a student may read words with a certain phoneme correctly, but consistently misspell words with the same phoneme (or vice versa). The next week's lessons should incorporate information from the assessment and generally drive instruction.

Arguably the aspect of assessment that is most demonstrative of a student's overall reading level is the fluency reading. Students are provided leveled texts with the words numbered by the line. They read the passage while being timed. Instructors monitor the number of read per minute while subtracting the number of errors. Students
are then asked simple who/what/when/where comprehension questions to evaluate the level of which students gain information from reading. These fluency readings serve as a weekly snapshot as to a student's overall reading level and is easily reportable to the teachers and administrators involved in the program. Like other aspects of the assessment, it also helps teachers in driving instruction. For example, if a student is consistently doing well in reading and spelling word lists but reads with limited fluency, it tells the instructor to dedicate more time to fluency practice.

Similar to timed fluency readings are running records. These are longer readings, often more than 300 words. Students read familiar texts and instructors take word by word notes on accuracy. Each error is analyzed based on whether it is a decoding/visual error or a more syntax based error (e.g. using the word "dish" for "bowl" based on the picture alone). The accuracy level is recorded along with responses on comprehension questions. Running records are for familiar texts and are primarily designed to measure student progress on texts that students have practiced on.

Appendix D also included examples of how data keeping can be used for student-led goal setting and progress monitoring. It also includes examples of assessments and running records. The weekly assessment data is designed to inform instruction, but students should be involved in the this process whenever possible. Students are typically more invested in the intervention if they see evidence of their own improvement. It provides critical motivation and a self-esteem boost for students who have possibly gone years with little success in developing literacy skills. Appendix D provides an example of student-friendly data monitoring that can be maintained by individual students. Teachers
are encouraged to use group data sheets and charts to decorate intervention spaces to create a culture of monitoring and celebrating student reading success.

Unlike the pre-reading intervention, there is not as strong an emphasis on moving students quickly out of the phonics intervention program. The initial screening is designed to ensure that students placed into the program have significant deficits in their decoding skills that will likely not be alleviated in several weeks. Research in Mercer (2001) show that interventions are most effective when students are provided services for over six months. In general, schools should prepare to have students involved in the phonics intervention program for the majority of a school year. The goal of the intervention is not to have students at grade level by the end of the year. As discussed in Chapter Two, there is little research to back up the notion that phonics intervention can match extremely low readers up to their average peers. The phonics intervention is designed for students whose basic decoding skills are too undeveloped to be appropriately served by more holistic intervention such as Guided Reading Plus (which is itself designed for students below grade level). Therefore, the exit criteria for the phonics intervention program is that students can demonstrate the level of decoding skills necessary to qualify for a guided reading intervention.

Students testing out early of the phonics intervention program is largely at instructor's discretion, but there are guidelines to follow. When a student is at least several months into the program and has demonstrated weekly mastery on phonics assessments, the instructor can choose to have the student take the Star ELA test again. When a student scores within the age appropriate GRP range of scores found in Appendix A, the student is exited from phonics intervention. If a student were to test at grade level,
a team meeting should be called to discuss the appropriate level of intervention to proceed with. However, it is worth noting that this level of progress is extremely rare and can likely be dealt with on a case by case basis.

All students, including students in various levels of intervention, are given the Star ELA and Literacy assessment for a second time at the end of the year. Individual student test results determine the level of intervention students will likely receive the next year. The goal of the program is to have the vast majority of students in the phonics intervention program improve by one to two grade levels in a year. They should receive a DRA score improving from the level of 1-6 (the level recommended of students in the intervention) to a level of 16-20 (the preferred level for guided reading intervention).

The data is also used to determine the overall efficacy of the phonics intervention. Given the sizable investment schools are required to make through this proposal, the interventions has an obligation to consistently demonstrate through test data that students make significant improvements in the Star ELA and Literacy Assessment. The weekly assessment data helps inform instruction and should be used to as data to show student growth. However, the phonics intervention program must ultimately be effective in raising Star and DRA scores. Chapter Five will go into greater detail regarding this accountability piece.

Summary and Implementation

As elaborated upon in this chapter, developing effective school-wide phonics intervention programs requires a commitment to consistent assessment and data keeping. It is essential that students are tested at least twice a year in an approved assessment such
as the Star ELA which contains components of reading comprehension, phonological processing, phonics, and fluency. This data must be used to group students into the tiered reading intervention levels discussed above: pre-reading, phonics, and guided reading.

The final chapter will address the practical and logistical elements of implementing such a plan. Specially, the chapter will discuss how the interventions will be incorporated into the READ Act structure and the role special education and IEPs play in implementing these interventions. In order to be more sustainable in modern high-needs school, the chapter will also set clear targeted goals for student improvement in order for the interventions to be deemed effective.
CHAPTER FIVE

Reflection

Overview

The previous chapter detailed the various structural components to implementing tiered reading interventions. On a macro level, we have addressed how students are evaluated through the Star ELA and how the data determine a student's placement in one of three literacy intervention tracks. The daily routines, resources, and weekly assessment regiment detailed in the previous chapter is designed to provide schools with a framework for developing these interventions.

In this final chapter, the future possibilities of this proposal will be reviewed. In order to build long-term networks of support, practical logistical issues need to be addressed. In the previous chapters, it has been stated that this intervention is designed to fit within the requirements of the Colorado READ Act. This chapter will detail what this intervention will look like in the management of both READ plans and IEPs. As part of a final reflection, this chapter will detail the accountability in regard to progress necessary for continued investment in phonics intervention.

Staffing and Role of Special Education

In the process of developing this improvement plan, I have come to see the importance of special education teachers stepping out of the shadows of IEPs and becoming advocates for the needs of all students. I have come to see that the skills I have developed in the last eight years of teaching special education can be instrumental in
changing school-wide interventions. Students do not need to have an active IEP in order to qualify for phonics intervention. Conversely, qualifying for phonics interventions does not, in itself, qualify a student for special education. Nevertheless, there is significant overlap between special education populations and populations of students with dyslexia or other reading decoding difficulties.

Consistent underachievement in literacy and evidence of processing disorders (such as dyslexia) is typically considered qualifying factors for a learning disability. It is to be expected then that many of students on a phonics intervention track either have an IEP or are being evaluated for one. This allows the special education teachers in the school to serve as the primary coordinators of these interventions. My work on this capstone has helped grow into this role. I now advocate for systematic phonics at curricular design meetings and open my room for observation.

Part of my advocacy is to show how schools can implement these structured interventions using staff that is largely already in place. I believe special education teachers need to shift into adopting the role of phonics based intervention experts. This is appropriate, given the high need amongst our student populations. It is important, however, to make clear that systematic phonics intervention should be a district-wide initiative, not simply a program utilized in special education resource room.

Having several special education teachers in a building is no substitute for a more systematic, school-wide commitment to phonics interventions. As stated previously, a full 20% of students nationwide are not meeting Common Core reading standards. Many of these students are found in the low-income Title I schools this proposal is intended for. This is not merely a special education issue. A disability should not be a prerequisite to
receiving necessary reading supports. This is particularly salient when factoring in the National Reading Panel's findings that phonics instruction is most beneficial for first grade students. Schools should focus on serving students as early as possible. This means that students should receive phonics instruction before they would even be eligible in most cases for a special education learning disabilities evaluation.

Literacy coaches and intervention staff throughout the district will have to maintain caseloads for phonics interventions in addition to their higher level guided reading groups. Vadasy, Sanders (2012) showed that paraeducators can also serve this function provided that they are provided several weeks of training and regular coaching sessions. In my school, there is already discussions about how to utilize para staff. There is concern that they spend too much of their time sitting passively next to students. My building's administration is open to any ideas that use para staff more proactively.

READ Plans

As discussed in earlier chapters, my improvement plan proposal is designed to work within the framework Colorado READ Act rather than serve as an alternative to it. By design, all students receiving any of the three tiered reading interventions would have a READ plan. Even students with an IEP are required to have a READ plan, even if there is significant overlap with IEP goals and services.

To develop long-term support for my proposals, it has been important to show how such interventions make it easier to manage READ plans, not more difficult. The student goals and progress monitoring required through a READ act can be coordinated with the intervention tier the student is placed in. When students test into the phonics
intervention track, they are showing significant deficits in their decoding skills. Their goals on their READ plan should thus reflect those deficits and call for specific skill growth in that area.

There is some misconception within Denver Public Schools that the READ Act is specifically aligned with guided reading programs, so that students with READ plans are mandated to receive guided reading whole language programs. A significant part of my personal growth this process is to view myself as an advocate of tiered intervention. As such, I am working to dispel this notion to colleagues and administrators alike. It is true that GRP interventions is the sole intervention officially supported by Denver Public Schools. That does not, however, mean that the READ Act requires a specific type of intervention. According to the Colorado Department of Education students merely need to demonstrate "student growth in the Performance Frameworks [such as the Star ELA]." The READ Act then is primarily concerned with results above all else. The basis of my proposal is that an investment in phonics based interventions will demonstrate the type of student growth expected from the READ Act.

**Limitations and Accountability**

Phonics based reading interventions are not currently in vogue in Denver Public Schools. Results, however, will always speak for themselves. In order for any school district to make a commitment to phonics interventions, consistent and measurable student improvement is essential. The phonics intervention model requires instructors to temporarily forsake balanced instruction for heavily targeted instruction based on drastically improving decoding skills. This model must its efficacy.
Students in the phonics tier must demonstrate significant in the Star ELA and DRA assessment. The studies reviewed in Chapter Two utilized different programs and assessment methods to measure progress, so it is difficult to pinpoint an average level of progress in phonics interventions. Looking at the commonalities, we can set certain benchmarks for success. Students in the intervention should improve from scaled scores of 100-200 to scores of 700 or above on the Star ELA. On average, students should make measurable progress of at least 1.5 grade levels in one year of phonics intervention as measured comprehensive running records of leveled books. This will be particularly noteworthy as students selected for phonics intervention are typically those who demonstrated no measurable reading progress for several schools years in a row.

Equally important to delivering measurable results is to not oversell the benefits of phonics intervention. There are clear limitations to what phonics intervention can accomplish. It must be clear that the interventions in and of themselves will not typically raise a student to grade level. In every one of the studies reviewed in Chapter Two, students demonstrated significant growth but still fell well below school and national averages in literacy skills. Many students selected for phonics interventions have diagnosed learning disabilities and/or disorders such as dyslexia. The ultimate long-term goal of any reading intervention is allow these students to be college-ready readers, but this is not a realistic expectation for a six-to-ten month intervention.

More likely, the onus is on proving that phonics intervention can be more effective for certain students that a more balanced GRP model. Proponents of phonics intervention must be clear that these interventions should be limited to those who struggle with fundamental decoding, not all students who struggle in reading. If an extra level of
accountability is needed, schools can largely adopt the proposal laid out in Chapter Four with minor adjustments. Students who would qualify for phonics intervention based on their low scores on the Star ELA can be placed at random into a treatment group and a control group. The treatment group will receive phonics interventions as described in Chapter Four. The treatment group will receive the standard GRP intervention (which ensures that both groups receive the support required through the READ Act).

After one year, the results of the Star ELA, as well as other formative assessments such as fluency charts and running records, can then be compared. The phonics intervention group would need to demonstrate growth that is on average higher than the control/GRP group. If schools decide to go this route, it is important that they develop the control and treatment groups as described above. It might otherwise be tempting to simply compare the scores of the students in the phonics tier and the scores of the students in the GRP tier to see which method of intervention is more effective.

This ignores several important critical pieces of information. One, it would assume that GRP and phonics are mutually exclusive and thus in direct competition. Two, it assumes that all students in need of intervention begin at equal footing. Introducing phonics interventions is not a repudiation of the GRP model. Rather, it is a targeted intervention to dramatically improve a student's decoding skills. This will, in theory, allow them to benefit more substantially from subsequent GRP interventions. In order words, emphasizing phonics is simply the belief that a higher level of phonics mastery is a prerequisite for the efficacy of GRP intervention. Therefore, the goal is never to prove which method is superior.
As for the second concern, it is important to remember that any student below grade level qualifies for the READ plan. In the model set up in this capstone, only students testing with the lowest scores in Star ELA would qualify for phonics interventions. Given their lack of basic letter sound knowledge and struggle to decode even CVC words, these students are far more likely to include students with learning disabilities and dyslexia. Students placed in the GRP tier scored substantially higher on the Star ELA, albeit still below grade level. This group may include large number of students who merely lack sufficient exposure to literacy and can make substantial gains with small group instruction. Even though these students are below grade level, they are not directly comparable to the students in the phonics track.

The limited sample sizes of the groups means that the results would have limited use as broad research. It would, however, function as a simple in-house way for schools and districts to measure the effectiveness of phonics interventions. Whether a district attempts this level of comparison is optional. Either way, the phonics interventions need built-in ways to prove their effectiveness. This layer of accountability—and positive results—will result in a sustained commitment to the proposed tiered intervention system.

This proposal is designed with elementary schools in mind. It is highly preferable to build a robust system of interventions in the early grades. The hope is that a strong focus on literacy in the early grades will dramatically reduce the need for remedial instruction in secondary schools. Nevertheless, the research reviewed in chapter two shows that tiered phonics interventions can be just as effective, if not more so, for older students. The overall framework described in this paper can easily be applied to middle schools and high schools. If data consistently show the efficacy of these proposed
Interventions, advocates can point to that success as a reason to adopt such a program for older students. This might be even logistically easier as far fewer students would likely qualify for such services. It likely can be managed completely within special education departments. The success of phonics interventions can provide a structured framework for IEP case managers.

**Capstone Question Revisited**

This paper was guided by an essential question: How might I aid schools and districts in implementing district-wide systematic phonics intervention, both instructionally and organizationally? This has led to personal growth as a teacher that I did not anticipate. I have found that I must openly advocate for policies I believe in. As mentioned previously, I have been more open about the systematic phonics interventions I am implementing and the positive results I am seeing. I have found many people open to new ideas. Even more critical, my guiding question led to create a thorough proposal that works as a practical roadmap for a school like mine to adopt tiered reading interventions for all qualifying students. I have found that it is not enough to simply mention the benefits of phonics and then hope someone at a higher pay scale will make it happen. School leaders are open to new ideas, especially if you have a detailed proposal on offer.

On an instructional level, the key is to accept the research and deliver phonics instruction with fidelity to those who need it. This means incorporating the "big five" elements into instruction and systematically teaching them for up to 30 minutes a day at least four days a week. It is not sufficient to occasionally provide students with phonics
drills, games, and worksheets. These phonics concepts also need to be reviewed more than five minutes a day.

On an organizational level, the READ act provides strong guidance for other states and districts. All students must be individually tested and the results documented on an online database. The results of these tests must be accessible by many parties and cannot be kept in a closed system such as a teacher's assessment notes or gradebook. Students need to be tested using assessments, such as the Star ELA that can diagnose in which elements of literacy a student struggles. This data must be incorporated into tiered interventions in which the lowest achieving students are guaranteed phonics-based services.

Reflection

In the process of writing this capstone, I have moved states and moved school districts. The demographics of the school districts are quite similar—urban, minority majority, predominately Title 1 schools—yet the approach to literacy is starkly different. Arizona, fittingly enough, is far more the wild west of education policy. Districts are kept small and schools are given a high degree of autonomy. This resulted in impressive levels of innovation from individual teachers, but a lack of cohesion in the way students received intervention and remediation. Students do engage in state testing, but their reading scores are not as rigorously tracked. It is not surprising then, that the early concept for this paper revolved primarily around tracking and identifying students.
Moving to Denver inadvertently addressed many of these concerns. The READ act takes school accountability further than any other state in which I have taught. Schools are held legally accountable to testing, tracking, and intervening with students who are below grade level. Not only are students identified, they are placed within a state-wide internet database. Progress must be tracked and recorded by a case manager. In a sense, the state of Colorado mandates that all low readers are placed on something akin to an IEP. While the READ act does not necessarily stipulate and guarantee service minutes, it does state that schools must actively develop small-group interventions for students on READ plans. With this, the focus of this capstone started to shift.

As different as Denver is from Arizona, there was one constant. This brings us back to the very beginning of this paper. Reading over my caseload, the same clinical language was omnipresent. Students were always varying degrees below grade level, most of them significantly so. Teachers would refer to these students with less clinical but equally revealing language: "He/she still reads like a kindergartner." For all the extra layers of accountability in Colorado, the picture on the ground is very similar.

Denver's level of commitment to reading intervention is commendable. The GRP model has tremendous potential. It has, unfortunately, become a "one size fits all" model of instruction that belies that multilayered complexity of why students struggle to develop literacy skills. With the added layers of accountability comes a more hierarchical structure. The district has invested heavily in GRP and there is a top-down mandate that teachers comply with the READ act through the GRP model. While I find this needlessly limiting, my previous notion for this paper was advocating for greater coordination, consistency, and accountability in delivering reading intervention. The commitment to
GRP is certainly a consistent, well-organized response. And yet, students continue to fall "below grade level" and my caseload still largely consists of fourth and fifth grade students initially unable to decode one-syllable words.

In developing this plan and reviewing the most current research on this topic, I have largely drawn three conclusions that I believe this capstone lays out. One, a formal commitment to accountable, small-group literacy intervention must be a priority for all urban school districts. Two, a major part of this commitment must include a tier of phonics intervention to best serve the needs of students with learning disabilities or disorders such as dyslexia. Three, there is no inherent conflict between targeted phonics interventions and more broad-based guided reading intervention. Pitting these potentially complementary programs against each other is counterproductive.

This capstone and the research reviewed therein posits that phonics intervention is a necessary and effective intervention for students who demonstrate the highest needs in developing literacy skills. I have found that administrators are far more open to innovation than I previously thought throughout my first year in Denver Public Schools. This capstone process has helped me become a greater advocate for what I believe in. I do not intend this school improvement plan to be purely academic. My intent is for this paper to serve as a template for my school to follow in implementing these types of interventions for all qualifying students. Each new school year does not have to begin with a long list of students of students perennially trapped at a kindergarten reading level. Phonics intervention is an integral part in making that notion a reality.
Appendix A: Star ELA Scoring Rubric
Appendix B: Pre-Reading Intervention Resources
Components of Pre-Reading Intervention

Phonological Processing and Phonemic Awareness

Developing strong phonological processing and phonemic awareness skills is the essential component the pre-reading phonics intervention. Many of the activities will be auditory in nature with activities with strong kinesthetic and visual components. Students will:

- Identify rhyming patterns
- Breaking compound words into individual words and words into syllables
- Identifying initial, medial, and final sounds of words
- Delete and substitute sounds within words
- Add beginning sound to make phoneme blends
- Orally separate words into distinct phonemes

Phonics

The pre-reading intervention will focus on basic letter/sound recognition. Students will practice reading and spelling CV and VC sounds. Students will:

- Identify names of all letters both in and out of alphabetical order
- Identify all consonant sounds and all short vowel sounds
- Spell letter sounds upon hearing them
- Blend consonants and vowels to create distinct phonemes

Fluency and Reading Comprehension

Student reading during this intervention will be limited and teacher guided. Students will read books with repetitive language patterns and visual cues. Students will:

- Choral read with instructors and peers
- Read passages using visual clues and wording patterns
- Identify repetitive sight words
Daily Pre-Reading Intervention Routine

Phonological processing and phonemic awareness (10 minutes)
Teachers choose from 1-2 activities from activity bank
- Students practice identifying initial and ending sounds
- Students practice sound substitutions
- Students identify rhyming patterns in words and develop rhyming words
- Students break words into phoneme components

Letter/Sound Recognition (5 minutes)
- Students read/sing alphabet
- Students identify letter names
- Students spell letters
- Students review previously learned letter sounds through flash cards and spelling

Introduce new sounds (5-10 minutes)
- Students practice specific consonant or vowel sound(s) orally and through spelling
- Practice with an activity (see activity bank)

Reading (5-10 minutes)
- Students choral read with teacher
- Practice limited CLOZE reading
Weekly Assessment Routine

The pre-reading intervention is designed to last no more than four weeks. Students are tested every week and must meet a baseline criteria to proceed to the phonics intervention.

Must pass with 80% accuracy or above:

Sound recognition

- Students are provided an auditory list of 10 words. They must verbally identify the beginning sound.
- Students are provided 10 words verbally broken into individual syllables. Students must blend syllables and verbally identify the word.
- Students must identify 2 rhymes for a given word (and eliminate the non-rhyming word) for 10 words.

Must pass with 90% accuracy or above

Letter recognition

- Students identify letters both by name and sound
- Students read a list of 10 VC/CV sounds
# Letter and Sound Activities

<table>
<thead>
<tr>
<th>Pre A Lessons Lesson #</th>
<th>Book</th>
<th>Level</th>
<th>#Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with letters and names (Choose One)</td>
<td></td>
<td></td>
<td>3-4 minutes</td>
</tr>
<tr>
<td>Letter activity #</td>
<td>Letter formation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ways of Working With Letters:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Match the letters in the bag</td>
<td>2. Use name puzzles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Match letters to an alphabet chart</td>
<td>4. Make names out of magnetic letters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Match upper- &amp; lowercase letters</td>
<td>6. Do rainbow-writing with names</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Sort by color</td>
<td>8. Name letters left to right</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Name a word that begins with that letter</td>
<td>10. Name the letter that begins that word</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Find the letter that makes that sound</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working With Names (omitted once each student can write name without a model &amp; knows all the letters in name)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name activity</td>
<td>name puzzles</td>
<td>make names out of magnetic letters</td>
<td></td>
</tr>
<tr>
<td>Working With Sounds (Choose 1)</td>
<td>2-3 minutes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clapping syllables 1 2 3</td>
<td>Picture sort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beginning sounds</td>
<td>Sound boxes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1 From Pinnell and Fountas (2009)
Appendix C: Phonics Intervention Resources
Components of Daily Phonics Instruction

Phonological Processing and Phonemic Awareness

Students will detect and discriminate differences in phonemes in the absence of words. Students will hear and manipulate phonemes. Students practice:

- Rhyming words
- Breaking compound words into individual words and words into syllables
- Identifying initial, medial, and final sounds of words
- Segmenting words into their component sound
- Deleting sounds from words
- Adding beginning sound to make phoneme blends
- Substituting sounds within words
- Orally separate words into distinct phonemes

Phonics

Students will practice the relationships of sounds to print. This makes up the majority of instruction. Students will:

- Read and spell individual letter sounds, digraphs, and blends
- Visualize and verbalize sounds and words
- Manipulate letters in words to create new words (i.e. change C in cat to an H)
- Identify, read, and spell word families and rhyme schemes
- Read and spell sight words
- Read and spell common prefixes, affixes, and suffixes
- Divide polysyllabic words in individual syllables
- Listen to spoken sentences and correctly transcribe sentences into writing

Fluency

Students will read a variety of leveled texts with accuracy and proper expression. Students will:

- Choral read with instructors and peers
- Engage in timed fluency readings
- Read texts multiple times to increase speed and expression
- Practice reading silently and independently
**Reading Comprehension**

Students will summarize, discuss, and evaluate texts. Comprehension is not the key objective in phonics instruction; rather the goal is to increase phonics skills and fluency in order for students to independently comprehend texts. Nevertheless, it is critical that students practice comprehension. Students will:

- Verbally summarize texts
- Identify characters, events, and setting in fictional texts
- State their thoughts and opinions on texts
Sample Daily Phonics Routine

Optional: Phonological Processing Warm-up (2-3 minutes)
Students review phonological processing through a quick warm-up activity [see activity bank]

Review of letters, digraphs, blends, affixes (3-4 minutes)
- Students review previous sounds through flashcards
- Students spell review sounds

Review of sounds in words and sentences (7-10 minutes)
- Students read word lists/flashcards featuring previously learned sounds
- Students spell words in isolation
- Students are provided verbal sentences or sentence fragments and must transcribe the sentence with correct spelling and punctuation.

Introduce new material (7-10 minutes)
- New sound/phoneme is introduced
- Practice with an activity [see activity bank]
- Practice spelling words containing new sound

Reading and reading comprehension (10 minutes)
- Students practice reading aloud independently or in groups (choral reading, turn taking, "popcorn" reading)
- Students read passages/texts multiple times in order to read with speed and feeling
- Students discuss texts and verbally answer basic comprehension questions
Weekly Assessment Routine

Students will be assessed individually every week. Students will rotate in the group to be assessed while others independently read.

Reading word lists
- Students read lists 20 words that include recently learned sounds as well as review older sounds
- Students must read words with at least 80% accuracy and read the list in under two minutes in order to proceed

Spelling word lists
- Students spell 20 words that include recently learned sounds as well as review older sounds
- Students must spell words with at least 80% accuracy. There is no time limit.

Fluency reading
- Students read leveled texts
- Teacher notes words per minute and accuracy

Note on progress:
Data is kept weekly. Sounds that students struggle with should be reviewed in the following lessons before introducing new sounds. The needs of the students in the group must be balanced. When the majority of the group is showing proficiency, new sounds should be introduced but with emphasis on reviewing sounds other group members are struggling on. If a significant discrepancy continues week to week between group members, it might be advisable to change the groupings.
Low to No Prep Activity Bank: Phonics

Sound Tic-Tac-Toe
Materials: Dry erase boards/markers
Students create a standard nine-grid tic-tac-toe board. Teacher provides nine words/sounds that students write onto the nine grid spaces. Students then take turns playing standard tic-tac-toe, but they must read the sound/word before putting an X or an O in the grid.

Memory
Materials: Up to 20 cards with words/sounds
Teacher places an even number of cards face down on the table. Each card has a duplicate match cards. Students take turns flipping cards and reading the word until all cards have been matched.

Go Fish
Materials: Even number of cards with words/sounds
Teacher has an even number of word/sound cards. All words/sounds have a duplicate card. Teacher shuffles the deck and hands students three cards each and places the remainder in the Go Fish pile. Students take turns asking each other "Do you have [word]?” If the student does not have the match card, they must draw from the Go Fish pile. The game ends when all cards have been matched.

Speed Flip
Materials: At least 10 cups, marbles or cubes, cards with words/sounds
Teacher places cups in a grid and places a sound/word card face up covering each cup. Students close eyes and teacher places the marble in one of the cups. Students have one minute to read the word on the card, lift the card, and look for the marble before the minute is up. Students take turns and collect marbles.

Word Sort
Materials: Envelope containing category cards, cut out words
Students open the envelope and place the category cards in front of them. These categories can be virtually anything. For example, categories can simply be "words with e," "words with o." They could be "Short vowel sound" or "Long vowel sound." Students pour out the words in the envelope, read the words aloud, and place them in a column below each category. Students are timed and attempt to beat their time.

**Word Bingo**

Materials: Teacher created bingo cards with words/sounds (http://myfreebingocards.com/bingo-card-generator)

Students get bingo cards. Teacher reads words at random and students stamp out the words at they called until student gets a bingo.

**Word Roll**

Materials: 4-8 custom foam dice of 2 colors, white boards

On one color of dice, teacher write beginning sounds and blends. On the other color of dice, teachers write ending sounds. Students take turns picking a beginning sound die and ending sound die. They roll the dice and must put the sounds together to read a word. If it is a real word (such as "fl" and "ap"), they write it on their whiteboard. If it is a nonsense word (such as "bl" and "ap") they do not write it. Whoever has 10 written real words first wins.

**Game Station**

Materials: any appropriate board game

Choose any board game with simple, short repetitive turns such as Connect 4 or Chutes and Ladders. Students simply play the game as instructed but must read 1-5 word cards before they take their turn.
Appendix D: Data Keeping
Sample Running Records

**Recording Form**

**Part One: Oral Reading**

Place the book in front of the student and read the title.

<table>
<thead>
<tr>
<th>Page</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>We went down the river. &quot;Look at the boat,&quot; said Mom.</td>
</tr>
<tr>
<td>4</td>
<td>We went down the river. Dad said, &quot;Look at the ducks.&quot;</td>
</tr>
<tr>
<td>6</td>
<td>We went down the river.</td>
</tr>
</tbody>
</table>

**Accuracy Rate**

<table>
<thead>
<tr>
<th>Errors</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<td>%</td>
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<td>75%</td>
<td>70%</td>
<td>65%</td>
<td>60%</td>
<td>55%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Self-Correction Ratio**

\[ \text{SC} = \frac{(E + SC)}{EC} \]

**Fluency Score**

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

**Fluency Scoring Key**

1. Skips while reading with occasional but intelligible mispronunciations; no errors or mispronunciations, irregular pauses, and no indication of author's meaning or pronunciation; no errors or mispronunciations, irregular pauses, and no indication of author's meaning or pronunciation.
2. Skips while reading, if need or picture groups; some errors, mispronunciations, and pacing guided by author's meaning and pronunciation; occasional errors or mispronunciations, with slow rate and fluency.
3. Skips while reading, if need or picture groups; some errors, mispronunciations, and pacing guided by author's meaning and pronunciation; occasional errors or mispronunciations, irregular pauses, and some with some slowdowns.
4. Skips while reading, if need or picture groups; mostly errors, mispronunciations, and pacing guided by author's meaning and pronunciation; occasional errors or mispronunciations, irregular pauses, and some with slow slowdowns.
Sample Assessment²

Assessments in the phonics intervention must be used to inform instruction. All assessments must be strategically designed to support systematic phonics. Errors in specific phonemic concepts are analyzed and retaught until mastery in reading and spelling is consistently demonstrated.

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² An example of an assessment from The Sunday System by Windsor Learning.
Sample Student Plan

Personal Learning Plan

<table>
<thead>
<tr>
<th>Date</th>
<th>Word List Decoding</th>
<th>Spelling</th>
<th>Running Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>Level _____</td>
<td>Level _____</td>
<td>Level _____</td>
</tr>
<tr>
<td></td>
<td>Score:</td>
<td>Score:</td>
<td>Accuracy %: _____</td>
</tr>
<tr>
<td></td>
<td>_____ out of _____</td>
<td>_____ out of _____</td>
<td>Error: Self-correction Ratio</td>
</tr>
<tr>
<td></td>
<td>Target sounds/errs:</td>
<td>Target sounds/errs:</td>
<td>_____ : _____</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comprehension score</td>
</tr>
<tr>
<td>Follow-up</td>
<td>Retest score:</td>
<td>Retest score:</td>
<td>Level _____</td>
</tr>
<tr>
<td></td>
<td>_____ out of _____</td>
<td>_____ out of _____</td>
<td>Accuracy %: _____</td>
</tr>
<tr>
<td></td>
<td>Accuracy % of target sounds:</td>
<td>Accuracy % of target sounds:</td>
<td>Error: Self-correction Ratio</td>
</tr>
<tr>
<td></td>
<td>_____</td>
<td>_____</td>
<td>_____ : _____</td>
</tr>
<tr>
<td></td>
<td>Accuracy % of non-target sounds:</td>
<td>Accuracy % of non-target sounds:</td>
<td>Comprehension score</td>
</tr>
<tr>
<td></td>
<td>_____</td>
<td>_____</td>
<td>_____</td>
</tr>
</tbody>
</table>

---

3 Example of a type of person learning plans that should be kept for each student. The personal learning plans record assessment data and analyzes the data for common mistakes which become target sounds.

Students are independently re-tested to measure progress on specific target sounds.
Sample Student Graph

<table>
<thead>
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<th>Words Read</th>
<th>Date</th>
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<tr>
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<td>40</td>
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<td>20</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

' s Fluency Goal Graph (Level ___)

---

4 Students record reading fluency and accuracy scores on personal bar graphs. Students set goals and track their own progress throughout the year. Celebrations can be planned for making and exceeding goals.
Reference List


Langenberg, D., Correro, G., Ferguson, G. (2000) Teaching Children to Read: An Evidence Based Assessment of the Scientific Literature on Reading and its Implications on Instruction. *The National Reading Panel*


Savage, R. S., Abrami, P., Deault, L. (2009) A Randomized Controlled Trial Study of the ABRACADABRA Reading Intervention Program in Grade 1. *Journal of Educational Psychology*, 101 (3), 590-604
