Master Capstone Project

Primary Literacy Instruction: A Design for Increasing Pre-Reading Skills

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Submitted to the

Graduate School of Education

City University of Seattle

In Partial Fulfillment of the Requirements

For the Degree of Master in Teaching

I give permission to City University to store and use this MIT Project for teaching purposes.

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Acknowledgements

This research project is dedicated to the excellence in leadership displayed by City
University Masters in Teaching Program Director, Susan Gray, City University Field Supervisor,
Leann Torgerson, and City University Capstone Advisor Corll Morrissey. Further dedications
extend to my fabulous mentor teacher at Spinning Elementary School, Donna Paul; my City
University colleagues, Sandra Sajewski and Manveer Parmar; and my husband, Eric Strub.

Abstract

Student practice and exposure to foundational literacy skills as building blocks to their later reading fluency and comprehension is an important aspect of fostering student success in literacy. Many studies explored within this work will attest to the importance of student engagement with these foundational skills in the primary grades. While many of these foundational skills are practiced, such as letter-sound and letter-symbol recognition, other foundational skills, such as blending and segmenting, are not prioritized as much, leading to some struggling readers continuing to fall behind. This work explores some viable solutions to introduce key phonological skills within the bounds of the prescribed curriculum to maximize classroom time management, student exposure and practice with these skills, and ultimately to meet the needs of struggling readers to improve their chances of reaching grade-level literacy expectations.

Introduction

Cultivating and fostering a solid foundation of student literacy is one of primary education's cornerstone goals; there is an abundance of resources, strategies, and studies about how to effectively instill literacy and comprehension abilities in young students. There has been a recent and growing focus on pre-reading skills to improve written, read, and spoken language in students. The intention of improving primary literacy by developing pre-reading skills had helped to provide a solid foundation of letter sounds and sound patterns for students to independently read and write. More recently, there has been a focus on phonics in literacy instruction. Though this focus has increased, resources and practical implementation trainings can be limited for many educators. This work aims to explore how to integrate baseline phonics skills into existing curriculum and materials to make this instruction more accessible to teachers and students. The goal of this investigation is to provide methods educators can use to solidify pre-reading skills in grades kindergarten through third.

Rationale

The phonological skills of blending and segmenting have been said to be one of the key skills to predict student reading fluency and comprehension during late elementary and beyond (Lonigan et. al., 2004). Other research suggests that blending and segmenting are the most neglected early primary literacy skills (Juel, 1988).

The Science of Reading conference suggests that reading comprehension can be simplified into the following equation: Decoding + Language Comprehension = Reading Comprehension (Burke, 2020). While letter-sound and letter-symbol recognition are also key to these two skills, blending and segmenting will further the mastery of the baseline skills of decoding and language comprehension, leading to overall improved reading comprehension.

Other more recent discussions have also been raised regarding phonological awareness and decoding as baseline literacy skills. There have been recent discussions on the efficacy of decodable texts and sound patterns to help students connect verbal phonics skills to written words. The International Literacy Association not only lists blending and word recognition as foundational literacy skills, but also discusses the efficacy of decodable texts to prepare beginning level readers for more complicated and varied texts (2019). Especially with students returning to school from pandemic accommodations, many students are behind on the foundational literacy skills and continue to struggle with reading fluency and comprehension. The practice and mastery of these baseline skills may be beneficial to students who are struggling particularly due to skills lost during virtual learning.

Literature Review

Background Information

There are two main components to primary literacy success: phonemic awareness (lettername and letter-sound recognition) and phonological awareness (blending and segmenting sounds and sound patterns). A study conducted by Ehri and associates suggests that letter-sound recognition and letter symbol recognition are primary literacy predictors for incoming kindergarten students. It was found that students who correctly associated letter sounds with their symbols were more likely to end the year on grade level for literacy (Ehri et. al., 2001). This information is further emphasized in Al-Bataineh and Sims-King's work. The two researchers state that students who struggle with literacy in primary grades (specifically kindergarten) tend to struggle with letter sounds and how to blend those sounds into words (Al-Bataineh and Sims-King, 2013). Their study had an explicit focus on the skill blending, but they also put equal weight on the issue of lack of letter sound recognition.

Phonemic Awareness Instruction (Letter-Sound and Symbol Recognition)

Phonemic awareness is a pre-reading skill that students have engaged with at the primary level. Hallie Yopp outlined methods of developing phonemic awareness in young students. She identified the primary problem as students not seeing that words are composed by a pattern of individual sounds. The study found that activities such as letter sound matching improved phonemic awareness and therefore student literacy skills (1992).

Abbott and colleagues found growth in kindergarten students' phonemic awareness after implementing intervention on letter sound recognition. Initially, the intervention also contained strategies to blend and segment sounds, but these were removed after concern was expressed by school administrators about the difficulty segmenting and blending presented for the students

(Abbott et. al., 2002). Though these studies showed improvement of literacy skills by focusing primarily on letter and sound recognition, the issue remains that blending sounds and syllables and segmenting syllables proved challenging to many primary students.

Once the phonemic skills are mastered, the next set of skills for students is typically phonological skills. Foorman and associates explored secondary phonological growth and found marginal improvement in blending and segmenting via focusing on letter-sound recognition. However, many primary students still struggled with the aspect of blending sounds and syllables or separating these sounds and syllables (Foorman et. al, 2003).

Phonological Awareness Instruction (Blending and Segmenting Sounds)

Pre-reading skills have been typically taught in a stair-step manner. This means that once students have mastered phonemic skills, phonological skills were taught next. Yeh and Connell also found that sound segmentation was a primary indicator to literary success with primary students. Those students who were able to blend and segment sound patterns were more likely to have a higher level of fluency and comprehension while reading (2008). Another important aspect of phonological awareness that the researchers discussed were sound patterns, such as rhyming, that helps students correlate patterns of sounds to building words based on a repeating sound (i.e. cat, rat, fat) (Yeh and Connell, 2008).

Juel also studied phonemic and phonological skills and found that decoding sounds was one of the least developed skills for underperforming readers. She found that when these skills were improved, elementary student literacy improved as well (Juel, 1988). Similar to the findings of Yeh and Connell, the investigations done by Lonigan and associates found that phonological skills, such as blending and segmenting, were among the necessary foundational skills to predict

and develop literacy at the primary level. Other foundational skills identified are alphabet knowledge, oral language concepts and printed language concepts (Lonigan et. al., 2004).

Pre-Reading Skills and Available Curriculum Materials

Before beginning to read, students must have had exposure to pre-reading skills. The International Literacy Association suggested to support the mastery of pre-reading skills, that phonics be taught systematically with a clear review and repetition cycle (2019). This association listed primary foundational skills for reading fluency and comprehension such as: letter-sound recognition, an effective scope and sequence, blending and dictation, word awareness and exposure to high frequency words, and reading texts associated with each new skill (e.g. decodable texts) (ILA, 2019). Weiser and Mathes also explored pre-reading skills and the effect on reading fluency and comprehension (2011). The two researchers synthesized data for grades kindergarten through third to compare the results of phonemic and phonological interventions and reading fluency and comprehension. They found that student growth in reading comprehension and fluency had grown to between 33% to 60% in groups of struggling readers with explicit and systematic phonological and grapheme awareness (Weiser and Mathes, 2011).

A study conducted by Kretlow and Helf examined the types of reading curriculum and how frequently the components of the curriculum were used. In a survey of 1,500 teachers across the United States, they found that only 35% of teachers reported using the scope and sequence for teaching letter sounds (2013). About 36% of teachers used the phonemic awareness components of their curriculum. They found that most of the curriculums studied did not have scientific evidence to back their efficacy (Kretlow and Helf, 2013). Another component of the curriculums they studied was the use of decodable readers. The researchers found that only 29% of teachers

were using decodable readers daily and that most teachers (31%) only used decodable readers once or twice a week (Kretlow and Helf, 2013).

The International Literacy Association confirmed the efficacy of decodable readers, stating that their use in the beginning levels of learning to read helped provide a controlled, explicit, and systematic connection between baseline phonemic and phonological skills and the graphing system (2019). The association discussed the usefulness of decodable texts to more quickly connect phonics skills to literacy skills. For example, when solidifying pre-reading students have been found to be more successful with exposure to varied level texts that pertained directly to the phonics skills they had been working with (ILA, 2019).

Analysis of the Problem

The main issues found for the practice of phonological skills appears to be effective implementation and access to materials. While phonics instruction is becoming an essential focus in the primary classroom, many teachers still lack either materials or training for effective phonics instruction. The problem many young readers are facing is that they are not achieving mastery of baseline literacy skills. To fulfill these student needs despite lack of available training or materials, this work explored how to integrate phonics instruction into existing methods of literacy instruction. The goal is to provide mastery of these literacy foundational skills for continued success in reading fluency and comprehension.

Bridging the Gap

Phonemic Awareness, Phonological Awareness, and Decodables have built upon each other as literacy foundational skills. The science of reading is the concept that language is broken down into four major components: meaning, sentence structure, sound, and the graphic system. The first three components are skills that most students have when entering the primary grades, taught solely by spoken language at home. However, the graphic system – or letter-sound recognition and word building and recognition skills – is a skill set that some students do not have experience with prior to entering the classroom (Caulkins, 2016).

To bridge the gap between these foundational skills and reading fluency and comprehension, Riley discussed the use of varied leveled texts, content knowledge, and vocabulary for students (2020). While mastery of phonemic and phonological skills provides a baseline for reading fluency and comprehension, additional steps were needed to elevate student success in literacy. He continued to state that while science-based reading practices are beneficial, they should inform teaching practices rather than dictate them; educators may take the principles found by

exploring reading science and apply the pieces needed to enhance the students' literacy experience and mastery (Riley, 2020).

The International Literacy Association spoke to the efficacy of teaching phonemic and phonological skills in a "stair-step manner" (2019). Each foundational skill is built from the last, therefore letter-sound recognition and blending and segmenting are essential baseline skills for students to master before they can decode (ILA, 2019). Another important aspect discussed by the association for teaching literacy is the gradual release model. In this model, students are introduced to the concept being guided by the educator. As time goes on, they do more and more on their own until they are completely independent. Decodables are a common resource for bridging the gap between phonemic and phonological skills and reading fluency and comprehension. They provide a structured approach to reading independently that is connected to the phonics skills the students are engaging with in class (ILA, 2019). When focusing on these foundational skills in the primary grades, students are successful with reading fluency and comprehension in the later elementary levels. However, while all these baseline skills are important, they are not the only keys to successfully teaching literacy.

District Leader Expectations for Pre-reading Skills

While a previous major study conducted by Yeh and Connell ran into issues with district expectations, resulting in the removal of the practice of blending and segmenting sounds at the kindergarten level, the discussion of explicit phonics instruction has changed more recently (2008). Jared Myracle, district leader in Louisiana, discussed his observations for successful literacy education, including the need for explicit and daily phonics instruction in the primary grades (2020). The district leader also discussed the importance of mastering foundational literacy skills in the primary grades before prioritizing other concepts such as main idea, or

author's purpose (Myracle, 2020). Another component he found to student success was background knowledge of the concepts in the texts. He found that students that had background knowledge of the topics they were reading about were more likely to be successful in reading fluency and comprehension (Myracle, 2020).

The Louisiana district leader demonstrated that teaching vocabulary was valuable to reading fluency and comprehension (Myracle, 2020). Many curriculums he discussed included methods and tools for teaching new vocabulary words in whole group lessons. These could easily be adapted to practice foundational literacy skills while expanding the vocabulary to the students. Students could engage in using sound patterns that they are learning in class to identify those sounds in the new vocabulary words. His findings drove him to find more curriculum resources that include explicit phonics instruction, knowledge building opportunities, and varied texts for grades K-5. Myracle stated that decodables could also be used as a steppingstone to more difficult texts, since they contained predictable patterns that prepare students for more challenging texts during other lessons (ILA, 2019).

Based on Myracle's observations, adapting existing materials and curriculums to meet the literacy needs of the students, helped educators improve literacy instruction for varied levels of readers. Another example of district or national requirements supporting phonics instruction are discussed by Riley, who explained that many states such as Alabama, Arkansas, Connecticut, Massachusetts, and Mississippi have implemented policies to include reading science principles into educational practices regarding literacy instruction (2020). These policies have shown that many states saw and acted on the needs of pre-reading skills to enhance mastery of reading fluency and comprehension.

Teacher Education in Teaching Phonemic and Phonological Skills

Pre-service teachers, or even established teachers, may not have had proper training in how to implement phonemic and phonological education. Benjamin Riley found that while 60% - 80% of pre-service teachers had training in teaching phonics, only about 50% - 60% of pre-service teachers could effectively deliver phonics instruction (2020). Caulkins also found that many educators are not prepared to meet the needs of students regarding phonics instruction (2019). While phonics instruction is being highlighted more recently, as seen by the previous observations of Jared Myracle, many teachers or pre-service teachers may not have access to practical trainings for phonics instruction (2020). It would be ideal for educators to receive the proper, practical training for teaching phonics. However, this may not be a reality in many school districts. In this case, resources pertaining to the science of reading can help supplement educators' literacy instruction to provide opportunities for mastery in foundational skills.

Discussion and Dilemma

In the elementary settings that I have worked in, the focus for phonemic and phonological awareness falls in letter-sound and letter-symbol recognition, which mostly takes place in kindergarten and first grade. Despite these skills showing marginal, secondary growth in the skills of blending and segmenting, it is not enough to allow the students to achieve full mastery of the concept (Foorman et. al., 2003). In order to help students fully realize their ability to read fluently and comprehend the information they are learning from the texts, there must be a balance in the practice and exposure students have with all foundational literary skills (e.g. phonemic and phonological awareness).

Below are discussions of potential design solutions as well as limitations; a brief introduction to these considerations are as follows:

- 1. Instructors may not have time for or access to supplemental materials in order to fully practice these foundational literacy skills. A viable solution would include modifying current curriculum materials and district or school approved materials to practice the skills of blending and segmenting, such as curriculum prescribed vocabulary words or Fry words. In terms of reading assessment, many preexisting and well established assessment options will still test the long-term goal of improving reading fluency and comprehension through the practice of phonological skills, such as Fry word recognition or DIBELS reading fluency and comprehension tests.
- 2. A limitation that would be beyond the control of the educator would include strict curriculum guidelines expressed either by school or district administration.
 Though there may be a way to continue to modify current curriculum materials to include the practice of blending and segmenting, the provided protocol of the school or district may prevent educators from engaging in the modification of curriculum materials.

Implications and Relevance

While the focus on phonics skills such as letter-sound recognition improves literacy skills, Foorman and associates shows that solely focusing on phonics is not enough: the students in his showed marginal growth, but to the point where only a small portion of the participants were able to segment and blend fluently (2003). Juel has also found, the most underdeveloped skill in many struggling readers at the primary level is blending and segmenting. This suggests that even if primary students come to a strong sense of individual letter sounds, they may struggle with connecting and separating consistent sound patterns to create words (Juel, 1988).

Another study that was conducted by Husam Alhumsi suggests that using interactive activities and technology (such as a smart board) where students can physically, visually, and verbally manipulate sound patterns may be one of the key factors to achieving a developed and independent ability in blending and segmenting, which furthers and strengthens the students' literacy skills. They found that students who had hands-on experience and physically manipulated the sound patterns were more likely to master the skill, which then led to improvement in fluency and comprehension (Alhumsi, 2016). More recently, the implementation of explicit and systematic phonics instruction has been highlighted. While many districts may not be so fortunate as to receive new curriculum, district leader Jared Myracle in Louisiana saw a need for curriculum supplements for phonics and decoding (2020).

Limitations

Some limitations to the proposed design may include:

Removal of supplemental instruction of non-curriculum-based skills per school or district administration due to a variety of proponents (e.g. strict scope and sequence calendar, classroom time management, or the priority of other subjects over literacy skill supplementation).

Recommendations

Some recommendations to overcome main limitations include:

Present proposed supplemental materials and strategies to the school board, school administration, and district administration for approval prior to implementing the designed solutions.

Design Question

This work explores the following question: How can educators use their time, prescribed curriculum, and reasonable supplemental materials in order to strengthen blending and segmenting skills, which will ultimately improve reading fluency and comprehension at the elementary level? The main constraints are time or district-based and school-based expectations of how to use the curriculum. The following solutions are created with time management and use of provided curriculum in mind.

Proposed Design

Purpose

The purpose of this design is to include accessible blending and segmenting activities to strengthen decoding and language comprehension skills to improve reading comprehension in the primary and later elementary classrooms. Some ideas include:

- 1. Adding blending and segmenting activities to prescribed curricular vocabulary activities.
- 2. Small group interventions that include the practice of blending and segmenting activities during literacy centers with the teacher (intensive group).
- Individual blending activities for students during literacy centers for extra practice (benchmark and above benchmark groups).
- Progress monitoring of grade level appropriate vocabulary words (e.g. Fry words) and short reading comprehension passage (~ 5 minutes per student per progress monitoring session).

Theory of Change

Incorporating the above strategies allows teachers to work with these skills in a time sensitive manner as well as using materials provided for them via their curriculum. The practice of blending and segmenting, which is generally overlooked in the classroom due to either time or curriculum-based scope and sequencing, will become available to educators and students, furthering their decoding skills, language recognition skills, and reading comprehension skills.

Outcomes

Design of whole group blending and segmenting supplement using prescribed curriculum materials.

| Activities or Actions Whole Group Verbal/Written Practice | Short-term Outcomes | Long-term Outcomes |
|---|--|---|
| Use the vocabulary focus words from the curriculum for this activity (e.g. Fry words). Present 3-4 words per day (Appendix A). Ask students to verbally segment the words or blend sounds to create a vocabulary word using hand actions to further concept understanding and engagement. Repeat the prior activity with written vocabulary words on personal student whiteboards where students combine or segment sounds from the vocabulary words (Appendix A). | Students work with letter sounds and blended sounds that make up new focus words. Students practice isolating and combining sounds against the control word (focus word). Students practice oral, written, and read phonological skills. | Students are able to use these skills to sound out new words. Students recognize word patterns that help with fluency and comprehension. Students' overall reading fluency and comprehension ability increases. |

Design of small group blending and segmenting supplement using supplemental and prescribed curriculum materials for below grade level students.

| Activities or Actions Small Group Verbal/Written | Short-term Outcomes | Long-term Outcomes |
|--|---|---|
| Practice for Intensive Readers Begin with a quick review of letter-sound and letter-symbol recognition. Use the same vocabulary focus words from the curriculum from the previous whole group lesson (e.g. Fry words). Review 3-4 words per session. Ask students to verbally segment the words or blend sounds to create a vocabulary word using hand actions to further concept understanding and engagement. Repeat the prior activity with written vocabulary words on personal student whiteboards where students combine or segment sounds from the vocabulary words. Conclude by practicing reading and defining the focus words. | Students are experiencing repeat exposure to letter sounds and blended sounds that make up new focus words. Students expand upon initial literacy skills (phonemes) and practice isolating and combining sounds against the control word (focus word). Students practice oral, written, and read phonological skills. | Students strengthen their letter-sound and letter-symbol recognition skills. Repeated exposure of the phonological skills will aid students in sounding out new focus words. Students recognize word patterns that help with fluency and comprehension. Students' overall reading fluency and comprehension ability increases. |

Design of independent center rotation of blending and segmenting supplement using supplemental and prescribed curriculum materials for all students.

| Activities or Actions Independent Blending and Segmenting Activities for all students | Short-term Outcomes | Long-term Outcomes |
|--|---|---|
| This activity would be an independent center rotation after the whole group lesson. Use the same vocabulary focus words from the curriculum from the previous whole group lesson (e.g. Fry words) and a few additional review words (Appendix B). Activity includes 5-6 words per worksheet. Ask students to either combine sounds from a sound bank to create focus words into sound blends and syllables. | Students practice skills from whole group lesson independently. Students practice isolating and combining sounds against the control word (focus word). Students practice written and read phonological skills. | Students recognize word patterns that help with fluency and comprehension. Students' overall reading fluency and comprehension ability increases. Repeated exposure of the phonological skills will aid students in sounding out new focus words. |

Example: Design of independent student progress monitoring of grade level sight words and reading comprehension.

| Activities or Actions Independent sight word and reading comprehension progress monitoring | Short-term Outcomes | Long-term Outcomes |
|--|---|--|
| This activity will take place either weekly or biweekly. Students will read grade level sight words to monitor their progress towards grade level reading fluency (Appendix C). Students will then read a short grade level appropriate passage and answer comprehension questions (Appendix D). The instructor will take note of how many sight words are read correctly over time and track their errors and words correct per minute as well as the quality of student responses to comprehension questions. | Students practice grade level appropriate sight words and reading fluency and comprehension activities. Students continue to practice written, oral, and read phonological and reading fluency and comprehension skills. | Students recognize word patterns that help with fluency and comprehension. Students' overall reading fluency and comprehension ability increases as the text and word difficulty increases. Students' ability to retell and answer comprehension questions will improve, including proper sequencing of events and important details from the passage. |

Differentiation

The main differentiation options can be provided for the whole group lesson and the independent center activity. For the whole group lesson, students who are below benchmark for reading may be paired with students that are at benchmark as well as placed near the instructor for additional support. A short review of the whole group lesson will then take place during the small group session with the instructor during center rotations. One viable differentiation option for the independent blending and segmenting activity is to work with the below benchmark students on the independent activity during the teacher center of the rotation, or to at least complete the first couple in the small group setting before the students complete the activity individually.

Assessment Options

Assessment #1 Formative, Observational Assessment of Whole Group Lesson

The instructor will observe student engagement and understanding of the whole group blending and segmenting lesson in order to provide the best possible exposure and practice of these skills and relating them to the current literacy skills being explored within the curriculum via the associated vocabulary words.

Assessment #2 Small Group Formative Assessment (Below Benchmark Readers)

The instructor will observe growth and manipulation of letter-sound recognition, blending and segmenting, and sight word fluency and comprehension. The instructor can then use this information to adapt small group instruction to focus on sounds and syllables that are difficult for these readers as well as their understanding of new sight words.

Assessment #3 Independent Blending and Segmenting Activities

Students will engage in a written version of either breaking sight words down by sound and syllable or using provided sounds and syllables to create sight words. This independent practice will help the instructor gage which students may need more reading intervention and which students can freely manipulate sounds and words.

Assessment #4: Sight Word Recognition Assessment Progress Monitoring (Fry Words)

Students will engage in 1-1 testing either weekly or biweekly with grade level appropriate sight words. This will help the instructor identify which students are progressing as needed with grade level appropriate vocabulary and which students may need more intervention. The results will also show the efficacy of the phonological skills practice as students will learn to manipulate sounds and identify sound patterns to help their reading fluency.

Assessment #5: Reading Fluency and Comprehension Progress Monitoring (DIBELS)

Students will engage in 1-1 testing either weekly or biweekly with grade level appropriate reading passages and comprehension questions. This will help the instructor identify which students are progressing as needed with grade level appropriate vocabulary and which students may need more intervention, based on correct words per minute and retell ability. The results will also show the efficacy of the phonological skills practice as students will learn to manipulate sounds and identify sound patterns to help their reading fluency (correct words per minute) and comprehension (retell and comprehension questions).

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Appendix A

Whole Group Phonological Intervention Using Assigned Curriculum Example



Bauman, James F. (2014). Journeys 2nd Grade Lesson 17 Vocabulary. *Houghton Mifflin Harcourt*.



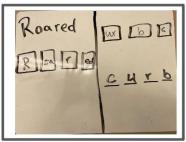
Example of Segmenting Hand Motion



Example of Blending Hand Motion



Example of Projection During Written Activity

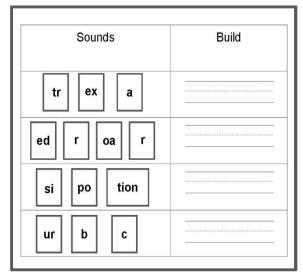


Example of Individual Whiteboards

Appendix B Independent Blending and Segmenting Practice Example

| Read | Сору | Segment |
|----------|------|---------|
| roared | | |
| curb | | |
| extra | | |
| position | | |

Example of Independent Segmenting Activity



Example of Independent Blending Activity

Appendix C

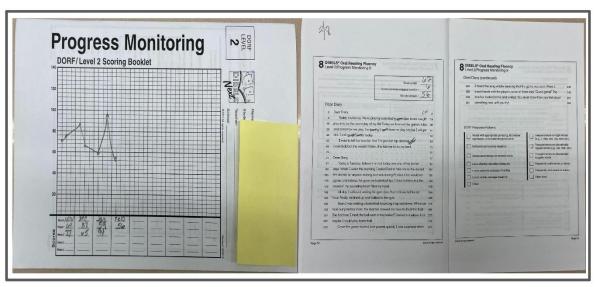
Sight Word Fluency Progress Monitoring Example (End of Year 2nd Grade Fry Words)



Example of Sight Word (Fry Words) Assessment (End of Year 2nd Grade Expectations)

Appendix D

Reading Fluency and Comprehension Progress Monitoring Example (2nd Grade DIBELS)



Example of Fluency and Comprehension (DIBELS) Assessment (End of Year 2nd Grade Expectations)

Author's Note

Anna Wells Strub has been interested in the development of literacy skills when she began helping her nephew learn to read. Going into third grade, her nephew had a tested reading level of a preschooler or early entry kindergartener. She committed herself to improving her nephew's reading fluency and comprehension over the summer before her nephew entered third grade the following fall. Her nephew, through much attention and practice, and with help from his aunt, two uncles, and Nonna; was able to enter third grade with a mid to late second grade reading level.

Though the experience was still beneficial, many of the baseline skills explored in this work were skipped over in the instruction he received due to the lack of knowledge Anna had to the importance of these baseline skills. Her interest in blending and segmenting continued when she worked in a second-grade dual language program and later when she taught high school Spanish. Though there are notable differences between the development of English literacy and Spanish literacy, Anna noticed that there was an overlap in language acquisition when certain phonemic and phonological skills are highlighted. This interest began her research inspiration, and her findings have helped her prioritize what is necessary for her students in terms of literacy skills practice, adapting school provided literacy curriculum to meet the needs of all students, but particularly struggling readers.

Dissemination Plan

The Dissemination Plan of the proposed solutions include the use of the information complied within this study as well as the examples from the appendixes to be used as guidelines if these strategies are chosen to be used in the classroom by the professional discretion of the educator. The purpose of these designs is to be flexible to many facets including: classroom time management, material scope and sequencing requirements, differences in prescribed curriculums, etc.; therefore, these solutions are not strict methods, but rather adaptable for individual educator use by design. Though there are many great studies compiled within this work, I also encourage any educators who may use these proposed solutions to not only assess the need for this kind of foundational literacy instruction in each individual classroom and to continue to follow new research that continues to be published on the efficacy of practicing and exposing students to these phonological skills.