IMPROVING READING SUCCESS FOR 1ST AND 2ND GRADE STUDENTS THROUGH TEACHER TRAINING AND ACCOUNTABILITY USING EVIDENCE-BASED ASSESSMENT AND INSTRUCTION

A Record of Study

by

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ABSTRACT

The researcher implemented structured literacy on a primary campus with 1st and 2nd grade students and measured reading growth during the school year. The study began by measuring teachers' initial knowledge of basic language constructs and providing training in structured literacy that would be implemented during the literacy block each day. The teachers received ongoing support and job-embedded professional development while providing evidence-based instruction to students. The students' reading growth was measured and analyzed six times during the year using STAR Renaissance and STAR Early Literacy assessments; and as the data indicated, students were moved to different tiers within a 3 Tier Response to Intervention model. After a posttest survey was administered to teachers at the end of the year, paired samples t tests were utilized to measure growth in teacher knowledge of basic language constructs and also student reading achievement. The tests showed that both measures increased significantly after the implementation of structured literacy.

DEDICATION

I dedicate this work to the families and educators I hope to impact through my work with structured literacy in the recent past, present and in the future. My aim is to use my current and future knowledge, my time and my passion for getting reading right the first time to improve the education of preservice teachers, the ongoing support instruction of in-service teachers through job-embedded professional development, and most importantly the daily education of students across this great nation. By supporting the implementation of structured literacy as a Tier 1 essential, and an aligned intervention in Tiers 2 and 3, educators can and will forever change the trajectory of students' lives in every school regardless of socioeconomic makeup. That is access at its finest, and I am excited to be part of it!

Without research-based knowledge of how to teach reading effectively and the subsequent implementation in classrooms, we as educators are unknowingly putting students at risk of not just academic failure, but failure with major life tasks such as pursuing a career of their choosing. Therefore, I additionally dedicate my future endeavors to making a difference for students from Prekindergarten to adult learner!

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Contributors

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CHAPTER I : LEADERSHIP CONTEXT AND PURPOSE OF THE ACTION

INTRODUCTION

According to the 2017 National Assessment for Educational Progress (NAEP), 60% of 4th grade students scored at or above a Basic Proficiency level in reading. Texas' results were 6th from the bottom of the list and several percentage points below the national average. A score at the Basic level implies that students are capable of simple inferencing tasks, finding the main idea when it is explicitly stated, which are much simpler tasks than the 4th grade Texas Essential Knowledge and Skills statements for English Language Arts and Reading required. These are just the most recent results from the NAEP, but the historical data reflects much the same for the past few decades (NAEP report retrieved August, 2019 from https://www.nationsreportcard.gov/profiles/stateprofile?chort=1&sub=RED&sj=AL&sfj=NP&st=MN&year=2017R3).

Historical Context

Forty years ago, Ron Edmonds, father of the effective schools movement pointed to the need for equity in education for all students (1979). Boykin and Noguera, more than 30 years later begged for the same recognition of the achievement gap. So, for many years, researchers have studied the effects of poverty, the government has tried to mandate a fix for the effects of poverty and other factors on school performance, and schools have worked to share the responsibility of breaking the harsh cycle set in motion

by poverty through providing students the needed emotional, behavioral and academic skills to help students move onward and upward in life. Researchers such as Hart and Risley's 1995 study documented the impact poverty can have on literacy. They found a more than 30-million-word gap as measured in prekindergarten children from poverty compared with those from professional families this is a daunting task. However, although environmental factors such as economic disadvantage can greatly impact many aspects of schooling, including reading, this is not always the case and even more important, it is an area that educators have no control.

Yet, there are other factors that collectively or individually receive the blame for reading difficulties. One area that can greatly impact reading ability is the way reading is taught. In fact, the lack of research-based instruction in foundational reading skills is one of the major causes of reading difficulties (Kilpatrick, 2018). Seidenberg (2017) states that the magnitude of a child's reading success or struggle is tied to how rapidly the child's need was identified and whether intervention is provided by a skilled professional. Focusing solely on students' low socioeconomic status which is something that schools cannot change detracts from an issue that can be changed and that research has shown to make an important impact, teacher effectiveness [in reading instruction]. Seidenberg (2017) stated that the lack of effectiveness is due to lack of preparation in structured literacy [during pre-service or in-service training].

The National Reading Panel reported on five essential components that constitute effective reading instruction which include the following: phonological awareness,

phonics, fluency, vocabulary and comprehension (National Institute of Child Health and Human Development, 2000). Yet, even after this revelation, educators continue to resist the science of reading. Why is that? Seidenberg (2017) concluded that the lack of educator literacy in seeking out scientific claims rather than what is claimed by vendors or uninformed and unskilled decision makers, combined with a strong belief in the validity of personal experiences, creates a vulnerability to wholeheartedly believe claims that are sound convincing but are actually lacking in any scientific truth. If educators do not know to look to peer reviewed journals for answers to reading woes, they may get lured into believing the best marketing schemes that publishers release. Furthermore, websites are not always the most reliable source for research-based information; so, if educators do not know how to access peer reviewed research on how to teach reading, they will be lured into believing the best marketing schemes that publishers release. For example, one of the biggest hoaxes in recent years occurred when a blurb dubbed as research was circulated around the internet. It contained "words" such as: Accordrnig to resarch at Cmabrigde Uinervtisy… This "research" was widely accepted by an unknowing public. Yet, there was no such research conducted at Cambridge University. The premise behind this "research" was that people read whole words, not sound by sound; so, only the first and last letters make a difference. This seems to make sense in words that our minds are used to filling in the blanks for such as these or curse words with an asterisk instead of a vowel. However, this is the kind of "research" that most people who are not scientists like to accept because it is interesting [and they do not

know enough to know better] (Seidenberg, 2017). Yet, Seidenberg (2017) concludes that the only certain way to obviate low literacy is prevention: successfully teaching children to read in the first place (p. 9). This type of instruction relies on scientifically validated reading instruction practices such as structured literacy.

Moats and Tolman (2009) point to a strong relationship between initial reading achievement and later reading achievement as very high. Therefore, in order to defy the prediction for those children who do not come as equipped to read as others (less oral language, lack of reading materials or role models at home), the literacy instruction provided must be informed and intensive to close the gaps. The danger is that children who do not read well, do not read often and those that do read well, read a lot which adds up over time and continues the downward spiral for a student that is behind. Moats and Tolman (2009) stated that a voracious reader may read up to 4 million words over a year's time, whereas a child who is a struggling reader may rarely read at all (p. 85). This is a disparity that reading science says there is an answer for if educators will only pay heed to during the critical period of instruction between prekindergarten through 2nd grade.

However, it takes more than knowing how to break the unproductive systems that are not producing what is desired in education. Educators at all levels must take action to put the right systems in place. Therefore, rather than turning to a new program to solve reading woes, district and campus administrators must become knowledgeable about effective reading instruction in order to make appropriate curricular choices rather than

be impacted by the political pressures put on educators by vendors who push ideas that are not research based and from other educators that do not possess the knowledge of reading science to make change a reality. University professors must also ensure that preservice teachers acquire the necessary skills to teach students using evidence-based literacy instruction (Duke and Block, 2012). In the meantime, children are receiving inadequate reading instruction and fail to develop as readers (Danielson, 2002). In 1979, Ron Edmonds made the following strong statement:

> We can, wherever and whenever we choose, successfully teach all children whose schooling is of interest to us. We already know more than we need to do that. Whether or not we do it must finally depend on how we feel about the fact that we haven't so far. (p. 23)

Situational Context

North Primary School (NPS) serves grades PK through 2nd grades and is situated in a small East Texas town with a population of approximately 4500. The total district student population is just over 1200, with 379 enrolled at North. This enrollment has fluctuated slightly over the past few years according to the Texas Academic Performance Reports (TAPR). In the 2017-18 school year the following data were reported: white - 54.2%, African American - 23%, Hispanic - 11.9%, and other - 10.9%; 205 males (54.09%); 174 females (45.91%); Special education students represent 13.23% of the student population. The economically disadvantaged percentage is 83.6%, and at-risk is 55.6%. The campus mobility rate is 21.9%. Additionally, there are 14 English Learners and 6 gifted and talented students. The professional staff is 89.7%

white, 96.6% female, with 48.3% having 0-5 years of experience and 10.3% having 6-10 years of experience. On average, the teacher/student ratio is 1:16 (Texas Academic Performance Report, retrieved from https://tea.texas.gov/perfreport/tapr/index.html, June, 2019). Furthermore, in 2018, the federal government required a new report be filed by districts called the Equity Report. This report showed that NPS was staffed by teachers with the least experience and served the most at risk students in the district.

Defining the Problem

In 2017-18 North School's end-of-year Texas Primary Reading Inventory (TPRI) scores indicated that first graders struggled due to a fluency rate being part of the criteria for earning a Developed score. Only 45.1% of first grade students met the fluency standards set by TPRI in order to meet the developed criterion. Additionally, the TPRI data from the previous three years were no better, which suggests that reading instructional issues on the campus have been present for a while.

In late April, 2015, a Response to Intervention (RtI) team from the University of Texas Meadows Center for Preventing Educational Risk visited NPS to observe reading instruction. The principal investigator (PI) of the team noted that teachers were using leveled texts rather than scientifically based approaches to teaching reading for both Tier 1 and intervention instruction. In May, 2015, the NPS principal followed up with the PI to gather input for texts prior to purchasing leveled libraries for the campus. The PI had recently conducted a thorough investigation of the validity of leveled texts and found that there is no research to support their use to increase academic achievement of any

students, either at risk or those on grade level (e-mail communication, October, 2017). However, in October, 2017, the principal stated that the previous reading interventionist worked with the campus teachers in the 2016-17 school year to choose a different reading curriculum and intervention resources from Teacher Pay Teacher, an online marketplace for educational resources (personal communication, October, 2017). All resources chosen were based on a balanced literacy framework. Also, in the fall of 2017, the Instructional Specialist for Elementary recommended that the superintendent purchase Learning A-Z for Kindergarten through 2nd grade teachers. This resource provides leveled readers for students and is therefore drawn from balanced literacy research.

The researcher was named principal of the campus in March, 2018 and began campus planning at that point. Moats and Tolman (2009) state that an instructional leader establishes goals and creates a context in which those goals can be achieved through mutual and reciprocal learning (p. 84).Therefore, in order to ameliorate the effects of years without research-based reading instruction, the following strategies were implemented: revise the master schedule to add specificity for reading instruction; find funding for professional development in structured literacy instruction; and give teachers support through ongoing feedback and modeling of research-based reading instruction, assessment, and data analysis. These strategies were intended to increase the accuracy in students' placement in RtI tiers. As the instructional leader on campus, the goal was to support the needed changes intended to make a positive difference in students' reading

achievement. Based on my experience as an administrator, the change process is unsettling for many; however, through the implementation of encouragement and accountability, I hoped to provide the structures needed to ensure more primary-aged students' reading success through improved teacher effectiveness.

Significance of the problem

The International Dyslexia Association (IDA) Knowledge and Practice Standards (2010) state that informed and effective classroom instruction, especially in the early grades, can prevent most reading problems from developing and ameliorate others (Background: Why these Standards are Necessary, para. 4). Therefore, my aim was to eliminate those processes and resources that are not research based, develop and implement a structure for reading instruction and intervention, and prepare teachers to provide these to students in order to increase reading achievement on the campus.

In the fall of 2017, when examining literacy issues at NPS, I learned that the new reading curriculum chosen by the reading interventionist for kindergarten through 2nd grade was purchased from Teacher Pay Teacher, and does not teach phonological awareness or phonics in an explicit, systematic, direct manner. The curriculum was in its second year of use in the fall of 2017. In my discussions with NPS kindergarten through 2nd grade teachers, they did not recognize the curriculum as a problem. They also lacked training in other state approved assessment programs they had access to using such as Renaissance Learning's STAR Reading and STAR Early Literacy assessments, and classroom instructional resources such as Accelerated Reader and Learning A-Zs.

According to the IDA's Educator Training Initiatives Brief for Structured Literacy (2019) even the most competent teacher cannot be successful in teaching reading...if provided with if provided with inadequate instructional contexts or inappropriate instructional materials (p. 2). Also, the principal reported that the teachers had not been trained to use the TEKS Resource System, the district's selected curriculum (personal communication, October, 2017).

Research Questions

1. Does student reading performance significantly increase after the implementation of a structured literacy approach?
2. Does teacher knowledge significantly increase after training in structured literacy, data analysis, goal setting with students, and response to intervention procedures?
3. Does teacher implementation of a structured literacy improve after accountability and continued feedback and training?

Personal Context - Researcher's Roles and Personal History

In December, 2009, after nine years as a successful classroom teacher, I graduated with a Master's degree in Educational Administration with the intent of becoming a school administrator the following year. During my last semester of coursework, I took a course called Research and Methods that according to my degree plan, I should have taken my first semester of graduate work. Yet, in the long run, the

timing was perfect. The research assignment that I chose to pursue in that course, altered my career trajectory. My professor challenged the class to find something within our workplace that was controversial or less than popular to investigate. Due to my desire to enter administration the following year, I was not excited about finding something amiss in the district. Nevertheless, I decided to investigate a reading program that was new to our campus, Direct Reading Instruction (DRI). As a 2nd grade teachers, I was trained to implement the program; yet I was not provided any historical background or research base regarding the program. I also had not been trained to look at the data; so at the end of the year, I really had no idea what, if any, impact the program had on my students. What I did know is that the rest of the 2nd grade team did not feel we needed a mandated to use since the campus had always boasted top reading scores. At this point, I had no real training in reading though, so all I had was their opinion that the program was not good.

The research assignment led me to read for the first time the now widely accepted fact that if we do not get students reading on grade level by the end of 3rd grade, they may never read on grade level. I was both intrigued and burdened by this.

I accepted an administrator role for the next school year and began a three year stint as next the Coordinator for Multilingual Education where I was immersed in all things bilingual and English as a Second Language (ESL). Six weeks into the job, I was informed that the Texas Education Agency (TEA) was coming to audit the programs due to great deficiencies found in English Learners' progress data. Over the next three years,

in working to improve these programs, I also continued to learn a lot about reading. My Region 8 Educational Service Center (ESC) contact, became a mentor for me in this area. I learned from him that learning to read is like climbing a staircase because there is a continuum of skills necessary to reach mastery. I also learned how to interpret and analyze Texas Primary Reading Inventory (TPRI) and Tejas LEE data due to his mentoring.

Due to this effective partnership with ESC contacts, I was offered a position at the service center that encompassed administering state and federal programs, serving as the Regional Testing Coordinator, and providing districts support as lead consultant for a new accountability system. During the year and a half that I worked there, I helped districts study their data and look for ways to make improvements, with the goal of helping them meet accountability requirements the following year. I always pointed districts back to their data in grades kindergarten through 2nd grade. I found most districts had not considered that the root of their students' reading problems might have begun much earlier than what was currently reported on the state assessment results in grades 3 and above.

When I left my job at the ESC, I moved back to the district I had worked for most of my career and took on the role of Academic Support Specialist, supporting two campuses that served the highest numbers of at risk students in the district. It was obvious according to state assessment data from kindergarten through 5th grade that students were struggling in all academic subjects and the main reason was the lack of

reading achievement. Therefore, I began to look for answers to systemic issues and not just quick fixes to ameliorate the issue. At this time, I also began my doctoral work and was pointed in the direction of the International Dyslexia Association's upcoming conference, the work of Dr. Louisa Moats and training from Neuhaus Education Center. I quickly engaged with all of the above by attending the IDA conference where I heard from Dr. Moats and then read many of her articles upon returning home. I also interviewed with Neuhaus Education Center and was accepted into the Certified Academic Language Therapist training program.

I began my structured literacy training with Neuhaus Education Center in the summer of 2016, and have tutored students with this curriculum over the last three years both inside and outside of a school setting. This background in structured literacy and all the positions I have had the last ten years that have built both my conviction to and my understanding of what is necessary for research-based reading instruction to occur.

Journey to the Problem

In the 2017-18 school year, I served the district as the Director of State and Federal Programs. Therefore, I was not directly responsible for curriculum choices on the NPS campus. However, in reviewing the Campus Improvement Plan for NPS, I noted data included for the Texas Primary Reading Inventory (TPRI) that concerned me. The percentage of students who scored Still Developing on the end of first grade state assessment was 67%. This was a much lower percentage than I had seen in my previous experience working on a campus that was 99% at risk students.

Upon discussing the data with my superintendent, she asked me to set a meeting with the campus principal to discuss the lack of reading proficiency. During that meeting, we discussed the current reading curriculum,, only to discover there was no research-based phonics program present. Therefore, my superintendent encouraged me to further investigate the literacy block, curricular options, and systems in place in regard to reading at NPS. The Elementary Instructional Specialist and I studied NPS' master schedule and observed in classrooms. I concluded that there was much misused time within the master schedule due to lengthy transitions and no systematic phonemic awareness for grades kindergarten through 1st grade nor phonics instruction for kindergarten through 2nd grade. Upon further investigation of the reading curriculum, I found that the phonics program did not provide for direct, systematic and explicit instruction.

During the 2017-18 school year, the new Instructional Specialist for Elementary Schools also brought in three new programs to help with reading deficits: Learning A-Z (a program that provides leveled readers online), STAR Reading (an online diagnostic reading assessment), and Accelerated Reader(AR) , a program that is used to motivate students to read more . However, no training was provided in how to use any of the new resources. Therefore, although there were more books checked out from the library to students that year due to the addition of AR goals and rewards, there was no use of STAR reading assessment data to drive instruction or intervention. Furthermore, the master schedule was not set to provide students with the best opportunity for learning

due to many transitions which took up more than an hour of each day. During observations, the Instructional Specialist for Elementary and I noted the lack of incorporation of effective reading components during the reading block. The instruction was driven strictly by the components found within the recently purchased reading curriculum.

Although, I did not have the authority or presence on the campus at that point to create follow through or a climate of accountability for change; I did make recommendations for teacher training in structured literacy. So, over the summer teachers participated in online LETRS training in the foundations of reading theory and also Neuhaus Education Center training in presenting phonics and phonemic awareness lessons.

The climate in the district grew very tense in spring, 2018 due to a misunderstanding between the superintendent and the primary principal which caused her to resign immediately in February, 2018. The situation was in the news and the community was concerned about what was happening. In March, 2018, the superintendent approached me about taking over as principal for the 2018-19 school year. Knowing the immediate struggles of the campus matched my skill set, I gladly accepted the challenge.

I officially began in the role in July. As my first task as principal, in July, 2018, I drafted a more efficient master schedule to support structured literacy instruction that included a daily planning period so teachers could collaboratively plan instruction that

meets the rigor of the Texas Essential Knowledge and Skills (TEKS). Also, during summer 2018 discussions with the Instructional Specialist for Elementary, I discovered an extremely fragmented Response to Intervention (RtI) process had been used in 2017-18. During that year, teachers provided any intervention of their choosing during the appointed RtI time in the schedule. A different teacher (the dyslexia specialist on campus) progress monitored students on skills that were not tied to classroom instruction, and the assistant principal input the data. In the 2017-18 school year there was also no system for enrichment for students who were already performing on grade level. Therefore, the Instructional Specialist for Elementary and I worked to incorporate a more effective RtI process into our plan for improving students' reading success which included allowing those already at grade level to receive enrichment.

Furthermore, due to my position as Director of State and Federal Programs in 2017-18, I was charged with overseeing the decisions for how the district spent federal funding; and since the data pointed to a lack in reading achievement, I recommended we look for resources to support research-based phonological awareness and phonics instruction and provide teachers with the training to implement these. In April, 2018 the district administrators elected to provide Language Essentials for Teachers of Reading and Spelling (LETRS) training to all prekindergarten through 2nd grade teachers and all other 3rd through middle school teachers that teach reading directly. LETRS is "professional development for educators responsible for improving K-12 instruction in reading, writing and spelling" (Moats and Tolman, 2009, p. 1). The district committee

also chose to fund training in Neuhaus Education Center's Language Enrichment curriculum for teachers who would be teaching summer school in 2018 and training in Neuhaus' Reading Readiness and Automatic and Accurate Reading for all other Kindergarten through 2nd grade teachers in August, 2018.

Significant stakeholders

As campus principal and instructional leader of the campus, I served as the director of the changes for the 2018-2019 school year. I designed and created the structures for change, and also held staff members accountable for change. I trained staff members in the Response to Intervention protocol for the campus and in the retrieval and use of data for STAR Renaissance reports, led data meetings, tested all 1st grade students on the TPRI and completed 2 walkthroughs per teacher in classrooms utilizing Neuhaus curriculum.

The reading interventionist was also a significant stakeholder in this study. She served as the coordinator for Response to Intervention (RtI) for the campus. She and I worked together to design a streamlined process for RtI and she trained teachers to access and use assessment resources such as STAR Renaissance, TANGO (data management system that houses and creates data reports for TPRI) and Fast ForWord, an online reading intervention resource. She also worked with the librarian to design expectations for the Accelerated Reader program and set rewards in place for students to earn each nine week grading period. This program served to keep students motivated about reading growth throughout the year. Lastly, the reading interventionist assessed all

2nd grade students with the TPRI, any students she served with STAR Renaissance assessments, and attended the grade level data meetings that followed testing to provide input on changes in RtI placement for students.

The Instructional Specialist for Elementary Education is also an important stakeholder in the change process involved with this study. She and I worked together to design the master schedule for the campus and the new planning time in the schedule daily (each teacher had both a conference period and a collaborative planning period). She conducted limited walkthroughs on the campus, and provided both training and accountability for teachers.

The superintendent was an integral part of the project as well. I met with him several times throughout the course of the study and updated him on the reading progress on the campus.

The 1st and 2nd grade teachers were integral to the project. They implemented the new curriculum and worked with me during the year to adjust grouping of students and presentation of the curriculum components to best meet the requirements of the Texas Essential Knowledge and Skills (TEKS). Together, we tracked the progress of their students, and moved students through RtI tiers and into enrichment opportunities.

Definitions

The following terms will be utilized within the study. A mutual understanding of these will enable greater understanding of the project.

Alphabetic principle

Readers have mastered the alphabetic principle when they can recognize that individual letters (graphemes) represent sounds (phonemes) which combine to form words.

Balanced Literacy

The most commonly used definition of the concept of balanced literacy and the components assigned to it is based on Reutzel's observation of the components of the New Zealand reading program of the 1980s and 1990s. He named the components as the following: reading aloud, language experience, shared reading, guided reading, interactive writing, independent writing and independent reading. However, The University of Texas' Building Capacity for RtI group cites Pressley and colleagues' 2002 definition to name the following components of balanced literacy as follows: phonemic awareness and the alphabetic principle, word recognition instruction, vocabulary teaching, comprehension strategies, activation of prior knowledge, instruction in the writing process, and motivating students to read and write.

Data meeting

Data meetings were utilized as a time for teachers and administrators to meet together to discuss the results of recent assessments to make decisions for student placement in Response to Intervention tiers or make referral decisions.

Diagnostic assessment

A screening measure to let educators know where a student performs at a certain point in instruction and provides data regarding strengths and weaknesses. This type of assessment is not tied to the curriculum employed, but just assesses how a child performs as compared to grade level skills.

Explicit

To be explicit, a teacher must directly model skills and provide practices using the skill in order for a student to master a concept rather than providing incidental exposure while reading (retrieved from IDA website, June, 2019).

Literacy block

The literacy block refers to the amount of time allotted in the master schedule to provide reading instruction.

Morphology

As students learn the meanings of base words and affixes, they can more easily decipher word meanings which undergirds comprehension (retrieved from IDA website, June, 2019).

Phonemic awareness

The awareness of individual speech sounds and the ability to manipulate those sounds to create different words (Moats and Tolman, 2019).

Phonics instruction

Phonics instruction includes the mapping of letter sounds to print, or in other words, the teaching of the alphabetic principle.

Phonological awareness

Phonological awareness is an umbrella term that includes an acute awareness of and ability to manipulate all types of speech sounds including onset-rime, rhyme, syllables, word boundaries and phonemes. Phonemic awareness is part of phonological awareness (Moats and Tolman, 2019).

Progress monitoring

Progress monitoring is a means of assessing whether an intervention is causing needed results. It is a regularly scheduled brief assessment that tracks progress toward a specific goal (Moats and Tolman, 2019).

Structured Literacy

Structured literacy is logically sequenced, systematic and explicit instruction that emphasizes the structure of language. This type of instruction utilizes multisensory methods which are both diagnostic and cumulative in nature (retrieved from IDA website, June, 2019).

Six syllable types

Sorting words or parts of words by the six syllable types provides students with the means to associate vowel spellings with vowel sounds which supports the decoding of unfamiliar words.

Sound-symbol association

Students who have developed phonemic awareness, move into learning to map phonemes (sounds) to letters (graphemes). When students are able to map letters to sounds, this is referred to as sound-symbol association.

Systematic

Systematic instruction occurs when prerequisite instruction is sequentially taught prior to more advanced concepts (retrieved from IDA website, June, 2019).

Whole language

In the whole language approach to reading instruction, a more naturalistic belief to reading instruction is employed. A belief that word study should occur naturally during text reading and that children will learn to read through exploration of a large quantity of literature. The purpose and emphasis of reading and writing activities is on meaning rather than direct and systematic instruction in phonics (Moats, 2007).

Closing Thoughts on Chapter 1

Research has advanced the type of reading instruction that makes a positive difference for students; much resistance from all educational stakeholders still exists. It is perplexing that the evidence is not enough to create a tidal wave of change. However, the following quotation from the Neuhaus Education Center website is what motivated this study. It states, "Reading opens doors. The absence of proficient reading is not only a closed door, but signifies failure… The inability to read erodes hope and diminishes

human potential" (Teachers Make the Difference. [Video file]. Retrieved from http://library.neuhaus.org/webinars/teachersmake-difference).

CHAPTER II

REVIEW OF SUPPORTING SCHOLARSHIP

Significance of Reading

The National Assessment for Educational Progress (NAEP) results have shown for decades that the majority of 4th grade students in the United States perform at a Basic or Below Basic level with a slim number performing at the Advanced level. In 1992 when no accommodations were allowed on the NAEP reading test, 60% of 4th graders scored at or above Basic, and now, with accommodations, the 2017 results revealed 68% scored at or above Basic. In other words, even though students are receiving support during the test, the overall results have not changed significantly over the last 28 years. The results go on to show that 83% of students from low income families and 85% of low income students that attend schools with high poverty scored below proficient in reading. Thus, only about 16% of students from poor or minority homes are proficient readers (Feister, 2010, p. 7; Moats, 2007, p. 11). Juel (1988) stated that children who struggle with reading in 1st grade show a tendency to continue to struggle as 4th graders. Although the picture painted by these statistics is bleak; Moats (1999) stated that if students at risk for reading failure are identified early and provided appropriate instruction, all but 5% of the most severe reading disabilities could be ameliorated. In other words, knowledgeable teachers are the most influential factor for reading success; and, the strongest results are achieved in the window between Kindergarten and 2nd grade (Teachers make the Difference. [Video file]). Therefore,

rather than turning to a new program to solve reading woes, principals and university professors must ensure that teachers acquire the necessary skills to effectively teach literacy to children (Duke and Block, 2012).

Historical Background

Seidenberg (2017) noted that James McKeen Cattell began to study the reading process as ear1y as 1890. Then, during the early 1900s, literacy instruction progressed beyond signing with an "x" to include recitation and memory work; yet the availability was restricted to the privileged class. However, in 1964, due to the lack of Americans that were able to pass the entrance test to join the military, President Lyndon B. Johnson called for a War on Poverty, and as a result he supported the development of the Head Start program and also commissioned a study that researched the best practices in reading instruction. Yet, a subsequent report by the Annie E. Casey Foundation in 2010 revealed that 75% of Americans cannot join the military in large part due to a lack of education which shows how very little progress has occurred (Annie E. Casey Foundation, p. 5).

Education reform continued as a politically popular issue with presidents and governors alike. In 2000, George Bush's campaign slogan was No Child Left Behind (NCLB), which resulted in legislation by the same name. The purpose of the NCLB legislation was to impact students living in poverty and serve as a mandate for states to develop a timeline that allows for 100% of students to reach reading and math proficiency by the 2013-14 school year (Ravitch, 2010). NCLB was a radical break

from the traditionally accepted idea that the relationship between race and intelligence was unchangeable (Boykin and Noguera, 2011).

Reading Wars

Within this same time frame (1980-2019) a war between two reading philosophies waged which has created continuous confusion about which reading approach is most successful for students. The two approaches at the forefront of the debate are a skills based phonics approach and the whole language approach. Those supporting each approach have debated the pros and cons between the whole language belief that reading is a natural process that should be engulfed in rich, authentic literature versus a phonics-based curriculum without much hope of reaching agreement (National Institute of Child Health and Human Development, 2000; Moats, 2007). In the past few decades as the Reading Wars have waged, there have been several attempts at a truce which have included (1) combining the approaches into what is known as balanced literacy, (2) misunderstandings on both sides as to the purposes and intent of the other side of the argument, and finally, (3) research based claims by both sides that their way of teaching reading is superior to the other (Hessler and Morrison, 2016). The main crux of the issue is that the focal points of education and science are vastly different. Education pushes for literacy and focuses on the practices that make someone literate such as studying the different types of literature and our cultural attitudes toward literacy; whereas, science focuses on research based methodologies that enable all but a few students to master reading (Seidenberg, 2017, p. 10).

Lack of Teacher Preparation to Teach Reading Investigated

Dr. Louisa Moats published the seminal study in 1994 that prompted a new way to investigate reading failure. She questioned teacher skill level and how we might improve that in order to improve reading outcomes for students. This study became the first of several that would look into the depths of this issue and how to correct it. Moats (2009) stated that

> responsive and adaptive teachers decide, often several times per minute, how to correct student errors, how to explain concepts, and what examples to invoke. The structure of a core, comprehensive program may be very helpful for novice teachers and for promotion of cross-classroom consistency, but it cannot replace the analytical thinking of a teacher who understands how and why her students are responding to instruction (p. 383).

Therefore, if research showed that teachers were underprepared to effectively navigate the aforementioned activities, then reading failure could result.

Moats 1994 study specifically concluded that many graduate students are not well prepared to provide effective reading instruction. She pointed out that teachers cannot be prepared to teach the vast amount of diverse students with 0 to 12 hours of reading required in undergraduate coursework (p. 85). Additionally, Bos and colleagues (2001) surveyed both in-service and preservice teachers and found that 53% of teacher candidates and 60% of in-service teachers lacked important skills regarding the structure of language. In great part, this lack of knowledge to teach reading can be blamed for the lack of uniform standards for teacher certification in the United States. As part of the Every Child Succeeds Act, the federal government pushed the responsibility for

developing these standards back to each state to create and enact which did not help with uniformity of certification.

Moats (2014) referred to herself, as unconsciously unskilled even though she was armed with a master's degree and a Reading Specialist certification. She did not truly understand the need for systematic, explicit training until she sought her doctoral degree. How could that have happened? The answer goes back to the research stating that 60% of students come to school "wired" for reading regardless of the instructional program presented. So, teachers can become overconfident [while unskilled] and feel they are successful; whereas, it is really that the child has a predisposition to learn (p. 2).

Additionally, research done by the National Council on Teacher Quality stated that after reviewing over 1000 undergraduate teacher training programs, only 29% required coursework pertaining to 4 or 5 of the essential components of reading instruction identified by the National Reading Panel Report and 59% address two or fewer of the components within their programs of instruction (Moats, 2014).

2000 National Reading Panel Report

After six years of NAEP data that placed 38-40% of 4th graders Below Basic proficiency in reading, Congress convened a panel to study reading research and reading instruction to definitively solve the reading woes. As a result, the National Institute of Child Health and Human Development released the National Reading Panel (NRP) report in 2000 which provided landmark evidence that identified the following five

components as essential to quality reading instruction: phonemic awareness, phonics, fluency, text comprehension strategies and vocabulary instruction.

Phonemic Awareness

Phonemic awareness as noted by Moats (1994) is an early predictor of reading mastery during early schooling and is also the area where many readers struggle. Although there are 26 letters in the English language, there are 44 different speech sounds represented by letters and letter combinations. Phonemic awareness is an auditory skill which refers to the ability to focus on and manipulate the sounds within spoken language. Research from the 1970s through the 1990s found that intervention in the area of manipulation of phonemes, especially when the practice was linked to letters, allowed students who lacked these skills to overcome the early signs of reading failure (Moats and Foorman, 2008).

Phonics

Phonics, allows students to map sounds to letters and letter combinations is a visual process which follows the mastery of phonemic awareness and was identified by the NRP as another component of effective reading instruction. The NRP report stated that phonics instruction needs to be systematic, sequential and explicit. Phonics skills must then be spiraled continuously in order to move them to automaticity using decodable texts (National Institute of Child Health and Human Development, 2000).

Fluency

Fluency is a third component of effective reading instruction identified by the National Reading Panel's Report (2000). Reading fluency refers to those who can read with speed and accuracy which depend on many related subskills that develop over time (Birsch, 2018). As such, fluency extends to recognizing and using punctuation effectively and knowing where to place emphasis when reading. Developing fluency requires much dedicated practice to reach the automaticity needed in order to allow word retrieval not to slow cognitive resources that should instead be used for comprehension (National Institute of Child Health and Human Development, 2000).

Comprehension

Reading comprehension is another component of effective reading instruction identified by the National Reading Panel Report. Comprehension is intentional thinking during which meaning is constructed through interactions between text and reader. The National Reading Panel Report pointed out several research based strategies that were proven to increase comprehension for students: (1) monitoring comprehension while reading, (2) utilizing cooperative learning, (3) using graphic or semantic organizers to visually display text details, (4) visually mapping story structure and sequence, (5) generating questions about the text during the reading, (6) summarizing text, or (7) combining any of the aforementioned strategies.

Vocabulary

The final component of the National Reading Panel Report is vocabulary. Unless a word is in a student's working vocabulary, comprehension will break down while

reading, even if a student can decode well (National Institute of Child Health and Human Development). Beck and McKeown (1985) pointed to three different tiers of vocabulary words. Tier one is comprised of basic words which students rarely need additional instruction in order to acquire. The third tier are very context specific and technical, and not very utilitarian for students. Tier two words however, occur with more frequency and are useful in multiple subject areas (Beck, McKeown, and Kucan, 2002). Therefore, the teaching of Tier 2 words would greatly impact comprehension.

Emergence of Balanced Literacy and Guided Reading

Although the National Reading Report was a very thorough synthesis of research, it left some areas too vague to squelch the debate between whole language and phonics. Therefore, although the term whole language is rarely used anymore, it has been replaced with terms such as leveled literacy, guided reading and balanced literacy. So, those making decisions at the district and campus level that do not have a deep knowledge of reading pedagogy can easily be misled by curriculum developers that simply mention the Reading Panel's recommendations (Moats, 2007). The educational establishment has worked diligently to diffuse the controversy by encouraging the inclusion of phonics without noting specifically how instructional practices should change. Whole language proponents approach to reading includes the following: skip the word that is unrecognizable, guess the word, or as a last resort, sound it out (Seidenberg, 2017). One popular strategy used by whole language enthusiasts is the three-cueing theory. Seidenberg (2017) stated that:

> the 3-cueing theory is the product of teachers with little knowledge of the science of reading working with large numbers of like-minded people, under the influence of a few authorities, constructing accounts of how reading works...It didn't develop because teachers lack integrity, commitment, motivation, sincerity, or intelligence. It developed because they were poorly trained and advised. They didn't know the relevant science or had been convinced it was irrelevant. (p. 304)

Likewise, Denton and colleagues (2014) stated that though there is much research supporting explicit instruction as a means to accelerate struggling readers' progress, Guided Reading is one of the most widely used approaches. Guided Reading, a whole language approach, in effect deemphasizes instruction in phonics in favor of providing more time for students to read and has rare backing in empirical research.

Research on Structured Literacy. The 2014 study by Denton and colleagues concluded that direct instruction (structured literacy) has a significantly greater impact on student success than guided reading. Structured literacy relies on explicit, direct and sequential teaching of literacy skills and emphasizes each of the five components approved by the National Reading Panel. (Denton et al, 2014). Torgeson (2004) stated that explicit instruction…does not leave anything to chance… [or assume] that children will acquire [reading proficiency] on their own (p. 363).

Culture of Education

In reviewing the National Research Council's seminal report Preventing Reading Difficulties in Young Children, Duke and Block (2012) named three obstacles that keep the National Reading Panel's report from making a wider impact: (1) a short-term orientation for gaining results; (2) lack of teacher knowledge; and (3) limited time in the

school day/year to meet the increasingly high demands (p. 55). However, Seidenberg (2017) added the culture of education to the possible problems with lack of improved outcomes in reading. He noted that the lack of teacher skill in reading instruction causes stilted beliefs and attitudes about how children learn and pointed to that as the greatest obstacle to narrowing the persistent gaps in reading proficiency. Seidenberg stated that a look at science reveals that the methods commonly used to teach children are inconsistent with basic facts about human cognition and development and so make many children at risk for reading failure (p. 9). Jal Mehta and Joe Doctor (2013) recommended a complete overhaul in the path to teacher certification which would include a board exam similar to that found in medicine or engineering. They felt this would improve the public perception of the teacher's role and skill set, and hopefully impact student results. The International Dyslexia Association and the Center for Effective Reading Instruction have worked to do just as Jal Mehta recommended (Moats, 2014). The KPEERI exam is optional but now available for educators to take in order to gain certification as a Certified Structured Literacy Teacher (https://effectivereading.org/ceri-certifications/). However, with the passage of House Bill 3 in 2019, a mandated Science of Teaching Reading exam will be mandated in the near future as an addendum to many levels of teacher certification from early childhood through middle school. So, at this point, the best recourse for providing students with the most effective reading instruction is for campus and district administrators to increase their knowledge of structured literacy so

they will know how to ensure it is provided to all students during the optimal window between kindergarten and 3rd grade.

Professional Development for Inservice Teachers

Washburn and colleagues (2010) noted that professional development that provides training in basic language constructs related to word structure reaps great rewards for students' reading achievement for both in-service and preservice teacher groups. The National Reading Panel Report also stated that in-service professional development leads to improvement of teacher knowledge and practices and as a result, has increased student achievement in reading (National Institute of Child Health and Human Development, 2000).

Concannon-Gibney & Murphy (2012) stated that professional development (PD) that is the most effective for educators originates from a vision that is shared by all campus staff and is customized for the particular setting rather than a one size fits all. When teachers are provided support throughout the training initiative, the impact on student achievement in reading is enhanced. Furthermore, when administrators revisit the ideas presented in the initial training and provide feedback to teachers after they have had the opportunity to try out new strategies in their classrooms, the results for students increase.

Washburn and colleagues (2010) further described successful professional development for in-service teachers as ongoing and job-embedded (p. 24). Moats and Foorman (2008) noted that in the District of Columbia, professional development agenda

is planned to last over the course of several years. The teachers begin with a summer workshop that cements the foundation of reading. This is followed by several courses offered for credit each school year. Feedback to teachers from observations during the year also supports the learning trajectory.

There are endless options for ensuring the knowledge base is present for preservice and in-service teachers. The critical factor is that district and university leadership see it as a priority in eradicating reading failure. Moats (2008) relays a comment made by a teacher attended her LETRS training. He stated, "If someone had taught me how to do this, I would not have lost all those children who were passed on without the ability to read." (Meet the Experts: Dr. Louisa Moats, 2008. [Video file]. Furthermore, Moats and Foorman (2008) interviewed 50 kindergarten through fourth grade teachers who had participated in a two-year professional development project in order to gain their impressions at the conclusion of the work. 49 out of 50 rated the training as positive to extremely positive. Many teachers who attended the training noted that due to being better prepared, they now succeed in reaching children who are likely to fail at reading that they might not have reached before the training.

Teachers want to go forth prepared, and believe they are doing so as they graduate from undergraduate programs certified and ready to teach. Yet, a teacher does not know what he or she does not know. However, research done by Binks-Cantrell and colleagues (2012) provides evidence that student achievement does improve as a result

of teaching from knowledgeable professionals that have participated in professional development to increase knowledge of effective reading instruction .

Response to Intervention

Mellard (2017) defines Response to Intervention (RtI) as a prevention-oriented, multi-tiered organizational framework that integrates timely assessments and data-based decision-making with research-based interventions to support students' learning, achievement and positive behavior (p. 11). In the model used in Texas, RtI contains three tiers referred to as Tier 1, Tier 2, and Tier 3. The goal of all the tiers is to close the gap between students on track academically and those below grade level. Tier 1 is the level of foundational instruction based on grade level standards. In Texas, grade level instruction is based on the Texas Knowledge and Skills (TEKS). As long as the content matches the rigor intended by the standard during instruction, Tier 1 will suffice for 70-80% of students in the classroom.

As the data show that students have greater needs, they are referred to services in Tier 2 or Tier 3 (deepest level of intervention). Tier 2 is supplemental, small group instruction aimed to close any gaps for students who are minimally at risk for failure. Between 15-30% of students tend to need Tier 2 instruction. Finally, Tier 3 is reserved for students who are at greatest risk for failure; therefore, intensive intervention is provided to these students in a very small group setting of no more than 3 students. Only 5-15% of a student population usually need Tier 3 services (University of Texas, 2005). If a greater percentage of students is being served in Tiers 2 and 3, then the Tier 1

instruction may not be rigorous enough to support learning of the grade level standards. Danielson (2002) stated that permanent tracking harms all but the top students; however, the flexible grouping provided through RtI allows for students to receive just in time help on particular topics guided by data (p. 46). She went on to say that grouping and regrouping "sends the message that failure is not tolerated and progress is expected" (p. 101).

In 2004, with the reauthorization of the Individuals with Disabilities Education Act (IDEA), schools gained the ability to redirect some funding for special education into programs that provide prevention rather than the wait to fail model of intervention/referral that had been in place.. Therefore, RtI has received more attention, and as Ogonosky (2018) [points out there has been a major shift in the responsibility for struggling learners from the special education classroom to the general education classroom; therefore, teachers need to be more prepared than ever to differentiate learning based on data of student need (p. 5). The Elementary and Secondary Education Act as well as the Individuals with Disabilities Education Act require RtI to act as a problem solving approach where intervention takes place early rather than waiting for a student to fail. Ogonosky (2018) named the following components as important to include in an RtI framework: research based interventions, regular progress monitoring, and decisions for student tier placement based data.

In 2017, Senate Bill 1153 brought more mandates to RtI processes including parent notification of students that are serviced RtI and regular updates regarding their

progress in interventions. The University of Texas' Building Capacity for RtI research initiative produces many resources on the topic. In the video entitled Understanding RtI, Dr. Sharon Vaughan states that students should be provided the best education possible; and then depending on their response to this, more intensive intervention is provided. That is the crux of response to intervention.

Recent Work in the Field

In addition to the recent mandates and guidance in RtI requirements, there have been other occurrences that affect the state of reading instruction.

Dyslexia

The Research Excellence and Advancements for Dyslexia Act became law on February 18, 2016 which was followed by an update to the Dyslexia Handbook in 2018 which reflects the new mandates. Due to the most recent revision, clarifications for identification and assessment were specified. For example, during the 2017-18 there was an additional mandate that district's chosen assessment instrument for Kindergarten through 2nd graders contain appropriate measures that would serve to pre-screen for dyslexia. Furthermore, in 2018-19, administrators received more extensive guidance on parent rights, and testing companies such adapted to include the specific measures for dyslexia testing. The 2018 Dyslexia Handbook also gave timetable mandates for reviewing Kindergarten and 1st grade students screening measures to ensure that students received further testing as indicated and early intervention.

New English Language Arts Texas Essential Knowledge and Skills

Another recent change is the redesign of the English Language Arts Texas Essential Knowledge and Skills which will go into effect in the 2019-20 school year (TEA website). According to the newly released standards, phonics instruction is required from Kindergarten through 5th grade. There is also a renewed focus on silent sustained reading and oral language (personal communication with Callie Fortenberry, ELAR consultant for Region 8 Educational Service Center, April 9, 2019).

IDA Knowledge and Practice Standards and University Accreditation

Dr. Louisa Moats along with other reading experts such as Suzanne Carreker, Rosalie Davis, Phyllis Meisel, Louise Spear-Swerling, and Barbara Wilson worked together to compile the IDA Knowledge and Practice Standards there were adopted by the IDA Board of Directors in the fall of 2010. These standards were revised in 2018 to reflect the most recent legislation and research. As stated in a fact sheet on the IDA website, "the standards provide a research based framework that articulates what all reading teachers and specialists should know and be able to demonstrate to teach reading successfully to all students (IDA website, retrieved June, 2019).

Furthermore, at this point, 28 university programs have been accredited through IDA's evaluation process. The IDA has a well-defined process in place on their website and plan to continue in this valuable work (IDA website, retrieved June, 2019).

Center for Effective Reading Instruction

There are certifications available through the Center for Effective Reading Instruction (CERI) for individuals trained in structured literacy and also for those prepared as dyslexia therapists or specialists. The programs offered at accredited universities lead naturally to these certifications (retrieved from the IDA website, June, 2019).

Alignment with Action Research Traditions

The action research tradition this most closely aligns with is Action Science. Anderson, Herr, and Nihlen (2007) quote Haberman's theory of communication that focuses on discussion of the situation based on theory, fact and problem solving. I want to take a deep look at what is currently occurring with providing accommodations to primary students at two campuses, discuss the acquired data with principals and testing coordinators, provide training on accommodations, follow up as needed due to misunderstandings, provide resources, and note the collective effect this has on the accommodations provided to students on these campuses. Therefore, I feel through the use of discussion and action, I will affect the outcome and positively change the status quo to a more appropriate reading instruction that provides accommodations to all students

Conceptual Framework

The conceptual framework for the study was a cycle recognizing that change takes time, and the steps will continue to repeat themselves throughout the improvement

process. Therefore, the first step is teacher training both in structured literacy. Then, in the process of providing baseline assessment opportunities for students, I will model best practices for using the STAR Renaissance assessments and reports with students. Teachers will then group students using the data (support provided) and will implement structured literacy in the classroom in small groups. I will provide support, feedback and further training and resources during this time. Then, students will be monitored and regrouped as needed through progress monitoring and data meetings. Then, the cycle will begin again after evaluating the results and planning for improvements.

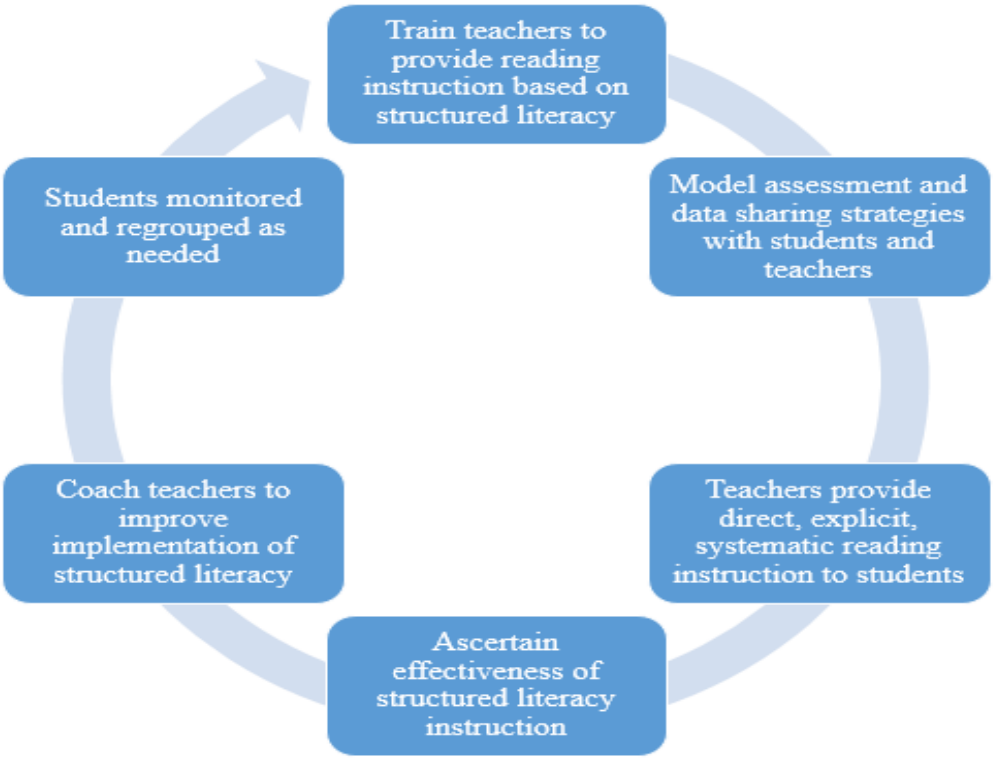

Figure 1. Conceptual model of research study.

Most Significant Research and Practice Studies

In 1938, Chester Bennett's An Inquiry into the Genesis of Poor Reading aimed to turn the tide to early identification of students with reading difficulties. However, that report was quickly dismissed. Yet, when Katrina deHirsch and Jeannette Jansky released Preventing Reading Failure: Prediction, Diagnosis, Intervention in 1972 which chronicled the study of 400 kindergarten students, the research community began to take note (Shanahan, 2018). Today, there continues to be a mandate to assess students in Kindergarten through 2nd with a beginning, middle and end of year assessments selected from the 2014-2018 Commissioner's List of Reading Instruments-Grades 1 and 2 released by the Texas Education Agency (retrieved from https://tea.texas.gov/About_TEA/News_and_Multimedia/Correspondence/TAA_Letters/Subject__2014-2018_Commissioner_s_List_of_Reading_Instruments%E2%80%94Grades_1_and_2/, June, 2019). The TPRI is on that list, and contains an initial screener that points out those who may struggle with reading instruction in an effort to intervene quickly. This effort intensified this year with the passage of House Bill 1886. This bill mandated early screening for dyslexia be coupled with these annual assessments. Students in 1st grade are screened at middle of year assessments and students in kindergarten receive an extra screening measure at the end of the year. Both screenings allow districts to make more informed decisions about which students to screen for dyslexia services. Although both measures of screening may lead to false positives or false negatives in students, it is a

step in the right direction which allows educators to proceed with reasoned precaution in order to identify those who may have reading difficulties because earlier (Poulsen, 2018).

Denton and colleagues (2014) compared the effects of guided reading instruction with structured literacy instruction provided powerful findings. This study concurred with many other researchers that state that direct, systematic and explicit instruction provides higher results in the area of decoding than did a guided reading approach. Yet, the more surprising conclusion was that this same approach increased the results for students in the area of comprehension as well.

Lastly, Dr. Louisa Moats' landmark study in 1994 about teachers' lack of knowledge to teach reading opened the way for more than 25 years of research that has followed on this very important topic. In her humility, Moats explained that even though she was certified as a Reading Specialist, her deficit of knowledge regarding research-based reading instruction persisted until she earned her doctorate from Harvard and learned more about reading science. Moats 2014 article, "What Teachers Don't Know and Why They Aren't Learning it: Addressing the Need for Content and Pedagogy in Teacher Education" chronicled the beginnings of the International Dyslexia Association's Knowledge and Practice Standards for Teachers of Reading , and ensuing processes for redesigning teacher certification and university accreditation in the area of structured literacy.

Closing Thoughts on Chapter 2

Snow, Barnes, Chandler, Goodman and Hemphill (1991) conducted their landmark study almost 30 years ago, and much research since that point has supported their conclusion that poverty cannot be blamed for students' reading failure. Their study followed students for two years and graded teachers as low, intermediate and high functioning when it came to providing reading instruction that produced students that achieved at grade level or above. They found that even in the face of dire home situations, that the impact of a high functioning teacher for two consecutive years could close the achievement gap. So, district and campus administrators, as well as university professors, have the responsibility for ensuring that all students are taught by teachers who are well-prepared to teach reading.

CHAPTER III

METHODOLOGY AND DATA SOURCES

Introduction to Methodology Used

Prior to beginning this study, I read a good deal about school improvement efforts. Bambrick-Santoyo (2018) describes one model of leadership as See it. Name it. Do it. He goes on to describe this as a way to "See," or look for a model of success. Next, the "Name it" portion refers to planning the concrete steps to make the model a reality. Lastly, the "Do it" step refers to putting the plan into motion. Figure 2 below is the Name it portion of this study.

Research Question	Intervention	Data Sources
1. Does student reading performance significantly increase due to the implementation of a structured literacy approach?	Neuhaus curriculum implemented in 1st and 2nd grades in Tiers 1-3; Data meetings held after diagnostic testing and progress monitoring to adjust groups in each tier as appropriate	Texas Primary Reading Inventory (TPRI); STAR Early Literacy; STAR Renaissance Reading
2. Does teacher knowledge significantly increase due to training in structured literacy, data analysis, goal setting with students, and response to intervention procedures?	Observations each semester during Neuhaus block; Feedback provided individually and in small groups; Modeled lessons; Plan Neuhaus lessons with teachers weekly	Observation notes; Agenda from small group meetings; Feedback conversations with teachers; Survey data from pre- and post-implementation
3. Does teacher implementation of structured literacy improve due to accountability and continued feedback and training?	Observations/walkthroughs; Periodic trainings/feedback meetings – individual and small group; Modeled lessons; Develop pacing calendar	Needs survey; Observation data; Feedback conversations

Figure 2. Overview of research questions, interventions, data sources used.

Investigation of Evidence-Based Phonics Programs

In the fall of 2017, the superintendent charged me with looking for research-based options for structured literacy instruction for the primary campus as represented in Figure 3. Upon discussing the options with all district administrators, we came up with Neuhaus Education Center training and online training LETRS training as our top

choices and planned the training for May and August, 2018. The framework for this study begins shortly after the initial training occurred in May, 2018.

Evidence-Based Phonics Programs				
Company	**Training Required**	**Cost**	**Pros**	**Cons**
Sopris Learning - LETRS modules	blended online with one day face to face	$17,000 + $6,000	online learning can be completed over the summer with the one day follow up to cement knowledge	requires teachers to learn over the summer
Saxon	1 day	$14,000	Take home readers; multi modal; research based; continuous spiraling of concepts	Must purchase the consumable curriculum yearly; just phonics PD
Neuhaus	3 days; train in only Automatic Decoding and Oral Language	$2500.00 (for 11 teachers)	Take home readers; multi modal; research based; continuous spiraling of concepts; Neuhaus will plan a full scale literacy initiative; grant opportunity	Must make copies
Neuhaus	5 days; training in Language Enrichment	$12,200.00	Full 45 minute segment of literacy block; training provides teachers a strong foundation in reading; research based	Must make copies
Success for All	5 days full literacy training	$30,000	Full literacy block	

Figure 3. Comparison of different phonics programs

Proposed Solution

The proposed solution to the low levels of reading success at NPS contained several main components as follows: restructuring the master schedule to make the most of instructional opportunities, altering the way that students were tested and placed/monitored in Tiers in Response to Intervention for reading, and providing a evidence based structured literacy curriculum that taught phonics in a direct and systematic manner.

Master Schedule

The summer of 2018 was devoted to creating a more effective Master Schedule for the campus (see Figure 4 below).

PK4	**7:50-8:00**	**8:00-10:00**	**10-10:3(**	**10:30-11:10**	**11:10- 11:15**	**11:15-12:45**	**12:55-1:25**	**1:20-1:40**	**1:40-2:00**	**2:00-3:20**	
	Lunch count and NPS news	Learning Time and Stations	Recess	Lunch and RR	Transition	Nap (and teacher conference/ lunch for paras)	Specials	snack	PE Recess	closing instruction and pack up	
Kinder	**7:50-8:00**	**8:00-9:30**	**9:30-10:30**		**10:30- 11:15**	**11:15-11:55**	**12:00-1:00**	**1:00-1:15**	**1:20-1:40**	**1:45-2:45**	**2:45-3:20**
	Lunch count and NPS news	Literacy Block (whole group and stations)	Math Instruction (whole group and stations)		Specials	Lunch	RTI Block	Snack	PE Recess and RR	Science/ SS/ Handwriting	Load up and read aloud
1st	**7:50-8:00**	**8:00-9:30**	**9:30-10:30**		**10:35- 10:55**	**11:00-12:00**	**12:05-12:45**	**12:50-1:40**	**1:45-2:30**	**2:15-3:00**	**3:00-3:20**
	Lunch count and NPS news	Literacy Block (whole group and small group)	Math Instruction (whole group and inpendend practice)		PE Recess	RTI	Lunch	Science /SS /Handwriting	Specials	Stations	Read Aloud/AR
2nd	**7:50-8:00**	**8:00-9:45**	**9:45-11:30**		**11:30- 12:15**	**12:20-12:40**	**12:45-1:25**	**1:30-2:30**	**2:35-3:20**		
	Lunch count and NPS news	Section 1	Section 2		Transition and Science/ SS/ Handwriting with HR	PE Recess	Lunch	RTI	Specials (go packed up)		
		ELAR	Math								

Figure 4. Master schedule.

The previous schedule had a transition time in place before and after every sequence of instruction, before and after recess, specials, and lunch. This reduced instruction time by 45 minutes daily. Therefore, since the goal was to raise reading achievement, time for reading instruction and collaborative planning (which included data meetings to move students between tiers of RtI) had to increase and extra time for movement needed to be reduced. The view of transitions as integral needed to shift to part of the next activity in the schedule so they became a more efficient process which would more closely align with prioritizing student achievement. Danielson (2002) also emphasizes that the way

time is blocked off within the master schedule speaks to the priorities of the school. Therefore, I wanted to make sure the emphasis was on reading instruction and Response to Intervention, eliminating some of the waste found in generous transition times. The master schedule and systems changes (testing, data meetings, response to intervention/referrals) were introduced to all staff members during the August, 2018 professional learning days prior to the start of the 2018-19 school year. I first met with the staff as a group so all would receive the information as a group from me. I then followed up by meeting with each grade level to allow time for questions and clarification. At this time, I also elaborated on my expectations for daily use of Neuhaus curriculum beginning the second full week of school.

Structured Literacy Training

Ogenosky (2017) stated that a successful RtI implementation requires the following: program-specific professional development, continual job-embedded professional development, modeling changes desired, and a way to measure staff accountability. Thus, the district set aside federal funding to support a literacy initiative which afforded all (reading) teachers of Prekindergarten through 8th grade students receive training in the foundations of research-based reading instruction through Sopris Learning's online LETRS training between May and August, 2018. Furthermore, all North Primary School classroom teachers, the special education teacher, and the reading interventionist were trained to provide structured literacy instruction utilizing curriculum from Neuhaus Education Center.

Surveying Teacher Knowledge

Upon the start of school, I administered the Survey of Basic Language Constructs to measure 1st and 2nd grade teachers' knowledge of reading instruction so I could provide support in areas of need. This survey was provided to me by Dr. Emily Binks-Cantrell and has been used in prior research projects involving measuring teacher knowledge of basic language constructs. I used this survey because it directly measures teacher ability in areas taught in structured literacy such as phonological awareness and phonics tasks. The survey was voluntary and anonymous as I was only measuring overall skill level change not individual teacher level skill level improvement. In order to measure teachers' growth of knowledge, the same survey was administered in May, 2019.

I provided an additional midyear survey as well. This was done only to gauge where teachers needed help with implementation of structured literacy in December, but not to measure actual skill level.

Baseline Assessment Data

Furthermore, beginning the first full week of the school year, kindergarten through 2nd grade students were taken to a computer lab by their homeroom teacher to participate in diagnostic testing in order to have a baseline for reading growth. Danielson (2002) notes that assessments have many purposes. For example, they measure the progress of students and the effectiveness of programs and/or teachers. However, the teachers on the campus had not been provided a model for how to administer the tests

with fidelity, and thus did not give much credence to administering the tests or in providing feedback to students or parents. So, the classroom teacher, the Reading Interventionist, and I all gathered in the lab to provide technical support to students, monitor their continual engagement with the content on the assessment, and celebrate their successes.

In August, all kindergarten through 2nd grade students were tested with STAR Renaissance assessments to teach them to use the test and to establish a possible baseline for reading ability. (The results would be compared with the same assessment, conducted in the same manner in September to ensure the most accurate data prior to assigning students to an instructional tier or small group). 72 Kindergarten, and 78 1st grade students were tested using STAR Early Literacy, a product of Renaissance Learning. This assessment is almost entirely read aloud and is computer adaptive, providing an ebb and flow of content based on student responses until arriving at a normed score. 73 2nd grade students took the STAR Reading assessment. This likewise is a product of Renaissance Learning and is computer adaptive throughout; but is read in its entirety by the student. Students who are English Learners, are dyslexic or receive accommodations through special education are provided extra time on the assessment (Renaissance Learning website, retrieved June, 2019).

The same students kindergarten through 2nd grade were once again assessed with the STAR assessments in September, 2018 (a month after the first assessment) to ensure RtI and small group placements were made on the most accurate baseline data. This

information was compared with the August STAR administration data and then also with results from the Texas Primary Reading Inventory, classroom observations and classwork which together formed the basis for data meeting discussions and RtI placements in mid-September, 2018.

Students were assessed with STAR and TPRI assessments over the course of a week each time the assessment was given. After each assessment window, a data meeting was scheduled to discuss student needs and place or move students between RtI tiers. Moats and Foorman (2008) state that without structured team meetings and opportunities to interpret student data, teachers did not use it purposefully (p. 99). Therefore, the teachers, the reading interventionist and I attended each meeting, updated individual student cards based on test results, discussed student movement within tiers, and any referral needs. This process was repeated in December, late January, March and May.

Also, as mandated by law, students were tested with an assessment from the TEA Approved list of reading tests at the beginning, middle and end of the year. The primary campus has used TPRI for several years and teachers are more comfortable with using the results of this assessment than with the Renaissance assessments. Teachers were also used to administering the TPRI with the district hiring substitute teachers while the classroom teachers gave the test. However, in order to provide a more standardized approach to the TPRI assessment, beginning in January, 2019, the reading

interventionist, the Instructional Specialist for Elementary and I administered the TPRI to all students Kindergarten through 2nd grade.

Danielson (2002) noted that successes are not isolated events (p. 13); so before students took each assessment I modelled for teachers how to give explicit instructions, reminders about how to achieve the best results, and promote the excitement of ringing the bell when students met their progress goals. The reading interventionist and I monitored each testing session to ensure fidelity of assessment. Students who made progress were rewarded with incentives such as Pie a Principal or ringing the bell in the central hallway on the campus. I believe that a big part of encouraging students to give their best efforts is showing them how to do so; and then getting excited with them about their growth. Students were also told that if they scored on grade level, they would get to move into an enrichment setting during RtI.

Neuhaus Curriculum Implementation

Teachers began implementing the Neuhaus curriculum the second full week of school in August, 2018. I provided teachers with a period of about six weeks to gain proficiency using the Neuhaus curriculum prior to observing in their classrooms. I then observed each teacher during October-November, 2018 for 45 minutes each and individually shared feedback through email and in person conversations. As I noted trends in implementation errors, we discussed in grade level groups and I providing coaching in the areas needing improvement. I repeated the observations during January-February, 2019. Teacher response to the observations varied both according to grade

level and within the grade level. As a whole, 2nd grade teachers were very open to feedback and wanted to make sure their implementation was done with fidelity. 1st grade teachers as a whole were resistant to feedback if they had been on the campus the year before. The one new 1st grade teacher was open to feedback and modelling and welcomed it as often as it was provided. This may be due to how I interacted with her from the beginning. She was an Alternatively Certified candidate, and in initial conversations beginning with her interview, we discussed feedback and observations and how important they are to growth as a teacher; so, she met these opportunities with an expectant nature. Since I was not on the campus the previous year as an administrator, I am not sure the level of transparency and openness that had been expected or developed.

In December, I surveyed teachers' needs in a different manner just to see what type of specific help I could provide them to help them achieve fidelity of implementation (see Figure 6). Three teachers requested additional modelling of lessons during their reading block. I scheduled this assistance individually and then observed teachers' subsequent implementation and provided feedback. The Instructional Specialist for Elementary accompanied me twice as I provided modelled lessons. She also videotaped portions of the lesson to provide a resource that she shared with teachers as a ready reference if they were struggling with a particular component.

In addition to the midyear survey, I also scheduled group feedback sessions with each grade level to give teachers an opportunity to voice where they were struggling. 1st grade teachers were still struggling with the timing of doing all components of the lesson

within the small group time and still maintain student engagement in other station activities. Therefore, we decided as a group that those teachers that felt this was an issue would teach portions of the lesson (oral language, new concept) whole group and then follow up with other components (reading practice, deck review, extended reading) with small groups during the station time. We agreed that teachers would try this method and then we would reconvene to provide feedback and adjust as needed. Another concern for 1st grade teachers was having their on grade level students take the time to go through all components of the lesson in small group when they already knew the material. So, we discussed the fact that providing the concepts and oral language practice in a whole group manner would allow these students to be presented with the concepts to make sure they did not have any gaps in knowledge, but use the small group time to move quickly through other components and spend more time on extended reading.

An additional request that teachers made through the midyear survey was that I attend weekly planning sessions for Neuhaus curriculum. So, in my grade level meetings I set particular days of the week to meet with Kindergarten and 2nd grade teachers. This provided both a time for teachers to ask timely questions and for me time to give mini professional development sessions on upcoming content or misunderstandings.

In January, I asked each teacher to create a pacing calendar to plan out Neuhaus instruction from January through May. This allowed them to plan for days that were dedicated to other things such as testing, assemblies, and shortened schedules and still

see where they would finish with students at the end of the year. This also helped with conversations regarding future planning of the curriculum implementation.

Response to Intervention and Data Meetings

Prior to the 2018-19 school year, the campus had a Response to Intervention period defined in the schedule. However, the curriculum to be used during this time was not defined. Also, there were no meetings to determine student placement and/or movement through the tiers. In fact, the system was fragmented. The dyslexia teacher did progress monitoring for students who had a need according to their previous TPRI testing results, and then another individual entered the data into a system that teachers did not know how to access, and no report was given back to the teachers. Thus, no one was really aware of who was making progress and who was not, and no movement occurred between the tiers. Neither students nor parents were aware of progress in any subject. Therefore, the reading interventionist (who serves as the RtI coordinator for the campus), the Instructional Specialist for Elementary and I created a plan that allowed for both remediation and enrichment, and for all stakeholders to be informed of the progress and movement between tiers.

Tier 1 instruction is grade level instruction and as such is provided to all students. In Texas, this means that it is based on the Texas Essential Knowledge and Skills (TEKS). Response to Intervention literature states that 80% of students are successful with this level of instruction when the curriculum and instruction are as rigorous as the standards demand (Ogenosky, 2017). Students who performed at or above grade level

according to diagnostic assessments, were then grouped to receive enrichment instruction during the intervention period of the day. Those that are not successful on grade level TEKS instruction received extra instruction through either tier 2 or tier 3 interventions depending on the assessed need. Tier 2 interventions for the campus occurred within the classroom during small group instruction with the classroom teacher during the daily 45 minute intervention period. Neuhaus Education Center curriculum presented at a slower pace than Tier 1 instruction was used, and also Fast ForWord, an online reading program was used four days per week during this time. Tier 3 students attended small group reading instruction led by the reading interventionist or dyslexia therapist for 30 minutes four days per week.

Justification of proposed solution

I chose the components of the solution due to the assessed needs of the campus based on classroom observations, small group discussions with teachers which revealed lack of teacher knowledge, an analysis of the master schedule and current reading curriculum, and lastly the decline in TPRI data over the last 4 years. The greatest needs were research-based phonics instruction and data-driven student placement and follow up in Response to Intervention tiers.

Effective Reading Instruction

Reading aloud to children is widely accepted and encouraged in our culture. However, although this practice does have merit in providing models of what a good reader sounds like, it does not equate to reading instruction. Seidenberg (2017) states

that [effective] reading instruction must encompass a systematic approach to delivering all evidence-based reading skills and providing students feedback as they are mastered (p. 114). Snow and colleagues (1998) defined an effective reading teacher as one who implements evidence-based instructional strategies, readily identifies struggling readers and subsequently differentiates for them according to individual student needs. The National Reading Panel report goes on to note that for teachers, the art of instruction involves a series of "wh" questions: knowing when to apply what strategy with which particular student(s) (National Institute of Child Health and Human Development, 2000, p. 269). Teachers must present reading skills along the research based continuum, starting with broad phonological awareness tasks, moving to more narrow word based phonemic awareness tasks such as manipulating and changing sounds within a word, and finally mastering the alphabetic principle, before moving to more complex skills such as decoding and becoming a fluent reader.. If students do not master skills in this order prior to moving to the next grade level, they will become a struggling reader (Seidenberg, 2017). Neuhaus Education Center curriculum and training provide a research based approach to structured literacy instruction that is explicit, direct and sequential; and thus provides what students need in an appropriate manner when implemented with fidelity.

Response to Intervention

The resources used on the campus for intervention were not aligned to Tier 1 instruction and the process for progress monitoring and movement through tiers of

intervention were either non-existent or fragmented at best. Foorman and Torgeson (2001) stated that regardless of the purpose of the instruction (whether Tier 1 for prevention or for intervention in Tiers 2 or 3) the components of effective reading instruction remain the same. Therefore, it was my belief and commitment that providing students with research-based, structured literacy tier 1 instruction and aligned tier 2 and 3 interventions would serve to increase students' reading achievement. A study conducted by EdSource in 2003 (as cited in Moats and Tolman, 2009) stated that the introduction of a structured, systematic, comprehensive classroom program used throughout a school...usually accounts for substantial school wide gains (p. 87). This was exactly the aim.

The RtI realignment was accomplished through a variety of support mechanisms related to Structured Literacy. These included fidelity of diagnostic and progress monitoring assessments led to appropriate student placement in Response to Intervention and enrichment settings. Also, the teachers were directed to use certain interventions which aligned to Tier 1 instruction. All of these structures were relatively, if not totally new to the group of teachers and the reading interventionist serving 1st and 2nd grade students; so this was a grand task. Yet. all worked together to form a cohesive educational plan. So, through collaborative processes such as data meetings, peer observations, and coaching, teachers were provided the support they needed to be successful if they engaged in and remained open to the change process.

Instructional leadership and ongoing accountability

Fletcher and Nicholas (2017) state that principals need to be cognizant of the importance of reading as a success factor for...students (p. 644). They go on to state that principals need to lead the way with their knowledge of literacy and provide needed support to staff as they grow in knowledge of effective reading instruction if they are going to provide a strong lever for creating positive change. In today's era of accountability, there is a lot of pressure to close the gap for at risk students; and, Dempster (2012) states that the role of the principal in improving student outcomes is second only to teachers (p. 50). Therefore, my aim in the study was to model engagement in the learning process, and then through observation and feedback, provide support for teachers' new learning in order to create a positive trajectory for student achievement on the campus.

Study Context and Participants

The study took place on a primary campus and involved ten classroom teachers, a reading interventionist, and (plus or minus on any given day) 160 students in grades 1 and 2. All students and classroom teachers were included in the study. As stated previously, research-based phonological awareness and phonics instruction had been absent on the campus for a few years and so students in both 1st and 2nd grades were measurably behind at the beginning of the 2018-19 school year.

Proposed Research Paradigm

This action research project was designed solely on a quantitative research paradigm. All activities were measured solely by the numbers. Although classroom observations led to adjustments in the professional development support provided teachers, the study conclusions were based on the data derived from surveys, TPRI and STAR Renaissance results.

Data Collection Methods

In August, all 1st grade students were assessed with STAR Early Literacy, a 27 question, computer adaptive assessment which in large part reads test content to students. STAR Early Literacy assesses four of the five components identified as important by the National Reading Panel. 2nd grade students were assessed with STAR Reading, a 34 item computer adaptive assessment which is read entirely by the student. The assessments start with content that mimics the grade level reflected by the student registration, and then goes up and down in rigor until the completion of the assessment. At that point, an overall scaled score is provided and percentile rank for each subskill is given. An Instructional Reading Level is assigned as well for those students taking STAR Reading. The students that were classified as dyslexic, special education or English Learners were provided extra time as an accommodation. These tests were repeated on five subsequent occasions to provide progress monitoring for students and to allow for celebration of student success.

Data Meetings

The data from these assessments was discussed during grade level team meetings with teachers, the reading interventionist, and me. During those meetings, student placement in RtI tiers was discussed and altered. During 1st grade data meetings, we also discussed which students needed to be moved to the STAR Reading assessment. The premise with this assessment is that students are ready to take it when they have a 100 word reading vocabulary. This test is more rigorous and provides a truer picture of a student's reading ability since it is not read to the students. The data from both STAR assessments is collected by the Renaissance Learning database which provides an excellent source of reports for users. I created a Google spreadsheet that I shared with 1st grade teachers to track the movement of students that were added to the list for STAR Reading testing throughout the year.

Test Administration

In Texas, students in Kindergarten through 2nd grade must be assessed three times per year with an assessment from the Commissioner's List of Reading Instruments. The Texas Primary Reading Inventory (TPRI) fits that description and is used widely throughout the state and has been used for many years at North Primary School. In years past, teachers were provided substitutes so they had the time and concentrated attention to assess their students. However, when I discussed this process with the former principal and the Instructional Specialist for Elementary, the principal recommended that we utilize more standardized testing protocol to make sure the data

were not inflated. Therefore, a plan was put in place to have one retired teacher test all North Primary students. However, due to a funding issue, this plan did not work out, and teachers gave their homeroom students the assessments in September, 2018. Yet, the superintendent asked that the reading interventionist, the Instructional Specialist for Elementary and I take over the testing at midyear. The testing is done using an online system called TANGO system that captures the data and organizes it into very useful reports.

Teacher Observation and Feedback

In the summer, 2018, I created a campus walkthrough observation form. However, I found that the observations done in the fall and spring were better captured by taking extensive notes rather than simply completing this form. This allowed me a reference point to use during my follow up feedback conversations. Also, the walkthrough form did not provide an adequate reflection of implementation fidelity, but instead only provided a notation of whether a Neuhaus lesson was taught during my time in the classroom. Therefore, this data collection strategy was not widely used during the study.

Surveys

I used two different surveys during the course of the study. The first survey served as the pre- and posttest for knowledge of reading, assessment processes/data driven instruction, and Response to Intervention, and was an adaptation of a survey provided me by Dr. Binks-Cantrell. The subsequent survey, administered in December,

2018, was used to measure teachers' current comfort level with providing structured literacy instruction and help needed. I used both surveys to drive the support I provided for teachers.

Justification of Use of Instruments in Context

All students in the district, Kindergarten through 8th grade is administered a STAR Renaissance assessment. Students in Kindergarten through 1st grade are assessed with STAR Early Literacy and students in 2nd grade and above are assessed with STAR Reading. Therefore, the use of this instrument is commonplace and expected in the district. The TPRI is also used to assess students and has been for many years. This assessment is on the Texas' List of Approved Tests for Reading Assessment, and by law districts must choose one from the list to administer at the beginning, middle, and end of the year to monitor students' progress, and now to signal possible further dyslexia screening needs.

Data Analysis Strategy

The data were analyzed in several different ways depending on the research question that was being considered. Overall, in looking at the results for all questions, I created tables or figures for each set of results that was measured.

For questions 1 and 2 in regard to reading achievement of students, I examined the results of each grade level on each assessment, STAR Early Literacy/STAR Reading and TPRI, and then compared the two grade levels' results on each assessment to see if the results were consistent or unique for each grade level. Then, I compared the results of

the TPRI versus the STAR Renaissance assessments to see if both pointed to the same conclusions for each grade level.

Teacher knowledge was measured through a pre- and posttest survey. However, I also gained an even deeper and probably more reliable insight into teachers' knowledge about reading, assessment and RtI through classroom and assessment observations, conversations in data meetings, and during feedback or grade level discussions.

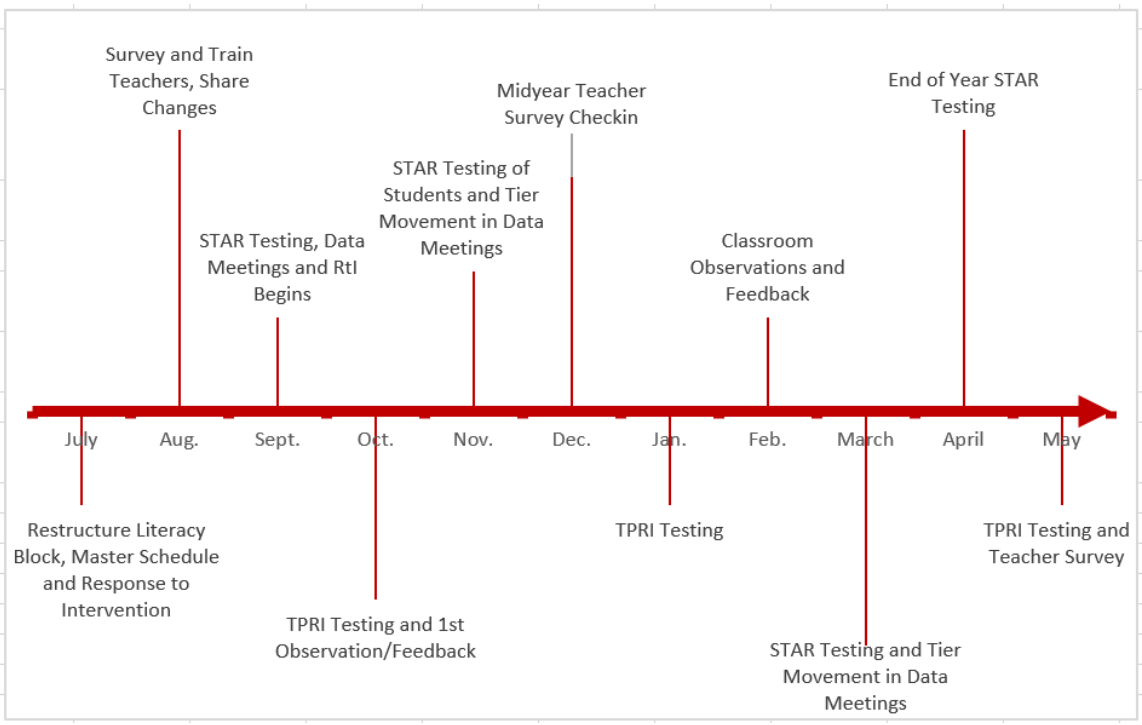

Figure 5. Timeline of the Research Study

Reliability and Validity Concerns or Equivalents

Reliability

One measure of reliability was the nature of the assessments given. STAR Renaissance assessments and the TPRI are both research based assessments that measure essential components of students' progress toward becoming a proficient reader. As previously mentioned, the original aim was to have one individual give all TPRI assessments to ensure they were administered without bias and in a standardized manner. In the past, teachers were provided a substitute for their classrooms and they gave the assessment to their homeroom class. However, district administration suggested that the data gained in the past might have some bias. Therefore, an attempt was made to change this by hiring a recent retiree. Yet, in September, that plan had to be altered. So, teachers did give the TPRI assessment in the fall; but in January, I gave the assessment to all 1st graders and the reading interventionist gave the test to 2nd graders. Therefore, we maintained the same grading standards for all students in the grade level from midyear to the end of year assessment without being subject to bias.

Another measure of reliability was the manner in which the STAR Reading and STAR Early Literacy were administered. Previously, teachers simply assessed students in their classrooms without much monitoring or test preparation preceding the examination. However, the procedure was different throughout the study in that students came into a computer laboratory setting with several adults who could monitor students' attention and engagement with the content. If the data seemed to prove less than

accurate, the student was asked to retest with greater supervision to ensure the data truly showed the level of student's knowledge.

Validity

The study was also structured to provide several measures of internal validity. I provided the same monitoring and feedback throughout the study. We had data discussions about student placement in tiers as a group so all were part of the discussion, and we also tested students as a group to make sure we were achieving accurate data. One major validity concern was based on the 1st grade teachers' lack of faith in the validity of the STAR reading assessments. This assessment was purchased for the campus in 2017; yet, teachers received no training or coaching in how to administer the assessment with fidelity or how to interpret data from the assessments. Thus, this was a learning curve that I had to tackle as well during the study.

Furthermore, even though I had an inkling that I knew what the data would show, I refrained from making a solid judgement until I looked at all the data points in an organized fashion which brought much greater clarity. Again, the fact that the study was set to have more than one way to determine an answer to a question provided more validity to the results.

Closing Thoughts on Chapter 3

In August 2018, I was confident and excited about the student data driven instruction that NPS would be utilizing for the coming year. I truly felt I had worked to examine things from a research-based perspective, and at the same time not overwhelm

staff by too many changes. I knew that if we as a staff were going to improve reading achievement for students, it would depend on several factors working in tandem: well-trained staff members that teach utilizing structured literacy, meaningful data gained through progress monitoring and diagnostic assessments, and collaboration from all parties to ensure students are moved through the tiers of Response to Intervention to ensure all are given the opportunity to succeed at reading.

CHAPTER IV

ANALYSIS OF RESULTS/FINDINGS

Introducing the Analysis

After collecting and printing the data from surveys and assessment instruments, I organized the data into tables to make accurate comparisons. I chose to include information that provides statistical significant data as well as figures and tables that provide a visual of growth in a different manner. I reviewed each question and compared the question with the data sources I had put in place to make a determination of impact based on a preponderance of evidence. I also cross checked my sources to make sure each source supported like conclusions.

Presentation of Data

Data Regarding Research Question 1

The initial research question examines whether reading performance would increase significantly due to the implementation of a structured literacy approach. In looking at data regarding this question, I examined the overall improvement in students' baseline scores (Tables 1 through 4 for 1st grade students, and 6 through 9 for 2nd grade students). Each table looks distinctly at a grade level and a particular diagnostic assessment, charting the growth from the beginning of year assessment to the end of year assessment.

1st Grade Students' Data.

Table 1 (1st grade) provides a visual of student growth by percentages on the Texas Primary Reading Inventory (TPRI). This table is provided for triangulation of data and comparison only, but not to show statistical significance. The TPRI changes from a screener at the beginning of the year to a full assessment of skill by the middle of the year; so due to this change, these tables were included as extra data to provide continued historical comparison, but not as the basis for statistical significance for growth.

Table 1. Scores for 1st Grade Students Based on Texas Primary Reading Inventory (TPRI)

Date of Assessment	# Students Assessed	# at Still Developing	% at Still Developing	# at Developed	% at Developed
September, 2018	77	39	50	38	49
April, 2019	84	53	63	31	37

Table 2 references 1st grade students' numeric and percentage growth through the following STAR reading levels: Early Emergent, Late Emergent, Transitional, and Probable Reader. Therefore, this table is also included only for comparison and extra information for discussion purposes. These first two tables are also what school administrators would more readily relate to if they were considering utilizing a similar approach on their campus.

Table 2. Scores for 1st Grade Students Based on STAR Early Literacy

Date of Assessment	# Students Assessed	% at Early Emergent	% at Late Emergent	% at Transitional	% at Probable
August, 2018	78	15	58	15	10
April, 2019	84	0	10	46	44

Table 3 provides the descriptive statistics for the paired samples t test done to show statistical significance of growth of 1st graders reading knowledge during the 2018-19 school year.

Table 3. Descriptive Statistics for 1st Grade Paired Sample T Test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	ESS	775.52	77	65.401	7.453
	BSS	602.92	77	111.214	12.674

Table 4 provides the results of a paired samples t test performed to prove statistical significance of growth for 1st graders during the 2018-19 school year.

Table 4. Data from 1st Grade Paired Samples T Test.

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	ESS - BSS	172.597	90.817	10.350	151.984	193.210	16.677	76	0.000

Lastly, Table 5 shows the movement of 1st graders from the STAR Early Literacy Assessment to the more rigorous STAR Reading assessment. This is another table that does not provide statistical significance data, but does provide more information that will be included in the discussion portion. 1st graders who were moved to the STAR Reading assessment continued to take the STAR Early Literacy assessment as well to maintain a continuous comparison of growth on one instrument throughout the year.

Table 5. Number of 1st Grade Students Moved from STAR Early Literacy to STAR Reading

	# Students Tested on STAR in November, 2018	# Students Tested on STAR in January, 2019	# Students Tested on STAR in March, 2019	Grand Total Moved to STAR in 2018-19 School Year
Teacher 1	3	0	4	
Teacher 2	4	1	3	
Teacher 3	3	3	5	
Teacher 4	1	4	2	
Teacher 5	4	3	4	
Total Students	15	11	18	44

According to Table 2, 1st grade students moved from 10% of the students functioning at a Probable Reader designation to 44% of students at Probable Reader. This stands as contradictory to the data presented in Table 1 from the TPRI assessments in September, 2018 and May, 2019. However, as mentioned previously, the nature of the TPRI assessment changes from a mere screening at the beginning of the year to a full assessment including a fluency measure by the end of the year. However, the STAR Early Literacy assessment measures students' improvement on a continuum of literacy skills, adding new content as students show mastery of previously assessed skills. Also, teachers administered the September, 2018 TPRI assessment to their homeroom classes; whereas, I gave the end of year TPRI assessment in May, 2019. Therefore, the assessment results were more standardized in May, and the difference in test

administrators could have possibly caused reliability issues if that test had been used to prove statistical significance.

Tables 3 and 4 provide SPSS data for 1st graders. I conducted a paired samples t test which compared growth from the first STAR Early Literacy assessment in 2018-19 to the final one done in May, 2019. These tables show n=77 whereas, Table 1 lists n=77 and 84, and Table 2 lists n=78 and 84. The difference in student number is based on student mobility. However, with Tables 3 and 4, students had to be present for both the beginning and end of year test to be included. So, based on 32 weeks of instruction in reading (first test occurred during the 2nd week of school and the final test was the first week of May, 3 weeks prior to the end of school), the mean growth was 172.597 scale score points growth which produced a 0.00 score for statistically significant growth. The Benchmark, Cut Scores, and Growth Rates chart available on the Renaissance Learning website shows that moderate growth for a 1st grader who is meeting benchmark expectations is 3.71 scale score points per week which equates to 118.72 points in 32 weeks . The Renaissance Learning website also stated that according to national data for STAR Early Literacy, 50% of the students at each level of growth shown on the chart (from the 20th percentile to the 80th percentile) were able to achieve the level stated as moderate growth (retrieved from renaissance.com on September 24, 2019) . Therefore, NPS 1st grade students grew on average more than 50 scale score points above the expected rate for moderate growth during the 2018-19 school year.

Table 5 shows the number of students by classroom that were moved from the STAR Early Literacy Assessment to STAR Reading during the 2018-19 school year. As students progressed to approximately 700 scaled score points on the STAR Early Literacy assessment, classroom teachers, the reading interventionist and I discussed moving them to the STAR Reading test for subsequent assessment windows. The teacher was given the final authority for moving a student to the STAR Reading assessment. I encouraged teachers to share their informal and observational data to determine placement in the new test so they could also consider how the student functions in class and not base the decision solely on STAR Early Literacy assessment data. STAR Reading requires that students have a 100-word vocabulary and they read the entire test by themselves; whereas the STAR Early Literacy was predominantly read to them. After the October, 2018 STAR Early Literacy assessment was administered, teachers added 15 students to the list of those that would be administered the STAR Reading test in November, 2018. This equated to 34% of the total moved to STAR during the year. Only 44 students were moved by March, 2019 which equated to 52% of 1st grade students.

2nd Grade Students' Data.

Table 6 provides a summary of student growth as measured by the TPRI for 2nd grade students. As mentioned previously, since this assessment moves from a screener to a full diagnostic assessment for students, it is included for triangulation purposes and to further the historical data trend understanding presented in the introduction of this study.

Table 6. Scores for 2nd Grade Students Based on Texas Primary Reading Inventory (TPRI)

Date of Assessment	# Students Assessed	GK 3 or more* % D	WR 2 or more* % D	Story 1 Reading % D	Story 1 Comp. % D	Story 2 Reading % D	Story 2 Comp. % D
September, 2018	71	13	45	63.4	53.5	56.3	39.4
April, 2019	79	66	75	73.5	60.8	77.2	58.2

*Texas Literacy Plan Standards
GK = Graphophonemic Knowledge; WR=Word Reading; D= Developed; SD=Still Developing

Table 7 provides numerical and percentage movement through the following STAR Reading labels: Pre Primer, Primer, 1.0-1.9 (below grade level Instructional Reading Level, and 2.0 and above (at grade level Instructional Reading Level and above). Just as mentioned for 1st grade data sources, this table does not provide statistical significance for growth, but instead provides a source of information that is easily understood by school personnel.

Table 7. Scores for 2nd Grade Students Based on STAR Reading

Date of Assessment	# Assessed	# at PP	% at PP	# at P	% at P	# at 1.0-1.9	% at 1.0-1.9	# at 2.0 and above	% at 2.0 and above
August, 2018	73	33	45	6	8	23	32	13	18
April, 2019	79	16	20	4	5	6	8	53	67

Table 8 provides the descriptive statistics for 2nd grade students used for the paired samples t test used to show student growth that occurred from the beginning of the 2018-19 school year to the end of year assessment.

Table 8. Descriptive Statistics for 2nd Grade Paired Samples T Test

Variable	n	Minimum Scale Score	Maximum Scale Score	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
BSS	65	66	500	171.15	97.535	1.095	0.297	1.171	0.586
ESS	65	71	559	325.15	128.545	-0.497	0.297	-0.526	0.586

BSS = Beginning of year scale score; ESS=End of year scale score

Finally, Table 9 provides the results of the paired samples t test conducted to show the statistical significance for the growth that occurred from the beginning of year assessment to the end of year assessment during the 2018-19 school year.

Table 9. Paired Samples T Test for 2nd Grade Students' Growth

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	ESS - BSS	154.000	89.437	11.093	131.839	176.161	13.882	64	0.000

In considering the data for student achievement for 2nd graders, I looked at tables 6 and 7 separately to examine progress on each assessment instrument, and then

compared the results to see if consistent conclusions can be drawn between the data sets. In looking at Table 7 which summarizes the results of students on STAR Reading, the number of students reading at a Pre Primer level (PP) decreased from 33 to 16, and the number of students reading at or above grade level increased from 13 to 53. In looking at Table 6 containing TPRI results, the percentage of students scoring Developed (D) on graphophonemic tasks (GK) increased from 13% to 66% by April, 2019. Furthermore, the percentage of students scoring developed on Word Reading (WR) tasks increased from 45% to 75%. The next area of the table details the percentage of students who successfully read story 1 and 2 on an independent or instructional level which are proficient enough levels of reading that do not significantly impede comprehension. Both story reading and story comprehension columns for stories 1 and 2 show increases. In fact, story reading and comprehension for story 2 show almost 20 percentage point gains for both areas.

Tables 8 and 9 provide SPSS data for 2nd graders. I conducted a paired samples t test which compared growth from the first STAR Reading assessment in 2018-19 to the final one done in May, 2019. These tables show n=65 whereas, Table 6 lists n=71 and 79, and Table 7 lists n=73 and 79. The difference in student number is based on student mobility throughout the school year. However, with Tables 8 and 9, students had to be present for both the beginning and end of year test to be included. Based on 32 weeks of instruction in reading (first test occurred during the 2nd week of school and the final test was the first week of May, 3 weeks prior to the end of school), the mean growth was 154

scale score points growth which produced a 0.00 score for statistically significant growth. The Benchmark, Cut Scores, and Growth Rates chart for the STAR Reading assessment which is available on the Renaissance Learning website shows that moderate growth for a 2nd grader who is meeting benchmark expectations is 3.6 scale score points per week which equates to 115.2 points in 32 weeks . The Renaissance Learning website also stated that according to national data for STAR Early Literacy, 50% of the students at each level of growth shown on the chart (from the 20th percentile to the 80th percentile) were able to achieve the level stated as moderate growth (retrieved from renaissance.com on September 24, 2019) . Therefore, NPS 2nd grade students grew on average more than 38 scale score points above the expected rate for moderate growth during the 2018-19 school year.

Therefore, in comparing both tests administered to 2nd grade students, there was significant growth in students' reading abilities as a result of structured literacy implementation, data meetings to discuss tier placement/movement and assessment/ data analysis coaching and feedback.

Data Regarding Research Question 2

Research shows that teachers with a greater knowledge of literacy constructs will cause a greater increase in student reading success. As a result, research question 2 looked at whether teacher knowledge would increase significantly due to training in structured literacy, data analysis, goal setting with students, and response to intervention procedures. The issue of teacher knowledge was measured through a pre- and post-

intervention survey as well as a midyear check in survey. In addition to the surveys, I observed each teacher twice and also performed brief walkthroughs in the classrooms. The conversations during the feedback sessions and data meetings provided further insight into teacher growth in structured literacy knowledge as well as knowledge regarding assessment and data driven grouping and instruction. I compared the pre- and post-test data, and also looked at the midyear check-in data to see if it also supported teachers' actual knowledge.

Questions 1-7 on the teacher survey were Likert scale questions that rated teachers' perception of their knowledge of literacy constructs and their ability to drive instruction with data and/or share data with students. Figure 6 shows the results of the 7 teacher perception questions and the growth from beginning to the end of year. Teacher confidence in their knowledge of the components of effective literacy instruction was strong from beginning to end; but measurable growth was evident in the areas of using data to drive instruction and also sharing data with students and parents. Both of these areas are critical to supporting student growth and movement through the RtI tiers.

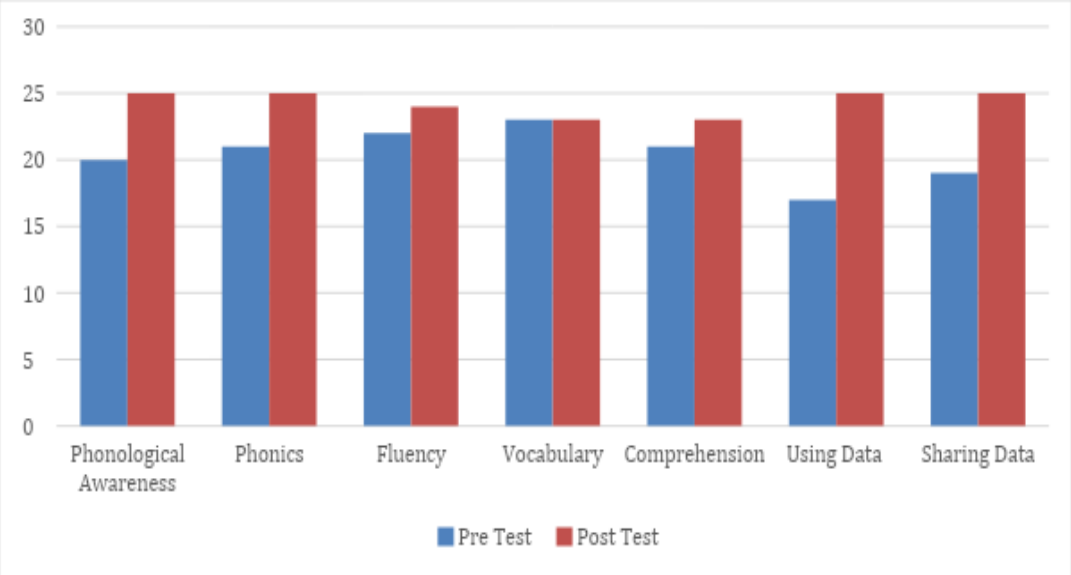

Figure 6. Teachers' perception of own knowledge.

Furthermore, the growth shown on specific skill questions and teacher knowledge about the difference in phonological awareness, phonemic awareness and phonics is relayed visually in Figure 7. Although the chart does not prove statistical significance, it is included to provide a visual representation of the growth that occurred on each literacy construct assessed. It is clear that professional development and feedback did indeed increase teacher knowledge in these areas.

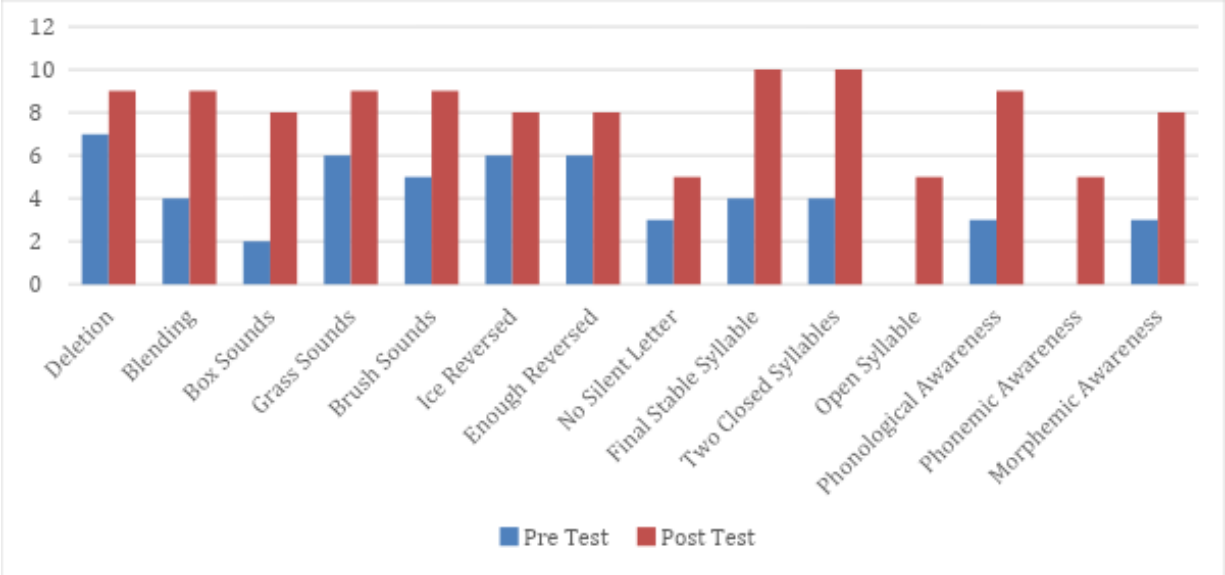

Figure 7. Teacher knowledge survey results

Although the survey I administered contained 29 items (7 were represented in Figure 6), I chose to focus on a sample of 14 in Figure 7. These items represent the types of tasks and definitions are critical to an effective implementation of structured literacy. Knowledge of syllable types is almost non-existent at the beginning of the year, even though teachers had gone through some online professional development with LETRS over the summer. As Figure 7 illustrates, there were no correct answers for the question that asked teachers to identify an open syllable, and less than half of the teachers could identify a final stable syllable or a closed syllable. This knowledge is essential for teaching phonics in a systematic and explicit manner. Furthermore, Figure 7 shows a notable increase in teachers' understanding of phonemic and phonological awareness and the tasks associated with each. If teachers are not strong in their knowledge of these

concepts, they cannot or will not provide for them within the lesson which results in noticeable deficits in students' ability to decode.

Midyear, I administered a teacher survey to gauge the need for additional professional development and/or support. Table 10 depicts the percentage of teachers that requested each type of help I offered in the survey.

Table 10. Midyear Teacher Survey Results

Type Help Needed	Number of Teachers Surveyed	% Requesting Help
Need More Help with Neuhaus Lessons	10	20
Watch a Neuhaus Lesson	10	20
Help Planning Neuhaus Lessons	10	30
Understanding Assessment Data	10	40

Figure 8 below is an excerpt from the December, 2018 teacher survey I conducted to gauge any needs for specific support for teachers' implementation of Neuhaus curriculum.

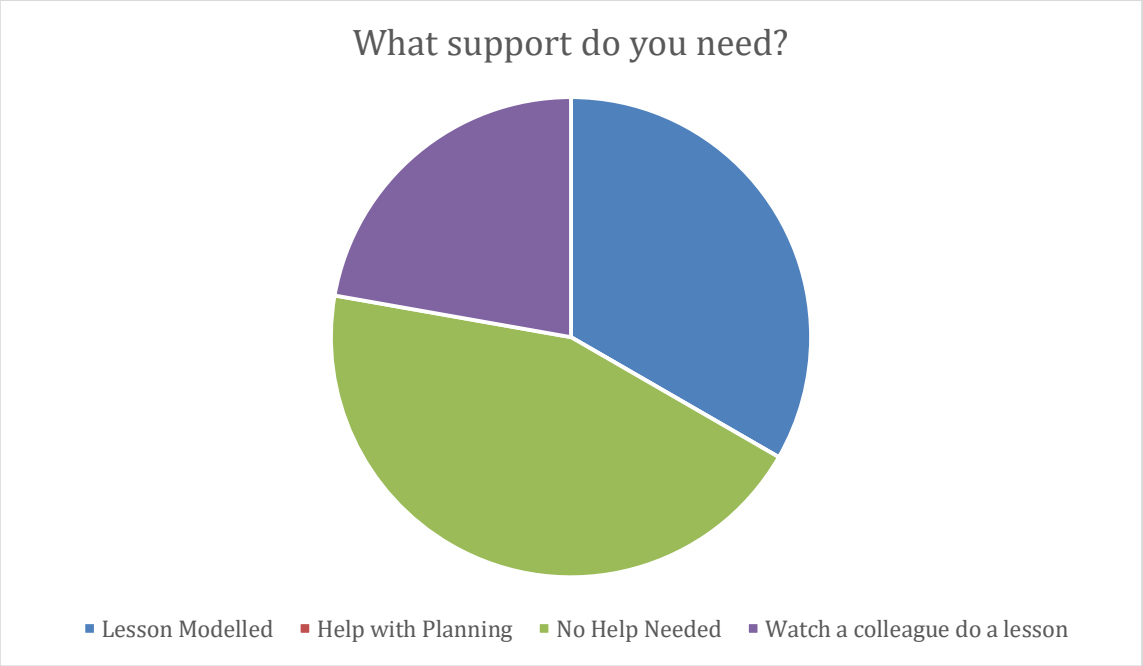

Figure 8. Excerpt from December, 2018 Teacher Survey

Lastly, I performed a paired sample t test to measure the growth in teacher knowledge from pretest to posttest according to the results of the Survey of Basic Language Constructs. Table 11 shows the descriptive statistics for the test that was run using SPSS.

Table 11. Descriptive Statistics for Paired Samples T Test for Teacher Knowledge Growth

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Post Test Score	18.67	9	2.693	0.898
	Pre-Test Score	11.89	9	2.934	0.978

Table 12 provides the SPSS data for the paired samples t test run to determine the statistical significance for the teacher knowledge growth that occurred between beginning and end of the year according to anonymous surveys completed by the teachers and reading interventionist. 9 of 11 teachers completed both surveys.

Table 12. Paired Samples T Test Data for Growth in Teacher Knowledge

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Post Test Score - Pre-Test Score	6.778	3.492	1.164	4.094	9.462	5.823	8	0.000

Table 12 showed that the mean score grew from 11.89 on the pretest to 18.67 on the post test. The total raw score for the survey was 19. Table 12 also revealed this growth rate to be statistically significant in regard to teacher knowledge of basic literacy constructs needed to provide effective reading instruction.

Data Regarding Research Question 3

The final research question looked at the effect that accountability had on teacher implementation of structured literacy. I used observation and feedback data, pacing calendar data versus end of year student data form information, as well as personal observation of student word attack while administering the TPRI test in January and May, 2019 Table 13 provides the comparison between all teachers in grades 1 and 2 pacing charts.

Table 13. Teacher Pacing Chart Results

Role	Grade Level	Pacing Chart Plan Estimate for Lesson to be Completed by May, 2019	Actual Lesson Completed by May, 2019
Teacher 1	1	79	37
Teacher 2	1	78B	42
Teacher 3	1	79	39
Teacher 4	1	79	44
Teacher 5	1	79	37
Teacher 6	2	90	92
Teacher 7	2	90	89
Teacher 8	2	90	88
Teacher 9	2	91	90
Teacher 10	2	89	89
Teacher 11	1 and 2	75	74

I initially intended to also use a brief walkthrough form to track teacher implementation of Neuhaus curriculum. However, after my first round of observations, I felt it did not provide enough information to foster rich coaching and feedback conversations. Bambrick-Santoyo (2018) states that exceptional school leaders are very intentional about how they use observations and walkthroughs, placing the utmost emphasis not on scoring but on giving the right feedback and follow up to make sure teachers implement...feedback (p. 7). Thus, I felt extended observations with feedback

afterward provided more support for teachers during their implementation of the curriculum.

After studying the data and comments from the December, 2018 midyear teacher survey, I realized that 1st grade teachers only provided structured literacy lessons four days per week and instead, conducted level testing and Fun Friday each Friday. On the other hand, 2nd grade teachers provided structured literacy lessons all five days and did not do level testing at all. As a result of the survey, I met with the 1st grade team during a January, 2019 professional development day and discussed their progress in the curriculum and the importance of providing structured literacy lessons all five days. We also adjusted their Friday schedule to how to ensure all was completed. Furthermore, all teachers completed a pacing calendar to gauge where students would end in the curriculum in May if structured literacy lessons were provided to them 5 days per week. According to their pacing calendars, 1st grade teachers were on track to finish around lesson 79 which is more than halfway through the first year of the Language Enrichment curriculum. However, as shown in Table 13, they finished around lesson 34.

In stark contrast, 2nd grade teachers ended around lesson 90 and the reading interventionist that served both grades 1 and 2 ended at lesson 74. Therefore, accountability measures put in place such as walkthroughs, surveys, lengthy observations with feedback, data meetings, and grade level meetings had inconsistent impact between the grade levels.

Results Analyzed by Research Question

Question 1. Does Student Reading Performance Significantly Increase after the Implementation of a Structured Literacy Approach?

When looking at the data in Tables 1 and 2 , the picture seems contradictory for 1st grade students unless the structure of the TPRI assessment is considered because at the beginning of the year, a student can earn Developed based on a screening only; but as the year progresses, the whole test must be completed. However, in looking at Table 4, the paired samples t test showed statistically significant growth. Also, as compared to the nationally normed Renaissance data, both 1st and 2nd grade students experienced greater than moderate growth as compared to what is expected to achieve a score that meets Benchmark standing. Furthermore, looking at both the number of 1st grade students that moved to STAR Reading by March, shows that all measures taken during the 2018-19 school year including creating conditions for valid assessment, sharing data with students, and including phonics instruction through a structured literacy implementation created the opportunity for many students to succeed at high levels.

The data in tables 6-9 show incredible progress for 2nd grade students as well. In August, 45% of 2nd graders tested at a Pre Primer (PP) level, but in April only 20% were still at this level. Among these still at PP are students who were identified as special education and as dyslexic. Also, at the beginning of the year, 18% of 2nd graders scored on grade level or above; and at the end of the year 67% were on grade level or above. Furthermore, every area of TPRI showed significant growth by 2nd grade

students. Table 9 shows that student growth was statistically significant, and when that growth is compared to Renaissance Learning's nationally normed data, the growth rate was almost 40 scale score points ahead of the norm.

Question 2 - Does Teacher Implementation of Structured Literacy Improve after Accountability and Continued Feedback and Training?

In looking at Table 12 and Figure 7, it is clear that teacher knowledge increased significantly during the period of the study. The lecture plus the embedded practicum portion of the initial professional development provided a strong base to build upon; but without the continued conversation and learning during the year, fidelity of implementation would not have been sustained for 2nd grade teachers and reading interventionist. The open conversations between grade level team members, weekly planning sessions I where provided coaching, and observations and feedback continued the learning needed to provide timely support.

However, I also note a connection between Figures 6 and 8 and Table 10. Teachers' confidence in their knowledge was very high from beginning to end; but their actual skill level did not match the confidence. I feel this is why some teachers were ready to move forward and some held great resistance to the change. One teacher even said to me, "We thought we were doing everything right last year and we worked hard to implement everything we had been given." I have no doubt that they were working very hard, but it was just on the wrong things. That was not due to wrong motives, but due to lack of knowledge of structured literacy components. However, the lack of willingness of some teachers to implement with fidelity or receive feedback caused some students

not to receive as much strong instruction in evidence based reading components as could have occurred as evidenced by the pacing chart in Table 13.

This is where having more administrators trained in structured literacy would have provided me support as well since the observation and feedback process is time consuming. Yet, as I was administering the TPRI test in both January and April, 2019, I noted students' lack of inclination to sound words out which becomes a natural process as Neuhaus curriculum is implemented with fidelity because the teacher is continuously enforcing this. Instead, students were prone to guessing. This points to teachers trying to implement both structured literacy (Neuhaus lessons) and leveled texts on Learning A-Z, and not doing justice with either. This also indicates a lingering need for more teacher training in structured literacy and reading research to help them better prioritize which activities need priority in effective reading instruction.

Question 3 - Does Teacher Implementation of Structured Literacy Improve After Accountability and Continued Feedback and Training?

This area of the results probably surprised me the most as it runs so contrary to my educational philosophy. Anderson, Herr, and Nihlen (2007) state that action researchers who work in schools are often ill-prepared for resistance (p. 51). I am a rule follower and change does not bother me as long as it has merit and will benefit student success. Furthermore, the last time I had to lead a change initiative, it was forced upon the district by a TEA audit and thus everyone in the district was held accountable to buy into or at least go through the motions to make the change process a reality. Therefore,

implementing change is very straightforward to me. If it is a research based solution that is good for students and leads to increased achievement, it is the right thing to do.

The 2nd grade team along with the reading interventionist responded just as I would have when presented with a curricular change/expectation. Trusting the research, they implemented Structured Literacy with fidelity. However, the 1st grade team proved to be resistors. Each grade level team meeting proved to be a heated debate over how to alter the system to fit in all they had taught before and Neuhaus lessons. Au and Scheu (1996) chronicled the attempt to make change a reality at Kamchemeha Elementary Education Program in Hawaii and found that even after 5 years of working with teachers who were willing to learn and grow, change is still challenging to accomplish. Moats and Tolman (2009) state that if a faculty is divided by differences in philosophy, methodology or interpretive framework, then productive teamwork is nearly impossible (p. 84).

Ridley (1990) identified four factors that caused teachers to resist change: a lack of understanding about a topic, unwillingness to change, a lack of resources, and uneasiness concerning accountability. For this current study, I believe that three of the four factors were at work. Teachers did not lack resources; yet there was resistance to change which I feel was caused by the tide of changes that had occurred over the last few years, resulting in a general sense of mistrust in change itself. One teacher said, “I have been here for four years and every year we have done something different.” That is certainly a valid point that I was unaware of at the outset. The 1st grade team’s feelings

surfaced first in November which opened up some honest communication; however, their silent resistance had already caused a stall in student learning and impacted the culture among all stakeholders. Two other causes of resistance were the teachers' orientation toward activities rather than philosophy and the concern over accountability, both of which point to a lack of knowledge of structured literacy. Teachers were insistent that sight word testing and level testing were vital to student improvement, and they also felt driven to follow the scope and sequence presented in the TEKS Resource System. During a workshop on the new English Language Arts standards adopted for implementation during the 2019-20 school year. The English Language Arts consultant for the local Education Service Center, stated that if your district purchases a structured phonics program such as Saxon Phonics, then the scope and sequence included with the program is what should be followed rather than the one presented in the TEKS Resource System (personal communication, April 9, 2019). However, at that point, I was unaware of the fragmented manner in which the 1st grade teachers were implementing the Neuhaus curriculum. Bates and Morgan (2018) state that teachers' plates are already full. Thus, when new administrators were introduce their one more new thing, teachers struggle with where to fit it all into their schedules. Therefore, it would have helped for me to have taken the time to pause in November when the first concerns arose in order to guide them to do a time audit of their schedule to prioritize curricular choices.

Questions I Still Have

The questions I still have are in regard to improving implementation. I wonder if

I had started by researching Structured Literacy with teachers and looking at data more transparently if the results would have been more impressive. However, I could also agree with many other researchers before me that teacher development can take [as much as] ten years and any school change takes multiple years (Bambrick-Santoyo, 2018, p. 7). As for me, it is hard to sacrifice the important years for children over the preferences of adults. So, I probably would still approach the situation with the urgency that I did.

I also wonder if a different coaching or accountability approach would cause teachers to more fully support direct, explicit, systematic instruction. When I presented the Language Enrichment curriculum to the kindergarten teachers in February, 2019, I approached it differently than I had with 1st and 2nd grade teachers. First, I had teachers come observe me teaching the groups of kindergarten students I had started the month prior. I then taught the teachers the curriculum in small pieces, providing only what they needed to know for the upcoming week. Although there was still some resistance to doing things differently than they had always done, they were more open to implementation than other teachers had been.

Furthermore, would posting the scope and sequence of the curriculum outside the door with dates beside each lesson completed have improved my ease of monitoring? I received this suggestion from a Neuhaus coach in March, 2019; so it was a bit late for the current year, but I feel it would definitely increase the realization and expectation for teachers that they need to remain on track with instruction.

Lastly, I wonder how the reading ability of students who will receive structured literacy instruction from Kindergarten through 2nd grade will compare to those that I studied this year. I am excited that those moving to 1st grade next year received a thorough foundation in phonological awareness through implementation of Neuhaus' Reading Readiness curriculum and a few months of Language Enrichment instruction.

Interaction between the Research and the Context

The study fit into the context of the school easily because the curriculum in place lacked a research-based phonics program. However, due to the transition between principals that occurred, I do not believe the data trends were well communicated to the teachers. Therefore, the changes I made coming in as a new principal were seen as a surprise and unnecessary by some teachers (most of the 1st grade team) which I feel impacted the research.

The 2nd grade teachers and reading interventionist received the training and curriculum readily which is evident in the results they had with children. During observations, I noted that the Neuhaus curriculum was implemented with fidelity, all 2nd grade teachers were open to feedback, and the teachers provided unwavering support for students' improvement when they were assessed. After assessing student progress, teachers easily shared data with students and celebrated successes. These teachers also readily accepted direction for grouping students for RtI, setting Accelerated Reader (AR) goals, and following campus AR expectations. They also encouraged students and families to participate in all campus extracurricular literacy activities with great

enthusiasm. Although all of these are positive comments and the results seen with 2nd grade students were phenomenal; I think the fidelity of implementation came from a place of blame placed on what 1st grade teachers had not done the previous year and the stress they felt of needing to get students reading on grade level, rather than blame being placed where it should have been, the lack of a research based curriculum taking its toll on student achievement. I feel the teachers felt unnecessarily burdened for the students' poor reading levels at the start of 2nd grade and so they did not veer from the path set before them with structured literacy instruction, trusting that it would provide what the students were missing.

On the other end of the spectrum, the attitudes of the majority of the 1st grade team of teachers (four out of five) were negative at best. The one that was positive was a new teacher working through an alternative certification. I was unaware at the beginning of the 2018-19 school year that there were negative feelings (most were unspoken, but obvious) that 2nd grade teachers shared with 1st grade teachers. 2nd grade teachers had made comments to 1st grade teachers such as, "What did you teach these students?" When I was made aware of it in late October, I had a conversation with the main spokesperson from the 2nd grade team.

However, I think the blame game had a detrimental and lingering effect on the 1st grade team's ability to embrace structured literacy and implement it with fidelity. Their feeling of competency was attacked, and all interactions afterward to improve literacy instruction were marred. After doing an observation with one teacher, I

scheduled a feedback session. Even after beginning with positive words and then making suggestions, she responded with a teary, “I thought I was doing it all right.” The corrective feedback had little impact on her practice. This remained to be the case throughout the year. I worked with the whole 1st grade team on several occasions to split the elements of the Language Enrichment curriculum into both whole group and small group components based on which needed closer supervision and accountability with the teacher (decoding words). Two of the five were open to feedback and made changes after my observations. Others continued by carrying out practices whole group that should have been carried out small group.

Furthermore, in a February, 2019 conversation I had with the 1st grade team, the teachers expressed concerns about covering all their grade level TEKS and stated that they liked the way Neuhaus curriculum presents concepts. They asked to pull concepts earlier when the TEKS Resource System scope and sequence listed them since at the current pace, they may not get to some concepts in the Neuhaus curriculum. I agreed to this as long as it was done in addition to continuing the program in a sequential manner, not instead of using the program as intended. However, I found out in May when reviewing the teachers’ student data forms, they had misunderstood our discussion and only picked around in the curriculum and did not additionally present concepts sequentially which stalled students’ progress in becoming solid and fluid decoders. This resulted in much less growth in 1st graders than for 2nd graders as is evidenced in the data. This also points back to teachers’ lack of secure knowledge of the definition of

structured literacy being an explicit, systematic and direct teaching approach. If the teachers truly understood the spiraling nature of structured literacy, they would have continued presenting lessons in sequence. Haphazard implementation did not produce the same results that 2nd grade teachers experienced by implementing the curriculum with fidelity.

Impact of the Research on the Context

The results were shared widely with all stakeholders: parents, students, and the teachers involved as well as the whole campus during staff meetings and district administrators. I was very passionate about our progress and hoped this would encourage all in the impact it would have for the future. It appeared to be well received.

Prior to assessments, the teachers and I talked to students about the purpose of the assessment and our expectations. Students could easily communicate that we were looking for progress, and they knew that those that scored on grade level would move to an enrichment class setting for RtI. We celebrated student progress with ringing a bell when they met goals and with different incentives along with movement through the tiers of RtI. This excited further growth in students.

The results were communicated to parents through social media posts that showed students ringing the bell for goals met. Assessment score reports were also sent home, and in January, we held an assessment explanation meeting for parents. All these avenues were well received and many parents commented positively about the increased rigor for their students. Furthermore, I shared reading improvement in both in

principals' meetings and in data meetings with teachers. As teachers recorded student data on data cards and moved them up the walls in the data room, they were excited about the visual representation of growth among the grade levels. The excitement carried over to teachers in the next grade level looking forward to receiving students the following year that were more prepared for grade level reading instruction due to receiving a better foundation.

However, even amid all of the celebration of success, there has been a shift in how Neuhaus curriculum will be utilized next year due to changing district priorities. Over the last year, a district committee has met several times to discuss curriculum and to set some policies and expectations in place regarding curriculum and grading. There is currently a major push for curriculum alignment in the district and training geared toward lesson planning with the TEKS Resource System. Structured literacy will be used only in Tier 3 moving forward. During Tiers 1 and 2, teachers will rely solely on what is presented in the Instructional Focus Documents of the TEKS Resource System.

Closing Thoughts on Chapter IV

The student reading success that occurred this past year was nothing short of phenomenal. After initial baseline STAR Reading testing in August, 2018, 24 of close to 80 students qualified for Tier 3 assistance through scoring at a Pre Primer level. Feeling challenged but hopeful, I told my diagnostician, "I do not plan to refer all these students. My belief is that they have not had effective instruction, and when they do, we will sort out those that truly do need a referral for other services." My prediction was correct. The

2nd grade teachers and reading interventionist began implementing Structured Literacy with fidelity, and by January, I was able to go back to my diagnostician and report that now only 8 students are served by Tier 3. This is the value of effective reading instruction. So, regardless of the current political shift and the struggle to get a few teachers on board with research based practices, these successful students' lives are forever changed.

CHAPTER V

DISCUSSION

Summary of Findings from Chapter IV

Regardless of the challenges of change that occurred during the 2018-19 school year, several things happened that improved student outcomes. Teachers grew in their knowledge of structured literacy and effective research based reading practices. They also learned how to administer assessments with fidelity in order to ensure the data was reliable enough to drive instruction and intervention. Lastly, teachers' enhanced skills allowed them to regularly share data with students and parents. All of these together led to data driven instruction and student grouping which are, in turn, directly tied to greater student proficiency in reading.

Discussion of Results in Relation to the Extant Literature

My study proved the validity of previous research regarding structured literacy, using data driven instruction through RtI placement and monitoring, and growth in teacher knowledge due to effective professional development. In the research report, Preventing Reading Difficulties in Young Children, the National Academy of Science Committee Council (Snow et al, 1998), stated that "quality classroom instruction in kindergarten and the primary grades is the single best weapon against reading failure" (p. 343). Moats (2014) concurred by stating that although children's incoming literacy levels are a strong predictor of future success; a teacher who is knowledgeable about

reading and who provides explicit instruction, can bring success for at risk students.

Personal Reflection

I learned several lessons from this study. The first is the importance of gaining initial buy in from the top to the bottom stakeholders as early as possible. Due to my odd transition to the campus principal role and the departure of my superintendent in June, 2018 and the new superintendent arriving in August, 2018, I was unable to gain full buy in for my plan for improving reading outcomes for the campus. The new superintendent was supportive of my actions and plan, but lacked full understanding of structured literacy and Neuhaus Education Center curriculum. In retrospect, although he had to tackle many other issues that needed his attention in August, I wish there had been an opportunity to sit with him or connect him to resources at Neuhaus Education Center to help him see the importance of the work from the beginning.

Another lesson learned that I would handle differently next time is presenting beginning of year data in a more transparent fashion. I am not sure this would have made a difference in the attitudes and actions of the 1st grade team as opposed to the 2nd grade team, but it might have. In an effort to build a more positive culture, I chose to simply start with emphasizing beginning of year data briefly and moving on since we were moving forward with a new structure, instead of dissecting the whys behind where 1st graders ended the previous year.

Lastly, I learned how to more effectively coach teachers through coaching kindergarten teachers in the spring. I trained them to use the program, and then came in

weekly to present just in time help and modeling of concepts and activities that the teachers and students would encounter soon. This seemed to give teachers as much information as they needed without overwhelming them with the whole picture. I also allowed them to observe me teaching the program to their students a few times prior to their initial training. This allowed them to have a positive view of what their students would be capable of just a few weeks into the program before implementing it in their classrooms. This approach did not totally ameliorate negative feelings of change, but did help most move forward confidently.

Implications for Practice

Connection to the Context

I will present the data at the beginning of the year and talk specifically about my expectations for structured literacy. Also, I will require teachers to post the Language Enrichment scope and sequence outside each classroom door. Teachers will then date when each concept is taught. This will enable administrators to quickly determine if the teacher is on track with the curriculum. This will help with accountability and fidelity of implementation.

I will also provide weekly planning and coaching to the teachers regarding the curriculum. I think presenting a smaller amount of coaching advice and just in time professional development will help teachers have their questions answered in a timely fashion.

Connection to the Field of Study

I can make several connections to the fields of reading science, Response to Intervention, and creating change through professional development. First, when implemented with fidelity, the professional development in structured literacy increased teacher knowledge of effective literacy instructional practices and students' academic performance. When teachers resisted change and chose to implement structured literacy in a manner not consistent with research, students continued to struggle.

Accountability is imperative in making a change with teachers. However, if all parties on the leadership team are not dedicated to following through as needed to ensure success of all parties, then it is probably too industrious a challenge to work with 11 teachers at once. Therefore, as recommended by a Neuhaus Education Center trainer when she and I discussed creating momentum for change, "you need to run with the runners and allow the resistors to watch the results." She also stated that there will be 30% resistors (personal communication, January, 2019).

Lastly, I can easily connect the study results to RtI and leadership literature about data driven instruction. Making data visible through the creation of data walls created visual impressions of improvement for teachers. This served to encourage their change efforts. Also, the conversations during the data meetings and the ensuing student follow up (whether changing the students' tier arrangements or moving to some type of referral) were vital to serving students well.

Lessons Learned

I have learned that as a first year principal on a campus, changing all teachers to structured literacy is an ambitious goal if I am their sole support. However, when I look at student data and know that without the big change, we are doing a disservice to students; I do not feel that ethically I would have approached it any other way. Those teachers who were resistors learned more about what is necessary to teach reading in a research based manner even if they did not fully implement the curriculum as intended. On the other hand, for those that implemented the curriculum with utmost fidelity, students soared. Therefore, more than 100 students were well served with structured literacy this past year; and their lives are forever enriched.

Recommendations

I recommend continuing the implementation of structured literacy on campus with a timetable for each grade level on expected lessons to begin and end with at each grade level. I also encourage continued coaching conversations and also collaborative learning to continue teachers' learning about research regarding structured literacy and its effects on reading achievement. The implementation can also be improved by training more administrators in the value of structured literacy and how to recognize it in the classrooms. Then, they too can provide feedback and support for teachers. To ensure fidelity of implementation, I recommend hiring Neuhaus staff to do implementation walkthroughs twice per year. I would also require that the scope and sequence be posted outside each classroom with lessons initialed as they are taught. Lastly, I would continue

to work with teachers on how to teach some areas of Language Enrichment whole group so all students are exposed to the content and other areas of the curriculum during small group so teachers are able to hear students and hold them accountable for their learning assign the best teachers to teach Language Enrichment groups during Tier 2 instruction.

Closing Thoughts

A fellow principal and close friend, encouraged me along my journey in January, 2019 by saying that it has taken her five years to create a cohesive staff. Change takes time and not every staff member will be in agreement with changes that are implemented, even if they are in the best interest of students. However, at the end of the day, leaders and resistors must all realize that as educators, we are collectively responsible for what happens to and with our children while they are on our watch. Therefore, I agree with the International Dyslexia Association's belief that every teacher whether they are classroom teachers, special education teachers, or reading specialists, need training in the science of reading if America is going to see improvement in student reading achievement (IDA website). Researchers have known this for decades, and it was my hope to make a difference for the teachers and children on my campus. I believe that did indeed occur. My passion for structured literacy only burns brighter due to the results gained this past year. Therefore, I will continue to stand with and work toward the IDA motto, "until everyone can read" (IDA website). Hessler and Morrison (2016) stated that our children are precious, the most important stakeholders. When academicians, administrators, publishers, researchers, or administrators of public policy

lose sight of that, they inadvertently risk harming those they aim to educate (p. 50). I plan to do my part to keep that from happening anywhere I can make an impact.

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APPENDIX

SURVEY OF BASIC LANGUAGE CONSTRUCTS

Please evaluate your knowledge of:

1. Phonemic Awareness

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

2. Phonics

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

3. Fluency

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

4. Vocabulary

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

5. Comprehension

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

6. Children's Literature

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

7. Teaching literacy skills to ELLs

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

8. Using assessment to inform reading instruction

○ MINIMAL ○ MODERATE ○ VERY GOOD ○ EXPERT

9. A phoneme refers to

- a single letter.
- a single speech sound.
- a single unit of meaning.
- a grapheme.
- no idea

10. If tife is a word, the letter "i" would probably sound like the "i" in:

- if
- beautiful
- find
- ceiling
- sing
- no idea

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

- silent consonant
- consonant digraph
- diphthong
- consonant blend
- no idea

12. How many speech sounds are in the following words? For example, the word "cat" has 3 speech sounds 'k'-'a'-'t'. Speech sounds do not necessarily equal the number of letters.

box
grass
ship
moon
brush
knee

 through

13. What type of task would the following be? "Say the word 'cat.' Now say the word without the /k/ sound."

- blending
- rhyming
- segmentation
- deletion
- no idea

14. A "soft c" is in the word:

- Chicago
- cat
- chair
- city
- none of the above
- no idea

15. Identify the pair of words that begins with the same sound:

- joke-goat
- chef-shoe
- quiet-giant
- chip-chemist
- no idea

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

16. If you say the word, and then reverse the order of the sounds, ice would be:

- easy
- sea
- size
- sigh

- no idea

17. If you say the word, and then reverse the order of the sounds, enough would be:
    - fun
    - phone
    - funny
    - one
    - no idea

18. All of the following nonsense words have a silent letter, except:
    - bamb
    - wrin
    - shipe
    - knam
    - phop
    - no idea

19. For each of the words on the left, determine the number of syllables and the number of morphemes. (**Please be sure to give both the number of syllables and the number of morphemes, even though it may be the same number.**)

	# of syllables	**# of morphemes**
disassemble		
heaven		
observer		
spinster		

pedestal		
frogs		
teacher		

20. Which of the following words has an example of a final stable syllable?

- wave
- bacon
- paddle
- napkin
- none of the above
- no idea

21. Which of the following words has 2 closed syllables?

- wave
- bacon
- paddle
- napkin
- none of the above
- no idea

22. Which of the following words contains an open syllable?

- wave
- bacon
- paddle
- napkin
- none of the above
- no idea

23. Phonological awareness is:

- the ability to use letter-sound correspondences to decode.

- the understanding of how spoken language is broken down and manipulated.
- a teaching method for decoding skills.
- the same as phonics.
- no idea

24. Phonemic awareness is:
    - the same as phonological awareness.
    - the understanding of how letters and sounds are put together to form words.
    - the ability to break down and manipulate the individual sounds in spoken language.
    - the ability to use sound-symbol correspondences to read new words.
    - no idea

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

26. What is the rule that governs the use of 'k' in the initial position for /k/?
    - 'k' is used for /k/ in the initial position before e, i, or y
    - the use of 'k' for /k/ in the initial position is random and must be memorized
    - 'k' is used for /k/ in the initial position before a, o, u, or any consonant
    - none of the above
    - no idea

27. A morpheme refers to:
    - a single letter.
    - a single speech sound.
    - a single unit of meaning
    - a grapheme
- no idea