

12-2013

# The Effects of Providing Additional Reading Opportunities for Struggling Readers at Their Independent Reading Levels Within Content Areas

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THE EFFECTS OF PROVIDING ADDITIONAL READING  
OPPORTUNITIES FOR STRUGGLING READERS AT THEIR INDEPENDENT  
READING LEVELS WITHIN CONTENT AREAS

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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December 2013

Indiana University of Pennsylvania  
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Title: The Effects of Providing Additional Reading Opportunities for Struggling Readers at Their Independent Reading Levels Within Content Areas

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A mixed-methods study was conducted to determine if extra reading practice incorporated into fifth- and sixth-grade social studies and science content classes would have a positive impact on reading assessments for readers at risk. At-risk readers' independent reading levels were assessed using Dynamic Indicator of Basic Early Literacy Skills or DIBELS. Once their independent reading levels were determined, leveled texts on their independent reading levels were matched up to their social studies and science curricula. The at-risk students engaged in the reading of these texts either before or after class.

The students did the reading in their classes for five months. However, there were some inconsistencies due to the preparation and administering of Pennsylvania State System of Assessment (PSSA). Pre- and post-testing were utilized to determine if the reading of the texts had a positive impact on the students' reading assessments. In addition to the quantitative data, focus groups were incorporated to investigate how the teachers felt about integrating the leveled texts within their content area classes.

## ACKNOWLEDGMENTS

This major endeavor would not have been possible without the help and support of Dr. Paquette. I cannot thank you enough for all your help. Thank you for being my thesaurus, editor, sounding board, cheerleader, and mentor. I appreciated all of your knowledge and positivity.

Thanks also go to Dr. Creany and Dr. Rieg. Dr. Creany, thank you for creating a passion for learning and researching about reading, inside a math teacher. Dr. Rieg, many thanks for your guidance and help through the dissertation process as well as instilling confidence in one frightened doctoral student during her very first doctoral class.

## DEDICATION

First and foremost, thank you God for helping me on this path. I could not have done it without You. Next, I would like to thank my husband, Rob, who has taught me many lessons in patience, perseverance, and faith. Another big thank you goes to my children, Rob and Elizabeth, who are my constant joy and provide my inspiration to always try and better myself. I would like to thank my parents, Gene and Kathy Morris, who never stopped believing in me even when I stopped believing in myself. They were my constant cheerleaders! Last but certainly not least, Ryan, Gigi did it! I love you all!

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# CHAPTER I

## INTRODUCTION

Children who are struggling readers in third grade remain struggling readers in ninth grade (Lyon, 2003). Unfortunately, struggling young readers continue to grapple with reading into adulthood. It is important to note that illiteracy and crime are closely related. The Department of Justice stated, “The link between academic failure and delinquency, violence, and crime is welded to reading failure. Over 70% of inmates in America’s prisons cannot read above a fourth grade level” (Begintoread.com, para. 8). Statistics like the one previously mentioned above brought the problem of reading into the limelight of public debate and eventually the attention of the United States government.

With the passing of No Child Left Behind (NCLB) 2001, much light was cast upon students not making adequate progress in reading. As a result of the passing of NCLB, Response to Instruction and Intervention (RtII) was developed. RtII is the proactive approach to identifying all children who are struggling in reading. The first step of the RtII process is screening all children for reading difficulties.

Through the RtII process, all children are assessed using reading and phonics screeners, such as Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to determine if the child is at risk for reading difficulties. The children are then grouped into a triangular-shaped pyramid called the RtII model.

The RtII model is represented by a triangle separated into three parts. The bottom part of the triangle, which is also the largest part of the triangle, represents the general population of students. This bottom part of the model is called Tier One and is where all students of low-risk reading competencies are placed. Tier One reading instruction should be rigorous, research

based, and grounded in the five components of reading instruction. The RtII model moves students to progressively higher tiers of intensive intervention on the triangle model if they are not successful in the general education classroom using research-based instruction. If students in the Tier One reading program in the general education classroom are not making adequate reading progress, those students are moved to subsequently higher tiers for more intensive reading instruction until progress is achieved (Hughes & Dexter, 2011).

Children who struggle with phonics or reading are put on a Tier Two reading intervention and instruction (Hoover & Love, 2011). Tier Two is displayed as the next narrow part of the triangle. Students who are on a Tier Two of the RtII model are assessed to determine why they are reading below grade level and receive extra reading instruction and intensive intervention in their skill deficits. Once the students' needs are assessed, the students are grouped by skill and receive direct and additional reading instruction. It is essential for the intensive reading instruction to be from a rigorous and research-based reading program (Hoover & Love, 2011). The students are assessed weekly or biweekly, frequently referred to as progress monitoring, to determine if the intervention is working. Progress monitoring and small group instruction are the basis of the RtII framework. Data collection is an integral part of Tier Two. Student data must be constantly monitored to determine if the interventions are working (Hoover & Love, 2011).

If, after intense remediation, progress monitoring, and detailed documentation, the student is not making progress on Tier Two, the student must then move into a Tier Three model. The Tier Three model, which is the narrowest part of the triangle model, may include even more intense reading instruction, perhaps a different reading curriculum and/or a program which may involve the child being removed from the general reading program to a small group instruction

program. Tier Three may involve extra time given to reading in place of social studies or science (Hoover & Love, 2011).

If the three levels of the RtII model of instruction and intervention are implemented and the student is still unsuccessful, then he or she will be referred for special education services (Hoover & Patton, 2008). The RtII process ensures that a student is referred to special education only after less restrictive means are exhausted. The ultimate goals of RtII are as follows: to ensure all students are receiving a rigorous and scientifically-based reading program, universal screening to identify students who may be at risk, assessments and progress monitoring to warrant all students are responding to the instruction, and increasingly more intensive reading instruction for students who are not responding to the intervention (Wanzek & Vaughn, 2009).

When struggling readers are identified through the Response to Intervention system, students are placed into small groups to practice reading on their instructional levels and for remediation of deficit phonics skills. The time allocated to these groups is approximately 30 to 40 minutes per day. The student then rejoins his or her peers for the general education curriculum which is most likely above his or her reading level. Allington (2006) declared that for the remainder of the day, the struggling students are not reading on their instructional levels. However, they are the students who are in most need of reading practice.

### **Problem Statement**

Elementary children who are deemed at risk through reading assessments are usually placed into small groups to remediate deficit skills. However, the time allocated is usually between 20 or 40 minutes, three to four times per week (Gersten, Compton, Connor, Dimino, Santero, Linan-Thompson et al., 2008). The students then rejoin the general education setting where the majority of the reading material is too difficult. Allington (2009) questioned, “Is it

best practice for a struggling reader to only have 30 minutes of daily practice reading on their independent levels” (p. 7).

Children who struggle in reading need to practice in order to become better. Children who read several grade levels behind their peers do not have the opportunity to practice reading on their independent reading levels throughout the school day. Children struggle due to the fact that grade level reading material is above their independent reading levels and they need to practice reading on their independent levels. Allington (2009) stated that a key finding to improved reading scores involved teachers’ use of “multi-text and multi-leveled curriculum design” (p. 3).

### **Research Questions**

1. Is there a correlation between extra practice reading and proficiency on reading assessments?
2. How do content area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes?

### **Null Hypotheses**

Hypothesis 1. There will be no significant change in reading scores from mid-year to end of the year assessments using DIBELS, EdPerformance, and Pennsylvania System of School Assessment.

Hypothesis 2. There will be no significant correlation between time students spend reading on their independent reading levels and their gains in reading assessments.

### **Purpose of the Study**

What if students who struggled in reading were given extra time to practice on their independent reading levels during their social studies and science content classes? Would extra

time practicing reading result in greater gains as measured by DIBELS, EdPerformance, and Pennsylvania System of School Assessment (PSSA) reading tests? The purpose of the study was to identify whether students' reading skills improved, pursuant to their test scores, after having additional reading experiences with multi-leveled texts. Additionally, teachers reported the advantages and disadvantages, if any, of incorporating multi-leveled texts in the content areas.

Readers who struggle need access to independent reading levels texts in the classroom to practice reading (Caldwell & Ford, 2002). In the social studies and science content areas, textbooks are difficult to read resulting in students with deficits in reading not being able to access the concepts within the text, and the curriculum. Likewise, and equally important, is for the students to practice reading throughout their school day (Caldwell & Ford, 2002). In this study, for nearly every concept introduced in the students' social studies and science classes, multi-leveled texts were available so students could access the content and have extra practice reading on their independent levels. The teachers had a curriculum map that identified all the standards and big ideas of the social studies and science concepts as well as a list of multi-leveled texts that reflect the curriculum.

This study followed a mixed-methods design. Quantitative data that were collected were from DIBELS which included both Benchmark and Progress Monitoring Oral Reading Fluency assessments. Additional assessments were EdPerformance and the PSSA.

Qualitative data were collected via interview sessions and focus groups with the fifth-and sixth-grade teachers. These interviews and focus groups attempted to identify the teachers' reported perceptions on incorporating multi-leveled texts in the content areas. In addition to the teachers' perceptions, the sessions were utilized to identify potential positive literacy behaviors (Hunt, 2009).

## **Definitions**

Dynamic Indicator of Basic Early Literacy Skills (DIBELS) - An assessment that measures the five big ideas for reading instruction as outlined in the National Reading Panel: phonemic awareness, phonics, alphabetic principles, comprehension, and fluency (DIBELS).

EdPerformance - An on-line assessment that tailors proficiency levels in state standards in math and reading (Performance Series).

Inclusion - A philosophy shared by members of a school community, “often emphasizing the commitment to education for all students so they can reach their potential” (Friend, 2008, p. 520).

Fluency - Reading with speed, accuracy, and proper expression (Allington, 1983).

Leveled Texts - Reading materials that represent a progression from simple to more complex (Brabham & Villaume, 2002).

Pennsylvania State System of Assessment - A standards-based, criterion-referenced assessment used to measure a student’s attainment of the academic standards while also determining the degree to which school programs enable students to attain proficiency of the standards (PSSA).

Response to Instruction and Intervention or RtII - Response to Instruction and Intervention is a multi-leveled approach to helping readers who struggle (Hughes & Dexter, 2011).

Frustrational Level - Knowledge of less than 90% of the words in a text (Gickling & Armstrong, 1978).

Instructional Level - Knowledge of 93%-97% of the words in a text (Gickling & Armstrong, 1978).

Independent Level - Knowledge of 97% or more of the words in a text (Gickling & Armstrong, 1978).

Intensive Intervention - According to DIBELs the student who achieves this score is in need of intensive reading instruction.

Strategic Intervention - According to DIBELs the student who achieves this score is in need of strategic reading instruction.

Core Intervention - According to DIBELs the student who achieves this score is on grade level.

Close Reading - “meaning is hidden in the text, and the reader’s task is to extract this meaning through careful and thorough analysis and reanalysis, with each subsequent return to the text based on a unique purpose” (Shanahan, 2013, p. 13).

Reading Stamina - The ability to read challenging and rigorous texts (Snow, 2013).

### **Significance of the Study**

According to the National Assessment of Education Progress reading scores, roughly two out of three students in the United States have reading proficiency below the level needed to successfully complete grade level work (Allington, 2009). Nevertheless, the stakes have never been higher for school districts trying to instruct and move students to proficiency reading levels on state assessments. Students who are reading below grade level are in the general education settings that are rich with materials that they cannot read.

However, if students were given more opportunities to read at their independent levels throughout their school day, this experience would result in more time to practice reading. Students who could practice reading in social studies and science at their independent levels would not only have extra practice but also greater access to the content information (Hunt,

2009). Textbooks and instructional materials in later grades often consist primarily of expository text that is more difficult to comprehend than narrative text for all students, especially for those with reading difficulties (Williams, 2005). This study aimed to see if extra practice in independent reading time would result in greater gains in reading as assessed by DIBELS, PSSA, and EdPerformance.

### **Theoretical Framework**

This study was grounded in Perfetti's theory of Verbal Efficiency (1985) and Vygotsky's Zone of Proximal Development (1978). Perfetti (1985) stated that when phonological (sound), orthographic (spelling), and semantic (meaning or understanding) are at an adequate level, then mental resources are freed for the higher-order components of comprehension. This cannot be achieved without reading practice on the student's independent reading level. Likewise, tasks within the zone of proximal development promote maximum cognitive growth. This is the zone of learning for a child between what he can learn on his own and what he can learn with the assistance of others.

The idea of scaffolding learning comes from Vygotsky's Zone of Proximal Development theory (1978). Scaffolding refers to learning situations in which adults and other more competent individuals provide some form of guidance or structure that enables students to engage in learning activities within their zone of proximal development (Caldwell, 2011). The usage of leveled texts to build upon the reader's growth correlates with Vygotsky's Zone of Proximal Development. In using leveled texts, the reading on the independent level can help the student practice reading and gradually build reading skills with more difficult texts.

### **Participants**

Participants were 15 students in the fifth and sixth grade. Some of these students were identified as struggling readers and had been placed on Tier Two of the RtII model. These students had access to multi-leveled texts during social studies and science to practice reading on their independent levels in the content area classes.

### **Limitations**

There were limitations to this study. The sample size in this study was small. The sample of 15 students was not an adequate representation of a national population and the student population lacked diversity. The student population being studied was 98% Caucasian which makes the study limited in its generalizability. The study took place over a school year resulting in many outside influences that had an impact on a student's academic reading progress. The identified school population was in a rural school district in Western Pennsylvania and was not generalizable to other areas.

### **Disclaimer**

The researcher is a promoter and an advocator for people-first language. However, to enhance the readability and flow of this dissertation, the researcher employed the terms struggling readers and/or at-risk readers. The researcher believes these terms are clear, concise, and will contribute to the overall effectiveness of this project.

## CHAPTER II

### LITERATURE REVIEW

#### **Significance of the Study**

This chapter reviewed the current literature that examines struggling readers and incorporating leveled texts in the content areas of social studies and science. Furthermore, this study examined the literature on teachers' perceptions of teaching reading in the content area classes. In order to cultivate a comprehensive review of literature for the purposes of this study, primary and secondary resources, dissertations, and government publications were reviewed.

Lyons (2003) stated that children, who are struggling readers in third grade, remain struggling readers in ninth grade. Therefore, teachers need to identify struggling readers and address their reading deficits as quickly as possible. If reading problems are not addressed, children will continue to struggle and could develop into adults who struggle with illiteracy. This study examined the importance of giving struggling readers more time to practice reading on their independent levels thus increasing their literacy skills and successes.

According to the Adult Literacy Survey (ALS), between 21% and 24% of people in the United States performed at the lowest rate in literacy in three scales: document, prose, and quantitative or number literacy (Wright, 2007). Document literacy is the ability to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables, and charts. Prose literacy is the ability to comprehend and use information from texts including editorials, news stories, brochures, and instruction manuals (Kirsh, Jungeblut, & Mosenthal, 1998).

Another sobering statistic, of the children who are considered juvenile delinquents, 85% have reading problems. To determine how many prison beds will be needed in future years,

some states base part of their projections on how well current elementary students are performing on reading tests (Ellis, no date given). With these trying statistics, reading deficiencies are not only a problem in the elementary schools but globally as well.

Children who enter school as struggling readers need quick assessments and remediation. However, Allington and Gabriel (2012) stated that we can prevent reading problems, or at least most of them, for all children by third grade if we follow several key items. One of the items is to have children practice reading on their independent levels throughout the school day.

Elementary children who are deemed at risk through reading assessments are usually placed into small groups to remediate deficit skills. However, the time allocated is usually between 20 or 40 minutes, three to four times per week (National Center on Response to Intervention, 2010). The students then rejoin the general education setting where the majority of the reading material is too difficult. Allington (2006) declared that for the remainder of the day, the struggling students are not reading on their independent levels, yet they are the students who are in most need of reading practice. Allington (2009) questioned, “Is it best practice for a struggling reader to only have 30 minutes of daily practice reading on their independent levels?” (p. 2).

This study is grounded in two theories. The first theory is Perfetti’s Theory of Reading and the second theory is Vygotsky’s developmental theory. These theories complement the study.

### **Perfetti’s Theory of Reading - The Verbal Efficiency Theory**

The Verbal Efficiency Theory states that mere word recognition accuracy is not, in itself, sufficient to enable fluent reading comprehension. Instead, word-coding skills or decoding must be increased to a high level of efficiency and automaticity in order for the reader to be able to devote attention to meaning and comprehension. Perfetti (1985) explained that the outcome of

reading can be limited by the efficient operation of the child's local processes. If the child's processes such as decoding or lexical access are delayed or not efficient, then the end product, reading, is ineffective and results in loss of comprehension. One implication of the Verbal Efficiency Theory is that struggling readers' reading should improve with phonics instruction. However, Perfetti (1985) also stated that isolated phonics instruction may not be adequate because a student's rapid decoding, merely training a student to say sounds quickly, does not indicate a good reader. Practice at actual reading will not only improve reading comprehension but also decoding. Perfetti (1985) noted that for students to become proficient readers with both comprehension and decoding strategies they need time to practice, or what he calls a "systematic rereading of meaningful passages" ( p. 247).

In addition to Perfetti's theory, O'Conner, Bell, Harty, Larkin, Sackor, and Zigmond (2002) stated many levels of reading processes become effortless with sufficient learning exposures and practices. If struggling students can access texts on their independent reading levels during the school year, the leveled texts would result in children having more time to practice reading which should theoretically produce better readers. Thus, scaffolding becomes an integral part of the reading instruction which is why Vygotsky's Zone of Proximal Development is another theory in which this research is grounded.

### **Vygotsky's Zone of Proximal Development**

Vygotsky's developmental theory corroborates the use of leveled texts scaffolding for reading instruction and some of his most influential ideas that support leveled text in scaffolding reading are as follows:

1. Complex mental processes began as social activities. As children develop, they gradually analyze these processes and can use them independently of those around them.

Vygotsky called this process of social activities being internalized as mental activities “internalization.” When children begin reading instruction, they need to interact with each other, the text, and the teacher. The teacher’s role is to guide and scaffold the reading instruction.

2. Children can often accomplish more difficult tasks when they have the assistance of other people more advanced and competent than themselves.

3. Tasks within the zone of proximal development promote maximum cognitive growth. The zone of proximal development is the zone of learning for a child where he or she can learn something with the assistance of others. Without such assistance, he or she would not be able to learn the subject.

4. The idea of scaffolding learning comes from Vygotsky’s zone of proximal development theory or ZPD. Scaffolding refers to learning situations in which adults and other more competent individuals provide some form of guidance or structure that enables students to engage in learning activities within their zone of proximal development. (Caldwell, 2011)

Scaffolding is a main component of Vygotsky’s ZPD. The use of leveled texts in reading instruction support the struggling reader’s reading instruction by starting the student on reading material he or she can read and comprehend. These points also support the use of independent texts in the content areas. A one-size-fits-all reading program cannot benefit every child (Allington, 2006). Each child’s individual reading needs are different, resulting in the need for reading instruction that meets all students’ needs. Leveled texts give the opportunity for differential instruction and all children to practice reading on their independent levels.

Being an efficient reader is crucial to academic success and overall life success. Children not only need proper and efficient reading instruction but also time to practice reading. These theories both state that children need scaffolded instruction and multiple practice sessions to become better readers. Leveled texts offer both scaffolded instruction and practice. Usually social studies and science content level textbooks are very difficult to read due to the advanced content level vocabulary. Using leveled texts in the content areas of social studies and science not only offers additional reading practice throughout the day for the students but also better access to the curriculum. Giving choices of various reading material helps the students feel in control of their own reading, promoting motivation and the development of lifelong readers. Part of creating a lifelong and motivated reader is to incorporate time to read during the school day. Schools need to be flexible in their schedules to create extra reading practice in the content areas. A question that is pondered by content teachers is how to meet the needs of struggling readers without sacrificing content knowledge.

### **Teaching Reading in the Content Area**

In a dissertation research project by Hunt (2009), the researcher studied struggling readers in second grade. Hunt stated that the second graders were deemed “At Risk” readers, due to the fact that their oral reading fluency scores were at the bottom 25<sup>th</sup> percentile of their grade level. For her project study, Hunt enrolled a veteran teacher with both a teaching degree in elementary and reading specialist certification to do additional reading instruction with the students as an intervention for the struggling readers. The intervention consisted of the veteran teacher using science trade books that matched the students’ reading level and science curriculum. Hunt (2009) stated:

A variety of repeated reading strategies were used with these texts to increase oral reading fluency, to develop participants' inter-textual connections, to increase utilization of chunking and phrasing for prosody development, and to enhance vocabulary recognition skills so that gains in oral reading fluency could be realized. (p. 66)

To measure oral reading fluency progress the formative assessment AIMS web was used. Hunt (2009) hypothesized that not only would students' oral reading fluency scores increase but also their class participation in the science content class would increase as well. Class participation in this study was defined as "contributions to classroom lessons in both reading and speaking, based on knowledge obtained through intervention or classroom content area lessons" (p. 61). The researcher's data showed that the intervention helped the students make gains in their oral reading fluency scores using leveled science trade books. Through observations and teacher interviews, Hunt (2009) also noted that the struggling readers' participation rate in their science content class increased. She concluded her research by saying that using science trade books not only gave the students more practice time reading on their levels, and increased their oral reading fluency scores, but also helped the students access the curriculum. A secondary result of the study was an increase in the students' confidence and participation levels. The data in this study showed extra practice time can produce positive reading results.

One can conclude that in order to be better readers, children who struggle with reading need time to practice. However, other studies show using leveled texts within the content areas is not the norm in classrooms. Swanson (2008) conducted a meta-analysis of reading instruction. She examined numerous studies using the key words such as observations, reading instructions, reading disabilities, and reading teachers. The final research report selected was a meta-analysis involving 21 studies. Perhaps one of the most striking findings of the meta-analysis was that

struggling readers spent the least amount of time engaged in actual reading (Swanson, 2008).

The researcher also stated that there seems to be “a real disconnect between what occurs during reading instruction for students” and “research supported components of effective reading instruction” (p. 130).

In another study, Short (1999) stated “upper grade students often spend most of their time reading content materials and rarely have time to simply enjoy a good book” (p. 133).

Gallagher (2007) agreed by proposing a new word entitled Readicide which she defined as “the systematic killing of the love of reading, often exacerbated by the inane, mind numbing practices found in schools” (p. 2). She further stated that many schools in the effort to fix reading problems are actually producing a nation full of non-readers (Gallagher, 2007). With reading being at the forefront of the education system today, the questions beg to be answered, are all teachers reading teachers? What about social studies and science teachers?

### **Content Teachers’ Perceptions of Teaching Reading**

Jones-Moore (2011), in her dissertation entitled *Exploring Elementary School Teachers’ Perception of Their Role in Teaching Content Literacy in the Elementary Science and Social Studies Classrooms: A Mixed Methods Study*, wanted to research elementary science teachers’ perceptions of teaching reading in the content area and how the content teachers met the reading challenges of their science textbooks. Most teachers who taught science content stated that their focus was to teach the content and not to teach reading. The study further stated that content area teachers often do not see the connection between content and literacy instruction and see reading being taught by the reading teacher (Lester, 2000).

In a similar study conducted by Wilson, Grisham, and Smetana (2009), the researchers taught and implemented a year-long professional development in the area of literacy for content

area teachers. The teachers were instructed in the literacy framework and comprehension strategies to help their students, thus they became teachers of both content and reading. The researchers stated that teachers were more than willing to implement these strategies once they received training in the area of literacy.

In a contrasting study, Gerwertz (2012) stated that social studies and science content teachers were hesitant in supplementing the curriculum because the process would be difficult. Not only would teachers have to match texts to concepts, but also find texts that were engaging, content-rich, and would bring forth writing assignments. In fact, some teachers stated that using leveled texts would not work for every concept in science or social studies.

In an additional study, Brozo and Fisher (2010) concluded that content area teachers, especially teachers at the middle and high school levels, have not had training in literacy and often lack support, and the knowledge of content literacy. Due to this lack of knowledge and support, teachers may feel uncomfortable infusing reading instruction into the content area. However, if struggling readers need extra time to practice reading, content teachers need to provide reading instruction and the time in their classrooms.

Hall (2005) did a literature review of teacher attitudes toward reading in the content areas. In her review she found that for a century, researchers have agreed that students could benefit by having reading instruction infused into their content area classes. The researcher began her literature review by creating a database to conduct searches to identify specific themes that may have existed in the studies. Hall (2005) found two existing themes. The first theme was that teaching reading was the “job” of the reading teacher. The second theme was that pre-service teachers often lacked instruction in the area of teaching reading within content areas. She concluded her study by saying that many pre-service teachers felt ill-prepared to teach reading in

the content areas and colleges and universities need to have courses to help pre-service teachers be able to teach reading in the content areas. This study showed pre-service teachers need training to infuse literature into the content areas but that universities and colleges lack the proper instruction and course work to train pre-service teachers. Hall (2005) further stated that a positive attitude toward teaching reading in the content area did not always determine adequate reading instruction and that education and training of pre-service and in-service teachers was the key.

Questions often asked is how is reading taught and can reading be taught in the social studies and science content areas. In *Teaching Reading is Rocket Science*, Moats (1999) stated:

The most effective programs include daily exposure to a variety of texts as well as incentives for children to read independently and with others. Practicing reading was defined as practices that build reading fluency include repeated readings of text, alternate reading with a partner, and simultaneous oral reading in easy material. (p. 16)

One can conclude that in order for students to improve in oral reading fluency, all teachers need to be teachers of reading and children need to be reading on their instructional levels in all classes. However, how does a teacher teach reading? This is a complex question.

### **How is Reading Taught?**

The question how to best teach students reading has been debated for decades (Cunningham & Allington, 1999). The very first approach in teaching children to read was the alphabetic principle approach with a heavy emphasis on phonics and letter-to-sound correspondence. The alphabetic principle approach consisted of two parts: alphabetic understanding that words consist of letters that indicate different sounds, and phonological

awareness, or using the relation between those letters and sounds to pronounce and spell words (National Institute of Child Health and Human Development, 2000).

Ehri (2002) stated that students become fluent readers by forming connections between letters in the spellings of words and sounds in the pronunciations of words, and this connection has been demonstrated to be a critical component of fluent reading (Perfetti & Bolger, 2004). Ehri (2005) classified the development of the alphabetic principle in terms of four distinct phases: pre-alphabetic, partial alphabetic, full alphabetic, and consolidated alphabetic stage. In the pre-alphabetic phase, children do not form letter-sound connections to read words. Word reading in this stage is likely a result of visual cues that do not involve the alphabetic system. For example, a child seeing the McDonald's Golden Arches and "reading" the McDonalds name is merely recognizing visually the McDonald's sign and not really reading the McDonald's sign. When a student is just beginning to learn the names and/or sounds of alphabetic letters, and using those connections to read words, they are classified as having skills in the partial alphabetic phase. Students in this stage are limited by their phonemic awareness skills, and may display partial decoding (Ehri, 2005).

In the full alphabetic stage, as the name suggests, children form complete connections between letters in spellings and phonemes in pronunciations. Their word reading becomes more accurate, and they use a decoding strategy so that similarly spelled words are infrequently confused. Children are said to be in the consolidated alphabetic stage when they consolidate grapheme-phoneme connections into larger units, and build their vocabulary of words (National Institute of Child Health and Human Development, 2000).

Another popular method to teach reading is through trade books or literature-based instruction. In literature-based instruction, research on literacy learning clearly shows that the

processes of reading, writing, speaking, listening, viewing, and thinking develop simultaneously as learners become literate (Cooper, 2000).

The most common approach to teaching reading has been the use of basal readers that introduce sight words and some phonic skills. As basal readers evolve to increasingly difficult text, the percentage of decodable and sight words decrease (Cunningham, Spadorcia, Erickson, Koppenhaver, Sturm, & Yoder, 2005). Due to the increased difficulty of the texts, the struggling readers are always reading on their independent reading levels, yet continually challenged by having new words introduced. One way to teach with the basal readers is dividing the reading class into homogenous groups. This division enabled the students to learn and be instructed in reading at their own pace and can provide the opportunity for individualized instruction. Basal readers allowed teachers to address and meet the students' diverse needs in the classroom (Caldwell & Ford, 2002). However, Barr and Dreeban, (1991) stated that grouping students can lead to a number of dangers. For example, grouping low performing readers with other low performing readers can counteract growth for a struggling reader.

The last method is a language experience/writing process which involves the combination of the reading and writing process. By writing, children learn reading "from the inside out" (Cunningham & Allington, 1999).

Cunningham and Allington (1999) stated that a common feature to all four of these instructional methods is that one method alone does not work in instructing reading. The researchers further suggested that all approaches must be used for a well-rounded reading program. Moreover, the one key item that is needed is reading practice.

To ensure quality literature throughout the day for struggling readers, Brozo and Fisher (2010) proposed that in a classroom three criteria need to be met: make content learning and

content literacy inseparable, have a language arts curriculum that is reading-to-learn as well as learning-to-read, and increase experiences with informational texts.

Although there are several different approaches to teaching reading, one component that most researchers agree on is time for the students to practice reading and apply the newly-learned reading skills. Despite the agreement on practice, there has always been debate over the best approach to teach reading.

### **Response to Instruction, Intervention, and Reading**

Historically, there have always been struggling readers in schools. Many struggling readers were just promoted and continued to struggle throughout their school years or students were placed into special education classrooms (Stecker, Fuchs, & Fuchs, 2008). Neither direction produced positive results. As stated previously, students who continued to struggle likely were struggling readers in high school and many students who were placed into special education stayed in special education classrooms until graduation. However, the issue of struggling readers came to the forefront when NCLB was signed into law on January 8, 2002. NCLB was based on four pillars, the first of which is Stronger Accountability for Results. This pillar dictates that all states close the achievement gap and ensure all student sub groups, such as economically disadvantaged and special education achieve academic proficiency. The second pillar is Freedom for States and Communities. States and communities have flexibility to use federal funds for educational materials. The third pillar is Proven Educational Methods. Proven educational methods enabled students to benefit from rigorous scientific research based core programs. The fourth pillar in NCLB is Choices for Parents. In schools that do not meet state standards for at least two consecutive years, parents have the option to transfer their children to a better-performing public schools, including a public charter schools, within their districts

([www.2.ed.gov/nclb/overview/intro/4pillars.html](http://www.2.ed.gov/nclb/overview/intro/4pillars.html)). In addition, the *Individuals with Disabilities Education Improvement Act* (IDEA) of 2004 added the component of Response to Intervention as a way to identify students who struggle in reading, math, or behavior (Harlacher, Walker, & Sanford, 2010). Child Find, an added segment of NCLB, is a continuous process of screening and evaluation designed to locate, identify, and refer as early as possible all young children with disabilities and/or difficulties in reading (<http://www.childfindidea.org/overview.htm>).

The 2004 IDEA legislation introduced Response to Intervention and Instruction or RtII and invited schools to use 15% of their special education money for regular education interventions. The law requires “appropriate,” “scientific, research- based” instruction, by “qualified personnel” (Johnston, 2010). With the reauthorization of IDEA, states now have the option of discontinuing use of IQ-achievement discrepancy procedures as part of the learning disability (LD) identification process in favor of a RtII approach. RtII is based on the premise that students are identified as Learning Disabled or LD when their responses to effective educational interventions are dramatically inferior to that of peers (Davis, Lindo, & Compton 2007).

The legislation brought to light struggling readers and defined a plan to help readers who read below grade level. RtII was adopted by elementary schools and put into place to help readers. The RtII model that was implemented by most elementary schools was the three tiered triangle of reading support with its three major components. The first component is matching high quality research-based reading intervention to students’ educational needs. Second, progress monitoring is used to assess the need for changes in instruction or goals. Third, students’ data from progress monitoring are the basis of important educational decisions, which might include additional levels or tiers of instructional intensity (Bianco, 2010).

Five recommendations were directed to districts and schools seeking to effectively implement an RtII system:

1. Screen all students for potential reading problems at the beginning-of-the-year and again in the middle-of-the-year.
2. Provide time for differentiated reading instruction for all students based on assessments of students' current reading levels.
3. Provide intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark on universal screenings.
4. Monitor the progress of Tier 2 students at least once a month.
5. Provide intensive instruction on a daily basis that promotes the development of the various components of reading proficiency to students who show minimal progress after reasonable time in Tier 2 small group instruction. (Baker, Fien, & Luft Baker, 2010)

Recommendation one advises that all students receive a screening three to four times per year to gauge and assess children who may be at risk for failure in reading, math, or behavior. This screening enables children who may be at risk to have their deficiencies addressed before major academic problems arise (Baker, Fien, & Luft Baker, 2010).

Recommendation two emphasizes that reading instruction should be rigorous and research-based in the five components of reading: phonemic awareness, phonics, vocabulary, fluency, and comprehension. Guideline two also stresses that reading instruction cannot be a one-size-fits-all program. Allington (2006) agreed by stating that clear and effective reading instruction must meet individual needs.

Recommendation three states that all children in Tier Two and Tier Three need explicit instruction on specific deficit skills in small groups. The children in Tiers Two and Three need additional reading instruction in addition to their general education reading classes.

Recommendation four affirms the fact that children need progress monitoring to determine if the interventions are working. Progress should be monitored frequently and analyzed for patterns or stagnation.

Recommendation five affirms the idea of reading instruction on a daily basis on the child's independent level. Children who are struggling readers should not only be provided reading instruction on their levels in small groups but also in their instruction throughout the school day (Baker, Fien, & Luft Baker, 2010).

RtII is more than just a way to identify students with disabilities or to take a proactive stand on struggling readers. Instead, it is a way to ensure better academic outcomes for all students (Barnes & Harlacher, 2008). There is a focus on prevention, early intervention, and proactive action in order to provide students with adequate instruction before they show deficits in their reading skills (Barnes & Harlacher, 2008) and are possibly labeled as Special Education.

RtII not only teaches skill deficits in small groups but matches readers with texts that evoke high success reading. High success reading is accurate reading as well as fluent reading, and reading with understanding (Allington, 2009). Struggling readers need time to practice reading fluently. When struggling readers do engage in high success reading, their reading scores improve dramatically in a short period of time (Allington, 2009). RtII groups allow struggling students to get instruction in their deficit skills and practice reading for application of those new learned skills.

RtII not only allows for early screening of struggling readers but also a proactive approach instead of a wait-to-fail model. RtII also provides small group instruction and high success reading experience if implemented correctly. In the “wait-to-fail model” (Vaughn & Fuchs, 2003, p. 139) struggling readers met frustration in every grade until they eventually failed. After failing and being several grade levels behind, the students finally received reading help.

RtII has demonstrated some valuable outcomes in schools and districts where the model is being implemented with rigor and fidelity (<http://ncldtalks.org/content/interview/detail/750/>). However RtII is still a very vague concept on the exact implementation of the program. Many school districts still have questions and concerns about how to implement RtII. RtII can be taxing on school staff, budget, and time. When RtII is correctly implemented, extra support staff is needed for small groups, teacher schedules need to be altered, and several reading programs and materials need to be purchased to address the needs of diverse learners. Correct implementation of RtII can be a financial constraint to a school district. However, The National Reading Panel reported that reading scores in public education have remained virtually unchanged since 2009 (<http://nationalreadingpanel.org/Publications/summary.htm>), so is RtII really making an impact on levels of students who struggle in reading?

In the RtII process children who struggle in reading are taught in small groups to remediate their deficit skills for a 30 to 40 minute period. Nevertheless, struggling readers were still in the general education setting where most content reading levels were above their independent reading levels. Stahl (2004) stated that effective teachers constantly and consistently monitor and encourage children as they engage in independent reading. However many students do not get a chance to read on their independent levels in the classroom. Teachers

cannot adequately monitor a struggling students' reading in content area classes due to the difficult reading level of textbooks. In a struggling reader's school day, he or she does not have many opportunities to practice reading on their independent level. Extra reading practice can result in a students' increase in oral reading fluency. However does an increase of oral reading fluency always mean a more efficient reader?

### **Reading and Fluency**

The struggling reader's reading instruction is usually segmented into singular phonics instruction and is often boring with the student lacking motivation (Allington, 2006). Unfortunately, most curriculums for struggling readers lack rich literature and encompass rote scripted instruction (Allington & Gabriel, 2012). The end goal of these intensive reading curriculums is an increase in a child's oral reading fluency. Oral reading fluency is defined as a reader's mastery of three important components: automatic decoding of words, accuracy in decoding, and prosody which mean the accurate rate, intonation, pauses, and stress (Dudley, 2005).

However, fluency is also a much debated component of reading instruction. Allington (1983) once called fluency the most neglected area of reading instruction. Now fluency is receiving considerable attention (Dudley, 2005). The National Reading Panel (2000) stated that reading fluency is one of the five critical reading skills and defined fluency as "reading text with speed, accuracy, and proper expression" (<http://nationalreadingpanel.org/Publications/summary.htm>, p. 11). In order for children to increase their fluency, children need time to practice reading on their independent levels. There have been many studies linking fluency to adequate reading and comprehension.

This literature review looked at several reading assessments that are used in the public education school systems. These assessments include DIBELS, EdPerformance, and the PSSA. These reading assessments not only measure oral reading fluency but also reading comprehension. As of 2008, over 30 states are using DIBELS to measure fluency reading progress in their elementary schools (Paleologos & Brabham, 2011). EdPerformance is a PSSA predictor which enables districts to predict the student's success on the PSSA test. This predictor test gives teachers an opportunity to look at the student's data and determine deficit skills. The following is a more detailed look at what each of these three assessments, DIBELS, EdPerformance, and PSSA, entail.

### **Dynamic Indicator of Basic Early Literacy Skills Reading Assessments**

In the public education school setting teaching and assessing reading is a serious subject. Children are assessed several times a year using assessments like DIBELS. DIBELS requires a teacher to time a student reading orally for one minute. Rarely do students get to finish reading the actual passage. With all these assessments, Gallagher (2007) stated that the public school system is actually killing the joy of reading. Struggling readers are constantly assessed and progress monitored on their reading. DIBELS has become a widely used oral reading fluency screener for many elementary schools. Allington (2009) agreed by stating that DIBELS has become a widely used reading assessment in United States public schools. According to their website, DIBELS is the number one assessment in oral reading fluency and is based on the five components of successful reading instruction (<https://dibels.uoregon.edu/>). This fluency assessment is described as “an outcome-driven model, the purpose of which is to identify early, who may need additional support, evaluate, and modify instruction in an ongoing formative basis to ensure that all children achieve high stakes reading goal” (Good, Gruba, & Kaminski, 2002, p.

700). Oral Reading Fluency assessment (ORF) is a standardized set of passages designed to identify children who may need additional instructional support, and monitor the readers who are struggling or at risk; progress toward their instructional goals is evaluated (<https://dibels.uoregon.edu/measures/orf.php>).

The DIBELS ORF Benchmark passages are read and there is a pre-determined goal of specific words per minute to deem a reader low-risk, some-risk, or at-risk. The words per minute goal differ for each grade-level. Student performance is evaluated by having students read a passage aloud for one minute.

Words omitted, substituted, and hesitations of more than three seconds are scored as errors. Words self-corrected within three seconds are scored as accurate. The number of correct words per minute from the passage is the oral reading fluency score.

(<https://dibels.uoregon.edu/measures/orf>, para. 1).

DIBELS ORF includes both on grade-level benchmark passages to be used as screening assessments throughout the school year as well as 20 stories for progress monitoring progress for students identified as at-risk or some-risk readers (<https://dibels.uoregon.edu/measures/orf.php>). Using DIBELS for progress monitoring, students are able to read on their independent levels and have teachers monitor their accuracy.

Gickling and Armstrong (1978) stated that a student's independent reading level is directly related to time on task and task completion, two factors which are crucial to success in the general education setting. The researchers identified frustration, instructional, and independent levels are as follows:

Frustration - knowledge of less than 90% of the words in a text

Instructional - knowledge of 93%-97% of the words in a text

Independent - knowledge of 97% or more of the words in a text

DIBELS' website further defines the categories of frustration, instructional, and independent reading levels using the following diagram. The diagram represents a student who read 100 words correctly out of a passage containing 125 words. Using this formula below this reading level would be on the frustration level for this student and deemed inappropriate for him to be instructed on this reading level.

### Selected Formula to Compute Percentage of Accuracy in Words Read

Select text that students read with 95% accuracy:  $\frac{\text{\# of words read correctly}}{\text{total words read}} = \% \text{ accuracy}$

Example:

$\frac{100 \text{ words read correct}}{125 \text{ words read}} = 80\% \text{ accuracy}$  building. 80% accuracy would NOT be appropriate for fluency

Level of Challenge	Percent Accuracy
Independent Reading Level	97% or greater
*Instructional Level	94-97%
Frustration Level	93% or lower

Figure 1. Reading level – Frustration level.

\*For fluency building, materials should be at instructional level or above. (Modified from Hasbrouck, 1998)

Hoffman, Jenkins, and Dunlap (2009) conducted research on how practicing teachers felt about using DIBELS as formative reading screeners. The researchers mailed questionnaires and conducted open-ended interview responses to over 87 members of a professional reading association with a response rate of 24%. Teachers expressed positive reviews of DIBELS due to the quickness, easiness to administer, and speedy feedback. Negative reviews associated with DIBELS were the over-emphasis on speed and no comprehension test (Hoffman et al., 2009). Dessoiff (2007) said DIBELS raised many issues such as students being trained to read quickly with no regard for comprehending their reading material. Samuels (2007), in an article entitled “The DIBELS Tests: Is Speed of Barking at Print what We Mean by Fluency?” concluded that DIBELS’ test for ORF is a test of speed, not fluency. In addition to this article, Pearson (2006) stated that DIBELS “is the worst thing to happen to the teaching of reading since the development of flash cards” (p. 5). While DIBELS measure oral reading fluency, other assessments such as EdPerformance measure comprehension.

### **EdPerformance**

EdPerformance is a performance-based Internet assessment. The EdPerformance enables students to take three assessments, one at the beginning, middle, and end of the year. The EdPerformance results are immediately available for teachers to view who is considered at-risk in reading and mathematics. EdPerformance won the Distinguished Achievement Award in 2005 ([www.edperformance.com](http://www.edperformance.com)).

The online assessment is described as individualized because the tests automatically gauges if the test is too easy or difficult and adjusts to the students’ level ([www.edperformance.com](http://www.edperformance.com)). According to Merrell and Tymms (2007), online assessments are advantageous to teachers because they offer individualized assessments, reliable results for

students, and lead to improvement of instruction for students. Another assessment that the students will take as part of this research study is the PSSA.

### **Pennsylvania System of School Assessment**

In the state of Pennsylvania, students in grades 3 through 11 must take the PSSA in the subjects of reading, mathematics, writing, and science. The PSSA measures how well a student is doing in reading, mathematics, writing, and science in accordance to the Pennsylvania state standards ([www.psea.org/general.aspx?id=1218](http://www.psea.org/general.aspx?id=1218)). In all subject assessments, the PSSA contains open-ended and multiple choice questions. With the students' scores, parents, teachers, and school districts can evaluate their students' achievement and examine strengths and weaknesses ([www.psea.org/general.aspx?id=1218](http://www.psea.org/general.aspx?id=1218)). According to the NCLB, all students, even those with disabilities, must be 100% proficient in reading and mathematics on the PSSA by 2014.

McBride (2004) stated that the PSSA helps teachers understand ways to pinpoint a student's weak area(s). He continued by saying if schools base their instruction on data results, align their instruction to the standards, and analyze their data, their students are better prepared for the state assessment. However other researchers disagree that the PSSA helps teachers. For example, Pederson (2007) disagreed that PSSA testing is beneficial and can be damaging to other subject areas such as social studies and science by stating "what is not measured is not treasured" (p. 1). He goes on to further explain that state assessments put an emphasis on reading and mathematics and less time is being spent on the arts and humanities.

### **Does Practice Make Perfect?**

Children who struggle in reading need to practice in order to become better. As with anything or any undertaking, people need to practice effectively in order to improve (Allington, 2009). Struggling readers are no exception. Children who read several grade levels behind their

peers do not have the opportunity to practice reading effectively on their independent reading levels throughout their day. Reading materials that struggling students have access to are usually above their reading levels. Allington (2009) stated that the key finding to improved reading scores involved teachers' use of "multi-text and multi-leveled curriculum design" (p. 3) meaning that teachers need to be cognizant of their students' reading levels and match appropriate text to ensure that students are accessing and reading materials on their independent reading levels.

Struggling readers need intervention time to practice reading and learn explicit phonics. In a study conducted by Harlacher, Walker, and Sanford (2010), readers who struggle need academic learning time (ALT) in reading. ALT refers to the time that students are engaged in explicit reading instruction. Schools need to find time to increase ALT for struggling readers within the school year. However, finding the time requires creative thinking and implementing reading instruction throughout the school day, not just in reading class. Another component of ALT is the implementation of a literacy rich classroom which provides accessible high quality books with frequent and sustained opportunities to engage in reading (Gettinger & Stoiber, 2007). Students, especially readers who struggle, should have access to books of different content subject areas that are on each student's independent reading level.

In a well-known research project by Anderson, Wilson, and Fielding (1998), it was found that productive readers are frequent readers. In a study conducted with 155 fifth graders that measured reading proficiency rates with the frequency of reading, strong results supported the concept that practice is needed for children to become good readers. The study asked the fifth graders to keep a log of their activities. The study then analyzed how much time on average was spent reading independently and looked at the children's three reading assessments. These assessments included the Metropolitan Achievement Test in Reading Comprehension, a

vocabulary test, and a reading fluency tests. Results showed the longer a child practiced reading the better he or she became. Table 1 shows the percentage rank on standardized reading tests, the time spent reading, and estimated number of words per year.

Table 1

*The Relationship of Estimated Number of Words Read and Reading Proficiency Tests*

Percentage Rank on Standardized Tests	Minutes of Reading Per Day	Estimated Number of Words Read Per Year
98	90.7	4,733,000
90	40.4	2,357,000
70	21.7	1,168,000
50	12.9	601,000
20	3.1	134,000
10	1.6	51,000

*Note.* Adapted from Anderson, Wilson, and Fielding (1998). Growth in Reading. *Reading Research Quarterly*, 23, 285-303.

**Using Leveled Texts**

Leveled texts are defined as reading materials that represent a progression from simple to more complex and challenging readers (Brabham & Villaume, 2002). Leveled texts give the reader who struggles opportunities to read on his or her level and eventually to evolve to more difficult levels as he or she gains proficiency. Utilizing leveled texts in the classroom not only gives students access to content and curriculum but also time within their school day to practice reading.

Leveling systems or leveling texts grew out of a need to address concerns about the overuse of whole-group and one-size-fits-all instruction and more traditional ability-based small groups (Glasswell & Ford, 2010). Conventionally, some reading programs were a one-size-fits-

all model and if children struggled in the one-size-fits-all program it was deemed the child's fault and not the reading program. Thus, the child received failing grades and possibly was even referred to special education. Children who were able to read on grade level spent time in reading class independently reading while the struggling reader spends very little time reading. Instead the struggling readers spent most of their reading class in phonics-based skill groups with very little time actually practicing reading and in the general education classes with texts that they could not read (Caldwell & Ford, 2002).

When teachers have access to leveled texts in the classroom, they allow the teachers freedom from dependency on grade level materials that may not fit all students' instructional needs. Leveled texts allow teachers to individualize instruction for all students in the classroom and continually monitor their students' reading progression (Brabham & Villaume, 2002). Students also have the opportunity to not only choose their reading material but to practice reading on their independent levels. Use of leveled texts also gives the teacher the ability to observe the text progression or reading progression of the child. Text progression or the reader progressing to more difficult or challenging texts helps readers integrate meaning structure and print cues to determine what they do not know and develop important word-solving and meaning-constructed strategies that empower them to extend their own reading skills (Brabham & Villaume, 2002).

There are other benefits to leveled readers other than individualized instruction. Leveled readers benefit the teachers, as well. Teachers stated that when they participated in text-leveling, the process made them more sensitive and cognizant of the needs of readers who struggle (Brabham & Villaume, 2002). Conversely, some negative effects of leveling are that schools

and teachers get so caught up in leveling and do not pay enough attention to the rigor of the curriculum and lose sight of explicit reading instruction (Brabham & Villaume, 2002).

Progressions of decodable texts also help struggling students build on their phonics development and build toward more complex reading. Some leveled texts are based on readability formulas and others provide estimates of grade level difficulty (Brabham & Villaume, 2002). These estimates provide teachers and students with information on the reading levels. However, teachers need to be aware of potential side effects of leveled readers. Glasswell and Ford (2010) stated that when a focus is given to assigning numbers or letters to texts, teachers can lose sight of what matters in reader-text interaction. Readers need to interact and be able to choose their texts. Allington and Gabriel (2012) stated that an important part of effective reading instruction is that students need to select their own reading materials. Allington and Gabriel (2012) stated “that children are more likely to continue reading when they have the opportunity to choose what they read” (p. 10). In a 2004 meta-analysis, Guthrie and Humerick (2004) found the two most important factors for improving reading motivation and comprehension in students were the students having access to books on their instructional levels and having a personal choice of what to read. In a similar study, Allington and Gabriel (2012) also stated having the students choose their own reading materials boosted motivation and made it more likely that the students would select a match to their own interests. A second important point teachers need to be aware of when using leveled texts in the classroom is that leveled texts do not take the place of explicit phonic and reading instruction. In fact, leveled texts should complement the explicit instruction by allowing the students the opportunity to practice the acquired skills.

Teachers should also monitor word counts to provide greater equity in instructional opportunities. Lower level books are often less text dense yet students who read below grade

level need to read more texts, not less (Glasswell & Ford, 2010). Teachers need to be cognizant of the fact that they need to provide extra reading practice and opportunities for their struggling readers. Leveled texts' role is not to simplify the instruction but to enhance the instruction. Furthermore, teachers need to be aware of the content being presented in the leveled text and not so much the level of the text (Glasswell & Ford, 2010). For example, in one study, a second grade classroom was divided into two groups: one group was working on a text that contained a total of 80 words; whereas, another group of second graders had 80 words on the first page alone. This demonstrated the fact that the teacher may need to utilize multiple texts to equalize the amount of reading practice students receive. Glasswell and Ford (2010) state that teachers need to use a variety of formats that revolve around choice, text difficulty, and engagement to create a community of readers.

Leveled texts encourage teachers to select materials that are just right for the students. For effective reading instruction to occur, struggling readers must have text that they are comfortable with instead of experiencing constant frustration with reading material (Brabham & Villaume, 2002). Leveled texts free the teachers from dependency of grade level materials that may not fit the educational needs of their students (Brabham & Villaume, 2002). As the relative difficulty of texts with phonetic control increases, the percentage of decodable words decreases or the complexity of words considered decodable increases (Cunningham, et al., 2005). In other words, words in texts become more challenging. In one study examining reading gains for students in grades three through five identified as poor readers, researchers reported that students who read text matching their instructional or independent reading levels gained significantly more in terms of oral fluency than students reading class material (O'Conner, et al., 2002).

In a similar study, Fountas and Pinnell, (2001) stated that the reading we do in our adult lives is almost always silent. Most students when reading on their independent levels read silently. Therefore, this skill must be developed to become an adequate and functioning adult reader. Fountas and Pinnell (2001) further stated that silent reading is faster and students are more attentive to what they are reading which means they can comprehend better.

### **Sustained Silent Reading**

Krashen, (1993) stated that students who participated in free voluntary reading (FVR) in 38 out of 41 studies did as well or better in reading comprehension tests than they did with traditional skills based reading instruction. He noted that Sustained Silent Reading (SSR) is a good predictor of reading comprehension, vocabulary, and reading speed and that the longer SSR is practiced, the more consistent the students' overall reading.

However, the National Reading Panel stated that there was no definite finding that indicated FVR or SSR had a positive effect on reading comprehension (Gallagher, 2007). A study by Reutzel, Fawson, and Smith (2008) casted doubt on the National Reading Panel study by stating they examined only 10 studies. Five of the 10 studies found no statistical significance and the other five did not have enough of a sample size but were found statistically significant. One of the critiques of the National Reading Panel report is that teachers could not adequately monitor their students' reading. The study concluded that SSR had no student accountability; teachers could only monitor student reading behavior and did not know if the students benefitted from the reading practice. The Reading Panel report stated that teachers need to be aware of their students' fluency, comprehension, and accuracy when reading. However, Bryan, Fawson, and Reutzel (2003) concluded that when teachers engage and conference with their students during SSR student accountability and engagement increased.

Reutzel, Fawson, and Smith (2008) decided to conduct a study on third graders to determine if Scaffolded Sustained Silent Reading (ScSr) was a better approach to increase comprehension and fluency rates in third grade than SSR. For this study, ScSr was defined as students engaging in silent reading but with leveled texts, teacher monitoring, and interaction between teacher and students with accountability assignments. Students used ScSr and guided repeated reading (GROR) in their classrooms. GROR is defined by National Reading Panel as “an established and scientifically approved reading fluency practice approach” (Reutzel, Fawson, & Smith, 2008, p. 39). During ScSr students read independently and in GROR the students read aloud. Their study found no difference between GROR and ScSr in the areas of accuracy, rate, expression, and comprehension. One can tentatively conclude from this study that if no differences were found in the growth of these third grade students that ScSR is just as effective as GROR, a researched based reading instruction accepted by the National Reading Panel.

In another study Hale, Hawkins, Sheely, Reynolds, Jenkins, Schmitt, and Martin (2011) submitted research that looked at silent reading versus reading aloud and application of comprehension. The study had students in the first and second grades read aloud and then read silently several passages. The students were then tested on their comprehension of the reading passages. Statistically there was no difference in comprehension skills of students who read aloud versus students who read silently. Reading aloud or silently offers students equal opportunity to practice reading as long as the text is at an appropriate level. However, how does a teacher choose and level appropriate texts for students?

### **How to Level Texts for Reading**

Fry’s formula and the Flesh Kincaid readability system are well known ways to level books for students. Both operate on the system that easier texts have shorter syllables, words,

and sentences. These formulas give teachers a quick check of the text's readability but the formulas are based only on some of the books' passages rather than all of them which can lead to some margin of error (Brabham & Villaume, 2002).

What constitutes a "just-right" book that a struggling student can read independently? Fountas and Pinnell (1996) defined an independent text as a text of which a child can read more than 90% of the words. When students can read correctly 95%-100% of the words in a selected text is the student's independent level, 90%-95% is the student's instructional level, and anything less than 90% is considered frustration level. Fountas and Pinnell (1996) noted that leveling texts is a difficult numerical formula and other factors must play a part in matching texts to their readers. These factors include the length of book, appearance and placement of print on page, the degree of support offered by the illustrations on the page, complexity of concepts and subject matter, and predictability of the text. Leveled texts have different characteristics at each level. Rog and Burton (2001) stated that Level one books have one or two words on each page with familiar illustrations and words. Level two books still describe illustration and there is a verbal pattern repeated throughout the book. Level three books contain complete sentences but still contain highly predictable text. Level four texts contain more words with strong phonics patterns. Level five contains increased and more complex sentences and words. Level six will have highly decodable and high frequency words. Level seven books have illustrations that represent ideas more so than words and the text continues to have more words and more complex sentences. Level eight texts have new vocabulary words and students will need to rely on their reading strategies to read this text. Level 9 and 10 take on the look of a real story and contains unfamiliar words that the students need to decode. The progression of texts allows students to

build their knowledge of vocabulary, decoding, and fluency in order to become more proficient readers.

Table 2

*Progression of Texts*

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Book Level	Characteristics
	One or two words on each page Familiar illustrations and words Still describes illustration
2	There is a verbal pattern repeated throughout the book
3	Complete sentences but still contains highly predictable text
4	More words with strong phonics patterns
5	Increased number of and more complex sentences and words
6	Highly decodable and high frequency words Illustrations that represent ideas more so than words
7	The text continues to have more words and complex sentences New vocabulary words
8	Students will need to rely on their reading strategies to read this text
9 and 10	Takes on the look of a real story and contains unfamiliar words that the students need to decode

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Leveled texts become an important tool in reading instruction when matched appropriately with the reader. Matching texts to readers cannot be reduced to a numerical formula. The teachers must be knowledgeable about the curriculum, the reading level, the student's interests and reading instruction. The leveled texts can complement content area subject books.

## **Adapting/Accommodating Content Area Books for Readers Who Struggle**

A Herman and Wardip study in 2012 showed that expert readers tackle text differently than novice readers. Expert readers know their purpose for reading and self-monitor their comprehension. On the other hand, novice readers spent most of their energy struggling over the written text.

Textbooks are the primary tool for teaching social studies and science in the elementary and middle school classrooms. The difficulty of the language, presentation, and content contained in a science or social studies textbook is well known and documented (Bean, Zigmond, & Hartman, 1994). As increasing numbers of children with special reading needs are being placed in the general education classrooms (Will, 1986), textbook accessibility has changed. Although teachers today still rely heavily on the textbook as the primary tool of instruction, many teachers find trade books to complement the curriculum due to the fact that they are teaching children with more diverse backgrounds (Rice, 2002). Trade books are often more colorful, newer, and contain more familiar language for children to decode (Rice, 2002). Trade books allow most children to access the content area and the content vocabulary because a teacher can match trade books to the students' independent reading levels. However, Rice cautions that teachers need to be aware of and research the accuracy of the trade books because the emphasis is not only providing students with accessible text to access the content but to make sure the content in the leveled texts is accurate. In a similar study, Guthrie and Klauda (2012), stated that research demonstrates that students gain most of their content knowledge about science and social studies through extended reading and outside resources. Like Rice (2002), Guthrie and Klauda (2012) emphasized the importance of children being able to access accurate content on their independent levels. Many texts used by content teachers have some content

accuracy issues. When students believe the information is important and valuable, they will read it. Gunthrie and Klauda (2012) also stated that in the present time many teachers are abandoning their textbooks because of the diverse range of readers in their classroom.

Bean, Zigmond, and Hartman, (1994) conducted research and found that 91% of all teachers reported using a single textbook to teach social studies. Some adaptations that teachers used to accommodate struggling readers were oral reading, having the students listen to the chapter via cassette tape or compact disc, guided reading outlines, study guides, and peer grouping. Accommodations help the students to access the curriculum but do little to help students practice reading on their instructional levels. Typically, science and social studies texts are too dense. Density refers to the rate of which concepts and vocabulary are introduced in the text (Dreher & Singer, 1986). When children labor and struggle to decode the words, comprehension will suffer resulting in the child not knowing the text or understanding the content. Teachers have been encouraged to use trade books to supplement the science curriculum for over 20 years (Barlow, 1991) because using the trade books or leveled texts enable the students to gain content knowledge and practice reading.

In each school day, a typical reading class averages about 70 minutes. Despite this fact, only seven to eight minutes is devoted to actual allocated reading time on the student's independent level in the primary grades and 15 minutes in intermediate grades (Fisher, Berliner, Filby, Marlieve, Cohen, Dishaw, & Moore, 1978). Many teachers are now adapting textbooks or supplementing with newspaper or magazine articles. However, several potential problems exist with adapting textbooks. One potential problem is the "dumbing down" of materials (Mastropieri & Scruggs, 2000) and students who read several grade levels below their peers and receive fragmented content are at risk for not accessing the curriculum.

All readers who struggle, regardless of their ages, need time to practice reading. Allington and Gabriel (2012) stated that with all the budget shortfalls many schools complain that they do not have the resources to buy leveled texts in content areas for large multi-leveled classroom libraries. Yet these are the same school districts that have the money to buy one-size-fits-all workbooks and curricula.

Most upper elementary and adolescent schools focus on expository text. The shift is due to the fact that starting at the fourth-grade level students begin the process of reading to learn. Empirical evidence indicates that for most students, expository reading or content reading poses greater challenges than narrative texts (Saenz & Fuchs, 2002). Students need ample opportunities to practice reading so that they can also make the shift of learning-to-read to reading-to-learn.

### **The Implementation of Leveled Texts in Social Studies and Science Classrooms**

To understand how to implement texts in the social studies and science content areas, one has to understand the difference between independent and silent reading. These two types of reading are very different and have different goals and outcomes. Both are utilized for students to practice reading, enjoy reading, and practice reading strategies (Fountas & Pinell, 2007).

Silent reading is when the students choose their own books with some guidance from their teacher and read for enjoyment with the teacher taking a minor role in silent reading and little or no guided instruction. Teachers should partake in silent reading along with their students (Fountas & Pinell, 2007). Teachers should serve as reading role models and demonstrate the behaviors of lifelong readers. Gardner (2005) stated an important factor of SSR is the teacher's attitude and reading behavior.

In independent reading, students still get to choose their own text with guidance from the teacher. However, the difference is that students have guided questions, a goal, and explicit instruction from the teacher. Teachers will also conference with the students on what they read and use observations to evaluate behavior during reading and keep records of reading gains and deficits (Fountas & Pinell, 2007).

Students need to know where to find their specific book location in the classroom. The student should be familiar with what reading level he or she is on so the student can adequately choose books on his or her personal independent reading level. The teacher should have a curricular purpose for the student to read the book. The leveled text should reflect the content standards or big ideas in the social studies and science content areas. The students should also keep a reading journal to record their thoughts processes, ideas, and thoughtful reflections of literature (Fountas & Pinell, 2007).

The social studies and science content teachers can present the initial lesson using whole group instruction and utilizing the text book. The teachers can use a multi-sensory approach and supplement the whole group lesson with web sites, movies, and/or virtual field trips. Then the students can choose their appropriate leveled text to do their own research to further expand their knowledge on the social studies or science concepts. The class can then assemble to present their supplementary information. With this type of class organization, teachers can present the content and still involve the readers who struggle and have them practice reading on their independent levels. Extra reading practice would result in an increase in oral reading fluency and overall improved reading achievement. If teachers either within their districts or universities were taught literacy in the content area, the teachers would be better equipped and feel more comfortable integrating literacy in their social studies and science courses.

## Summary

Reading is considered the fundamental basis for life success (Wei, Blackorby, & Schiller, 2011). Job and life success depends on being literate. Readers who struggle need to be top priority in the school system and be given the maximum time to practice reading on their independent level. This extra time needs to be infused into all academic areas to ensure that throughout the whole school day the student is practicing reading.

This study attempted to synthesize the various research on teaching reading using leveled texts and specifically how to best utilize them in science and social studies content area classes. This plan was carried out by the content teachers with help in instructional planning by the researcher. Progress was monitored by the reading assessments, DIBELS and EdPerformance, which were administered three times throughout the school year. The PSSA was administered to the students in April 2013. All of the results were analyzed to determine if providing students with extra practice time in reading would benefit the student and result in an increase in oral reading fluency and comprehension.

In Chapter III, the researcher illustrates the mixed methods study. This study not only looked at the qualitative data in the form of interviews and focus groups. The quantitative data were in the form of oral reading fluency scores in DIBELS and the increase in the overall reading score in EdPerformance and PSSA.

## CHAPTER III

### METHODOLOGY

This chapter includes the research methods and design used in this study which explored the use of independent reading leveled texts being incorporated into the social studies and science content areas. The researcher was trying to answer the questions, How do struggling readers in fifth and sixth grades who spend extra time reading on their independent levels during their social studies and science classes perform on reading assessments? Is there a correlation between extra practice reading and proficiency on reading assessments? How do content area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes? In this chapter, the researcher examined the research design, the mixed methods incorporated into the study, and the type of data used for analysis.

#### **Purpose of the Study**

The purpose of this research study was to evaluate whether extra reading practice on a student's independent reading level would have a positive effect on the student's reading scores. Students in the fifth- and sixth-grades were assessed in reading and some of these students were categorized as at-risk readers. The at-risk readers were given extra practice in reading during the students' social studies and science classes. The struggling readers engaged in the extra reading practice for approximately five months. The researcher utilized three assessments to assess the reading at the end of the year: DIBELS, EdPerformance, and the PSSA. Furthermore, the researcher explored social studies and science content teachers' perceptions of teaching reading during social studies and science content classes.

## **Participating Subjects**

The study consisted of two different types of subjects. The first subjects were students at a rural elementary school. The students' reading test scores were used in this study for the quantitative data. Teachers were also used for the qualitative piece of this study. Focus groups were utilized to determine teacher opinions on teaching reading in the science and social studies classes.

### **Students**

Both purposive and intensity sampling were used to gather participants for this research study. Purposeful sampling is described as “selecting a sample that is believed to be a representative of a given population” (Gay, Mills, & Airasian 2009, p. 136). Bogdan and Biklen (1998) described purposive sampling as “choosing particular subjects to include because they are believed to facilitate the expansion of the developing theory” (p. 65). Intensity sampling is defined as “selecting participants who permit study of different levels of the research topic” (Gay et al., 2009, p. 137). The purposive sampling in this study is the struggling readers based on the students' reading assessments. This means the students' reading scores according to DIBELS had to be considered at-risk or some risk or strategic category. The intensity sampling used in this research project is the teachers who vary in age, years in education, their personal education levels, and how they view themselves as reading teachers.

The fifth-grade participants in the research study consisted of three girls and five boys. Of these participants, two had Individualized Education Plans (IEPs) and one participant had a speech IEP. All of the participants were in Tier Two RtII status and were fully included in the general education setting. Of the fifth-grade students involved in the research study, three were

reading on grade level but did not meet DIBELS’ fluency requirement, two were reading on a fourth-grade level, and the remaining students were reading on a third-grade level.

Of the sixth-grade participants, two were female and five were male. The student participants all had IEPs and three participants were in a Tier Three RtII status which meant the students were participating in a pull-out reading program and were not included in the general education reading curriculum. These students were in a more intense reading program due to their reading needs and worked on specific skills such as phonics, word, and phrase fluency. The sixth-graders’ reading levels consisted of three students reading on a fifth-grade level, two students reading on a third-grade level, and two students on a second-grade reading level. See Tables 3 and 4 for further descriptive details about the participating students.

Table 3

*Reading Levels and Levels of Support Needed According to DIBELS for Fifth-Grade*

*Participants*

Student	Reading Level	Level of Support
5-1	4 <sup>th</sup> grade level	Intensive
5-2	3 <sup>rd</sup> grade level	Intensive
5-5	5 <sup>th</sup> grade level	Strategic
5-6	3 <sup>rd</sup> grade level	Intensive
5-7	5 <sup>th</sup> grade level	Intensive
5-8	5 <sup>th</sup> grade level	Intensive
5-9	3 <sup>rd</sup> grade level	Intensive

Table 4

*Reading Levels and Levels of Support Needed According to DIBELS for Sixth-Grade*

*Participants*

Student	Reading Level	Level of Support
6-1	5 <sup>th</sup> grade level	Strategic
6-2	5 <sup>rd</sup> grade level	Strategic
6-3	2 <sup>nd</sup> grade level	Intensive
6-4	2 <sup>nd</sup> grade level	Intensive
6-5	3 <sup>rd</sup> grade level	Intensive
6-6	3 <sup>rd</sup> grade level	Intensive
6-7	5 <sup>th</sup> grade level	Strategic

**Teachers**

Teachers who volunteered to participate in the research project are identified as Teacher 5-A and 5-B in the fifth grade and Teacher 6-A and 6-B in the sixth grade. The teachers involved in the research study were three females and one male. Teacher 5-A has a master’s equivalency and has taught 13 years in the fifth grade. Teacher 5-B has a bachelor’s degree and has been teaching for four years. Teacher 6-A has a master’s degree and has taught 13 years. Teacher 6-B has a bachelor’s degree and has taught for 13 years. Table 5 provides a visual overview. All teachers teach in the same district and elementary school building. All teachers attended professional development sessions conducted by the researcher, and the researcher organized and supervised the implementation of leveled texts in their classrooms.

## Demographics of Participating Teachers

Table 5

*Teacher Participants, Years Taught in Public Education, and the Teachers' Levels of Education*

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Teacher	Years Taught	Education
Teacher A	13	Master's Equivalency
Teacher B	4	Bachelor's Degree
Teacher C	13	Master's Degree
Teacher D	13	Bachelor's +

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### Quantitative and Qualitative - Instrumentation

For the quantitative portion of this research study, the data collected were oral reading fluency scores from DIBELS reading assessment (both middle-of-the-year and end-of-the-year benchmark scores), EdPerformance (a PSSA reading indicator or predictor), and the reading portion of the PSSA. These scores were entered into the computer data analysis program Statistical Package for the Social Sciences (SPSS) to determine any impact the reading intervention had on students' reading scores. Descriptive statistics and a Paired Samples T-test were utilized to determine what, if any, effect the extra reading practice had on the reading assessments (see Appendix G).

For the qualitative portion of this research study, teacher focus groups were conducted. All focus groups were audiotaped. The researcher then transcribed all data collected from the focus groups and entered the data into NVivo. The focus group questions were auto coded and coding stripes were utilized to determine themes and patterns in the qualitative data. The teachers were asked 11 questions related to their perceptions of teaching reading during science and social studies content classes (see Appendix F).

## **Procedures**

The study was completed in several phases. Phase one consisted of preparation for the study. Phase two involved Institutional Research Board approval (see Appendices H and I) and other organizational facets. The final phase, phase three, was comprised of the actual research project. Each phase is explained in depth.

### **Phase I**

The researcher wanted to incorporate extra reading time within the school day for struggling readers, especially during science and social studies classes. The project began with a visit to the Assistant Superintendent of the district with the idea of children practicing reading on their independent levels in all classes throughout the day. The researcher decided to focus on fifth- and sixth-grade science and social studies content and found books and/or magazines that not only matched the content but varied in readability levels. This process provided all readers access to the curriculum and they were able to practice reading on their independent reading levels.

The Assistant Superintendent agreed to the project (see Appendix E). His one stipulation was that the complementary reading list using leveled texts in the content areas of social studies and science would be compiled and implemented in all three elementary schools (see Appendix J).

A group of fifth- and sixth-grade teachers from a rural school district in Southwest Pennsylvania met with the researcher to create a reading list that matched not only the content from the fifth- and sixth-grade social studies and science curricula, but also matched with the Pennsylvania State Standards. The teachers consisted of the researcher, two fifth-grade teachers,

and three sixth-grade teachers. Many hours were spent mapping the curricula, identifying specific concepts, and reviewing the common core.

The teachers met and discussed “big ideas” for the content areas and then began scouring grade level storage rooms and internet sites to download books that were pertinent to the social studies and science content in both fifth and sixth grades. The teachers performed frequent validity checks to ensure literature chosen was relevant to the curriculum. The teachers also checked to see if the reading books were appropriate for fifth- and sixth-grade readers. For example, some books that were on a second grade reading level were not appropriate for sixth graders due to childish pictures and/or concepts. The wide range was incorporated so that all readers could practice reading on their independent levels and access the curriculum.

The researcher leveled all the books the team acquired. Leveling was defined in Chapter II as using various methods to determine a reading level on the text. The two methods that were used to level the books were the Scholastic website entitled Book Wizard. The Book Wizard enabled the researcher to ascertain a readability level simply by keying in the title of the book. If that resource was unavailable then the Flesch-Kinkaid system was used.

The researcher spent many weekends at the elementary schools’ three libraries. The staff allowed the researcher full access to the library, library software, and the elementary buildings even at odd hours. Throughout this process, the team maintained communication to assure that the project was keeping within the content area.

The researcher decided on an organizational format for all the information and purchased storage container units and binders to stockpile the information. Grade levels at each building received a binder with all their information, along with storage containers for all materials. Once

the resources were disseminated to the individual buildings, the teachers were brought together to brainstorm ways to implement the leveled texts.

The researcher then conducted several professional development sessions on how to utilize the books to not only enhance the teachers' content but also to provide the extra reading practice for the struggling readers in their classrooms. Ultimately, the team decided to use the first or last 10 minutes of class to implement the project. The students also had a related academic task to do upon completion of the book. This task was a bookmark with several open ended questions concerning the contents of each book. All questions were created by the researcher in conjunction with the RtII coordinator of the school.

## **Phase II**

Seventeen letters were sent requesting permission from the parent(s) and the students to participate in the study during the winter 2012. The letters were directed to students who scored at-risk or some-risk according to their oral reading fluency scores in DIBELS. Of the 17 letters mailed, 15 were returned netting a return rate of 88% (see Appendices C and D).

The next step was to recruit volunteer teachers for the research study. Teachers who volunteered to participate in the research study had to implement leveled texts within their social studies and science classrooms. Teacher participation in the researcher's project was based on two criteria. The first criterion was that the teachers had accommodating schedules that taught either science or social studies to a class with defined struggling readers. The second criterion was that teachers were willing to be a part of this research project. Ultimately, four teachers volunteered to participate in this study: two fifth-grade and sixth-grade classrooms were selected (see Appendices A and B).

Teachers began incorporating the leveled texts in their social studies and science classes in January 2013. Teachers gave the students between 5 to 10 minutes to read independently before or after class. The students knew that when it was time to read, they would get their books and return to their seats to read. Upon finishing the book, the student would then complete a bookmark with an open-ended question. This open-ended question held the student accountable for his or her reading. The bookmarks were then checked by the researcher to determine accuracy. When a new unit was introduced, the researcher would then gather the new books and assign them based on students' reading levels. The whole class participated in the extra reading time. There were some students in the classroom who were able to read on grade level. These students also engaged in reading so the struggling readers in this research project could not be identified. This procedure continued until approximately February. Beginning in February and continuing to the administering of the PSSAs in April, teachers used science and social studies time for test preparation, thus the extra reading practice was inconsistent. Upon completion of the PSSAs, the extra time practicing reading resumed to the end of April.

### **Phase III**

Reliability and validity were constant concerns to the researcher. Many precautions were taken to ensure reliability and validity such as proofreading all consent letters, transcribing the focus group's responses with 100% accuracy, constant member checking, and making sure of consistent and accurate directions. The researcher employed three assessments to measure oral reading fluency and reading comprehension. These three reading instruments, as previously stated, were DIBELS, EdPerformance, and the PSSA. These assessments have been proven over time to have validity and reliability. The next section entitled "Instrumentation" will further document issues of validity and reliability.

## **Instrumentation: DIBELS, EdPerformance, and PSSA**

This section describes the three tools used in this study. The three assessments utilized in this study were DIBELS, EdPerformance, and PSSA. These assessments were already being employed within the elementary school.

### **DIBELS**

Goffreda, Diperna, and Pederson (2010) conducted an empirical review of the reading assessment DIBELS. Their review consisted of 26 references and the research was guided by several questions including: How reliable is DIBELS for making data-driven and various decision making purposes? According to the DIBELS website, a series of studies has confirmed the technical adequacy of the DIBELS.

Test-retest reliabilities for elementary students ranged from .92 to .97; alternate form reliability of different reading passages drawn from the same level ranged from .89 to .94. Criterion-related validity studied in eight separate studies in the 1980's reported coefficients ranging from .52 to .91. (<https://dibels.uoregon.edu/measures/orf.php>)

### **EdPerformance**

As stated by the developers of EdPerformance, the EdPerformance Reading assessment regulates the test questions based on the student responses. For example, if the student performs well and answers a number of questions correctly, the test will increase the question difficulty. Likewise, if the student incorrectly answers a number of questions, the test will decrease in difficulty. A population of over 37,000 fifth- and sixth-graders were included when the developers of EdPerformance normed this reading test. The standard error of measurement for the fifth-grade questions was 0.07 and for sixth-grade questions was 0.05. EdPerformance also

strived for two forms of validity, one being item validity and the other sampling validity (<http://www.bcvic.net/bcps/bcps-edperformance/PerformanceTechManual.pdf>).

## **PSSA**

According to the Data Recognition Corporation (DRC), the PSSA reading test indicates a high reliability coefficient of greater than 0.9 (Thacker, 2004). The PSSA has been used for demonstration of reading proficiency in fifth- and sixth-grades for 15 years. The test measures reading comprehension.

Each of the reading assessments used by the researcher for this study demonstrated adequate validity and reliability. The assessments were already in place in the cooperating school district and required no further parent permission. The researcher had confidence these reading assessments were adequate to test the participating students' oral reading fluency and reading comprehension skills.

## **Research Design**

This research project was a mixed-methods study. The purpose of a mixed-methods study is to “build on the synergy and strength that exist between quantitative and qualitative research” (Gay, Mills, & Airasian, 2009, p. 462). This researcher used the QUAN-QUAL method which is also called the Triangulation Mixed Methods Design (Gay, et al., 2009). This study relied heavily on both qualitative and quantitative data. Qualitative data were in the form of teacher focus groups and the quantitative data were in the form of various student reading assessments. These student assessments included DIBELS, PSSAs, and EdPerformance-reading. The beginning, middle, and end of the year data were collected and analyzed. Current grade PSSA reading scores were also analyzed. The main advantage of using both quantitative and qualitative data in a QUAN-QUAL study is that both types of data “are equally weighted and are

collected concurrently throughout the study” (Gay, et al., 2009, p. 463). This study was a quasi-experimental in design because the participants were not chosen at random but rather based on oral reading scores from DIBELS assessments.

For the qualitative data, teachers were asked questions through a focus group process. The focus groups were conducted over four sessions during the teachers’ lunch time periods and one morning meeting. Refer to Appendix F for the teacher interview questions.

### **Procedures for Quantitative Data**

To administer the DIBELS assessment, students were given a grade-level reading passage. DIBELS was administered by special education teachers, special education support staff, or Title 1 teachers. The students were then timed for one minute while they read aloud. Errors were marked such as mispronunciations and skipped words and subtracted from the total words read. Reading scores were analyzed so teachers could gauge which students were deemed at-risk, strategic, and/or core.

The second assessment used was the EdPerformance reading test. EdPerformance is an online computer-based assessment. The students sat at a computer, read stories, and answered comprehension questions. The test adjusts itself based on how the student answers the questions. When a student answers correctly a number of questions, the test will adjust the difficulty of the assessment. Likewise, when the student answers questions incorrectly, the test will decrease the number of difficult questions.

The last assessment used in this research project was the PSSA. The reading section included grade-level reading passages with multiple choice comprehension items, as well as several open-ended tasks.

## **Procedures for Qualitative Data**

The teachers in this research study taught social studies and science in the fifth and sixth grades. As volunteers, the teachers' responsibilities were to disseminate the reading material to the children, observe them reading and completing the bookmarks, and hand all the materials to the researcher to be checked. The teachers also agreed to participate in four focus groups. A focus group is defined as a group interview that is structured with a well-defined and specific set of goals (Bogdan & Biklen, 1998). The teachers knew each other and felt comfortable being together. Cheng (2000) stated that a key factor in focus groups was that people felt comfortable conversing with each other. The researcher opted to use focus groups because Sims (1998) stated that there were many advantages to using focus groups:

1. Focus groups were an economical way of bringing many people together and “tapping the views” of many people.
2. Focus groups provide information on the dynamics of the attitudes, opinions, and interactions of the group.
3. Focus groups may encourage a greater degree of spontaneity in the group.
4. They can provide a safe forum in which the participants do not feel obligated to answer all questions.
5. Participants may feel supported and empowered by each other.

The researcher asked the questions and the teachers would answer individually or in group form. Their responses were recorded. Sims (1998) stated that when data are audio taped it provides precise and verbatim analysis. The tapes were then labeled for data analysis. The researcher transcribed the notes. The focus groups were held in February, March, and April of 2013.

A pilot study was conducted on the interview questions. The three teachers who participated in the pilot study were people who were familiar with the study. The only recommendation that was made was to reword question nine for more concise terminology. The original interview question was worded, “What non-numerical data did you observe?” This question was reworded, “What other non-numerical data did you see in this process?”

### **Setting**

The study site occurred in a rural school district located in Westmoreland County in Pennsylvania. The participating school has a population of 900 students in kindergarten through sixth grade. The elementary school is located in a rural school district and is one of three elementary schools in the district. The elementary school is a Title 1 school which means that at least 40% of the students are low income and qualify for free and/or reduced lunch (<http://www.glsd.k12.pa.us/domain/24>).

### **Limitations**

A limitation to this research study was the small sample size. The sample size was 15 students. Permission letters were mailed out during the winter of 2013. Although a small sample size, the sample represented an 88% return rate.

Another limitation to this research project was the sample population. The study is not generalizable. The population did not represent a diverse population. Of the teacher participants, all were Caucasian. Of the student participants, 13 were Caucasian and two were African-American. Geographically, the study examined one group in one town which may not be generalizable to the rest of the population of the United States. However, possibly the results would be generalizable to struggling readers in all elementary schools. This researcher is

attempting to show support that extra reading practice on students' independent reading levels will result in greater scores and gains in reading and oral fluency assessments.

### **Role of the Researcher**

Although the researcher is a teacher employed in the same district, the researcher took on the role of data collector, interviewer of only teachers, and manager of paperwork. The paperwork included categorizing books by content, organizing reading levels for students, and checking bookmarks. During the interviews, the teachers felt relaxed to be open and honest concerning the implementation of independent reading materials in their science and social studies classes. The teachers also felt secure to tell the researcher the positive and negative aspects of the research project.

### **Summary**

The researcher, a special education teacher, was cognizant of the difficulties of struggling readers to access and read texts in the social studies and science curricula. Most social studies and science textbooks were written above the student's reading level which resulted in the student not being able to access the curricula or read and understand the information. The researcher realized that students are not getting enough practice reading on their independent levels. So, the researcher decided to pursue an internship with the goal of giving students the opportunity to read on their independent levels within the content classes of social studies and science.

Children who struggle in reading need to practice in order to become better readers. People need to practice in order to improve. Struggling readers are no exception. Children who read several grade levels behind their peers do not have the opportunity to practice reading on their independent reading levels throughout the day. Children need to practice reading on their

independent levels. Allington (2009) stated that the key finding to improved reading scores involved teachers' use of "multi-text and multi-leveled curriculum design" (p. 3).

The researcher decided to create a complementary reading list for the concepts in the social studies and science fifth- and sixth-grade curriculum. The researcher believed that students would benefit from extra reading practice on their independent levels and the students would have greater access to the information within the social studies and science curricula.

The researcher and the teachers began meeting in the spring of 2012 to implement the idea of using leveled text in the social studies and science classroom. The group met before and after school and sometimes on the weekends. These teachers helped the researcher with creating big ideas and objectives. The meetings were informal and involved an exchange of ideas.

As with all curricula, this was a fluid project that the team could continually expand. The librarians even requested a copy so they could use the information to order specific books for specific concepts. The professional development that went into this project was very valuable and involved highly educated peers in a free exchange of ideas for a common purpose. When teachers are given a common goal and freedom to exchange ideas, magical things can happen.

The researcher implemented the project with the help of the four elementary social studies and science teachers. The teachers implemented this project in their social studies and science classes for five months. There were some small lapses during the implementation due to PSSA preparation and testing. The researcher's role in this project was manager of paperwork, interviewer, and analyzer of data.

The researcher is hypothesizing that when students engage in approximately 5 or 10 extra minutes of reading on their independent reading levels per day, the extra reading practice will

have a positive effect on the students' oral reading fluency and reading comprehension skills, therefore, having a positive impact on students' DIBELs, EdPerformance, and PSSA scores.

Chapter III outlined the mixed-methods employed in this study. Included was a description of all participants and setting of the study, as well as the instrumentation tools used. The procedures were described in three phases. Phase I outlined the developing stages of the research project. Phase II identified the implementation of the research study, and Phase III detailed how the research study was measured. Also included was a description of the researcher's role in this study, along with the limitations of the study.

In Chapter IV the results of the research project are carefully organized, analyzed, and documented. The data both in qualitative and quantitative form were examined to determine if the data supported and completely answered the researcher's questions. In addition, the data were scrutinized to determine future ways to improve reading skills in struggling readers across all curricula.

## CHAPTER IV

### ANALYSIS

The purpose of Chapter IV is to present the quantitative data results from three student assessments and the qualitative data from the teacher focus groups. The data are presented in tables, figures, and histograms. The researcher attempted to answer the following questions:

1. Is there a correlation between extra practice reading and proficiency on reading assessments?
2. How do content area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes?

In addition to the research questions, the researcher had two Null Hypotheses.

#### **Null Hypotheses**

Hypothesis 1. There will be no significant change in reading scores from mid-year to end-of-the-year assessments using DIBELS, EdPerformance, and PSSA.

Hypothesis 2. There will be no significant correlation between time students spent reading on their independent reading level and gains in reading assessments.

For the quantitative data, three assessments were used: DIBELS, EdPerformance, and the PSSA. The researcher decided to use these assessments because these assessments were being used by the site school. In addition to DIBELS, Edperformance, and the PSSA being available to the researcher, psychometrics reveal that the three assessments are valid and reliable tests. The assessments used several different methods. DIBELS was given three times per year and the students were assessed by reading oral passages on grade level for one minute. The mistakes that were made, if any, were subtracted from the total number of words read. This score was their oral reading fluency score.

EdPerformance was taken three times per year and the tests were administered on a computer. The computer program adjusted the assessment when the students' baseline scores were calculated. For example if the student seemed to be struggling, the computer program would adjust the assessment thus creating an easier test so as not to frustrate the student. Finally, the PSSA was taken in April of 2013 utilizing a paper and pencil model. The assessment was taken over a period of four days at the elementary school. Not all the assessments were given by the same teacher. For example, DIBELS although given three times per year, was possibly given by three different teachers which may have had an impact on the validity of scores. Refer to Table 6 to see how the assessments were disbursed throughout the year at the research site.

Table 6

*Middle-of-the-Year and End-of-the-Year DIBELS and EdPerformance Reading Assessment Schedule for the Student Participants*

Beginning-of-the-Year	Mid-Year	End-of-the-Year
DIBELS September 2012 EdPerformance September 2012	DIBELS January 2013 EdPerformance January 2013	DIBELS May 2013 EdPerformance May 2013 PSSA April 2013

DIBELS measures how fluently a person reads. Fluency consists of three components: accuracy, automaticity, and prosody (Kuhn & Stahl, 2003; National Reading Panel, 2000). Accuracy is defined as how accurately the reader reads, in other words, the number of words read correctly. Automaticity refers to the speed or immediate recognition of words.

Automaticity in word identification is the largest contributor to reading comprehension (Kuhn & Stahl, 2003). Thus, several students, though reading on grade level, can still be in need of reading instruction based on their fluency. Table 7 displays the average ranges of oral reading fluency for fifth and sixth grades. Finally, prosody in inflection, stress, and timing when the student reads (Wise, Sevcik, Morris, Lovett, Wolf, Kuhn, Meisinger, & Schwanenflugel, 2010) also corresponds to a successful reader.

Table 7

*Fifth Grade Student Middle-of-the-Year and Middle-of-the-Year Benchmark Scores in DIBELS Oral Reading Fluency Scores/Words per Minute*

Benchmark	Beginning-of-the-Year	Middle-of-the-Year	End-of-the-Year
At or Above	111+	120+	130+
Below (Strategic Support)	96-110	101-119	109-129
Well Below (Intensive Support)	0-95	0-100	0-104

Table 8

*Sixth Grade Student Middle-of-the-Year and Middle-of-the-Year Benchmark Scores in DIBELS*

*Oral Reading Fluency Scores/Words per Minute*

Benchmark	Beginning-of-the-Year	Middle-of-the-Year	End-of-the-Year
At or Above	107+	109+	120+
Below (Strategic Support)	90-106	92-108	95-119
Well Below (Intensive Support)	0-89	0-91	0-94

**Research Project**

In previous years, social studies and science classes were taught using texts that some students could not access. The fifth- and sixth-grade students who were a part of this research participated in both social studies and science classes. In these four classes, students had labs in science and continued to have whole group instruction in social studies and science with the addition of extra practice time reading leveled texts. The researcher assisted the social studies and science teachers involved in this project by planning and incorporating the leveled texts within the social studies and science classes.

Participating students who were deemed at-risk or strategic according to DIBELS were then further assessed to determine reading levels and skill deficits. These children received small group instruction in the areas of phonics or fluency. These small group sessions were 30 to 40 minutes long, approximately 4 to 5 days per week. In addition to the small group reading instruction, the students also received the core reading instruction. Additionally,

for this research study, the children who were assessed and identified at-risk or strategic were also given books on their independent reading levels in their social studies and science classes; thus, they could practice reading for 5 to 10 minutes per day every day. The whole class participated in the reading so as not to draw unwanted attention to the children who were involved in this study. The independent reading which was done either before or after class was completed on a consistent basis until the end of January. When February and March arrived, PSSA preparation took precedence over the social studies and science curriculum. Thus, the social studies and science classes and the students' independent reading time were not as consistently implemented. The social studies and science classes were replaced with test taking strategies, reviewing, and test preparation. This preparation lasted until PSSA test time in mid-April.

The next section defines the social studies and science curriculum for the research project. The participating students in the study read the leveled texts that corresponded to the curriculum.

### **Science and Social Studies Curriculum**

An important aspect of this research project was the notion of students practicing reading on their independent levels. However, teachers find it difficult to implement extra reading practice during the busy school day. Research suggests that the more a student reads the more proficient he or she is in fluency, comprehension, and vocabulary (Anderson, Wilson, & Fielding, 1988). The researcher decided to have this extra reading practice provided during the students' science and social studies classes. The researcher hypothesized that not only would the students have extra reading practice; they would have greater access to the science and social studies curriculum.

The science curriculum consisted of hands-on kits which included numerous investigations and experiments for the students to perform. Teachers were responsible for teaching three kits per school year. The social studies teachers were responsible for teaching eight units from the social studies book. Table 9 and Table 10 display the specific content taught for each grade level and subject.

Table 9

*Science Curriculum for the Participating Students and the Schedule of the Science Curriculum for Fifth and Sixth Grades*

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Fifth Grade	Sixth Grade
Kit 1 – Micro-Worlds	Kit 1 – Ecosystems
Kit 2 – Motion and Design	Kit 2 – Paper Technology
Kit 3 – Nutrition	Kit 3 – Magnets and Motors

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Table 10

*Social Studies Curriculum for the Participating Students and the Schedule of the Social Studies*

*Curriculum for Fifth and Sixth Grades*

Fifth Grade	Sixth Grade
Unit 1 – The First Americans Unit 2 – The Indians of North America Unit 3 – Age of Exploration Unit 4 – Encounters in America Unit 5 – European Settlements throughout America Unit 6 – Life in the British Colonies Unit 7 – Differences Divide Britain and the Colonies Unit 8 – The War of Independence	Unit 1 – People of the Stone Age Unit 2 – Southwest Asia Unit 3 – African Civilization of the Nile Valley Unit 4 – Early Civilizations in Asia and the Americans Unit 5 - China Unit 6 – India and Persia Unit 7 – Ancient Greece Unit 8 – Ancient Rome

The researcher met with the district’s RtII coordinator and created open-ended tasks for the students to complete. The open-ended tasks not only resulted in the children being held accountable for their independent reading but also were good practice for the PSSA. These open-ended tasks were put in the form of bookmarks and given to the students to complete after they had read their texts. With regular SSR, students would read but not have an activity to hold the students accountable. In addition, with SSR the only way a teacher knew the student was reading was by observation (Reutzel, Fawson, & Smith, 2008). However with Sustained Silent Scaffolding Reading (SSSR), students are held accountable for their reading by completing the tasks provided on the bookmark. The tasks are included in Table 11.

Table 11

*Different Tasks That Students Completed After Reading Their Independent Texts*

Task	Student Task
Task 1	Summarize your story and identify character traits of the main character.
Task 2	Define the conflict in the story.
Task 3	Draw a Venn Diagram and compare and contrast two of the book you have read.
Task 4	Create a new title for the book and describe why you picked the new title.
Task 5	What is the main idea of this book? Name three supporting details.
Task 6	What is the theme of the story? Use examples from your book.
Task 7	Describe the setting(s) of the story.
Task 8	What are some details the author uses to let you, the audience, know how he or she feels about this topic?
Task 9	What question would you like to ask the author.
Task 10	Write a detail of the book and five facts that support that detail.
Task 11	How do you know this is an informational text? Give three details to support your answer.
Task 12	How does this book support what you are learning in the classroom?

*Note.* Tasks were incorporated into bookmarks.

**Oral Reading Fluency Scores**

Twelve participating students in the research study received general education language arts curriculum. This regular education curriculum consisted of an 80-minute class with each student additionally participating in a 40-minute reading intervention group. These intervention

groups included phonics instruction and/or fluency instruction depending on the students' individual reading needs.

Three students did not participate in the general education reading program. These students participated in a Tier Three reading program due to severe phonics deficits and oral reading fluency deficits. The Tier Three students were reading two to three grade levels behind their peers. These students also received an 80-minute intensive phonics-based reading program with an additional 40-minute intervention group with explicit phonics and fluency instruction.

It should be noted that in both tables there were students who were reading on grade level. However, students can read on grade level and still be deemed strategic because of a deficit in oral reading fluency. Tables 12 and 13 indicate all of the students' oral reading fluency scores according to DIBELS with the underlined median score.

Table 12

*DIBELS Scores of the Fifth-Grade Participants Both Middle-of-the-Year and End-of-the-Year Benchmarks*

Fifth-Grade Student	Middle-of-the-Year Benchmark Scores			End-of-the-Year Benchmark Scores		
5-1	85	94	<u>86</u>	96	81	<u>82</u>
5-2	<u>76</u>	69	83	100	65	<u>99</u>
5-3	<u>74</u>	66	85	98	71	<u>87</u>
5-4	145	<u>150</u>	157	<u>148</u>	150	144
5-5	58	<u>53</u>	44	53	<u>49</u>	48
5-6	149	<u>137</u>	133	132	<u>124</u>	110
5-7	130	<u>111</u>	100	<u>105</u>	112	104
5-8	69	<u>67</u>	53	74	<u>67</u>	66

Table 13

*DIBELS Scores of the Sixth-Grade Participants Both Middle-of-the-Year and End-of-the-Year*

*Benchmarks*

Sixth-Grade Student	Middle-of-the-Year Benchmark Scores			End-of-the-Year Benchmark Scores		
6-1	83	89	<u>89</u>	93	71	<u>85</u>
6-2	<u>89</u>	106	83	<u>97</u>	112	92
6-3	<u>62</u>	65	60	<u>86</u>	80	89
6-4	92	<u>91</u>	81	104	89	<u>100</u>
6-5	<u>46</u>	71	45	70	<u>53</u>	47
6-6	<u>48</u>	77	41	74	<u>57</u>	54
6-7	117	<u>117</u>	127	110	98	<u>108</u>

**EdPerformance Reading Assessment**

In addition to the DIBELS assessment, students participated in a PSSA indicator called the EdPerformance. This assessment categorized students with the score of Below Basic, Basic, Proficient, or Advanced. Table 14 displays the data for the students both Middle-of-the-Year score and End-of-the-Year score. The table contains both a numerical score and a categorization: Below Basic- BB, Basic- B, Proficient-P, and Advanced- A. One student in fifth grade during both the Middle-of-the-Year and End-of-the-Year test was spoiled or rendered non-scoreable due to testing inconsistencies. The status of spoiled means that the computer program deemed the student was progressing too fast with the program and spoiled or stopped the test.

Table 14

*Results of EdPerformance Scores Both Middle-of-the-Year and End-of-the-Year Benchmark  
for Fifth Grade*

Students	Middle-of-the-Year Benchmark	End-of-the-Year Benchmark
5-1	1912	2438 B
5-2	2152	2490 B
5-3	Spoiled	Spoiled
5-4	2818	2843 P
5-5	2179	2203 BB
5-6	2716	2853 P
5-7	2915	2918 P
5-8	1947	2170 BB

*Note.* Student 5-3's test was spoiled due to testing irregularities.

Table 15

*Results of EdPerformance Scores Both Middle-of-the-Year and End-of-the-Year Benchmark  
for Sixth Grade*

Students	Middle-of-the-Year Benchmark	End-of-the-Year Benchmark
6-1	2801	2805 P
6-2	2869	2678 P
6-3	2732	2782 P
6-4	2278	2590 B
6-5	2189	2316 BB
6-6	1868	2053 BB
6-7	2628	2735 P

## Results

This section presents the results from the statistical analysis of the focus groups and the quantitative testing. The researcher displayed the descriptive statistics for the DIBELS and EdPerformance scores, both Middle-of-the-Year and End-of-the-Year scores, and then differentiated between the grade levels. Descriptive statistics were achieved by the computer program, SPSS 20, a data analysis program. Descriptive statistics and a two-tailed t-test were used to analyze the data. A t-test mean and the standard deviation were also achieved through SPSS. The standard deviation or the spread of a set of scores around the mean determines whether the scores are relatively close together and clustered around the mean or widely spread out around the mean (Gay, Mills, & Airasian, 2009).

The sample group equaled 15 students in both fifth-and-sixth grades ( $N = 15$ ). These students were deemed at-risk readers due to their scores pursuant to DIBELS data. These students began the intervention of reading on their independent reading levels in pairs or individually during social studies and science classes. As shown in Table 15, the mean score for Middle-of-the-Year DIBELS Benchmark was 86.47 words per minute. The mean score for End-of-the-Year DIBELS was 89.80 words per minute. The data displayed a growth of 3.33 words per minute for the school year. However, the growth is below the DIBELS' expected growth. The fifth-grade Beginning-of-the-Year benchmark is 111 words per minute with an approximate growth of 130 words per minute by the Middle-of-the-Year which is a gain of 19 words per minute. However, the students in the study gained an average of only 3.3 words per minute. Also noted, two students in the fifth grade made Middle-of-the-Year Benchmark and were back in a Tier One status. Conversely, no students in sixth grade made benchmark or were put into a Tier One status.

The sample group (N = 15) also was administered the EdPerformance in January and again in May to determine Middle-of-the-Year and End-of-the-Year Benchmarks. The mean score for the reading part of EdPerformance Middle-of-the-Year Benchmark was 2428.86 and End-of-the-Year Benchmark mean was 2562.43. These two benchmark scores resulted in a growth of 133.57 points. See Table 16.

Table 16

*Descriptive Statistics on EdPerformance and DIBELS Scores (N = 15)*

Assessment	N	Minimum	Maximum	Mean	Std. Deviation
DIBELS Middle-of-the-Year	15	46	150	86.47	31.22
DIBELS End-of-the-Year	15	49	148	89.80	26.83
EdPerformance Middle-of-the-Year	14	1868	2915	2428.86	389.01
EdPerformance End-of-the-Year	14	2053	2913	2562.43	286.18
Growth of DIBELS	15	-13	24	3.33	11.03
Growth of EdPerformance	14	-191	526	133.57	177.37

### **Middle-of-the-Year Histograms**

Five histograms were created using SPSS 20 data analysis program. These histograms show the frequency distribution of DIBELS and EdPerformance both Middle-of-the-Year and End-of-the-Year and the final histograms will show growth, if any. The first two histograms display the frequency scores for the Middle-of-the-Year scores for both DIBELS and

EdPerformance. The median score frequency distributions are fairly consistent between the fifth- and sixth-grade students for DIBELS. The histograms show both grades have the majority of their students reading less than 100 words per minute, characterizing them as at-risk readers. The fifth-grade histogram displayed a wider spread distribution or range than sixth-grade with the least amount of words read per minute being in the 50s and the most words read per minute being around 150.

When interpreting the distributions, many distributions have the common Bell Curve known as a unimodal distribution or one distinct peak. Distributions that show two distinct peaks or modes are called a bimodal distribution (Howell, 2008). The histogram for Middle-of-the-Year Benchmark for fifth-grade DIBELS showed a positive skewed unimodal distribution. In contrast, the sixth-grade Middle-of-the-Year DIBELS showed a bimodal distribution. The histograms should be interpreted with caution, because a large sample size is needed to interpret the shape of a distribution (Howell, 2008). See Figures 2 and 3.

*Histogram Displaying Frequency of Median Scores for DIBELS Middle-of-the-Year Benchmark*



*Figure 2.* DIBELS Middle-of-the-Year distribution. The scores are displayed on the X axis and the number of students is displayed on the Y axis.

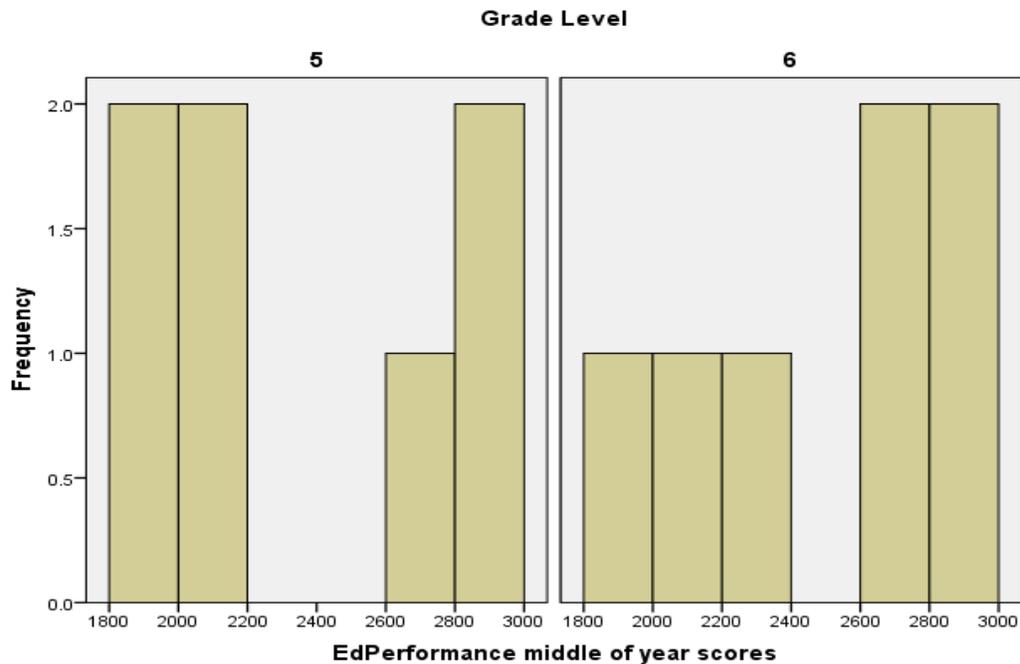


Figure 3. Distribution of scores for the Middle-of-the-Year EdPerformance. The X axis shows the scores of EdPerformance and the Y axis shows the number of students.

### End-of-the-Year DIBELS Histogram

In viewing the End-of-the-Year histogram for DIBELS in fifth-grade, the histogram shows a slight change in the distribution of scores. Although the sample size ( $N = 7$ ) is small, the histogram shows that three students who were reading in the range of 50 to 75 words per minute during the Middle-of-the-Year testing improved and tested End-of-the-Year in the range of 75 to 100 words per minute. However, it should be noted that the children who read in the 50 words per minute range or the lowest range stayed in that scale despite the intervention. On the other hand, the students who were at benchmark during the Middle-of-the-Year Benchmark progressed into a Tier One status.

In viewing both sets of Middle-of-the-Year histograms, the data showed that the fifth-grade students consisted of a wider range of readers, a larger distribution. In contrast, the sixth-grade histogram contained a lesser range of words read per minute with the least number of words per minute being 46 and the greatest being 127 words read per minute.

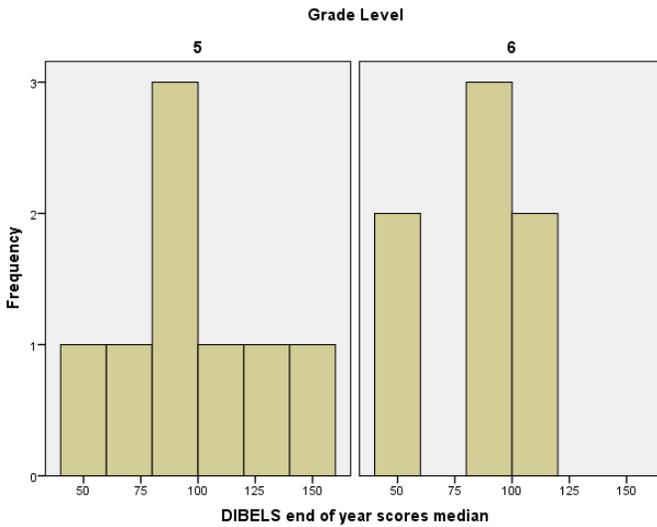
By the end of the year, sixth-grade students displayed a shift toward greater total of words per minute. For example, at Middle-of-the-Year, there were three students at 75 words per minute or less. By the End-of-the-Year benchmark, there were only two students at that level indicating that one student progressed into a greater word per minute range. The students with the greatest need that read the least amount stayed in the lowest range of words per minute. The fifth-grade DIBELS histogram was unimodal and the sixth-grade DIBELS histogram was bimodal for both Middle-of-the-Year and End-of-the-Year histograms. In contrast, EdPerformance histograms displayed bimodal display for the Middle-of-the-Year EdPerformance and then a unimodal distribution for the End-of-the-Year.

#### **End-of-the-Year EdPerformance Histogram**

The histogram for the End-of-the-Year Benchmark for EdPerformance for fifth grade showed there were three students at a score of 2200 or greater which shows an improvement of one student. In sixth grade, EdPerformance scores remained almost the same. At Middle-of-the-Year, there were six students who achieved a score of 2000. By the End-of-the-Year, there were still six students with scores of 2000 or more. However, it is important to note that a student with a score of approximately 1800 moved up and out of that range and into a greater range.

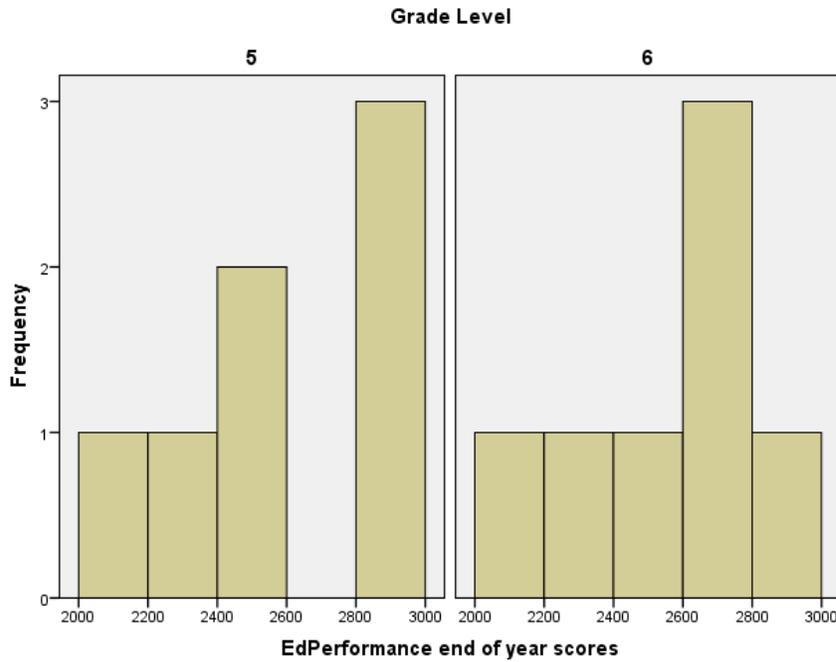
The next set of histograms displays End-of-the-Year Benchmarks in the assessments of DIBELS and EdPerformance. Please see Figures 4 and 5.

*Histogram Displaying Frequency of Median Scores for DIBELS End-of-the-Year Benchmark*



*Figure 4.* DIBELS End-of-the-Year distribution of scores. The X axis shows the Words-Per-Minute score and the Y axis shows the number of students that achieved that score.

*Histogram Displaying Frequency of Median Scores for EdPerformance End-of-the-Year Benchmark*



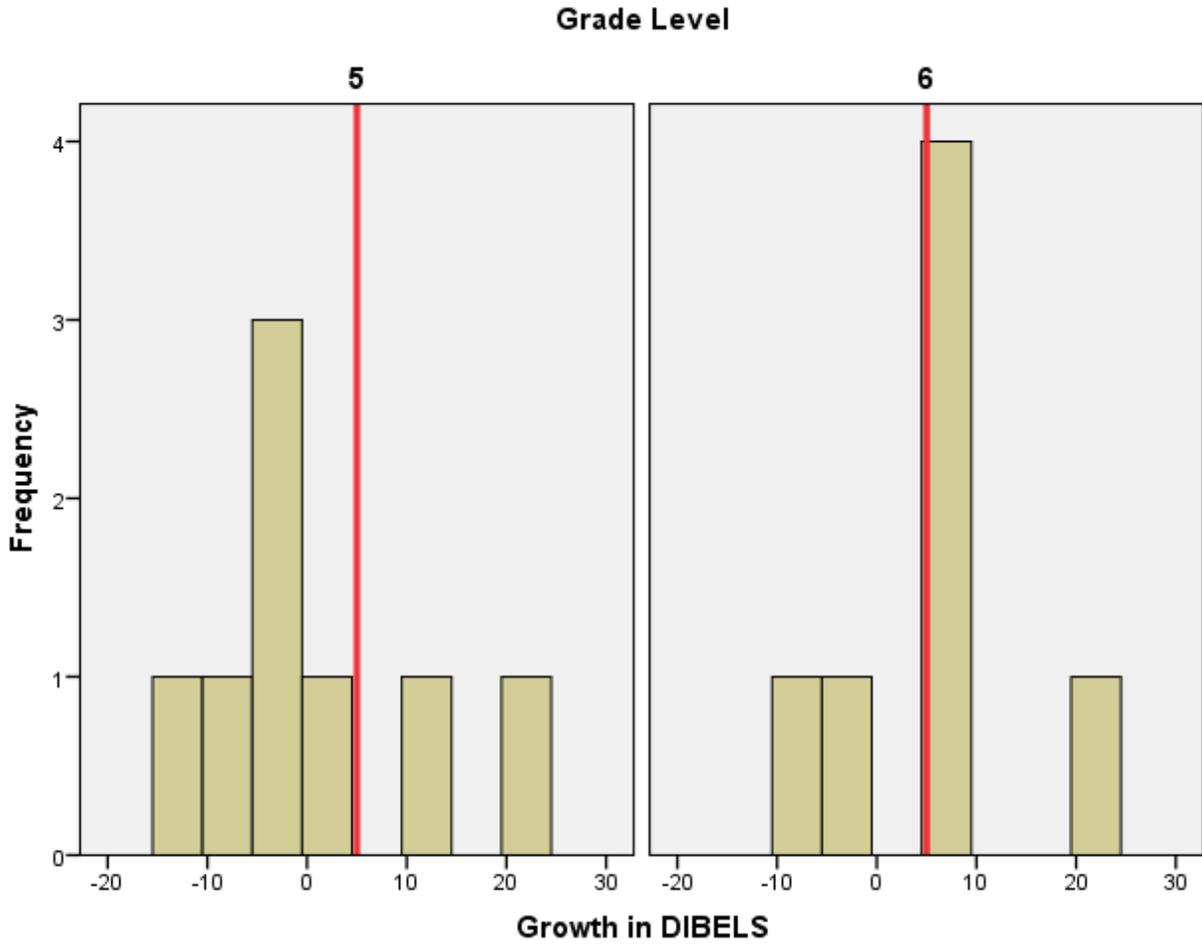
*Figure 5.* EdPerformance End-of-the-Year distribution of scores. The X axis shows the score of EdPerformance. The Y axis shows the number of students that achieved that score.

**Histograms Displaying Growth in DIBELS and EdPerformance**

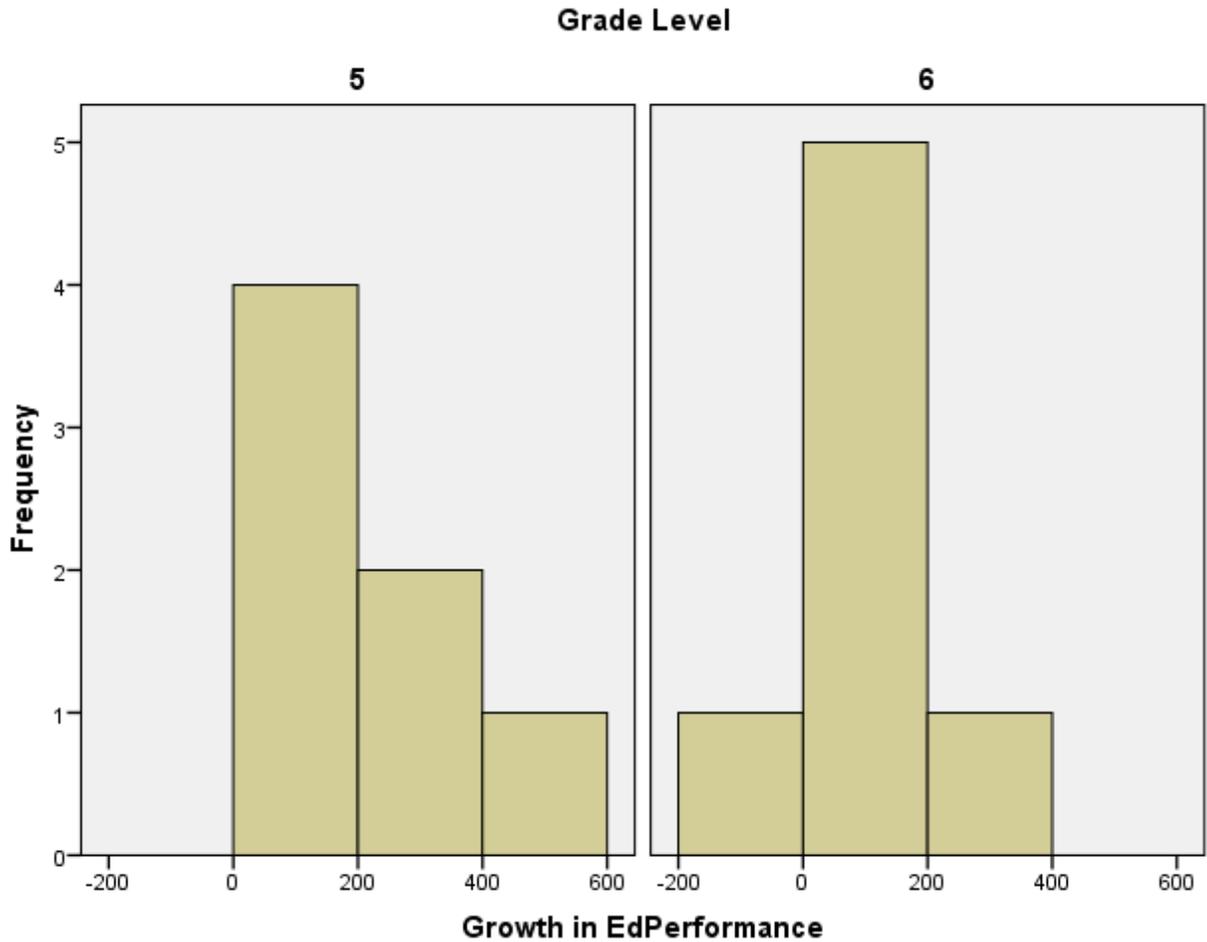
The final two histograms, Figures 6 and 7, displayed the growth of the students in DIBELS and EdPerformance, and separated the growth by grade levels. In examining the fifth-grade DIBELS histogram, the majority of the students gained little or nothing in terms of words per minute.

The EdPerformance histogram shows that fifth-grade students made more progress than their sixth-grade counterparts. The histogram for fifth grade displays the wide span of scores ranging from zero to 600 points with the majority of students gaining between zero and 200 points range. There was one fifth-grade student who gained between 400 and 600 points in EdPerformance.

The sixth-grade EdPerformance histogram shows that two sixth graders lost points but five students gained points between zero and 200 points. The fifth-grade histogram displays growth in EdPerformance. The sixth-grade histogram shows that one student did not show growth. Please see Figures 6 and 7.



*Figure 6.* DIBELS for fifth and sixth grades. Note the red line is showing the middle of the distribution. The x axis shows the growth and the y axis shows the distribution or the number of students that achieved the labeled growth.



*Figure 7.* Histogram showing the growth of EdPerformance. The x axis is the growth in points on the EdPerformance and the y axis shows the distribution or number of students who achieved the growth.

### **T-Tests and Paired Samples**

Table 17 displays the descriptive statistics for the paired samples, DIBELS and EdPerformance. The sample size ( $N = 15$ ) for DIBELS Middle-of-the-Year and End-of-the-Year yielded a Standard Deviation of 31.22 and 26.83 respectively. The Standard Error Mean was 8.06 and 6.92. The Standard Error Mean is the standard deviation of a sampling distribution (Howell, 2008).

Table 17

*Descriptive Statistics for DIBELS and EdPerformance for Both Fifth and Sixth Grade Paired*

*Samples*

	Mean	N	Std. Deviation	Std. Error Mean
<b>1<sup>st</sup> Pair</b>				
DIBELS Middle-of-the-Year	86.47	15	31.22	8.06
DIBELS End-of-the-Year	89.80	15	26.83	6.92
<b>2<sup>nd</sup> Pair</b>				
EdPerformance Middle-of-the-Year	2428.86	14	389.01	103.97
EdPerformance End-of-the-Year	2562.43	14	286.18	76.49

The second pair sample (N = 14) was for EdPerformance and the Standard Deviation was 389.01 and 286.18 respectively. The Standard Error Mean was 103.97 and 76.49. The sample size was one less due to testing irregularities in EdPerformance.

In addition to the descriptive statistics of the paired samples, Table 18 includes the Pairs Samples for DIBELS and EdPerformance results. The DIBELS had a mean of -3.33 and a Standard Deviation of 11.03. The Standard Error Mean was 2.85 and a t-score of -1.17. The degree of freedom was 14. The degree of freedom is the mean minus 1. The Two-Tailed test was not significant for the DIBELS because the T-test sig result was .26. In order to be significant, the T-test sig had to be less than .05 (<.05). One can concur that the difference between Middle-of-the-Year and End-of-the-Year DIBELS were not significant.

Table 18

*Pair Samples T-Test Between Middle-of-the-Year and End-of-the-Year DIBELS and EdPerformance*

Assessments	Paired Differences					
	t	df	Sig. (2 – Tailed)	Mean	Std. Deviation	Std. Error Mean
DIBELS Middle-of- the-Year & End-of the-Year	-3.33	11.03	2.85	-1.17	14	.26
EdPerformance Middle-of- the-Year & End-of the-Year	-133.57	47.41	-235.98	-2.82	13	.02

For EdPerformance, Middle-of-the-Year and End-of-the-Year had a mean of -133.57 and the Standard Deviation was 47.41. The Standard Error of Mean was - 235.98. The degree of freedom was 13 and the Two-Tailed test was .02. This test result was found to be significant (<.05) which indicated that there was a significant change between Middle-of-the-Year and End-of-the-Year EdPerformance.

**PSSA Reading Assessment**

The 2012-2013 PSSA, specifically the reading section, was examined to determine if students were advanced, proficient, basic, or below basic in reading. The researcher decided to use the PSSA reading scores for the study because the goal of improved reading fluency is reading comprehension. The reading section of the PSSA contained stories that were two to

three pages long with comprehension questions. The test also contained several open-ended questions. The following table displays the reading results.

Table 19

*PSSA Reading Scores 2012 for Fifth- and Sixth-Grade Participants*

Student	Score
5-1	BB Below Basic
5-2	BB Below Basic
5-3	B Basic
5-4	B Basic
5-5	BB Below Basic
5-6	P Proficient
5-7	B Basic
5-8	BB Below Basic
6-1	P Proficient
6-2	BB Below Basic
6-3	B Basic
6-4	BB Below Basic
6-5	BB Below Basic
6-6	B Basic
6-7	B Basic

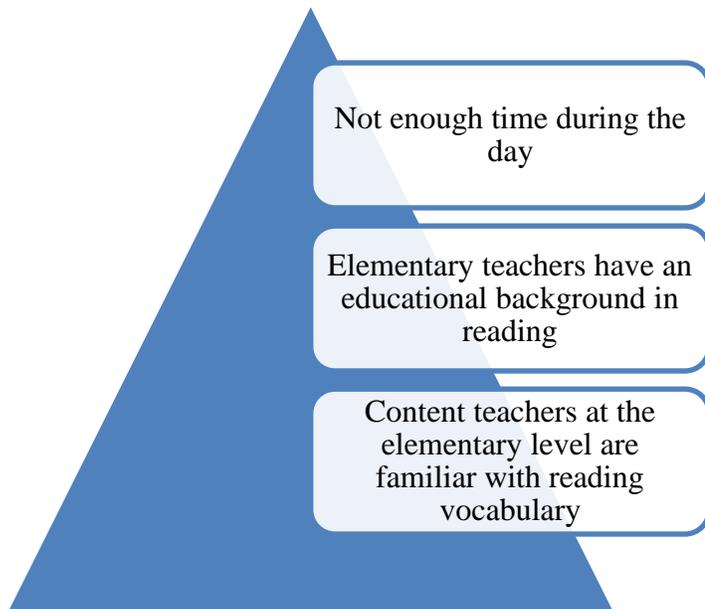
In conclusion, two of the participating students, one from each grade who were labeled at-risk by DIBELS were proficient on the PSSA reading section following the intervention. The rest of the students were Basic or Below Basic in reading.

The next section will look at the qualitative piece of the Mixed-Methods study.

**Themes of the Focus Groups**

A total of four focus groups were conducted between the months of January and May 2013. All focus group conversations were audio recorded and the tapes were then transcribed verbatim. The data were then color coded and typed into a NVivo computer program where

several themes were revealed. The themes were presented into a visual component. Figure 8 displays the themes.



*Figure 8.* Themes from focus groups conducted from February through May.

### **Theme One: Not Enough Time During the Day**

The theme, not enough time during the day, was common in the focus group even though the majority of the “behind the scenes” work was accomplished by the researcher. This “behind the scenes work” included, but was not limited to, leveling the books, researching each individual student’s reading level, organizing the books, and creating the bookmarks. The researcher did the organizational work and bookmarks so that the participating teachers could concentrate on solely disseminating the reading material and observing the students while reading independently. The teachers recognized the researcher’s endeavor but expressed concerns on how they would be able to achieve this independently. Table 20 displays the following statements that complemented this theme. Numerous times during the focus group, teachers spoke of the lack of time to do extra things throughout the school day. Teacher C stated

“When I reflect on my teaching at the end of the day, I realize we should have done more of this or more of that.”

Table 20

*Teacher Comments Concerning Theme One*

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Teacher	Comments
Teacher A	“If you (the researcher) were not completing the bookmarks, that would require a lot of time on my part to find all of the leveled readers and then read them in order for me to respond to the material that each student is currently reading.”
Teacher B	“As far as disadvantages to the student, I don’t think there are any, but like my colleagues said as a teacher, a lot of time to organize. I am finding it hard to give it enough time to read these books and still teach the curriculum.”
Teacher C	“Sometimes it takes a couple of more minutes to transition between classes, finding the books, putting the books away, bookmarks falls out, things that are manageable but it does take time.”
Teacher D	“I think it takes a lot of prep time to get all those leveled texts ready to know what levels each child is on.”

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*Note.* Teacher A was absent for the focus group but sent her response via e-mail.

**Theme Two: Elementary Teachers Have an  
Educational Background in Reading**

Throughout the focus groups, the researcher noted that the teachers possessed much knowledge of the whole reading process even though only one teacher actually taught the subject of reading. The group interviewed clearly demonstrated that they were educated in the process of teaching reading. For example, the teachers stressed the importance of phonics, oral reading fluency, and reading practicing. Teacher A stated, “There is a direct correlation, the more you

read the better you become at it. However, if the practice is not at a level you feel successful at then this is not going to be a positive experience.” All of the teachers stated that they felt competent embedding reading skills within their content classes. Table 21 further explains the results.

Table 21

*Teacher Comments Concerning Theme Two*

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Teacher	Comments
Teacher A	“I have them practice so they can internalize it and feel like in their mouth (how to pronounce difficult vocabulary words). So they are used to how they handle it when they encounter the word in the text. So it’s important that they are able to decode the words. A lot of this is done one to one. We do as a class try to figure out ways to sound out the words, find patterns, or find smaller words within the word. It is important because the vocabulary is usually so much higher in social studies and science.”
Teacher B	“I do as much as I can especially in our social studies program. The words are difficult especially the explorer names and the Native American names. We try and look at the pronunciation key and they pronounce it as well. I feel it is important that they can pronounce it. They will remember it and which will make it easier to comprehend it as well.”
Teacher C	“We try to do this (employ decoding skills) as much as possible. A lot of the articles in science are pulled from other resources so they may not always be on the reader’s reading level.”
Teacher D	“I agree but I feel they also need to listen to others read as well. I think that might be another option. So pairing them up with someone else and letting them hear that person read. You may want to reinforce the correct way as well. Eventually, I think they would be partnered up but there are issues with that. However when it’s done right it works really well.”

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**Theme Three: Content Teachers at the Elementary  
Level Were Familiar With Reading Vocabulary**

All of the teachers were cognizant of reading assessments and the process of teaching reading. They also were adept with the reading vernacular. The teachers knew and could discuss terms like phonemic awareness, DIBELS, and the importance of reading comprehension and how it relates to oral reading fluency. The teachers who participated in the focus group were confident in their knowledge of reading and the art of teaching reading. Table 22 displays the information.

Table 22

*Teacher Comments Concerning Theme Three*

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Teacher	Comments
Teacher A	“ . . . need to do nonfiction reading to practice comprehension . . . .”
Teacher B	“I agree it seems like any more and more that boys and girls do not want to read. I think this (the research project) is encouraging them to read in all disciplines.”
Teacher C	“ . . . I think it’s really important especially in our curriculum. We do not have a lot of nonfiction reading. Integrating as much as we can is important because it’s just another opportunity for the kids to learn information, to do nonfiction reading, and to practice comprehension skills. There is just not enough time in regular language arts classes to do that.”
Teacher D	“I agree with Teacher B. In our own library, we need more books that are geared to the content we teach. I know in science we don’t have a lot of books that are necessarily about ecosystems. I mean there are some but there is not enough of a selection for the kids.”

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## **Summary of Quantitative Data Analysis**

The data from the various reading assessments were varied. There was little to no growth in DIBELS, but some growth in EdPerformance. The PSSA data showed only two students deemed proficient in the reading portion of the PSSA. The data collected and analyzed invoked more questions than answers.

### **Conclusion of Research Question 1**

The first research question that guided the study:

1. Is there a correlation between extra practice reading and proficiency on reading assessments?

In summary, the quantitative data showed that the fifth-and sixth-grade students involved in the study (N = 15) had a mean growth in DIBELS of 3.33 words per minute. In the assessment, EdPerformance the mean growth among students was 133.57. The standard deviation for the growth of DIBELS was 11.03 and the standard deviation for EdPerformance 177.37. The DIBELS assessment did not show a significant gain in words per minute for the fifth-and sixth-grade struggling readers during the research period.

In examining the Pair Sampled Test, the Sig. (2-tailed) for both DIBELS and EdPerformance yielded the following information. The difference between DIBELS Middle-of-the-Year and End-of-the-Year was .26. Because .26 is greater than .05, the data indicated that there is no significant difference in the Middle-of-the-Year and End-of-the-Year DIBELS scores despite the intervention. Therefore, we fail to reject the researcher's Null Hypotheses which stated that there would be no significant change in reading scores from mid-year to Middle-of-the-Year assessments using DIBELS, EdPerformance, and PSSA, and there will be no significant

correlation between time students spent reading on their independent reading levels and gains in reading assessments.

The Sig score for Middle-of-the-Year and End-of-the-Year EdPerformance was .02 which is less than .05. Therefore, the Sig was significant for a difference in scores. Since, the Sig for EdPerformance was .02; we can reject the null hypothesis.

### **Summary of Qualitative Data Analysis**

#### **Conclusion of Research Question 2**

The second research question that guided the study:

2. How do content area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes?

The four teachers who participated in this research study emphasized that they were committed to teaching reading in their social studies and science content classes. The teachers stated that they used research-based strategies such as phonics, partner reading, and teaching vocabulary instruction. The teachers further commented that they felt comfortable teaching most features of reading due to the fact that the district in which they taught incorporated professional development in the area of teaching reading. All participating teachers in the focus group have degrees in elementary education and therefore had reading pedagogy classes during their four years of college or university instruction. The participating teachers took seriously the statement that, “Every teacher is a reading teacher” (Feldman, 2002, p. 6).

The teachers had positive statements about incorporating the leveled texts in their classrooms; however, all had concerns about time management of the project. Teachers agreed that struggling readers needed more time to practice on their independent reading levels. Their concerns included finding the time to retrieve the information of each student’s reading level,

locating books that matched their students' independent reading level, and holding each student accountable for their reading. Despite the time management issue, teachers stated that they would like to continue the project in the future.

The researcher would like to note that the teacher focus group yielded additional promising data that was not measured in the study. The teachers remarked that many students made connections between the texts they were reading and their social studies and science curriculum. The teachers described the students' comments as enthusiastic and motivated.

Although not part of the study, the researcher would like to include these statements:

- Students added information to the class discussion based on the information from their leveled texts
- Students remarked that the texts were easy to read
- A student took pride in the fact that he had completed a book
- When the students finished a book and bookmark, they eagerly asked for another book
- Students stay after class to share information with the teacher that they had read in their book

### **Summary**

This mixed-methods study began as a two-year long project. The first year began with the researcher analyzing the social studies and science curriculum for fifth and sixth grades. The researcher examined the content and matched picture books, chapter books, and web-based books with varying reading levels to the curriculum. The participating teachers implemented the leveled texts in their social studies and science classes. The students engaged in 5 to 10 minutes per day of independent reading in addition to their core curriculum and reading intervention skill

groups. As mentioned earlier, the researcher's goal was to investigate if extra reading time on the students' independent reading levels would have a positive effect on their reading assessments.

The researcher chose three reading assessments to determine if the students were making positive gains in reading. The researcher used DIBELS, EdPerformance, and the reading section of the PSSA. The researcher chose these assessments because they were already being used by the elementary school and had been proven valid and reliable.

In the fifth and sixth grades at the participating school, 16 children met all criteria for the study. Permission slips to participate in the study were mailed to the students and their families. Fifteen students responded favorably and consented to partake in the study. The researcher determined each child's independent reading level. These children were given specific books that matched their content in social studies and science grade level classes and reading levels. They were given the first or last 5 or 10 minutes of their social studies and science classes to engage in extra reading practice on their independent reading levels. During this time, the other students also read in the classes so as not to draw unnecessary attention to the children involved in the study. The students participated in this intervention from January 2013 to May 2013, with the exception of PSSA test preparation in February and March of 2013. The students were retested in DIBELS and EdPerformance in May to determine any reading growth.

The researcher took the quantitative data from DIBELS and EdPerformance and entered the data into SPSS. The data suggested that the children ( $N = 15$ ) on average had only a 3.3 word gain in DIBELS. In EdPerformance, the students ( $N = 14$ ) had an average gain of 133.57 points. The researcher also conducted a two sample t-test to determine a gain score or difference to see "the difference between the participant's performance on two occasions" (Howell, 2008, p.

313). The t-test showed that the difference was not significant in Middle-of-the-Year and End-of-the-Year in DIBELS. The Sig. on the DIBELS was .26 so the researcher could not reject null hypotheses one and two. The Sig. on the EdPerformance was .02 which was significant. In addition, only 13% were Proficient on the reading section of the PSSA, 40% were Basic, and 47% were Below Basic.

The researcher also analyzed the qualitative data through NVivo. Three specific themes emerged: Not enough time during the day, elementary teachers have an educational background in reading, and the teachers were familiar with reading vocabulary. Through the focus groups and qualitative analysis of data, the researcher determined that the elementary teachers who participated in the study felt comfortable being in the role of a reading teacher even though they taught the subjects of social studies and science. The teachers had a knowledge base of reading vocabulary and research due to professional development within their district and their degrees in elementary education.

Reading fluency is “one of the defining characteristics of good readers” (Hudson, Lane, & Pullen, 2005, p. 702). Children who struggle in reading need to practice by implementing extra reading time within their day. Therefore, the researcher decided to incorporate 5 to 10 minutes of extra reading practice time on the readers’ independent level and gather the students’ reading assessment scores to determine the value, if any, of the extra reading practice.

Chapter V explores the analysis of the data of the given study, summarize the given information, and identifies recommendations for future studies.

## CHAPTER V

### RECOMMENDATIONS AND CONCLUSIONS

Chapter V begins by providing a summary of the research project which began in January, 2013, and concluded in May of the same year. A review of the findings will follow, as they relate to the theories of Vgotsky's Zone of Proximal Development (1978) and Perfetti's Theory of Verbal Efficiency (1985). The chapter also contains conclusions of the data, limitations to the study, and recommendations for future studies. Finally, Chapter V provides a conclusions and reflections section of this research project.

#### **Summary of the Study**

Biancarosa (2005) stated, "Each successive year in school, students need to gain a greater proportion of new knowledge by reading" (p. 17). Snow and Biancarosa (2003) further corroborated the above statement by stating that poor readers are dropping out of school at a significant rate. Finally, Hernandez (2011) stated third graders who were reading below grade level were four times as likely to drop out of high school. These troubling statements, outline the urgency of reading instruction and proficient oral reading fluency skills for children in the intermediate grades and illustrate the importance of not only identifying but remediating at-risk readers as soon as possible.

Through the Response to Instruction and Intervention (RtII) process, students who are deemed at-risk for reading failure or who have been identified as struggling readers are put in a Tier Two status. Tier Two status requires the students to continue their general education reading curriculum with an additional reading intervention class. This reading intervention skill group or class is in the struggling reader's deficit area(s) such as phonics or fluency. However, to "catch up" the readers at-risk is a difficult task, especially with older readers. For example,

Fuchs, Fuchs, Hamlett, Walz, and Germann (1993) created a table that predicted rates of reading growth. First-grade readers were predicted to gain between two to three words per week. Conversely, when students are in the fifth grade, the words gained drops to 0.5 to 0.8 words per week. Clearly, struggling adolescent readers need intensive and frequent interventions to succeed in reading and the earlier this reading intervention is provided, the better. Likewise, Hasbrouck and Tindal (2005) developed an oral reading fluency data table to calculate average weekly improvements. By the fifth and sixth grade, the number of words gained or improved per week is approximately 0.8. The data corroborated other studies that illustrated the difficulty of closing the reading level gap of struggling readers once they are in the intermediate grades. Table 23 illustrates the Hasbrouck and Tindal’s Oral Reading Fluency Data.

Table 23

*Hasbrouck and Tindal’s Oral Reading Fluency Data for Fifth and Sixth Grade*

Grade 5	Percentile	Average	Grade 6	Percentile	Average
		Weekly Improvement -Average Words Per Week Growth			Weekly Improvement -Average Words Per Week Growth
	90	0.9		90	0.8
	75	0.9		75	0.8
	50	0.9		50	0.7
	25	0.8		25	0.8
	10	0.7		10	0.8

Swanson (2008) stated that research for the past 10 years has supported the idea that the time struggling readers spend reading on their independent reading levels, either orally or silently is low, and most reading instruction was still done in a whole group fashion. Children who read

below grade level need time to practice reading on their independent reading levels. The researcher wanted to see whether 5 to 10 minutes of extra reading practice on the reader's independent reading level, during the struggling reader's day, would increase reading scores. This intervention would be in addition to their core reading class and RtII reading intervention groups.

At the participating school, students were identified for this study based on their Middle-of-the-Year Benchmark oral reading fluency benchmark scores from Dynamic Indicator of Basic Early Literacy Skills (DIBELS). Permission slips were sent home to both student and parent. Of the 17 permission slips mailed home, 15 students volunteered to participate for the intervention (N = 15) which yielded a rate of return of 88%. The researcher decided to incorporate this extra reading time during social studies and science classes. The researcher had four teachers who volunteered to implement this reading intervention in their fifth- and sixth-grade social studies and science classes. The teachers (N = 4) volunteered and signed permission forms to participate in this study. The intervention began after Internal Review Board approval in January, 2013. Because this intervention was implemented by four different teachers, the intervention was sometimes executed either at the beginning or the end of class periods. The intervention continued on a daily basis until Pennsylvania System of School Assessment (PSSA) test preparation took precedence over social studies and science classes. After the state assessment, the reading intervention resumed.

The researcher used three reading assessments for the quantitative data which were already in use at the participating school. The researcher used Statistical Package for the Social Sciences (SPSS) to analyze the findings. In addition to the reading intervention, the researcher held several focus group sessions to determine if reading instruction occurred in the content areas

of social studies and science classes, as well as how the teachers felt about teaching reading in their content classes. All focus group conversations were recorded and transcribed by the researcher and all data were entered into NVivo. The following research questions guided the researcher's study:

1. Is there a correlation between extra practice reading and proficiency on reading assessments?
2. How do content area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes?

Two theories were embedded in this research study, Vygotsky's Zone of Proximal Development and Perfetti's Theory of Verbal Efficiency. These two theories were relevant in this study because both theories encompassed the meaning of scaffolding instruction. It was the researcher's belief that independent reading practice provided supported instruction to become a more efficient reader.

### **Vygotsky's Zone of Proximal Development**

The first theory, Vygotsky's Zone of Proximal Development (ZPD) and more specifically his term of scaffolding, fit well within this research project. The purpose of the leveled texts was two-fold. One purpose was to provide the scaffolding or support the students needed to improve their reading fluency by reading on independent reading levels. The second purpose was to provide the opportunity to practice reading during the day. Vygotsky's theory, ZPD, is considered "as the conceptualization of the approach to the evaluation of students in educational and remedial contexts" (Kozulin, Gindis, Ageyev, & Miller, 2003, p. 100). In other words, in this study, the ZPD was the availability of texts used to remediate the students. These texts enabled children to practice reading and provided remediation in reading. The leveled texts

provided the scaffolded instruction; thus, the texts provided practice on the students' independent reading levels.

### **Perfetti's Theory of Verbal Efficiency**

The second theory, Perfetti's Theory of Verbal Efficiency, was also utilized in this study. Perfetti's theory encompasses the fact that students need to practice reading in order to become proficient in reading. Perfetti (1985) stated the theory's components that if a student is a poor reader, then the student's "efficient lexical access, rapid and low in resource cost, enables working memory to carry out the propositional text work" (p. 113). In other words, students who struggle in reading have an "inefficient lexical access" (p. 113) which makes the process of reading slow and laborious. The researcher's goal was to identify whether extra reading practice would increase the student's efficiency in the reading process. By practicing reading, the students' oral reading fluency would increase. Therefore, resulting in gains in their reading assessments.

### **Conclusion of the Data**

In an attempt to answer the research questions, more questions surfaced. The following section will not only provide a synopsis of the data but state other questions that arose from the culminating data.

#### **Research Question 1**

Is there a correlation between extra practice reading and proficiency on reading assessments?

As previously stated, the researcher attempted to answer two research questions using both quantitative and qualitative data. The outcomes from the study were mixed. The researcher used three assessments to gauge the effectiveness of the reading intervention: DIBELS, EdPerformance, and the PSSA. The participants were benchmarked in January for a beginning

score and then reassessed in May, 2013, to determine whether growth in students' reading comprehension skills occurred.

### **Fifth Grade**

There were a total of eight students in fifth grade. Of the eight students, three had IEPs. All eight students were involved in a Tier Two status in RtII. All students participated in the general education language arts program and received small group instruction in their deficit skills. Six of the eight students were in an oral reading fluency program, while two were in a combination of oral reading fluency and phonics. At the conclusion of the study, three students had advanced to Tier One status. Table 24 shows the growth or loss of each individual fifth grade student measuring his or her oral reading fluency scores according to DIBELS.

Table 24

*DIBELS Median Scores for Fifth Graders and Growth or Losses of Words per Minute*

Student	Middle-of-the-Year	End-of-the-Year	Growth or Loss
1	86	82	-4
2	76	99	+23
3	74	87	+13
4	150	148	-2
5	53	49	-4
6	137	124	-13
7	111	105	-6
8	67	67	0

The DIBELS assessment was completed on grade level and administered in January and May of 2013. Most of the fifth-grade scores decreased in DIBELS with the exception of two students. The average gain in fifth grade was one word per minute. An important piece of information to note is that not all students were reading on grade level throughout the study.

However, benchmark assessments were always completed on grade level, not on students' independent reading levels. Of the fifth-graders who participated in the intervention, three students were reading on grade level but did not meet the predetermined standards of fluency, according to DIBELS, with the rest of the fifth-grade students reading one to two years behind grade level.

As previously stated, the average gain for fifth-graders according to the Hasbrouck and Tindal (2005) table is 0.8 of a word. When the average words gained (0.8) are multiplied by the number of weeks per school year, which is approximately 36 weeks, the average words gained should be approximately 28 words per school year. The fifth-grade students did not demonstrate that growth.

The fifth-grade students took the PSSAs at the end of the school year, April, 2013. Of these fifth-graders, one scored Proficient on the PSSA reading assessment. Three students were identified as Basic, and the remaining students were classified as Below Basic. The question to ask is why would two students who were reading on or close to grade level fail to be proficient on a PSSA grade level reading assessment? An interesting point to consider is that a student who was not on benchmark for January or May for DIBELS, was the only fifth-grade student Proficient on the PSSA reading.

Likewise, EdPerformance, a PSSA indicator, denoted that three students would be Proficient on the PSSA, when, in fact, only one was identified as being Proficient. Student 5-1 had the greatest gain in EdPerformance. The student gained 526 points but still achieved a score of Basic. In fact, all fifth-graders increased their scores on EdPerformance with the exception of the spoiled test. Table 25 displays the EdPerformance data.

Table 25

*EdPerformance Middle-of-the-Year and End-of-the-Year Scores and Growth for Fifth Grade*

Student	Middle-of-the-Year Scores	End-of-the-Year Scores	Growth
1	1912	2438	+526
2	2152	2490	+338
4	2818	2843	+25
5	2179	2203	+24
6	2716	2853	+137
7	2915	2918	+3
8	1947	2170	+223

*Note.* The assessment for student three was spoiled.

**Sixth Grade**

There were a total of seven students in the sixth grade. Of the seven students, all had IEPs for disabilities in the area of reading. Four students were in the district's core reading program with small intervention groups in the area of fluency. The remaining three students participated in a Tier Three reading program with a heavy emphasis on phonics with small intervention groups in the area of fluency. Table 26 displays the DIBELS results for sixth grade.

Table 26

*DIBELS Median Scores for Sixth Graders and Growth or Losses of Words per Minute*

Student	Middle-of-the-Year	End-of-the-Year	Growth or Loss
1	89	85	-4
2	89	97	+8
3	62	86	+24
4	91	104	+13
5	46	53	+7
6	48	57	+9
7	117	108	-9

*Note.* Students 3, 5, and 6 were in a Tier Three reading program.

In an analysis of descriptive data, the sixth-grade readers had more students show positive growth in reading than the fifth-grade readers. The average words per minute gained for the sixth-grade readers were nearly seven (6.9) words per minute. The sixth-grade readers gained more words per minute than the fifth-grade students. The fifth-grade students' average increase was one word per minute.

Of the seven sixth-grade students, not one student was reading on a sixth-grade reading level either at the beginning or end of the study. In fact, there were two participating sixth-grade students who were four grade levels behind their peers in reading. In contrast, the fifth grade had three students who began the intervention reading on grade level but not at the acceptable rate words per minute. The question the researcher pondered, why did the sixth-grade students have a significant increase in their words per minute when they displayed a much greater need for reading intervention?

An interesting concept to investigate is the growth of words per minute of the Tier Three children. When one reviews the average gain of words per minute for the Tier Three students,

the increase is approximately 13 words per minute, a significant gain. Interestingly, there was more of a gain from the Tier Three students than the fifth-grade and sixth-grade students combined who were in the school’s core reading program. The average words gained per minute for students in the core reading program was approximately one word per minute. Why did the most intensive reading students have the greatest gains?

The researcher also examined the descriptive statistics for both grades on reading assessments and growth. The mean average growth of DIBELS was 3.3 with the minimum score showing a -13 and the maximum score showing +24. A Tier Three student showed the maximum increase on the DIBELS assessment.

In analyzing data from EdPerformance, a PSSA predictor used by the research site, the mean growth for EdPerformance was 133.57 points with the minimum score -191 and the maximum score +312. According to the EdPerformance results, seven of the students should have scored Proficient on the PSSA. However, in reality, only one sixth-grade student was Proficient on the PSSA.

Table 27

*EdPerformance Middle-of-the-Year and End-of-the-Year Scores and Growth for Sixth Grade*

Student	Middle-of-the-Year Scores	End-of-the-Year Scores	Growth
1	2801	2805	+4
2	2869	2678	-191
3	2732	2782	+50
4	2278	2590	+312
5	2189	2316	+127
6	1868	2053	+185
7	2628	2735	+107

The researcher conducted a paired samples t-test to answer research question one. The data were entered through SPSS 20. The paired samples t-test was given to determine if there was a significant relationship between Middle-of-the-Year and End-of-the-Year DIBELS and EdPerformance assessments. The T-test Sig for DIBELS was .26. Since the Sig for DIBELS paired samples correlation and the paired samples test was greater than 0.05, the researcher failed to reject the null hypothesis. There was no significant difference between extra reading practice and proficiency on reading assessments for DIBELS. However, the T-test Sig for EdPerformance was .02, which is significant. The researcher can surmise that there is a significant difference between Middle-of-the-Year and End-of-the-Year EdPerformance. Therefore, we can speculate that there is a correlation between extra reading practice and proficiency on the EdPerformance. Consequently, the Null Hypothesis can be rejected.

Interestingly, the results display that the students in Tier Three made greater gains than the Tier Two students. Tier Three students were not involved in the school's main core reading program. The students were in a Tier Three program due to the fact that, data from past years showed that these particular students were not making enough progress in the core reading program and the students were three to four reading levels behind their peers. The Tier Three program in reading was heavily based on phonics, word fluency, and phrase fluency.

## **Research Question 2**

How do content-area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes?

During the focus groups, the teachers were encouraged to talk openly about what they thought the advantages and disadvantages would be in the implementation of independent texts during social studies and science classes. All conversations were recorded and then transcribed.

## **Advantages**

The teachers were in agreement of the advantages. They liked the idea of their students reading more throughout the day. They also liked the idea of the extra time spent reading in the social studies and science content areas and extending the curriculum beyond the textbook.

Teacher C made several comments to support the extra-time reading, “I think it’s really important especially in our curriculum (to incorporate leveled texts) because we do not have a lot of nonfiction reading.” Teacher B stated, “I agree it seems like any more and more that boys and girls do not want to read. I think this is encouraging them to read in all disciplines.” Teacher A stated:

It is important because the majority of what kids read outside of school is nonfiction content based reading. They are frequently or purposefully reading novels. They are reading those for fun so if they are reading for information then they are reading those content based materials.

Teachers also stated this project could help them as teachers get to know their students’ reading needs. In fact, Teacher D stated, “She would like an opportunity to talk more to her students’ reading teachers so she could help work on their reading goals.” All four teachers were eager that the students were able to read more throughout the day. Teacher C commented:

Yea, I think so and I think it’s important to read through the entire day and there are times in science where we are not reading because we are experimenting or doing some type of hands on experiment and we find out that there is not enough reading going on as much as we would like. I think it is definitely a worthwhile activity. It is just a matter of planning for it and integrating it not just throwing it in but it has to be a part of your class.

In conclusion, all teachers were optimistic about continuing this process and commented how they believe that extra reading time would benefit the students. Teacher B stated, “I think if we continue this practice I think definitely it will be an advantage to those students who are reading leveled texts.”

### **Disadvantages**

Teachers also expressed the disadvantages of this research project. The main disadvantage echoed by all four teachers was the concept of time. All the teachers expressed their doubts about implementing the reading intervention independently. Teacher B stated:

As far as disadvantages to the student, I don't think there are any but like my colleagues said, as a teacher it takes a lot of time to organize and I am finding it hard to give it enough time to read these books and still teach the curriculum.

Teacher D echoed this statement and added, “I think it takes a lot of prep time to get all those leveled texts ready to know what levels each child is on.”

All teachers who participated in this study were positive about implementing the leveled texts in their social studies and science classes. They also supported the idea that children need more time to read on their independent levels. However, they were hesitant about the actual implementation of this program due to all the actual organizational procedures. Another issue was finding the time to incorporate the reading in the science and social studies classes.

A theme that surfaced during the focus groups was the confidence all the content teachers portrayed in implementing reading strategies and skills within their social studies and science classes. The researcher speculated because of their elementary background, the teachers participated in reading classes throughout their college years. Likewise, the teachers also

admitted to in-service trainings on the topic of reading from their district. The teachers having the elementary background equipped them to infuse reading into all their content classes.

In conclusion, the teachers were enthusiastic about the project and thought the project would be valuable and help struggling readers. The teachers in the focus group all agreed that struggling readers need to practice more. However, the teachers would be hesitant in implementing leveled texts due to the amount of time this process would take them.

### **Reflections**

After analyzing the data and reviewing the results, the researcher had multiple questions. The first question was, “Why was the reading intervention not enough to increase scores on the reading assessment?” The second question was, “Was DIBELS an accurate assessor of oral reading fluency for fifth and sixth graders?” The third question was, “Why was there a greater gain for the Tier Three students rather than Tier Two students? Finally, the last question this researcher had was, “Did ‘Reading Stamina’ play a factor in the PSSA reading assessment?”

#### **Query 1**

Why was the reading intervention not enough to increase scores on the reading assessment?

As previously stated, there was not a significant difference between the Middle-of-the-Year and End-of-the-Year DIBELS due to the fact the Sig was .26. On the other hand, the Sig was .02 for EdPerformance which is less than .05 ( $<.05$ ). So the researcher can conclude that there was a significant difference between the Middle-of-the-Year and End-of-the-Year EdPerformance testing.

The reading intervention employed in this study was to give students who struggled with reading extra time to read on their independent reading levels throughout the class day. The

students would read science and social studies books that mirrored the content being taught in the classroom. Occasionally, the students engaged in silent and independent reading and partner reading. The results suggested that the extra reading practice did not have an impact on the DIBELS' scores. The results complemented the various studies on Sustained Silent Reading (SSR) (National Institute of Child Health and Human Development, 2000; Reutzel, Fawson, & Smith 2008). In particular, a study developed by the National Reading Panel report (National Institute of Child Health and Human Development, 2000) conducted a meta-analysis of SSR articles and suggested that there was insufficient evidence to support SSR. However, to avoid students engaged in independent reading with no accountability, the researcher incorporated activities to accompany each book to hold the student accountable. Accountable reading, also called Scaffolded Silent Reading (ScSr), was implemented during this study to hold the student responsible for reading. ScSr was denoted as an "approach to oral reading fluency practice that addresses the weaknesses of SSR" (Reutzel, Fawson, & Smith, 2008, p. 39). However, the DIBELS scores remained insignificant.

The researcher questioned whether the intervention was consistent and extended for a period of time great enough to make a difference. When children are reading several grade levels below, they are in need of intense intervention and practice. Allington (2002) stated that any struggling reader who "spends 80% or more of his or her instructional time in texts that are inappropriately difficult will not make much progress academically" (p. 3). Struggling readers only read on their independent reading levels about 10% to 20% of their school day on their instructional levels. The independent reading time the struggling readers encounter are mostly likely during the intervention or skill group time.

Unfortunately, the rest of the day's instruction is geared toward average readers. In other words, struggling readers continue to struggle because they get far less appropriate instruction. Allington (2006) continued by saying that struggling readers that are in the upper elementary grades are more difficult to "catch up" their reading levels and there are far fewer intervention studies and research evidence on what to do with struggling older readers.

The researcher wondered if this study would have been more successful if conducted with struggling readers in the primary grades. Would bridging the reading gaps have been more successful with younger children?

## **Query 2**

Was DIBELS an accurate assessor of oral reading fluency for fifth- and sixth-graders?

As stated previously, DIBELS has a proven reliability and validity in their Psychometric studies; however, Hoffman, Jenkins, and Dunlap (2009) stated that many teachers feel that because DIBELS is fragmented pieces of reading instruction, the students are missing the true definition of being literate. In addition, Allington (2008) stated that DIBELS has such a wide variability in their grade level readings. The student reads three different passages and the median score is taken for the Benchmark score. Allington (2008) indicated that the variability between the three passages all read on the same day, can have a variability of words per minute, as many as 56 words, which makes the author question the reliability and validity of the test. Due to this information, the researcher asks, "Is DIBELS the best measure for oral reading fluency? Would a different oral reading fluency assessment yield different results?"

### **Query 3**

Why were there greater gains for the Tier Three students?

When analyzing the data, an interesting piece of information emerged. The students who were in the Tier Three reading program made greater gains than the students in the district's core reading program. The children in the Tier Three program were the students who were deemed the neediest readers and in most need of intensive intervention. They were also assessed to be three to four grade levels behind their peers in reading. The three students did represent a small sample size; however, as stated previously, the Tier Three students' had a gain of 13 words per minute as opposed to the other students' one word gain in the core reading program.

The researcher speculated that the students who were in the Tier Three reading program had more opportunities to read on their independent reading levels throughout the day than the core program students. The Tier Three children were in a phonics-based program which required practice of oral reading with words, phrases, and passages on a daily basis. Could this additional extra practice have made a difference?

### **Query 4**

Did a lack of Reading Stamina play a part in the PSSA reading assessment?

Snow (2013) stated when a text is difficult or long, full of unknown words or about a topic that is too unfamiliar, then the student quickly exhausts his or her initial willingness to struggle with it. Teachers refer to this as a deficit of stamina (Snow, 2013). When reading upper elementary reading passages, children need to not only have Reading Stamina to endure longer stories but the ability to engage in Close Reading, which is returning to the text multiple times for multiple reasons (Dobler, 2013).

Due to the length and complexities of the PSSA's reading section, the PSSA reading assessment requires both Reading Stamina and Close Reading. Is the fragmented and short skill-based instruction detrimental to the students' reading skills?

### **Limitations to the Study**

The main limitation to this study was the number of participants. The number of participants was 15 students and 4 teachers. Gay, Mills, and Airasian (2009) defined sample as, "A number of individuals, items, or events selected from a population for a study, preferably in such a way that they represent the larger group from which they were selected" (p. 606). Unfortunately this was not the case in this present study. The population used in this study lacked in diversity. The study contained a population from one small town in rural Pennsylvania and may not be generalizable to other geographical locations.

A second limitation is the researcher was not present in the social studies and science classes to witness the fidelity of the implementation of the reading intervention. The reading intervention was implemented by four different teachers so validity may have been an issue. Another limitation was the various degrees of understanding, skill levels, and experience of each teacher. The teachers, although strong in their execution of implementing reading in their social studies and science classes, were varied in their years teaching and education.

A final limitation was the disruption in reading practice to accommodate PSSA drill. Students were unable to complete the content-level independent reading practice due to PSSA preparation. However the independent reading did resume at the end of April.

Every study has limitations but the outcomes and results of each study presents unique and interesting recommendations for further studies. The following recommendations emerged from this study.

## **Recommendations for Further Research**

The researcher has the following recommendations for further studies. The researcher feels that these recommendations would possibly result in a stronger study, have important educational implications for the future, raise PSSA reading scores, and add to the important literature of adolescent readers who have been identified as at-risk.

- Implement a longitudinal study to determine, if given more time to implement the reading strategy would yield different results
- Employ this study in a school with more of a cultural diversity
- Fully immerse a reading intervention where struggling readers are reading on their independent reading levels throughout the entire school day

After analyzing the themes and quantitative data the researcher would also recommend the following for future studies.

- Replicate this study with middle school or junior high teachers to gain insight on their perspectives of teaching reading
- Replicate the intervention with primary struggling readers to see if the students would have greater gains in reading assessments
- Arrange for teachers to integrate the leveled readers into their social studies and science classes rather than 5 to 10 minutes of independent reading and then see if the integration reflects positively on reading scores
- Test the students' comprehension level to see if the struggling readers are gaining more access to the curriculum with the leveled texts than the textbooks

- Conduct a comparison study by giving struggling readers the added intervention of reading on their independent level in their social studies and science content classes and compare with students who did not get this intervention
- Further studies to compare Tier Two and Tier Three reading program and evaluate their effectiveness in reading assessments
- Compare differences of SSR or ScSR and students who read their leveled texts aloud

The researcher determined that there were several implications for educators. The implications are as follows:

- Determine readability levels of all students and strive to have all students read on their independent levels throughout the day.
- If students' oral reading fluency rate is tested, ensure the students are practicing read aloud throughout the school day.
- Make sure curriculum is accessible to all students.
- Is PSSA preparation the best use of time for children who struggle with reading?

### **Conclusions and Reflections**

Fisher and Ivey (2006) stated that they did not know any cases of a struggling reader who became a better reader by not reading. The authors further stated that research has favored that time spent reading separates poor readers from good readers. However, many times struggling readers do not have many opportunities during the school day to read on their independent reading levels.

An examination of the data including DIBELS, EdPerformance, and the PSSA yielded mixed results and more questions. Although the DIBELS data generated little to no growth, various research presented in Chapters II and IV suggested that DIBELS results may not be as

reliable in older readers. The data presented from EdPerformance showed improvement but the true nature of the EdPerformance assessment as a PSSA indicator was not a reliable one.

EdPerformance inflated results of those who should be proficient on the PSSA when in reality only two of the students involved in the study were Proficient.

However, in examining recent literature on Reading Stamina and Close Reading, the researcher speculated that the struggling readers may not have the Reading Stamina to engage in long periods of Close Reading.

Teachers in all subject areas need to be aware of struggling readers in their classrooms and not only teach reading but provide numerous reading opportunities to incorporate throughout the struggling readers' day (Allington, 2006). Students need:

Contextual reading rather than reading words in a list (Jenkins, Fuchs, van den Brock, Espin, & Deno, 2003) and oral reading rather than silent reading (Fuchs, Fuchs, Eaton, & Hamlett, 2000 cited in Fuchs et al., 2001) both were found to be the best measures of reading rate. (p. 705)

By incorporating leveled texts in content areas of classes in all grades, teachers not only provide a unique opportunity for all students to access the curriculum but also provide valuable reading practice to students of all reading levels.

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## APPENDICES

### APPENDIX A

#### Teacher Informed Consent Letter

*An Investigation of the Effects of Providing Additional Reading Opportunities for Struggling Readers at their Independent Reading Levels within Content Areas*

My name is Teresa Vasinko and I am a doctoral candidate from Indiana University of Pennsylvania. I am currently beginning a research study and I would like to formally invite you to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions or concerns, please do not hesitate to contact me. You are eligible to participate because you teach a fifth or sixth grade content area class.

The purpose of this study is to provide struggling readers with additional opportunities to read at their independent reading levels in science or social studies. The researcher is hypothesizing that the extra reading practice in the content areas will result in an increase in the students' oral reading fluency and reading comprehension. This study was designed to examine the idea of students getting extra time to read on their independent levels in their science and social studies content classes and what effects this extra time, if any, would have on their reading scores.

Students will receive whole group instruction in social studies and science content classes but throughout the course of the week, students will be given extra reading practice on their reading levels. During this extra reading practice, students will read leveled texts that are on their independent reading level. These leveled texts will be content specific. You will receive a copy of the curriculum with all the leveled texts organized by reading levels. The leveled readers will

be organized and ready to use. The researcher will assist you with the organizational procedures of the extra practice time in the content classes. In addition, if you decide to participate in this study, you will engage with the researcher in several interviews and focus groups.

Your participation in this study is voluntary! You are free to decide to participate in this study and may withdraw at any time by informing the researcher verbally or in written form. Upon completion of the study or if you choose to withdraw from the study, all data collected on you and your students' reading scores will be destroyed. If you decide to participate, you will remain anonymous and all your information provided during the study will be held in the strictest confidence.

If you are willing to participate, please sign the statement below. I thank you for your time and consideration. My Faculty Chairperson's and my contact information is listed below.

Teresa Vasinko – Researcher	Dr. Kelli R. Paquette- Chairperson
139 Walnut Hollow Lane	IUP, 329 Davis Hall
Greensburg, PA 15601	Indiana, PA 15705
(724) 850-8121 or (724) 953-6744	(724) 357-2400

This project has been approved by the Indiana University of Pennsylvania Instructional Review Board for the Protection of Human Subjects (Phone: 724-357-7730)



## APPENDIX B

### Teacher Informed Consent Form

#### Voluntary Consent Form

I have read and understand the information provided to me on the form and I consent to volunteer to participate in Teresa Vasinko's research study. I understand that my interviews will be kept strictly confidential and that I have the right to withdraw at any time. I can withdraw at any time verbally or in written form. I understand that Teresa Vasinko will have access to my students' scores and I have also received a copy of the Consent Form.

Name-

Signature-

Date-

Phone Number-

## APPENDIX C

### Parental Informed Consent Letter

# Indiana University of Pennsylvania

Department of Professional Studies

724-357-2400

in Education

Internet: <http://www.iup.edu>

Davis Hall, Room 303

570 S. Eleventh Street

Indiana, Pennsylvania 15705-1087

Dear Parents and/or Guardians:

My name is Teresa Vasinko and I am a teacher at Latrobe Elementary School. I have been a teacher in the Greater Latrobe School District for thirteen years and absolutely love my job. I have recently completed all my coursework for the Doctorate in Curriculum and Instruction program at Indiana University of Pennsylvania. I am now in the process of writing my dissertation.

I am researching the topic of reading and how I can help those children who struggle with reading in their science and social studies classrooms. For the purpose of this study, I would like to see the benefits of providing science and social studies books at the reading level specific for your child. Your child's teacher has agreed to incorporate extra reading materials during their social studies and science classes. We are hopeful that this process will help your child

understand science and social studies content, as well as improve his/her reading skills. The whole class will be participating in this extra reading time; however, I am asking your permission to look specifically at the possible growth of your child according to the reading data.

My role in this process will be of a researcher and student at Indiana University of Pennsylvania. Your child's teacher will be administering the extra reading time in the classroom. I will be looking and analyzing your child's reading scores.

With your permission and your child's assent, I, as the researcher, will look at his/her scores on the Dynamic Indicator of Basic Early Literacy Skills (DIBELS), Edperformance, and PSSA reading scores to see if reading growth has occurred before and after the extra reading time. As you know, these reading assessments are already in place and used by Greater Latrobe School District. No new reading assessments will be used and your child will remain in the social studies and science classes.

Confidentiality is a top priority in this study. Your child will be assigned a number and remain confidential throughout the study. No names will be used. All information will be kept confidential. At the end of the study, I will store all records in locked cabinets for three years. After three years, this information will be destroyed. When I finish my research study, I will write all my research in a report. In addition to my report, I may publish or present what I have learned. I will be glad to share any of this information with you.

If you grant me permission to review your child's reading scores and use the scores in my study, please sign the voluntary consent form. Please know that your child will not need to do anything extra in his or her school day and remain in the social studies and science classroom. This extra reading time will be done in the social studies and science classes by all students.

At any time, you or your child have the opportunity to opt out of this study by simply contacting me by e-mail or phone. My information is listed at the bottom of this letter.

Two copies are attached. Please keep one for your records and sign and return a copy to me in the stamped, self-addressed envelope. Thank you for your time and consideration. If you have any questions, please call me at 724-539-9777 extension 428 or email me at [teresa.vasinko@glsd.k12.pa.us](mailto:teresa.vasinko@glsd.k12.pa.us).

Sincerely,

Teresa Vasinko, Doctoral Candidate

Teresa Vasinko – Researcher  
139 Walnut Hollow Lane  
Greensburg, PA 15601  
(724)539-9777 ext. 428

Dr. Kelli R. Paquette- Chairperson  
IUP, 329 Davis Hall  
Indiana, PA 15705  
(724) 357-2400

This project has been approved by the Indiana University of Pennsylvania Instructional Review Board for the Protection of Human Subjects (Phone: 724-357-7730)

APPENDIX D

Parent/Guardian Voluntary Consent Form

Indiana University of Pennsylvania

Department of Professional Studies

724-357-2400

in Education

Internet: <http://www.iup.edu>

Davis Hall, Room 303

570 S. Eleventh Street

Indiana, Pennsylvania 15705-1087

I have read and understand the information provided to me on the form and I consent for my child to participate in Teresa Vasinko's research study. I can withdraw at any time verbally or in written form. I understand that Teresa Vasinko will have access to my child's reading scores. I understand that no one will know my child's individual reading scores or name. I have the right to change my mind and not allow my child to participate at any time by calling, emailing, or writing to the researcher. I have also received a copy of the Consent Form for my records.

I give \_\_\_\_\_ permission to participate in Mrs. Vasinko's project.

Student's Name: \_\_\_\_\_

Parent/Guardian's Name: \_\_\_\_\_

Parent/Guardian's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ I give permission for my child to participate in this study.

\_\_\_\_\_ I do not give permission for my child to participate in this study.

### Student Assent

I have read and understand the information on the form and I agree that I can participate in this study. I understand that no one will know my individual reading scores or my name. I have the right to change my mind and not participate at any time by telling Mrs. Vasinko. I have a copy of this form to keep.

Student's Name: \_\_\_\_\_

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_ I will participate in this study.

\_\_\_\_\_ I do not want to participate in this study.

APPENDIX E

District Consent Letter

GREATER LATROBE SCHOOL DISTRICT

CENTRAL ADMINISTRATION OFFICE  
410 MAIN STREET • LATROBE, PENNSYLVANIA 15650-1598

*Gennaro R. Piraino, Jr., Ed.D.*  
*Assistant Superintendent*

*Telephone (724) 539-4208*  
*Facsimile (724) 539-4202*

March 11, 2012

Dear Internal Review Board:

The purpose of this letter is to grant permission to Mrs. Teresa Vasinko to conduct research for her dissertation. We understand that our teacher's and administrator's participation in this study is voluntary and that Mrs. Vasinko will work with the District to create the least amount of intrusion as possible and follow all District and University policies.

Sincerely,



Gennaro R. Piraino, Jr., Ed.D.  
Assistant Superintendent

## APPENDIX F

### Teacher Interview Questions

1. Do you feel reading instruction in the social studies and science content areas is necessary? Why or why not?
2. Do you view yourself as a reading teacher? Why or why not?
3. What are the advantages of implementing leveled texts within the content areas? For you? Your students?
4. What are the disadvantages of implementing leveled texts within the content areas? For you? Your students?
5. Do you think providing extra reading time with texts on your students' independent reading levels is a viable and time-manageable endeavor? Why or why not?
6. How could this process be improved, altered, or changed?
7. What are your perceptions as it relates to students' reading interest and enjoyment?
8. Do you believe there is a correlation between extra practice time reading and proficiency on formative and summative reading assessments?
9. What other non-numerical data did you see in this process?
10. How do you feel about incorporating multi-leveled texts in your content classes?
11. Have you seen pro-literacy behaviors (Hunt, 2009) in your classroom since incorporating texts? (I will describe "pro-literacy behaviors".)

## APPENDIX G

### Research Questions

1. How do struggling readers in fifth and sixth grades who spend extra time reading on their independent levels during their social studies and science classes compare to students who do not have access to this extra reading time? Is there a correlation between extra practice reading and proficiency on reading assessments?
2. How do content area teachers describe the advantages and disadvantages, if any, of incorporating multi-leveled texts in their content classes?

## APPENDIX H

### IRB Approval



Indiana University of Pennsylvania

[www.iup.edu](http://www.iup.edu)

Office of the Assistant Dean for Research  
School of Graduate Studies and Research  
Stright Hall, Room 113  
210 South Tenth Street  
Indiana, Pennsylvania 15705-1048

P 724-357-7730  
F 724-357-2715  
[www.iup.edu/research](http://www.iup.edu/research)

December 20, 2012

Teresa Vasinko  
139 Walnut Hollow Lane  
Greensburg, PA 15601

Dear Ms. Vasinko:

Now that your research project has been approved by the Institutional Review Board for the Protection of Human Subjects, I have reviewed your Research Topic Approval Form and approved it.

Your RTAF indicates your anticipated graduation date as May 2013. You must apply for graduation by May 1, 2013. This means that your dissertation must be submitted to the School of Graduate Studies and Research by April 15, 2013 if you desire to graduate by your anticipated date. For deadlines for subsequent graduation dates, please access <http://www.iup.edu/page.aspx?id=16683>.

**The Thesis/Dissertation Manual, additional resources, and information to help you start writing can be found at <http://www.iup.edu/graduatestudies/thesis/default.aspx>.**

Also, The Applied Research Lab provides free assistance with statistical analysis and research design--both quantitative and qualitative--to all IUP students. The ARL can also provide assistance in the use of the features in Word and Acrobat you'll need to correctly format your dissertation. For more information, please visit their website: <http://www.iup.edu/arl/default.aspx>.

You are now eligible to receive a FREE copy of Adobe Professional! This software will help you to create an electronic thesis or dissertation. It can be picked up at the IT Support Center, G35 Delaney Hall. If you live off campus, you can send an email from your IUP email account to [it-support-center@iup.edu](mailto:it-support-center@iup.edu). Please indicate you are a graduate student requesting Adobe Professional and include your Banner ID, mailing address, and which version - Windows or Mac.

Finally, if you change your topic, the scope or methodology of your project, or your committee, a new Research Topic Approval Form must be completed.

I wish you well and hope you find this experience to be rewarding.

Sincerely,

A handwritten signature in blue ink that reads 'Hillary E. Creely'.

Hillary E. Creely, J.D., Ph.D.  
Assistant Dean for Research

xc: Dr. Edward Nardi, Interim Dean  
Dr. Mary Jalongo, Graduate Coordinator  
Dr. Kelli Paquette, Dissertation Committee Chair  
Ms. Julie Bassaro, Secretary

HEC/bb

## APPENDIX I

### Approval Letter



Indiana University of Pennsylvania

[www.iup.edu](http://www.iup.edu)

Institutional Review Board for the  
Protection of Human Subjects  
School of Graduate Studies and Research  
Stright Hall, Room 113  
210 South Tenth Street  
Indiana, Pennsylvania 15705-1048

P 724-357-7730  
F 724-357-2715  
[irb-research@iup.edu](mailto:irb-research@iup.edu)  
[www.iup.edu/irb](http://www.iup.edu/irb)

December 4, 2012

Teresa Vasinko  
139 Walnut Hollow Lane  
Greensburg, PA 15601

Dear Ms. Vasinko:

Thank you for submitting the revisions to your Human Subjects Review Protocol titled, "An Investigation of the Effects of Providing Additional Reading Opportunities for Struggling Readers at Their Independent Reading Levels within Content Areas," (Log No. 12-208) as requested by the Institutional Review Board for the Protection of Human Subjects (IRB). On behalf of the IRB, I have approved the revisions for the period of November 14, 2012 to November 14, 2013 and will so inform the Board at the next meeting.

It is also important for you to note that IUP adheres strictly to Federal Policy that requires you to notify the IRB promptly regarding:

1. any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented),
2. any events that affect the safety or well-being of subjects, and
3. any modifications of your study or other responses that are necessitated by any events reported in (2).

Should you need to continue your research beyond November 14, 2013 you will need to file additional information for continuing review. Please contact the IRB office at (724) 357-7730 or come to Room 113, Stright Hall for further information.

Although your human subjects review process is complete, the School of Graduate Studies and Research requires submission and approval of a Research Topic Approval Form before you can begin your research. If you have not yet submitted your RTAF, the form can be found at <http://www.iup.edu/page.aspx?id=91683>.

I wish you success as you pursue this important endeavor.

Sincerely,

A handwritten signature in red ink that reads "J. Mills".

John A. Mills, Ph.D., ABPP  
Chairperson, Institutional Review Board for the Protection of Human Subjects  
Professor of Psychology

JAM:jeb

xc: Dr. Kelli R. Paquette, Dissertation Advisor  
Ms. Brenda Boal, Secretary

## APPENDIX J

### Example of Leveled Texts Used in Sixth Grade Social Studies Content Classes

#### 6<sup>th</sup> Grade Introduction to Social Studies

\*Reading series-leveled readers

@ Library

§ Supplemental

Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
<p>6.3.W.B: Analyze how conflict and cooperation among groups and organizations have influenced the history and development of the world.</p> <ul style="list-style-type: none"> <li>• Ethnicity and Race</li> <li>• Working conditions</li> <li>• Immigration</li> <li>• Military conflict</li> <li>• Economic Stability</li> </ul>	<p>Describe ways in which people and places everywhere on Earth are alike and different</p> <p>Explain why people disagree and how they can settle disagreements</p> <p>How continuity and change affect people</p> <p>Compare the actions of individuals and groups</p> <p>Summarize ways in which people and places affect one another</p> <p>The past can teach us about ourselves</p> <p>Identify factors that shape people's point of view</p> <p>Be able to locate, analyze, and explain parts of a map</p>	<p>8.4.6. A</p> <p>8.4.6. D</p> <p>8.4.6. D</p> <p>8.4.6. C</p> <p>8.4.6. A</p> <p>8.4.6. D</p> <p>8.1.6. B</p> <p>8.1.6. D</p> <p>8.1.6. B</p> <p>8.1.6. D</p> <p>8.1.6. C</p> <p>7.1.6. A</p>	<p>Grade 2</p> <p>§ Susan B. Anthony</p> <p>§ Martin Luther King</p> <p>Grade 3</p> <p>§ Paralympics</p> <p>§ Daniel Boone</p> <p>§ Abraham Lincoln</p> <p>§ Paul Revere</p> <p>§ Harriet Tubman</p> <p>§ Jackie Robinson</p> <p>§ Helen Keller</p> <p>§ Rosa Parks</p> <p>§ George Washington</p> <p>§ Sacagawea</p> <p>§ Thurgood Marshall</p> <p>§ Thomas Alva Edison</p> <p>§ Martin Luther King Jr.</p> <p>§ Lewis and Clark</p> <p>§ Cesar Chavez</p> <p>§ This is my House</p> <p>Grade 5</p> <p>§ Lift -the-Flap Picture Atlas</p> <p>§ Five Brave Explorers</p> <p>§ Joan of Arc</p> <p>§ Journey to Ellis Island</p> <p>§ Sacagawea-Sign of Peace</p> <p>§ Harriet Quimby-A woman of 1st</p> <p>Grade 6</p> <p>§ Heroes Don't just Happen</p> <p>@How I learned Geography</p>	<p><a href="http://www.tolerance.org/?source=redirect&amp;url=teachingtolerance">http://www.tolerance.org/?source=redirect&amp;url=teachingtolerance</a></p> <p><a href="http://www.edchange.org/multicultural/papers/keith.html">http://www.edchange.org/multicultural/papers/keith.html</a></p> <p><a href="http://natgeo.com">http://natgeo.com</a></p> <p><a href="http://www.kidinfo.com/Geography/Maps.html">http://www.kidinfo.com/Geography/Maps.html</a></p>

Chapter 1 People of the Stone Age

\*Reading series-leveled readers

@ Library

§ Supplemental

Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
<p>How early humans interacted with each other and their surroundings to meet their basic needs</p> <p>8.4.6. A: Explain the social, political, cultural, and economic contributions of individuals and groups to world history.</p> <p>8.4.6. B: Identify and explain the importance of historical documents, artifacts, and sites which are critical to world history.</p>	<p>How earliest humans met their basic needs</p> <p>How interactions with others led to the development of separate cultures</p> <p>Interpret and construct parallel timelines</p> <p>Identifying and applying methods of formulating generalizations</p>	<p>5.2.6.A</p> <p>5.2.6.C</p> <p>6.3.6.A</p> <p>6.3.6.B</p> <p>6.4.6.A</p> <p>7.3.6.C</p> <p>8.4.6.C</p> <p>8.4.6.D</p> <p>8.1.6.A</p> <p>8.1.6.D</p>	<p>Grade 3</p> <p>§ Building for a Purpose</p> <p>§ Haptupatu and the Birdwoman</p> <p>§ Cave Treasure</p> <p>§ How Stories Came to Earth</p> <p>§ Zala Runs for her Life @The Mud Pony</p> <p>Grade 4</p> <p>Grade 5</p> <p>Grade 6</p> <p>§ Skara Brae</p> <p>§ Stone Age Farmers Beside the Sea</p> <p>§ Dar and the Spear Thrower</p>	<p><a href="http://www.orkneyjar.com/history/skarabrae/skarab2.htm">http://www.orkneyjar.com/history/skarabrae/skarab2.htm</a></p> <p><a href="http://www.robertlomas.com/Orkney/skarabrae.html">http://www.robertlomas.com/Orkney/skarabrae.html</a></p> <p><a href="http://wiki.verkata.com/en/wiki/Skara_Brae">http://wiki.verkata.com/en/wiki/Skara_Brae</a></p> <p><a href="http://www.creswell-crags.org.uk/Explore/virtually-the-ice-age/stone-age-people.aspx">http://www.creswell-crags.org.uk/Explore/virtually-the-ice-age/stone-age-people.aspx</a></p> <p><a href="http://www.sldirectory.com/studf/research4.html">http://www.sldirectory.com/studf/research4.html</a></p> <p><a href="http://www.multcolib.org/homework/anchsthc.html">http://www.multcolib.org/homework/anchsthc.html</a></p>

Chapter 2 Southwest Asia

\*Reading series-leveled readers

@ Library

§ Supplemental

Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
8.4.6. D: Examine patterns of conflict and cooperation among groups and organizations that impacted the development of the history of the world.	<p>Evaluate how technology changed life in Mesopotamia</p> <p>Summarize the link between agriculture and religion in Sumer and the effect of agriculture on Sumer's economy</p> <p>Classify causes and effect of the Fertile Crescent, noting the achievements of Sargon, Hammurabi, and the Assyrians</p> <p>Evaluate the evolution of the three major world religions- Judaism, Christianity, and Islam</p>	<p>8.4.6. B</p> <p>8.4.6. C</p> <p>6.4.6. B</p> <p>6.5.6. A</p> <p>7.3.6. D</p> <p>8.4.6. A</p> <p>5.2.6. A</p> <p>5.2.6. B</p> <p>5.2.6. C</p> <p>5.2.6. D</p> <p>5.2.6.E</p>	<p>Grade 3</p> <p>§ Haptupatu and the Birdwoman</p> <p>@How Stories Came to Earth</p> <p>§ Building for a Purpose</p> <p>§ The Mud Pony</p> <p>Grade 4</p> <p>§ Growing Up In Ancient Aztecs</p> <p>Grade 5</p> <p>Grade 6</p>	<p><a href="http://www.authorstream.com/Presentation/G.Ken-1104472-the-ancient-near-east/">http://www.authorstream.com/Presentation/G.Ken-1104472-the-ancient-near-east/</a></p> <p><a href="http://www.sldirectory.com/studf/research4.html">http://www.sldirectory.com/studf/research4.html</a></p> <p><a href="http://www.multcolib.org/homework/anchsthc.html">http://www.multcolib.org/homework/anchsthc.html</a></p>

Chapter 3 African Civilizations of the Nile Valley

\*Reading series-level readers

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§ Supplemental

Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
<p>8.4.6. D: Examine patterns of conflict and cooperation among groups and organizations that impacted the development of the history of the world.</p>	<p>Evaluate the impact of the Nile river on life in ancient Egypt</p> <p>Examine how the people of the two Lands of the Nile Valley were in conflict and then united</p> <p>Examine how the pharaoh contributed to continuity in Egyptian life</p> <p>Evaluate the innovations that came during the old, middle, and new kingdom Recognize a problem-solving methods and apply to other scenarios</p> <p>Evaluate the relationship between the Nubians and the Egyptians Describe the physical characteristics and locate the Nile River Valley</p>	<p>7.4.6.A 7.4.6.B 8.4.6.C 8.4.6.D 5.2.6.C 8.4.6.D 5.2.6.A 7.4.6.B 8.4.6.C 8.4.6.D 5.2.6.A 5.2.6.B 5.2.6.E 7.3.6.B 7.3.6.D 7.4.6.B 8.4.6.B 8.4.6.C 7.3.6.B 5.2.6.C 6.3.6.A 6.3.6.B 6.4.6.B 6.4.6.C</p>	<p>Grade 3 § Desert Life § Secret of the Mummies § Mummies § Ms. Frizzle’s Adventures Ancient Egypt § Building for a Purpose</p> <p>Grade 4 § Egypt § Ancient Egypt Living in the Desert § Message from Africa § Why Mosquitos Buzz in People’s Ear § Secret of the Pyramid § A Story A Story</p> <p>Grade 5 § Growing Up In Ancient Egypt § Cleopatra § Pyramids</p> <p>Grade 6 *Pyramids of Egypt § Escape from Egypt § The Egyptian News</p>	<p><a href="http://mbarron.net/Nile/">http://mbarron.net/Nile/</a></p> <p><a href="http://www.woodlands-junior.kent.sch.uk/homework/egypt/nile.htm">http://www.woodlands-junior.kent.sch.uk/homework/egypt/nile.htm</a></p> <p><a href="http://www.sldirectory.com/studf/research4.html">http://www.sldirectory.com/studf/research4.html</a></p> <p><a href="http://www.multcolib.org/homework/anchsthc.html">http://www.multcolib.org/homework/anchsthc.html</a></p> <p><a href="http://www.multimedia-publishing.com/nile_river.htm">http://www.multimedia-publishing.com/nile_river.htm</a> <a href="http://shazlyasmal.tripod.com/aboutme.htm">http://shazlyasmal.tripod.com/aboutme.htm</a></p>

Chapter 4 Early Civilizations in Asia and the Americas

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Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
8.4.6. D: Examine patterns of conflict and cooperation among groups and organization that impacted the development of the history of the world.	Evaluate the physical setting on the development of the Indus Valley	5.2.6.A 7.3.6.A 7.3.6.B 7.3.6.C 8.4.6.A 8.4.6.C	Grade 3 § The Seven Chinese Brothers § Ms. Frizzle’s Adventures Imperial China § Arrow to the Sun-McDermott § Building for a Purpose	<a href="http://edselect.com/grade-5-early-civilizations">http://edselect.com/grade-5-early-civilizations</a>  <a href="http://www.ecb.org/surf/civ2.htm">http://www.ecb.org/surf/civ2.htm</a>  <a href="http://www.sldirectory.com/studf/research4.html">http://www.sldirectory.com/studf/research4.html</a>
	Observe how China uses legends to explain the past	7.3.6.B 8.4.6.A 8.4.6.B	Grade 4 § Climbing Mount Kilimanjaro § The Tomb of the Emperor Grade 5 § Growing Up In Ancient China § The Silk Route	
	Note different characteristics of the Xia and the Shang Dynasties	7.3.6.B 8.4.6.B	Grade 6 *The Moon Dragon-A Chinese Legend *The Ten Suns and The Moon * King of Cranes *The Wisdom of China *Everyday Life in Ancient China *The Empty Pot *The Fourth Question §Lost Temple of the Aztecs	
	Classify writing in Chinese culture as both an agent of change and a contributor to continuity			

Chapter 5 China

\*Reading series-leveled readers

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§ Supplemental

Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
8.4.6. D: Examine patterns of conflict and cooperation among groups and organizations that impacted the development of the history of the world.	Analyze China's economic and political system under the Jhou and summarize how they replaced the Shang as rulers of China	5.2.6.A 5.2.6.B 7.3.6.B 8.4.6.A  7.3.6.B 8.4.6.A  5.2.6.A 5.2.6.B 6.2.6.C 8.4.6.A 8.4.6.C	Grade 3 § Ming Lo Moves the Mountain § The Seven Chinese Brothers § Ms. Frizzle's Adventures Imperial China §The Wave § Building for a Purpose Grade 4 § The Tomb Of The Emperor Grade 5 § Growing Up In Ancient China § A Letter from China Grade 6 *The Moon Dragon-A Chinese Legend *The Ten Suns and The Moon *King of Cranes *The Wisdom of China *Everyday Life in Ancient China § Confucius- The Golden Rule *The Great Wall of China *The Empty Pot *The Fourth Question *Ancient China, Here We Come *A Race for the Chinese Calendar @Ancient China and its Influence in Modern Times- Walker	<a href="http://www.historyforkids.org/learn/china/">http://www.historyforkids.org/learn/china/</a>  <a href="http://china.mrdonn.org/">http://china.mrdonn.org/</a>  <a href="http://ancienthistory.mrdonn.org/Confucius.html">http://ancienthistory.mrdonn.org/Confucius.html</a>  <a href="http://www.lessoncorner.com/search?page=2&amp;q=Confucius">http://www.lessoncorner.com/search?page=2&amp;q=Confucius</a>  <a href="http://facts.randomhistory.com/2009/04/18_great-wall.html">http://facts.randomhistory.com/2009/04/18_great-wall.html</a>  <a href="http://www.discoveryeducation.com/teachers/free-lesson-plans/great-wall-of-china.cfm">http://www.discoveryeducation.com/teachers/free-lesson-plans/great-wall-of-china.cfm</a>  <a href="http://www.sldirectory.com/studf/research4.html">http://www.sldirectory.com/studf/research4.html</a>
	Interpret Confucianism as a response to disorder	5.2.6.A 6.4.6.B 6.4.6.C 7.3.6.C 8.4.6.A 8.4.6.B 8.4.6.C		
	Summarize how Shi Huardi kept the empire together-including building the Great Wall of China Evaluate the development and the achievement of the Han Dynasty			

Chapter 6 India and Persia

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Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
<p>8.4.6. D: Examine patterns of conflict and cooperation among groups and organizations that impacted the development of the history of the world.</p>	<p>Analyze the Aryan’s movement to India, their religion, and the connection to Hinduism and Buddhism</p> <p>Evaluate how the Maurya rulers used force to govern their empire and how Buddhist principles were followed by Ashoka</p> <p>Introduce Fables Summarize advances made during India’s Golden Age (Gupta Empire)</p> <p>Analyze how the Persian leader Cyrus built an empire and how Darlus was successful at organizing the empire</p>	<p>5.2.6.A 5.2.6.B 5.2.6.C 7.3.6.B 8.4.6.A 8.4.6.B</p> <p>5.2.6.C 5.2.6.F 7.3.6.B 8.4.6.A 8.4.6.B 8.4.6.C 8.4.6.D 6.4.6.C 6.4.6.A</p>	<p>Grade 3 § Building for a Purpose</p> <p>Grade 4 Grade 5 Grade 6</p> <p>@Ancient Persia-Bramwell @Once a Mouse-A Fable Cut in Wood § Persian Fairy Tales</p>	<p><a href="http://countries.mrdonn.org/india.html">http://countries.mrdonn.org/india.html</a></p> <p><a href="http://www.pbs.org/thestoryofindia/teachers/lessons/">http://www.pbs.org/thestoryofindia/teachers/lessons/</a></p> <p><a href="http://www.mrdonn.org/religions.html">http://www.mrdonn.org/religions.html</a></p> <p><a href="http://www.pbs.org/thestoryofindia/teachers/lessons/5/">http://www.pbs.org/thestoryofindia/teachers/lessons/5/</a></p> <p><a href="http://www.historyforkids.org/learn/westasia/history/persians.htm">http://www.historyforkids.org/learn/westasia/history/persians.htm</a></p> <p><a href="http://greece.mrdonn.org/persianwars.html">http://greece.mrdonn.org/persianwars.html</a></p> <p><a href="http://www.cumbavac.org/ancient_greeks_and_romans.htm">http://www.cumbavac.org/ancient_greeks_and_romans.htm</a></p> <p><a href="http://www.sldirectory.com/studf/research4.html">http://www.sldirectory.com/studf/research4.html</a></p> <p><a href="http://www.multcolib.org/homework/anchsthc.html">http://www.multcolib.org/homework/anchsthc.html</a></p> <p><a href="http://www.livius.org/persia.html#Topography">http://www.livius.org/persia.html#Topography</a></p> <p><a href="http://wn.com/ancient_persia">http://wn.com/ancient_persia</a> <a href="http://persianfairytale.com/">http://persianfairytale.com/</a></p>

Chapter 7 Ancient Greece

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Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
8.4.6. D: Examine patterns of conflict and cooperation among groups and organizations that impacted the development of the history of the world.	Evaluate how geography affected the early people's lives in ancient Greece	7.2.6.A 7.3.6.A 7.3.6.B 7.3.6.C 8.4.6.D	Grade 3 § The Night Boat to Crete § Building for a Purpose  Grade 4 § The Story of Persephone § A Tale of Two Spinners § Carved to Perfection § Dangerous Heights § Curiosity and the Box § Journey to the Underworld § The Mysterious Horse § A Trip Around the World	<a href="http://www.discoveryeducation.com/teachers/free-lesson-plans/comparing-athens-and-sparta.cfm">http://www.discoveryeducation.com/teachers/free-lesson-plans/comparing-athens-and-sparta.cfm</a>  <a href="http://www.pbs.org/empires/thegreeks/educational/lesson1.html">http://www.pbs.org/empires/thegreeks/educational/lesson1.html</a>  <a href="http://www.woodlands-junior.kent.sch.uk/Homework/greece/athens.htm">http://www.woodlands-junior.kent.sch.uk/Homework/greece/athens.htm</a>  <a href="http://www.socialstudiesforkids.com/articles/worldhistory/athenssparta.htm">http://www.socialstudiesforkids.com/articles/worldhistory/athenssparta.htm</a>
	Analyze the effect of trade on the development of Minoan civilization and observe that the Mycenaeans and ideas to fit their own way of life	6.3.6. A. 6.3.6.B 6.4.6.C 8.4.6.D 7.3.6.A 7.3.6.B 8.4.6.A 8.4.6.C	§ Welcome to Mount Olympus @gods and goddesses of ancient Greece- Ashworth Grade 5 § The Buried City of Pompeii § The Egyptian News § Cleopatra Grade 6 *The Colossus of Rhodes *It's Not just Ancient History *A Walk Along The Rock *Welcome to the Olympics §The Traveler's Guide to Ancient Greece @Ancient Greece- McRae @Technology in the time of Ancient Greece-Croshner	
	Interpret the Humeric poems as a reflection of the Mycenaean civilization Compare and contrast features of Athens and Sparta	7.3.6.B 8.4.6.C 5.2.6.A 5.2.6.B 5.2.6.C 5.2.6.D 5.2.6.E 5.2.6.G 7.3.6.B 8.4.6.A 8.4.6.B 7.3.6.B 8.4.6.C 7.4.6.C 7.1.6.B 7.2.6.A 8.4.6.D		
	Observe the			

	achievement of the Golden Age of Athens States the causes and effects of the Persian and Peloponnesian Wars Analyze the life of Alexander the Great in relation to the achievement of the Hellenistic Age Identify a method of and predict a likely outcome			
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Chapter 8 Ancient Rome

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Big ideas	Objectives	Standards	Differentiated Reading materials	Websites
8.4.6. D: Examine patterns of conflict and cooperation among groups and organizations that impacted the development of the history of the world.	Observe the effect of geography on the lives of early people of the Italian Peninsula and evaluate the geographic advantages of the site of Rome	7.1.6. B	Grade 3 § Building for a Purpose	<a href="http://www.archaeolink.com/ancient_roman-civilization_ancient_rome.htm">http://www.archaeolink.com/ancient_roman-civilization_ancient_rome.htm</a>  <a href="http://cybersleuth-kids.com/sleuth/History/Ancient_Civilizations/Rome/index.htm">http://cybersleuth-kids.com/sleuth/History/Ancient_Civilizations/Rome/index.htm</a>  <a href="http://www.historyforkids.org/learn/romans/">http://www.historyforkids.org/learn/romans/</a>  <a href="http://www.suffolk.lib.ny.us/youth/jcancient.html">http://www.suffolk.lib.ny.us/youth/jcancient.html</a>  <a href="http://www.worldartmuseum.cn/sjt_special/greatcivilization_en/roman/index.shtml">http://www.worldartmuseum.cn/sjt_special/greatcivilization_en/roman/index.shtml</a>
		7.2.6. A	Grade 4 § The Romans	
		7.3.6. A	Grade 5 § Growing Up in Ancient Rome	
		7.3.6. B	§ Horatio The man who saved the Day	
		7.3.6. D	Grade 6 *It's Not Just Ancient History *Welcome to the Olympics *The Ancient Romans	
		7.4.6. A	@Everyday life in Ancient Rome- Grant	
		8.4.6. C	§ The Traveler's Guide to Ancient Rome	
		5.2.6. A		
		5.2.6. B		
		5.2.6. C		
	Explain the differences in government in ancient Rome that led from the Republic to the Empire	Summarize Rome's conquests as the Empire reached its height (Julius Caesar)	5.2.6. D	
		Evaluate how Augustus helped unite the Roman Empire	5.2.6. E	
		Observe the evolution of religion in ancient Rome from the gods and goddesses to the beginning of Christianity	7.3.6. E	
		Analyze historical maps and be able to use a telescoping timeline	8.4.6. A	
		Describe the physical	8.4.6. A	
			8.4.6. C	
			7.3.6. B	
			8.4.6. C	
			7.3.6. E	
			8.4.6. A	

	characteristics and locate ancient Rome	7.2.6. A 7.3.6. A 8.4.6. A 8.4.6. B 8.4.6. C 8.4.6. D 7.1.6. B 7.2.6. A		
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