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FLUENCY DEVELOPMENT AND YOUNG READERS

by
Elizabeth Jenkins Diamant

A Thesis

Submitted to the
Department of Language, Literacy, and Sociocultural Education
College of Education
In partial fulfillment of the requirement
For the degree of
Master of Arts in Reading Education
at
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Thesis Chair: Valarie G. Lee, Ed.D.

Abstract

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FLUENCY DEVELOPMENT AND YOUNG READERS
2016-2017
Valarie G. Lee, Ed.D.
Master of Arts in Reading Education

The study investigated the effects of integrating explicit fluency instruction in the dimensions of: accuracy, rate, expression, and punctuation. Eight elementary students in second, third and fifth grades who received Response to Intervention services for reading and each group met four times a week for forty-five minutes participated. The district used the STAR evaluation system to establish the groups. After the lessons, participants recorded a reading of their instructional level text and completed a rubric to score their performance in each of the four dimensions: punctuation, expression, rate and accuracy. Later, I listened to the same recording and scored each student using the same rubric. The research in this study was qualitative and collected from observational notes, fluency rubrics, teacher journal entries, and audio recordings. This data served as the basis for the qualitative research, analysis determined a positive impact on the students' use of the dimensions as well as their self-efficacy. The study indicated teaching students, specific dimensions of fluency of punctuation, expression, rate, and accuracy, improved the fluency for students reading below grade level.

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Chapter 1

Scope of the Study

I wanted a meaningful topic for my teacher inquiry; something that I truly wondered about. I reflected upon some of my most significant teaching and learning experiences, it brought to mind my year at Roosevelt Elementary school during the 2013-2014 school year. It was my second year as a Literacy Interventionist. The prior year I worked in a different school in the same district, where I only provided remedial reading instruction.

Story of the Question

As the new Literacy Interventionist, I attended to remediation for students and provided support for colleagues. The principal made it clear, to become a Reading Specialist one day; I should start practicing now. She explained I needed to become more comfortable and confident in a leadership role, as well as a resource for everyone in the school community. I was not sure how I was going to break into this new community. I sat in the faculty room to eat lunch and desperately tried to get to know people, in hopes that someone would invite me into their classroom. Well, the invitations didn't exactly start pouring in. I committed to figuring out how to get into someone's room, as it would give me a glimpse into whether I wanted to pursue a degree as a Reading Specialist or something else.

One afternoon as I ate my lunch I overheard the second-grade teachers talk about not understanding how to administer the words per minute assessment as well as the fluency rubric, recently sent out in a mass e-mail from the district. I thought "Here is my chance!" I practically shouted to them that I would come and show them how to

administer the tests. I got one second-grade teacher to take me up on my offer. I showed her how to use the running records to select the right passage, how to calculate the words per minute, and how to examine the six dimensions of the Fountas and Pinnell fluency rubric. She welcomed me and really wanted my help.

As I said my goodbyes, she complained that this was for the new student growth objectives which were part of the new state mandate. The new student growth objectives annoyed most teachers because of the lack of instruction and training on how to implement them. The scary part was this score was going to influence overall evaluation as a teacher. She was going to have to use this information to somehow teach fluency. She, like many educators, was under the impression that fluency was something that just came when you modeled good reading. Before she could finish her thought, I jumped in and said, "I could model a lesson or we can co-teach". I told her I was free every Friday the period right after lunch for 45 minutes. To my surprise, my help thrilled and excited my colleague.

I honestly did not really know exactly how I was going to teach fluency, but I thought I have a week to figure it out. I ran into the faculty lounge, feverishly grabbed every book that I could find that had the word fluency in the table of contents and conducted a number of lengthy Internet searches. I ended up going back to the Fountas and Pinnell's "Six Dimensions of Fluency" rubric. I thought to myself that if this was the criteria for fluent reading, I could use these concepts as the foundation for my plan. Throughout my research, I found several different sources that discussed the need for the reader to have an awareness of punctuation as a part of fluency and in reading different blogs and looking at proposed fluency lessons; I noticed that many educators utilized the

academic vocabulary in their teaching. For instance, they used the words expression and rate in their teaching rather than saying things like, read with feeling or reading speed. This was something I included; it made sense to say read with feeling and not like a robot. I added the next step, I taught the students the academic term, and this meant that you read with expression.

Charged by these ideas, I asked my second-grade colleague to meet me for lunch and discussed how to proceed. All the information I brought excited her. The very diverse composition of her classroom concerned her because she felt some students lacked the schema needed. We decided to start with the basics and began by teaching punctuation. A large portion of her class did not know the different punctuation marks and those indicated to change your voice when reading. I picked an easy to read, silly poem with exclamation points to start instruction. During the lesson, we modeled the expectations and discussed what they noticed about the reading. They talked with their neighbors and brainstormed about what made the reading fun and exciting. The students highlighted the exclamation points on their paper and worked with multiple partners practicing the poem.

The excitement was genuine; we created anchor charts noting their findings and hung them in the room. The students utilized independent reading time to find books in the classroom library with exclamation points and practiced reading them. As a result of the success of this lesson, my second-grade colleague invited me to come back the next week and named it “Fluency Friday”. We went on to model each individual punctuation mark in successive weeks and then followed with lessons on rate, accuracy, expression or intonation, and phrasing. As a culminating project, the students performed a second-

grade level readers' theater script. Initially we considered rewriting some of the scripts to accommodate the various reading levels; however, we opted to give it a try before altering the scripts. The students' excitement, passion, and care resulted in a supportive environment that allowed for constructive criticism and growth for all students, irrespective of their reading levels.

For the first time, I provided support for a colleague. The students showed growth as readers. It was not just the way they sounded as readers, clearly the discussions about what they read improved as well. My colleague created quizzes to correspond with the readers' theater text which examined the impact on students' comprehension. As we expected, based on their classroom performance, the students performed well on these quizzes. This success excited, inspired, and caused me to start studies as Reading Specialist beginning spring 2014.

After I provided support for a colleague, the success awakened my curiosity and I wondered how to proceed. I did not have a good grasp on how to include fluency in a meaningful and time efficient way for my Response to Intervention students, who met with me for forty-five minutes, four times a week. The reigniting of my interest in fluency occurred throughout my graduate experience. Most of the texts discussed the topic of fluency, and its significance was apparent. Throughout the clinic experience, we were continuously reminded that we needed to think about and reflect on our experiences with literacy and its development. I found myself continuously going back to my experiences with fluency. I reflected, dug deeper, and isolated what made that experience successful. I wondered what components of "Fluency Friday" caused the students'

significant advances in fluency. These experiences led to my decision of making fluency the focal point of my thesis.

Statement of the Research Problem and Question

The students in my intervention classes lacked fluency and fluency was an important component of reading which affects comprehension. The research question I investigated: What happened when specific fluency dimensions punctuation, expression, rate, and accuracy were taught to students who read below grade level? I wondered if a student missed or did not understand one of the components, could fluency be improved. The statistics from the 2015 report by the National Center for Education Statistics (NCES, 2015) supported the need for attention to fluency for most students, not just those in intervention. NCES reported results of fourth-grade and eighth-grade students in the study as a percentage of students performing at three achievement levels: Basic, Proficient, and Advanced. The 2015 results found that nationally, 31% of fourth-grade students scored below Basic and 33% at the Basic level, results indicated a total of 64% of students scored below Proficient. The results for the eighth-grade reading assessment showed 24% below Basic and 42% at the Basic level, which totaled 66% below Proficient. These scores provided evidence for reevaluation and action. In a review of research and practice, Strickland, Boon and Spencer (2013) indicated a correlation between fluency and comprehension.

Comprehension directly affected the students' ability to make meaning of the text, thus without comprehension, the student simply decoded. Increasing fluency provided an avenue for greater comprehension and significantly impacted literacy development. Rasinski, Padak, McKeon, Wilfong, Friedlauer, and Heim (2005) found fluency a

significant factor at high school level reading and overall academic development, not just for elementary grade (K-5) students. This underscored the importance of quickly and efficiently addressing fluency to deter negatively impacting students for their entire academic career.

Pikulski, & Chard (2005) explained fluency as the bridge from phonics to comprehension. They stated that an in-depth view of fluency encompassed a developmental process of building decoding skills which lead to a causal relationship with reading comprehension. This raises the question of how students below grade level reading benefit from receiving instruction on specific fluency dimensions such as punctuation, expression, rate, and accuracy. In order to explore this question, lessons included instruction in fluent reading, its components, and how to evaluate reading fluency. Specific instruction in the fluency dimensions: expression, rate, punctuation, and accuracy guided the lessons. I taught each dimension using the gradual release model: I do, we do, and then you do. After the first lesson, each consecutive lesson began with a review of the previous concept. Complexity and student need determined the segmentation of the dimensions. For example, I taught punctuation over more than one day and addressed different punctuation marks each day.

Organization of the Thesis

Chapter two provides review of past and current research on reading fluency and its instruction. It defines reading fluency and several studies related to its implications. The chapter also discusses the importance of teaching reading fluency and research supporting its inclusion in reading instruction. Chapter three describes the design and context of the study. It includes information about the implementation of teaching

explicit fluency dimensions with Response to Intervention students. Chapter four reviews and analyzes the data and research by discussing findings of the study. Chapter five presents the summary, conclusions, and limitations of the study. It also offers insight for implementing explicit fluency instruction going forward.

Chapter 2

Review of the Literature

Introduction

Many define reading fluency as a students' ability to decode words accurately. Through the years, the characteristics of a fluent reader expanded and the understandings of the effects of being non-fluent evolved over time. This study explored what happened when I taught and students reading below grade level practiced the specific fluency dimensions of expression, punctuation, rate, and accuracy. This section presents a literature review on the definition of fluency, its composition, as well as the implications of teaching reading fluency for a student's literacy development.

Theoretical Perspective

An enlightening theoretical perspective, Bandura's Social Cognitive Theory provided the foundation for this study. This theory revealed that a significant amount of what we learned, we acquired through observational learning, rather than directly experiencing it ourselves. The Bobo study, where children imitated adult behavior seen on film, displayed observational modeling, a hallmark of social cognitive theory. Bandura's work utilized media and technology which facilitated a deeper understanding of behavior and gave substantiation to how technology and media potentially altered students' behavior. (Bandura, 1977)

Bandura identified self-efficacy, an individual's belief in their own ability to succeed or fail in a particular situation, as a major component of the theory. Self-efficacy developed when students succeeded at a task, received positive encouragement from others and positively evaluated their own ability to succeed in performing a task.

Bandura suggested an increase in self-efficacy provided greater satisfaction than an extrinsic incentive or reward. In his Social Cognitive Theory students developed and worked to achieve goals which resulted in increased self-efficacy that altered their feelings, behaviors, and thoughts on their own success. (Bandura, 1997) The social cognitive theory influenced many aspects of this research from lessons to findings.

Defining Reading Fluency

Pikulski and Chard (2005) viewed fluency as composed of multiple variables and part of a developmental process that bridged decoding to reading comprehension. Some of the variables identified as part of fluency included automaticity, accuracy, speed or rate, expression or prosody, and phrasing or chunking units.

As studies indicated, various definitions for fluency existed. Chomsky (1976) never stated a definition or criteria to judge fluency. However, she described fluency as modeled by recordings in the "style of a good dramatic presentation, with different voices for the different character, and interspersed music and song" (p. 289). Allington (2009) stated; "reading aloud with accuracy, appropriate speed and expression" (p. 2).as the most common and the oldest definition of fluency. However, this definition neglected the goal in reading to understand the text.

Clearly many factors contribute to successful reading, in addition to decoding words; thinking in the form of comprehension and questioning a text played an important role in establishing reading fluency, resulting in literacy development. Pikulski and Chard (2005) provided the most comprehensive definition of fluency stating that "reading fluency refers to efficient, effective word recognition skills that permit a reader to construct the meaning of text. Fluency is manifested in accurate, rapid, expressive oral

reading and is applied during, and makes possible, silent reading comprehension” (p. 510). This understanding established the connection of fluency and reading comprehension.

In some students fluency developed without direct instruction. With efficient decoding skills, the reader developed automaticity which according to LaBerge and Samuels (1974) theory on information-processing, freed up resources so the reader attended to the meaning and related it to his or her own schema. Higher achieving readers used phrases, thought units, or chunking of several words to gain meaning of the text.

Instruction to improve fluency aimed to attain a higher level of reading achievement and comprehension among students. However, views varied on the measurement of fluency. Earlier studies emphasized the speed of reading as measured by words correct per minute (WCPM) which fell short of achieving the goals. The inclusion of a test of comprehension leads to a more accurate measurement of fluency improvement. Standardized, definitive scales used to assess improvement in fluency do not currently exist. The absence of full understandings of development and attainment of fluency needed further research to achieve a universal standard for assessing fluency and establishing benchmarks to identify fluency by age or reading level.

Literature

The concept of fluency remained a relevant topic in reading instruction. Chomsky (1976) identified improvements in the reading of students behind one or two grade levels. These students listened to and practiced reading using professional audio tape recordings of stories. In addition to the oral reading, the students maintained a

notebook, for writing and drawing, and recorded their responses to the stories. Chomsky (1976) indicated that it is not clear “whether the writing contributed to the progress in reading, or whether the greater fluency in reading made writing more accessible to the children. It was apparent that the two activities were closely interrelated” (p. 292). This research placed the acquisition of fluency as a step somewhere between decoding and comprehension. Additionally, it suggested researchers needed to identify more factors that impacted fluency.

Pinnell, Pikulski, Wixson, Campbell, Gough and Beatty (1995) used the data from the National Assessment of Educational Progress (NAEP) Integrated Reading Performance Record (IRPR) and compiled the report *Listening to Children Read Aloud: Oral Fluency*. The demographic considerations of the 1136 subjects included race/ethnicity, parents’ highest education level, type of community, and gender. This stratified, three-stage sampling ensured a nationally representative sample of fourth graders. The study assessed fluency using oral reading, accuracy based on misread words, rate based on words per minute, the number of words in phrase groups and preservation of the syntax of the author, and expressive interpretation. The findings showed that 44% of the fourth-grade subjects as non-fluent which demonstrated a significant need for fluency instruction.

The National Reading Panel (NRP) report (2000) echoed the importance of fluency and identified the five pillars of effective reading instruction: phonological awareness, phonics, fluency, vocabulary, and comprehension. The report identified fluency as a critical component of skilled reading but found that instruction in fluency lacked attention in the classroom. The NRP (2000) results encouraged repeated oral

reading procedures for a positive impact on fluency, along with word recognition and comprehension. This led to the interpretation that fluency intervention should focus primarily on increasing the rate of reading and speed. In doing so, classroom practices neglected the other fluency components that support comprehension development. Repeated readings not only served as a valuable tool for increased accuracy and rate, they also served to deepen a reader's comprehension when clearly articulated as a goal of the instructional practice.

In the years following, the emphasis on fluency focused on helping students read more rapidly through interventions of various forms of repeated readings of texts. Researchers performed numerous studies using many different models and variations of repeat readings. For example, researchers and educators found that repeat reading strategies improved oral reading fluency in students with and without learning disabilities (LD) (Therrien, 2004). However, they did not assess effects on comprehension.

Implications of Teaching Reading Fluency

Research identified the importance of teaching fluency as a critical factor for reaching a high level of reading achievement and comprehension. Students who attained fluency exhibited a greater comprehension and recall of the material they read. As students moved beyond third or fourth grade into middle, high school and the college level, they gained a greater understanding of their world by comprehending what they read. Those students unable to gain a high level of reading achievement and limited or no comprehension experienced a significant disadvantage since school instruction centered on the students' ability to independently read and comprehend.

Reading aloud to students was very impactful; the exposure to fluent reading was typically one of the most developmentally meaningful experiences for many children. During this time students observed how an experienced reader interacts with a text. They noticed that fluent readers stop and think while reading and animate characters with different voices. This allowed the listeners to imagine the stories in their heads and visualize what happened. Through modeling fluent reading, we changed the expectations of reading from just decoding words on a paper to using words which conveyed layers of meaning and feeling.

Rasinski & Padak (2001) described the significance in the following:

During a read aloud, the listener hears how the voice can be used to create and extend meaning. Through intonation, expression, phrasing, and pausing at appropriate points, the reader demonstrates that meaning is embedded in more than just the word; it is also in the interpretation of words. By reading orally to students, we model for students what fluent, meaningful reading is like. (p. 39).

Many variables that impeded a student's exposure to the experience of modeled fluent reading existed. In some cases, dysfluent readers lacked the opportunity to benefit from lap reading at home, and/or their school environment or curriculum did not support consistent exposure to read alouds. Additionally, some groups, such as English language learners and low socio-economic students experienced limited contact with examples of fluent speaking and reading in English.

Research indicated that ELLs displayed a reluctance to participate and express themselves for fear of corrections and overly concerned with grammar and pronunciation

(Moll & Diaz, 1985). This affected the students' self-efficacy and hindered their progress in the acquisition of reading fluency.

In classroom research, Griffith and Rasinski (2004) examined the results of integrating fluency instruction into the reading curriculum. The researchers gathered data for three successive years in a rural fourth-grade classroom in North Carolina and looked specifically at the reading growth of Title I students. The first year instructional change included use of Readers Theatre, and the second year added timed reads and selective partner reading to the instruction. These strategies with some modifications continued in the third year. The results, when compared to the prior three years of a traditional reading program, showed substantial increases for all students in the classroom. Researchers measured Title I students' instructional reading levels using the silent reading comprehension portion of the informal reading inventory and 93% exited fourth-grade on or above a fifth-grade level. (Griffith & Rasinski, 2004)

In a review of literature, Strickland, Boon, and Spencer (2013) examined nineteen studies on repeat reading from 2001 to 2011. They identified four main strategies of instruction: repeated reading, repeated reading compared to other reading interventions, repeated reading combined with other reading interventions, and repeated reading as part of reading programs. The findings indicated that repeated reading resulted in improved fluency and comprehension skills. Most of the research strictly examined rate and accuracy and did not measure expression or prosody and comprehension.

Instructional Practices and Areas of Focus

Theories and research indicated multiple variables make up fluency. Nevertheless, research often focused strictly on accuracy and reading rate when

measuring fluency. The use of repeated reading served as the dominant remediation for fluency instruction (National Reading Panel, 2000; Rashotte & Torgesen, 1985).

Researchers associated repeated reading with improved outcomes for young students (O'Shea, Sindelar, & O'Shea, 1987) as well as college students (Carver & Hoffman, 1981). Students benefited from repeat reading by becoming more familiar with the text. This familiarity, in turn, increased the student's accuracy with the text. With lower demands on decoding, students used their cognitive resources to focus their attention on other dimensions of fluent reading.

Educators questioned the use of leveled text for reading instruction when textbooks frequently range two to four reading grade levels above the students' actual school grade level. Coulter and Lambert (2015) researched the effects of pre-teaching key words in connected text using three male third-grade general education students. Using the Dynamic Indicators of Basic Literacy Skills (DIIBELS) during the fall and winter of third grade, the students scored between 87 and 135 on oral reading fluency, which indicated a proficient level for third grade. Researchers used one hundred fifty to two hundred word passages similar to textbooks and leveled from N to T for fluent readers from grade five and six, and posed a challenge to the third-grade students. Each student independently read a list of fifty key words. Researchers chose books that eliminated a student's prior content area knowledge from any of their readings. Using two preselected passages from a book, students read the first passage and researchers scored them using words correct per minute. Prior to reading the second selected passage from the same book, researchers taught the students a 15 to 20 multisyllabic key word list to mastery. The student then read the second passage and researchers calculated fluency

by using words correct per minute. The mean score from baseline to intervention increased by 14, 22, and 23 correct words per minute for the three students.

The study showed the immediate effect of key word intervention on the fluency, which could impact comprehension. Additionally, researchers identified a significant drop in average errors for each student from baseline to intervention. This strategy increased fluency with the above grade level, more complex passages and indicated the opportunity for pre-teaching content words to reach a positive effect on fluency. This research provided instructional insight that classroom teacher may use, particularly when teaching in content area text, such as science or social studies, which often contains a wide range of readability.

Expanding research to identify the effects of instruction on other variables of fluency, Noltemeyer, Joseph and Watson (2014) examined three instructional models' effects on prosody and oral retelling. The three strategies that they examined: repeated reading (RR); phrase drill error correction (PD); and listening passage preview (LPP). Researchers used four students in summer school selected for poor reading performance at the end of second grade and tested them to determine a baseline prosody and correct words per minute (CWPM). Using three different experimental conditions of Repeat Reading (RR) 3 times or Listening Passage Preview (LPP) with RR or Phrase Drill (PD) with RR, researchers provided instruction in an alternating, counterbalanced sequence. Researchers evaluated students using a prosody rubric and Dynamic Indicators of Basic Early Literacy Skills (DIBELS) for oral retell fluency assessment. The results for oral retell assessment showed the least effective treatment was PD with RR. No other treatment stood out across all four students; the LPP with RR showed effectiveness for

two of the students, while the RR 3 times did not result in the highest retell fluency for all students. Analysis of the prosody rubric results showed that all three treatments resulted in improvement in prosody but identified no significant difference between the treatment combinations. The varying results for different treatments used among the individual students in this study underscored the importance of determining the treatment most effective for each individual child's needs. Educators could use this study's design to easily and quickly determine a particular treatment most effective for an individual student.

Part of all literacy instruction was the attainment of silent reading fluency, as this was ultimately the primary method most students will use to read in the future, whether for academic, work or personal reading. Researchers Reutzel and Juth (2014) identified one of the goals of elementary literacy instruction as silent reading fluency which they defined as the same as oral fluency. They examined the characteristics that make silent reading fluency instruction effective and argued the importance of developing silent reading fluency especially with the lack of evidence that reading practice, without instruction, improved reading fluency or comprehension (Kamil, 2008). Researchers identified four research based oral fluency development components: 1) practice time, 2) supportive environment, 3) engaged reading, and 4) instruction and scaffolding by teacher/adult. Reutzel and Juth (2014) identified Scaffolded Silent Reading (ScSR) and R5 as two program designs that effectively supported the development of silent reading fluency and suggested that additional research needed to examine the contribution of each of the four components to assess the level of contribution each provided. Future research should examine the frequency of progress monitoring and what might provide the

greatest levels of student motivation and achievement. To identify effective methods to move students from oral to silent reading fluency instruction further research needs to be conducted.

Clearly, many instructional methods studied improved fluency and comprehension. When planning instruction, I recognized the importance of fluency as a multi-faceted construct that included: automaticity, accuracy, speed or rate, expression or prosody, and phrasing or chunking units. For this study, I chose to examine several of the variables that compose fluency in an effort to examine the effect of explicit instruction on rate, accuracy, punctuation, and expression. In chapter three, I explained the design, method, and context of the study are explained.

Chapter 3

Research Design/ Methodology

Research Paradigm

This study employed the use of the qualitative research paradigm as its structure. In this context, the “practitioner himself or herself simultaneously takes on the role of researcher” (Cochran-Smith & Lytle, 2009, p. 41). Utilizing the qualitative research paradigm, naturally allows the teacher researcher to reflect and focus on what works best for students. “Teachers research is a process of discovering essential questions, gathering data, and analyzing it to answer those questions” (Shagoury & Power, 2012, p.2). By using this paradigm the teacher-researcher “examines her own assumptions, develops local knowledge by posing questions and gathering data” (Cochran-Smith & Lytle, 2009, p. 40).

Cochran-Smith & Lytle (2009) point out that unlike traditional academic educational research, teacher research is often qualitative in that it is; based in the natural setting of the classroom and the researcher is the data collector. They indicated the major critiques of practitioner (teacher) inquiry which linked the research, data, knowledge, evidence, effectiveness and who can legitimately be a knower as related to teaching, learning, and teacher development. Given the current educational environment in the United States, where only evidence-based educational practices received funding, many indicated that teacher research was only applicable to that particular environment and teacher, and cannot be generalized to other locations or teachers. However, the purpose of teacher inquiry was not replication; it was to gain further understandings. “An important feature shared by many forms of practitioner inquiry was that notions of

validity and generalizability were quite different from traditional criteria” (Cochran- & Lytle, 2009, p. 43). Nevertheless, what teachers knew about their students and their classrooms was that each student and classroom was unique and no class or student was identical.

According to Shagoury & Power (2012), teacher research was a natural extension of good teaching. Teachers study their students with the desire to make informed decisions about what the students needed, what process or method best conveyed the material taught and identified what worked and what did not. On an ongoing basis, teachers closely observed, sought to understand the students, collected data, analyzed the results, and responded to inform and change their own teaching. The understandings they gained and implemented lead to more questions, observations, and analysis. It was an effort to do things better.

For my research the use of the qualitative research paradigm allowed me to document my classroom experiences from what Cochran-Smith and Lytle (2009) define as the “insider’s perspective.”

What distinguishes the inquires of practitioners is that in addition to documenting classroom practices and student’s learning, they also systematically document from the insider’s perspective their own questions, interpretive frameworks, changes in views over time, dilemmas and recurring themes. (P. 44)

With this paradigm, I shared my findings from both my viewpoint and my students’ perspective.

My question began with my interest in explicit instruction and the influence of fluency instruction. I wanted to explore the effects of adding explicit instruction using

four dimensions of reading fluency. My question, what happened when specific fluency dimensions punctuation, expression, rate, and accuracy were taught to students who read below grade level? While the context of my situation was distinctive, the intention of the work was to illuminate the possibilities that existed and inspire further inquiry into the areas of explicit fluency instruction for students reading below grade level. In using the qualitative research paradigm, I gathered data from observational notes, fluency rubrics, teacher journal entries, and audio recordings, which provided an intimate look into the inner workings of this research inquiry.

Procedure of Study

The participating students came from their general education classrooms to the intervention room, at their assigned times. The students attended intervention four times per week for a forty-five minute session and received a minimum of eight lessons, not necessarily in succession due to school schedule, holidays, and absences. They worked in small groups, not larger than three students per group. As a result of the limited class time in the intervention room, one forty-five (45) minute class introduced the technology instruments prior to beginning the study. Using the gradual release model “I do, we do, you do”, I taught students how to create and replay a recording on a Chromebook using MicNote, how to use the timer, and how to complete a self-assessment in Google form using an iPad. I modeled each of these activities and asked the students to practice them. We discussed how listening to their own recording could help them as readers.

The first lesson consisted of an introduction to the meaning of fluency and the specific fluency dimensions: rate, accuracy, expression, and punctuation. I taught fluency as “We read the words like we talk to our friends at lunchtime.” Students learned

reading rate as “reading not too fast but not so slow, you do not want to bore your friends because you are talking too slowly. You do not want to talk so fast that they cannot understand what you are saying.” I explained accuracy as “reading the words correctly”, expression as “not sounding like a robot and reading with feeling” and punctuation as “reading using the marks in the text.” Students recorded their first reading with *Fountas & Pinnell Leveled Literacy Intervention System (LLI)* text at their instructional reading level and completed their self-assessment using the rubric in Google forms. Then, as a group, the students discussed what went well, what they wanted to improve on, how the lesson helped their brains grow, and the use of their learning in the general education classrooms.

The second lesson reviewed the first lesson and provided specific instruction on the punctuation dimension. Punctuation instruction lasted three days, first we discussed exclamation and question marks. Again, I instructed the students using the gradual release model and displayed examples of the same sentence with and without an exclamation mark or question mark. We discussed the effect of the punctuation mark on the meaning of the sentence. Students practiced reading aloud, sentences with exclamation marks, question marks, and periods. After completion of the instruction, the students created a recording. The students used the LLI system which provided them with instructional level text and were a rereads of the prior day’s LLI lesson. Each student listened to his/her recording and filled out a rubric on Google forms to reflect upon their reading, according to the four fluency dimensions. Then students gathered to discuss this fluency dimension lesson.

During the third lesson, I prompted students to share their understandings of what they learned about fluency. Instruction reviewed the meaning of fluency and the specific fluency dimensions of the exclamation and question mark. I instructed on the punctuation dimensions of commas and periods, explained as a pause or taking a breath when reading. Students identified punctuation marks based on the instructor's reading of a sentence and compared all punctuation marks. Student completed their recording and rubric and then convened for reflection and conversation.

We reviewed previous definitions and dimensions at the beginning of the fourth lesson. After identifying quotation marks and dialogue, students studied the reasons an author used them and how quotations changed the sound of the story. I modeled and students practiced the use of quotation marks which concluded the aspects of the punctuation dimension covered by instruction. Using the LLI text students made recordings and completed the rubric on Google form. The recordings used the LLI system text, and then the students completed the rubric which they filled out on Google form. We orally discussed the reflection questions at the end of the lesson.

The fifth lesson synthesized the learning; students thought aloud through the sentences, described the punctuation marks they saw, what the mark meant, how they changed their voice, and how the mark altered the meaning. Students showed their understanding as they read the sentence, attended to the punctuation marks and adjusted the inflections in their voice. I also taught rate during this session and described rate as reading not too fast and not too slow, like you conversed at lunchtime with your friends. We discussed, modeled, and practiced the new topic of rate. Using the LLI text, students

completed a recording and did the rubric on Google form. Students reconvened as a group and spoke about our ongoing reflection questions.

The sixth lesson briefly reviewed punctuation and rate. I explained the fluency dimension of expression as adding emotion and feelings in your reading, as though you are an actor/actress, like in reader's theater. Speech like a robot revealed speaking with lack of expression. Examples of the same sentence, spoken with different intonation, illustrated different expressions. Students practiced sentences with different voices to show various expressions. The students completed their recording using the LLI system text, at their grade level. Using Google form, each student completed their rubric. The group assembled for end of lesson reflections.

Lesson number seven started with a compilation of all the dimensions taught so far: punctuation, rate, and expression. All of the students recognized the last dimension, accuracy, and described it as "correct" or "right". We brainstormed some strategies used to check for accuracy. Does the first letter of the word match the sound I said? Is this a long or short vowel sound? As I listened to the word, does it make sense? Does the word make sense in the sentence? Using the LLI text, each student completed a recording and completed the rubric on Google form. The students worked together, discussed reflection questions, and shared progress.

For our eighth lesson, I conducted individual conferences with students to discuss where they thought they wanted to grow as a fluent reader. Students listened to selected recordings again, based on data, this assisted students who struggled to isolate which dimension they specifically needed to work on. After students listened to the recordings for a second time, students often found more success in determining a fluency goal. I

implemented one on one instruction on the identified dimension and reviewed as per individual need. For most students, this required more than one meeting. The ninth lesson finished conferences and finalized goals.

For the final lesson, students listened to a pre-selected recording again. I prompted them to reflect on their goal and what they heard in their recordings. Each student completed their recording using the LLI system text, at their grade level. Using Google form each completed their final rubric. With each small group, we conducted a post conference discussion for the students to express their experiences with the study.

Data Sources

As an interventionist, not a classroom teacher, I only had access to students that received Response to Intervention (RTI) services in second, third and fifth grades. Of the eligible candidates, only eight students returned a permission slip to participate. At the beginning of the study, I allocated to each student a random number which I attached to their current grade level and assigned each student a pseudonym. Audio recordings, fluency rubrics, anecdotal notes, teacher journal, and pictures provided the basis for data sources.

Students completed audio recordings using a Chromebook in the application “MicNote” and the cell phone app “Voice Memos”. “Voice Memos” recorded both class discussions and individual conferences, while students read their texts aloud into “MicNote”. In order to complete the fluency rubric, students listened to the recording of themselves reading aloud in “MicNote”.

I composed the fluency rubric and stored it in Google forms. Appendix C shows a sample rubric. After listening to the recording of their reading, students used the iPad

to complete the form. The rubric listed each fluency dimension: accuracy, rate, expression and punctuation. Students self-evaluated their reading performance based on the prompt below each fluency dimension. They chose one of these four options under each dimension: Not yet, I am a work in progress, I have room to grow, or this is a strength for me at this time. Additionally, they answered the reflection questions “What will your fluency focus be?” and “How will you work on your fluency focus?” The data stored automatically in Google sheets. At a later time, I listened to each student’s reading and completed the same fluency rubric. I assigned a number value ranging from one to four, to the rubrics completed by both the students and myself, for comparison and analysis purposes. The number values assigned provided a basis for research exploration only, not for the purpose of quantitative analysis.

In order to quickly capture thoughts, behaviors, wonderings, and student reactions throughout this research, I maintained anecdotal records. The anecdotal notes reflected behaviors and attitudes not captured in the audio recordings; such as body positions or facial expressions. This information influenced the depth of re-teaching that occurred at the next lesson. In a teacher journal, I recorded reflections on my practice; this summarized what went well and not so well. The reflections guided my instruction, I found myself more responsive to the individual students’ needs. The artifacts included pictures of the small, shared environment in which the study took place. The pictures captured students’ independence, their adaptation to the use of technology as tools for learning, as well as engagement in their work.

Data Analysis

In order to extrapolate the findings, the data collection took place using a variety of methods. The use of coding and triangulation across the data allowed me to determine if explicit instruction of four fluency dimensions in eight or more intervention sessions improved a reader's fluency overall or in a particular dimension. The data also unearthed students' perceptions of themselves as learners. The students' application of these understandings, in their recordings and responses, produced evidence for examination. Anecdotal notes from lessons and various recordings proved to be invaluable throughout the study. As the lessons progressed, completed recordings, notes, and rubrics indicated whether the students gained a greater understanding of the concept of the individual dimensions as well as how they personally viewed their learning and improvement. I also listened to the individual students' reading recordings; then analyzed and assessed the recordings using the same rubric that the students used, and focused on the dimensions of accuracy, rate, expression, and punctuation.

Coded data from the anecdotal notes, audio recordings transcriptions, in conjunction with the teacher journal revealed the emerging patterns and themes. I evaluated the data across the different sources to determine continuity. In order to pattern code the data, examination occurred for similarity, difference, frequency, correspondence, as well as potential causation. Pattern coding created simplified categories in order to develop major themes (Saldana, 2013). With the intention of synthesizing the findings, the data was then reviewed to connect like groupings and create overarching themes. An examination of the themes ensued, looking at multiple

sources of data from the study to check for consistency and verification of themes throughout data.

Context

Community. The town was located in Middlesex County, one of the larger municipalities in New Jersey, with more than 100,000 residents. The most diverse county in the state of New Jersey is Middlesex County. There was a total student population of 14,521 students in the town and growth has remained flat over the last five years. This community has unique pockets that contain a wide variety of cultures and economic status.

School. The study took place at Grant Elementary School in central New Jersey. Grant is one of ten elementary schools in this New Jersey town. It currently serves about 605 students. The building educates students in kindergarten through fifth grade. The teacher to student ratio is about fourteen to one, slightly higher than the New Jersey average. There is a high minority enrollment of 89%, primarily composed of Asian Americans. The overall demographic is about 1% American Indian, 75% Asian, 4% Hispanic, 9% Black, and 11% White. About 13% of the students in the school receive free lunch, and about 2% of the students receive reduced lunch price.

Classroom. The classroom was once an office and was a shared space with the math specialist. To use the space efficiently, I decided to forego a teacher's desk and replaced it with a kidney-shaped guided reading table that served as the primary workspace. The classroom only services small Response to Intervention (RTI) groups. The students in this research were Response to Intervention students, reading more than one year behind grade level determined by STAR Reading Assessment by Renaissance

Learning. Administration of the assessment takes places at three points during the year; fall, winter, spring. There are four cycles throughout the year.

Students. Aristotle is a second-grade boy who always tried his best and was a people pleaser by nature. This was his first year in Response to Intervention (RTI) because it was not offered to first graders in the 2014-2015 school years. His family took an active role in his education, especially his mother who attended all concerts, conferences, and sent frequent e-mails. She arranged additional conferences to track his progress, as well as discussed ways she and his father could help him. His father owned his own business and maintained a busy schedule; however, the family frequently visited the father at work. Aristotle was the youngest of three children and the only boy in his family. Aristotle and his family proudly spoke of their Greek heritage, but because of the demands of school, his family removed him from the Greek school that he attended once a week. His delays concerned his family and he was in the process of being evaluated by a neurologist. Aristotle perseverated on things and often struggled to articulate his ideas, which impacted him in all content areas.

Britney was an outgoing second-grade girl who loved to learn. She was very friendly, enjoyed working with her peers, and was very helpful. Britney was the child of a second marriage for both parents. Her mother and father had shared custody of her siblings; however, Britney was primarily the only child at her home during the week. The primary language spoken at home was English. Although both parents spoke Spanish, Britney did not. Her parents have not yet attended any conferences, but have communicated through e-mail and phone calls. Britney reports that her parents helped her with her homework and read with her at home. During the last few weeks she

struggled with attendance because her father was in an accident. However, he helped her more with her makeup work. She responded well to the lessons being taught during RTI service and her reading level increased multiple levels since the fall.

Quincy was a third-grade boy who began RTI with some trepidation. He was slow to trust people and very guarded. As we got to know each other he became more trusting of me. Often he put his head down during instruction, but with prompting and redirecting, he worked and demonstrated his abilities during our time together. Quincy lived in the local subsidized housing, with his blended family. He lived with his mom and two sisters, both had different fathers. He was very guarded about his family and did not like to share. He was very proud and did not like to take help from others; he came to school wearing the same sweater every day but declined a free sweater from the school. Quincy was tested last year by the child study team and was found ineligible as he was working within his IQ. They found no discrepancy using the discrepancy model. He struggled with the third grade expectations and frequently did not complete class work or homework for his classroom teacher. When I structured work he could complete independently at home, he was more successful.

Ariel was a third-grade girl who loved to learn, however, this was top-secret information. She put on an act of toughness in order to survive and thrive in her community. She was also very popular with her peers. She, like her cousin Quincy, lived in the local subsidized housing. Ariel never talked about her family; when asked questions about siblings or what she did during the weekend she was very vague or would tell you it was none of your business. Ariel tended to shut down immediately

when things felt too challenging for her. In working together she became more open-minded and willing to give things a try.

Anthony was an energetic third-grade boy. He struggled with peer relationships because he occasionally said inappropriate and sometimes hurtful things to his peers. He was not malicious in nature; however, he struggled to control and filter the things that he said. Anthony genuinely loved to learn; at times he had a hard time managing both his body and his brain while he coordinated them. Anthony was part of a blended family and lived in a crowded, full house. He lived in public housing with his mother, his mother's boyfriend, one brother who was in second grade, two sisters in fifth grade, and a brand-new addition of a baby boy who was nine months old. He realized that school could be an opportunity for attention both negative and positive. Response to Intervention service had been very beneficial for him. The small group setting, in conjunction with the time away from class, allowed him to focus on his studies and he received praise for his growth and efforts.

Bobby is a third-grade boy who was very confident. He was very positive and regardless of the obstacles he faces, he continued to try. Learning new things excited him; he wanted to learn and maintained good relations. He was an only child and lived in an affluent section of the neighborhood. His mother e-mailed, met for several conferences, and expressed concern about his development. She seemed aware that he was not growing like his peers and concerned that he struggled to learn, however, was unsure how to proceed. His classroom teachers in second and third grade referred him to intervention and referral services inter. Bobby was bilingual and spoke both Hindi and English. He spent his summers outside of the country in India, where he typically did not

speak English. His test scores over the last few years demonstrated that he tended to regress over the summer. Bobby thrived in small group Response to Intervention which assisted him in gaining back his understandings; in addition, it supported his growth as a learner.

Miguel was a fifth-grade boy with an incredibly outgoing personality, and an absolute passion to learn. Miguel had attended four other elementary schools before he attended Grant School. Miguel was a kind, young boy who went out of his way to help his peers. He helped one of his group members, Carol, who was very quiet, shy, and struggled to remember when to come to group. He stopped by her class and walked with her to the group meetings. Miguel loved to share his learning. When presented with the opportunity to share how to use the recording software for fluency development with a parent group, he immediately took ownership and was excited to participate. Miguel was bilingual and spoke Spanish in addition to English. Miguel had a little sister who was one year old and he enjoyed taking part in caring for her. He even composed a book for her. His parents did the best they could to support him in his learning, however, the language barrier was a challenge at times. His parents hired a high school student to help him with his homework and read with him. Miguel increased three reading levels since beginning RTI services and continued to thrive and grow as a learner.

Carol was a fifth-grade girl who was extremely meek. She talked in a very soft voice and frequently had to be asked to repeat herself. Carol was one of two girls in her family. She lived with her mother and stepfather. Her younger sister was in first grade and was also receiving Response to Intervention service. While Carol did not like to orally communicate, she took great interest in my website and asked to be taught how to

make a website. She developed a gaming website and ownership of it. The website became a platform for Carol to begin communicating with me which eventually translated into communication regarding her writing. The small group setting was a great way for her to feel supported. With a focus on fluency, the hope was for her to be more comfortable when she expressed herself orally and more confident in her reading abilities. In chapter four there is exploration of the data discovered throughout the study and an examination of the major themes that were revealed.

Chapter 4

Data Analysis

Chapter four presented the findings of the study. I collected anecdotal notes, teacher journal entries, and audio recordings of student readings and group discussions for in-depth analyses. Throughout the study, students came together to discuss what went well, what needed improvement, how the lesson helped their brains grow, and how they would use what they learned in their classrooms? At the end of every session, the questions fostered and encouraged students' self-reflection provided ongoing progress monitoring and afforded feedback to the teacher-researcher. In spite of the considerable limitations of the study, the findings from this experience proved notable and worthy of further investigation.

Revisiting the Study

The data collected during this study assisted in determining the effects of explicit fluency instruction for second, third, and fifth-grade students who were reading at least one year below grade level. Students created recordings and used them to complete student self-assessment rubrics addressing the four dimensions of fluency. I listened to these recordings and assessed the students using the identical rubric. The data yielded from the rubrics and recordings were one source used to explore the effects of integrating explicit fluency instruction during Response to Intervention service. I also kept anecdotal notes, teacher journal entries, and collected group reflections. The lessons in the fluency dimensions of expression, rate, punctuation, and accuracy guided instruction and assessment during this study. I coded this data in order to find patterns and themes, which illuminated the students' response to the instruction.

Data Analysis

I evaluated the recordings by the students and gave a rating of 1 to 4 based on the rubric, for each of the dimensions of fluency: accuracy, punctuation, rate and expression. The number of recordings ranged from 8 to 12, depending on each student's schedule and class attendance. The first recording served as the baseline score and I averaged the remaining 7 to 11 scores for each individual student. I assigned number values for the purpose of research exploration. Next I compared the initial score, designated as baseline score, to the average score of each individual student's remaining recordings in each of the fluency dimensions of accuracy, rate, expression, and punctuation for each individual student. I averaged the gain or loss for each of the eight participants and determined an overall change in each of the four dimensions for all eight participants. The findings shown in Table 1 indicated the average score increase/decrease across the four dimensions.

Table 1

Average Change in Each Fluency Dimension

Fluency Dimension	Grade 2	Grade 3	Grade 5	All 8 Students
Accuracy	.49	.09	.96	.41
Rate	.75	.49	.74	.62
Expression	.87	.62	.39	.62
Punctuation	.94	.60	.29	.61

The data analysis used a total score across all four dimensions of accuracy, rate, expression, and punctuation for each meeting. I graphed the sum score of all of the dimension scores across the number of meetings and calculated a trend line.

In the analysis by grade, Britney and Aristotle, second-grade students, showed the most rapid and consistent growth across all the grades. The third-grade students, Quincy, Ariel, Bobby, and Anthony, started with a higher baseline score than the second graders. Third-grade students increased but not as rapidly as the second-grade students. The fifth-grade students demonstrated less growth and a lot of irregularity. Their performance peaked around the day of individual conferences and setting their goals; however, students did not maintain those gains.

In order to code the data, I referred to my literature review and determined what major categories applied to the data from the transcripts, anecdotal notes, and teacher's journal. During this pre-analysis of the data, I read through and noted different domains. I looked for patterns, connections to the literature, and terms the students used frequently. I examined the data for similarities and differences. The original domains were numerous, broad and composed of notations that captured the students' exact words.

For a second time, I reviewed the data, distilled, and connected the domains into more cohesive categories. Finally, I combined like categories and determined major themes: self-awareness, accomplishment, engagement, self-efficacy, success, and connection to the classroom.

To determine continuity and consistency across all data sources, I evaluated the data by source: recording transcripts, anecdotal notes/observations, and documents, as shown in Table 2.

Table 2

Triangulation of Themes across Data Sources

Study Themes	Recording Transcripts	Anecdotal Notes/ Observations	Documents
Self-aware	X	X	X
Engagement	X	X	
Success	X	X	X
Accomplishment	X	X	X
Self-efficacy	X	X	X
Connection to classroom	X		

Britney. Based upon the findings from the data in Table 3, Britney demonstrated an increase in executing the fluency dimensions. A differential existed between her score and the score I determined, which indicated a need for additional assistance in evaluating her fluent reading. Britney responded well to the modeling but struggled with understanding the meaning of the words as evidenced in her self-assessments.

Table 3

Britney Second-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	1	1	1	1	4
M2	1	1	1	1	4
M3	1	1	1	2	5
M4	2	2	1	1	6
M5	2	2	2	2	8
M6	2	2	2	2	8
M7	3	3	3	3	12
M8	2	3	3	3	11

Note: Scored by Teacher

Britney struggled with decoding, which impacted her reading fluency. While Britney's expression, attention to punctuation, and rate suffered at times, her accuracy increased. She began to self-correct her reading more, which resulted in increased accuracy. I observed when she realized she made a mistake; she stopped and made another attempt at the word. Brittany reread the entire sentence until she read the words accurately. She broke apart the words, looked for vowel patterns, identified digraphs, and blended segments together; solved miscues and decoded words. Britney benefited from the opportunity to re-read the text and integrated her laborious decoding in with her newly learned fluency dimensions. Britney jumped in and enjoyed the new learning opportunities, asked questions, took risks, and made the most of the lessons. When I asked Brittany if she ever took what she learned during our lesson and used it in the regular classroom, she responded: "I did because we have reader's theater in my room and Mrs. J even told me that I sounded like a real actress now."

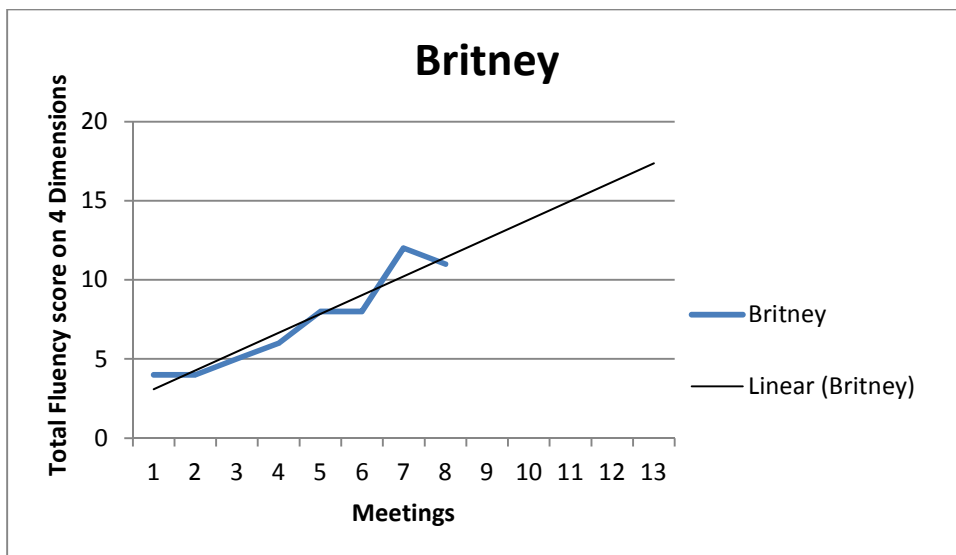


Figure 1. Graph second-grade student Britney

Aristotle. Aristotle struggled with evaluating his recordings. His student scores were the same in the individual dimensions for his initial recording all the way through his final recording, for example, he gave himself a two for all of his recordings in accuracy and punctuation. When asked to explain his reasons for scoring, he could not articulate or explain why he scored his recordings the way he did. While critiquing his own recording was more challenging for Aristotle, he responded well to the lessons and the use of gradual release model and explicit instruction. He demonstrated an increase in some of the emphasized dimensions as reflected in the scores he received.

Table 4

Aristotle Second-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	2	1	1	1	5
M2	1	1	1	1	4
M3	2	1	1	1	5
M4	2	1	1	1	5
M5	1	1	2	2	6
M6	3	2	2	2	9
M7	3	2	2	2	9
M8	3	2	3	3	11
M9	2	2	3	3	10

Note: Scored by Teacher

During observation, I noticed that at times Aristotle utilized his finger and tracked his print which negatively impacted fluency. The rate and expression dimensions decreased when Aristotle utilized his finger to track the print. His reading started to sound more like words in isolation and less cohesive. I offered Aristotle a reading tracking screen, however, he found it difficult to use and met with more success without

it. Aristotle responded favorably to feedback about how utilizing his finger or utilizing a pencil to read the words influenced how he read. Taking the time to bring attention to his reading tracking, and how it impacted his reading was very impactful for Aristotle. At times I prompted him not use his finger, however, he responded to the prompt and began reading without his finger. He became more aware and made a greater effort to look at the sentences as a whole rather than looking at each word. When asked about what reading fluency is, he answered, “Now when we read we have to try and do it like we talk. And you can’t just read the words you have to look to see if there are any punctuation marks.”

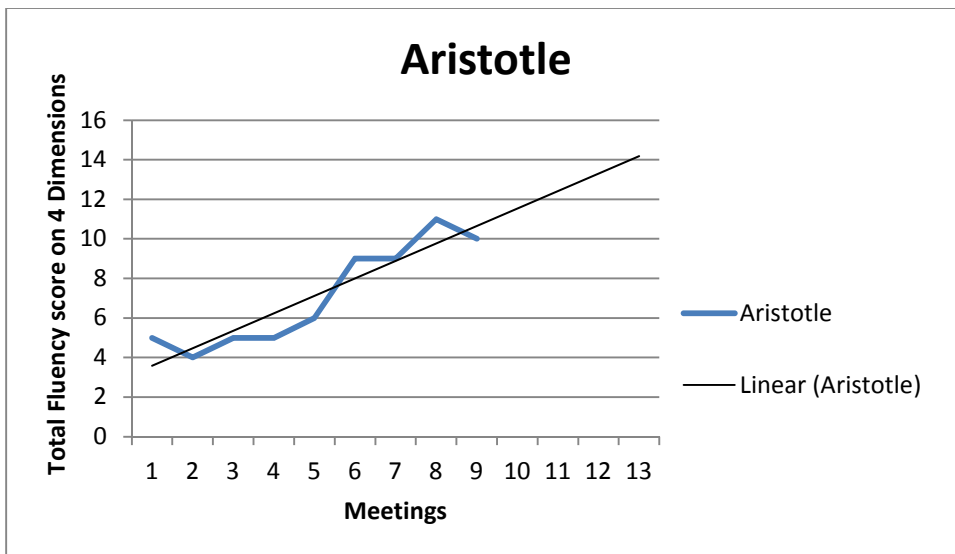


Figure 2. Graph second-grade student Aristotle

Quincy. Quincy’s growth in the individual fluency dimensions was not consistent. During our lessons he appeared to understand the dimension, however, was not able to apply his understandings in his recordings. The least amount of disparity

between grading occurred in the critiquing of the fluency dimension of accuracy. Accuracy was one of the more concrete dimensions in that the reader either did or did not read the words correctly. While his growth was not steady, he progressed in his understandings of what fluent reading sounded like. He did his best when provided with a model to demonstrate the expectation and showed he did not internalized the learning yet.

Table 5

Quincy Third-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	1	1	1	1	4
M2	2	1	1	1	5
M3	2	1	2	2	7
M4	3	1	2	2	8
M5	2	2	2	1	7
M6	2	1	1	1	5
M7	2	1	1	1	5
M8	2	1	1	1	5
M9	3	2	2	2	9
M10	2	2	2	2	8
M11	2	1	1	1	5
M12	3	1	1	1	6
M13	2	3	3	2	10

Note: Scored by Teacher

A variable that could have potentially influenced Quincy’s accuracy scoring ability had to do with one of his reading goals. Part of Quincy’s Response to Intervention service reading goal was to increase his overall high-frequency word recognition. I observed that texts that contained more high-frequency words that Quincy knew, he was able to read more fluently. High-frequency words that Quincy has studied and committed

to memory, he recognizes quickly and reads them easily. I noticed that this influenced his ability to read words accurately. When Quincy feels more confident about the word that he is reading and has an increased amount of accuracy, he is then able to allocate his attention to other fluency dimensions. However, when attempting to read several high-frequency words that he was unable to decode, Quincy perseverated on the words and struggled to commit them to long-term memory. As a result, he read those texts less fluently.

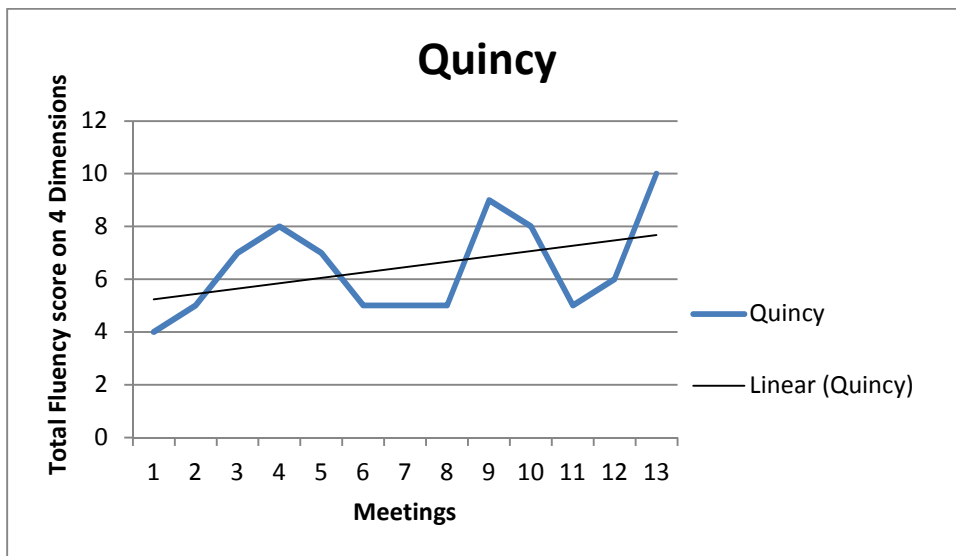


Figure 3. Graph third-grade student Quincy

While Quincy tried to act cool, he experienced anxiety because of the shared working space, as shown in the transcript:

Teacher: Where you surprised about how you sounded?

Quincy: Yeah. I felt scared because there were other people in here.

Teacher: You felt scared because other people could hear you read?

Quincy: I don't like reading in front of other people.

Teacher: You don't like reading in front of people but you were by yourself on the carpet during the recording.

Quincy: No. There was Mrs. Concho and Kelsey and Samantha

Teacher: There were other people in the room

Quincy: Yeah

Teacher: Sometimes it makes you nervous. How do you think doing the recordings and fluency helped you improve as a reader? What are some things that helped you improve?

Quincy: The sounds.

Teacher: Listening to the sounds of your voice.

Quincy: Yes

Teacher: What else did you learn?

Quincy: I heard people talking in the background.

Teacher: No what did you learn?

Ariel: I learned that you will mess up somewheres [sic] when you read

Quincy: you will not get them all correct.

Ariel. Ariel was receptive to lessons however the lessons only created an awareness of the fluency dimensions for her. She began to stagnate in her growth almost immediately in the areas of punctuation and expression, with little change observed in the teacher score. During individual conferences, Ariel chose to focus on her reading rate. When receiving explicit instruction again on rate Ariel demonstrated a greater awareness of this dimension and was able to complete her last recording attending more to her rate and scoring higher in this area. She, like many of her peers, struggled with critiquing and evaluating her recordings utilizing the rubric. Her scores overall were inconsistent and typically did not align with the teacher scores.

Table 6

Ariel Third-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	3	2	1	1	7
M2	3	2	1	2	8
M3	2	2	2	2	8
M4	3	2	2	2	9
M5	2	1	2	2	7
M6	2	2	2	2	8
M7	3	3	2	2	10
M8	2	2	2	2	8
M9	2	2	2	2	8
M10	3	3	2	2	10

Note: Scored by Teacher

During my observations of her recordings and during our mini-lessons, I noticed that Ariel struggled with self-monitoring. She often hesitated on unknown words and did not always utilize the reading strategies that she knew in order to decode words. She frequently read through sentences and did not monitor to determine if the sentence made sense to her. I noticed that her miscues were often inconsistent. However, when I echoed back what she said, Ariel identified that the sentence did not make sense. When prompted to look back at a word and utilize the decoding strategies, she usually determined the unknown word. Learning additional self-monitoring skills benefited her in multiple areas of reading. Throughout this study, Ariel persevered, despite frustration, she wanted to get better and remained determined. She pushed herself and accepted the obstacles as challenges to overcome.

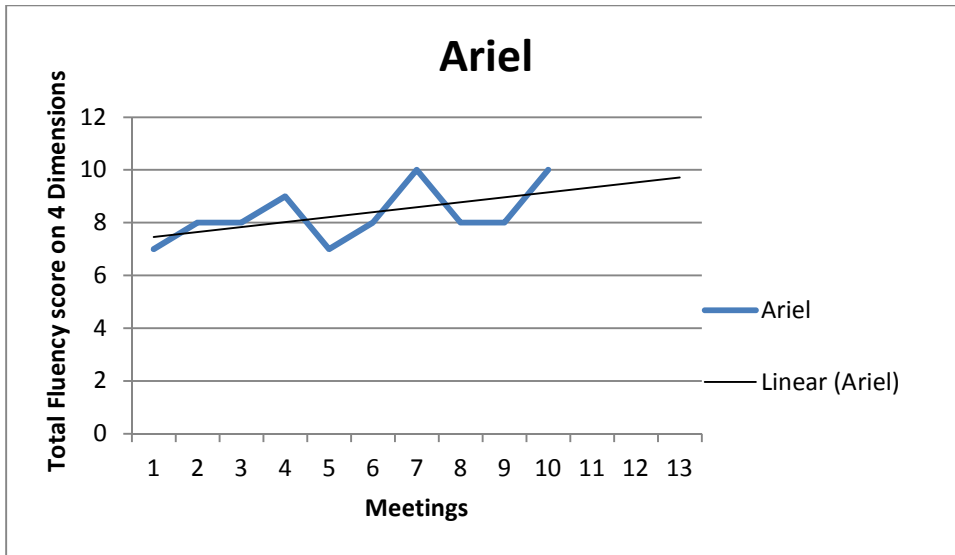


Figure 4. Graph third-grade student Ariel

Bobby. Bobby presented continuous growth throughout the fluency lessons. He was most consistent in the dimension of accuracy, starting with a relatively high score of the three in accuracy per the teacher’s score. He was a confident youngster who tends to score himself higher than the teacher. He grew in the fluency dimensions of rate, expression, and punctuation. He demonstrated that explicit instruction in the fluency dimensions assisted students in gaining increased awareness and applying their understandings to their reading.

Table 7

Bobby Third-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	3	1	2	2	8
M2	3	2	3	2	10
M3	3	2	3	3	11
M4	2	2	2	3	9
M5	2	1	2	2	7
M6	3	2	3	3	11
M7	2	2	2	2	8
M8	3	2	2	2	9
M9	2	3	3	3	11
M10	3	3	3	3	12

Note: Scored by Teacher

Bobby wanted to succeed as a fluent reader; he spoke about how sometimes he noticed that he read like a robot. At times during the lesson, Bobby only focused on the targeted dimension and the integration of multiple dimensions challenged him. He often relied on self-prompting to remember the other dimensions and keep them in mind when he completed recordings. I noticed towards the end of the research that Bobby prompted himself by whispering reminders. I heard him say, “A good reader reads, not too fast, not too slow”. Bobby implemented other strategies without being prompted; he used highlighter tape from our basket to emphasize quotation marks in the story, *The Hare and the Tortoise*, retold by Linda B. Ross.

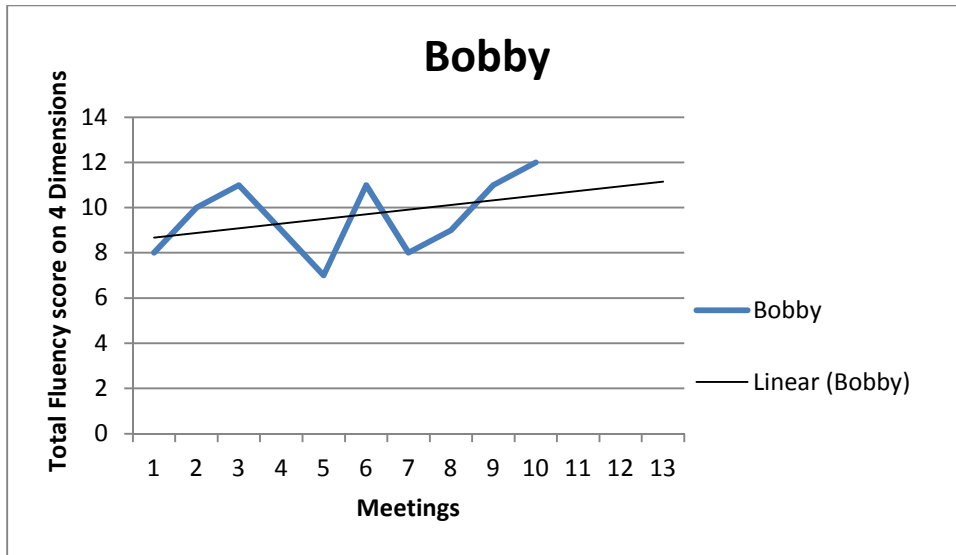


Figure 5. Graph third-grade student Bobby

Beyond the timeline of the research, Bobby internalized and utilized the strategies and tools from explicit teaching of fluency dimensions. He shared his new knowledge with his classroom teacher.

Bobby: First I did not like know a bunch of words and where a sentence ends. So then I wasn't paying attention for the punctuation marks. So then I read everything continuously without stopping.

Teacher: Mmmm. So before you learned about fluency, you read everything continuously and never payed attention to punctuation marks. Wow! That's like a huge change. I'm so impressed that you realized that you learned that. And that like you internalized that and you're applying that in other places.

Anthony. Anthony responded well to the lessons. As we progressed, Anthony gained a greater understanding of the individual fluency dimensions and attended more to how he assessed his self. His score grew about one point between his initial recording to his final recording in the areas of rate, expression, and punctuation as determined by the teacher scores. There was less consistency in his accuracy scores. He read several texts

with perfect accuracy of four but generally fluctuated from twos to threes. For Anthony, no correlation appeared between perfect accuracy and increased performance in the other fluency dimensions.

Table 8

Anthony Third-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	3	1	1	1	6
M2	2	1	1	1	5
M3	3	1	1	1	6
M4	4	1	1	1	7
M5	3	1	2	2	8
M6	3	1	1	1	6
M7	4	2	2	2	10
M8	4	1	1	1	7
M9	2	2	2	2	8
M10	3	2	2	2	9

Note: Scored by Teacher

Anthony grappled to solve unknown words. Anthony continued to persevere with using the fluency dimensions, whether he knew the word or not. He retained the meanings of the fluency dimensions as we progressed through the lessons. Often, he prompted other members of the group with the definition of the individual dimensions. Anthony demonstrated a strong understanding of what the individual dimensions meant, however at times, he struggled to attend to all the dimensions while reading.

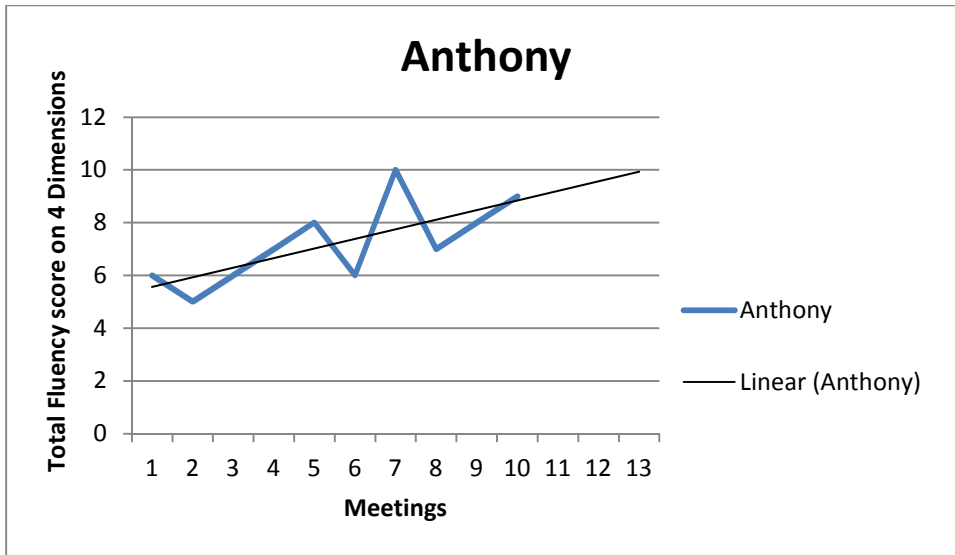


Figure 6. Graph third-grade student Anthony

Miguel. As we progressed through the lessons, Miguel gained a greater understanding of what it meant to demonstrate the individual fluency dimensions. This directly affected his ability to self-assess as he gained a greater understanding of what the dimensions entailed. He developed a sensitivity and awareness of his growth; in fact at times, he even graded himself lower than the teacher score. While his growth was not overt numerically, his gains with regards to understanding what each dimension detailed, showed in explanations and sharing during the lessons.

Table 9

Miguel Fifth-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	1	1	2	2	6
M2	1	2	2	2	7
M3	1	2	2	2	7
M4	2	2	3	2	9
M5	2	2	2	2	8
M6	2	2	3	3	10
M7	2	3	2	2	9
M8	3	3	3	3	12
M9	2	2	2	3	9
M10	2	2	2	2	8
M11	2	3	2	2	9
M12	1	2	2	2	7

Note: Scored by Teacher

Miguel gravitated to the concrete understanding of attending to punctuation. He demonstrated an awareness of the function of the punctuation marks, but at times labored with understanding dialogue. Miguel also struggled more with the genre of nonfiction, as he seemed to interpret nonfiction as not requiring expression. I noticed that he often read facts from the text in a very blunt way. Miguel succeeded with the fiction genre as he appeared to be able to embody the characters and represented them in his oral reading. Miguel proudly displayed his learning and enjoyed the fact that his opinion of his work mattered. This was evident when asked, “Did you like doing the rubric on the iPad?”

Miguel replied:

Oh yeah, I like it was something that, like it was not just how the teacher felt, It was like how I felt, like how I was reading too . . . Like when I first came to, like when I first started reading, it was like really hard for me to read and stuff. But

now . . . but now like if we have to read in social studies I read like good and stuff. I'm not scared to read out loud. I know my reading, like I know my reading is good. I read out loud to everybody I won't like stop and I don't need help.

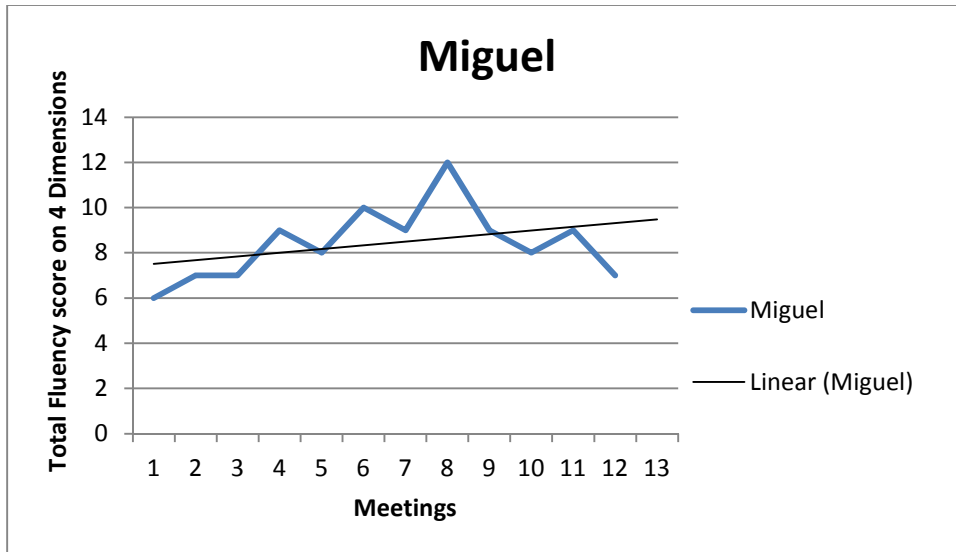


Figure 7. Graph fifth-grade student Miguel

Carol. Carol encountered emotional obstacles regarding her fluency development, which her rubric scores reflected. Carol was a very shy and quiet girl; she really struggled with seeing her growth and acknowledging the gains that she achieved. She made gains across most of the dimensions; emotionally, this impacted her positively. Her knowledge and understanding of what fluency meant expanded. She set goals and met these goals, which positively impacted her view of herself as a reader.

Table 10

Carol Fifth-Grade Student

Meeting	Accuracy	Rate	Expression	Punctuation	Total
M1	2	2	1	1	6
M2	3	2	1	1	7
M3	3	2	1	1	7
M4	3	2	1	1	7
M5	3	2	1	1	7
M6	3	2	2	1	8
M7	3	2	1	1	7
M8	3	2	2	2	9
M9	4	3	3	2	12
M10	3	2	1	1	7
M11	3	3	2	2	10

Note: Scored by Teacher

Carol had a very soft-spoken voice, which made it challenging to hear her. I noticed by having her create recordings, then listen to the recording; she naturally developed an increased awareness of how her volume impacted her learning. On more than one occasion, Carol re-recorded a reading because she could not hear herself reading on the recording. It was interesting to see Carol process how she sounds to others around her. Carol demonstrated the greatest gains when we reviewed expectations during individual conferences. Carol reflected, set goals and worked to achieve them after the time we spent in conferences. I thought that the enthusiasm from our conferences was short-lived. It surprised me that when we defined goals for the next reading cycle, Carol selected reading with more expression as a goal. I felt that the explicit teaching of fluency dimensions resulted in an increased awareness about the importance of reading fluency for Carol.

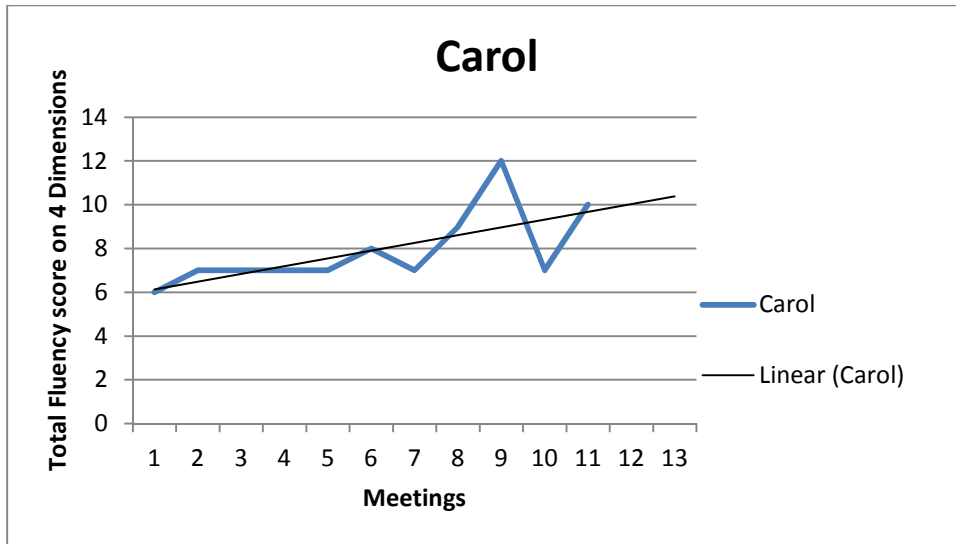


Figure 8. Graph fifth-grade student Carol

Summary of Data Analysis

After reviewing the collected data the cohort of students in grades second, third, and fifth receiving Response to Intervention services taught the four dimension of fluency explicitly over at least eight lessons demonstrated an average increase in accuracy of + 0.4, an increase of + 0.6 in rate, an increase of + 0.6 in expression and an increase of + 0.6 in punctuation.

When examining fluency growth across all four dimensions, the most consistent and rapid acquisition of the fluency dimensions occurred with the second-grade students. By comparison, the third and fifth-grade students showed inconsistent and irregular growth but overall positive development. Anecdotes from notes, observations, summary discussions, and transcripts reflected a positive change in how they viewed themselves as readers.

Table 11

Total Score per Meeting All Students

Meeting	Britney	Aristotle	Quincy	Ariel	Bobby	Anthony	Miguel	Carol
M1	4	5	4	7	8	6	6	6
M2	4	4	5	8	10	5	7	7
M3	5	5	7	8	11	6	7	7
M4	6	5	8	9	9	7	9	7
M5	8	6	7	7	7	8	8	7
M6	8	9	5	8	11	6	10	8
M7	12	9	5	10	8	10	9	7
M8	11	11	5	8	9	7	12	9
M9		10	9	8	11	8	9	12
M10			8	10	12	9	8	7
M11			5				9	10
M12			6				7	
M13			10					

The students’ perception of themselves as fluent readers changed as a result of their listening and reflecting upon their audio recordings. I observed their reactions, in addition they shared statements and blurted out comments. “I can’t believe I sound like that!” and “Why do I keep saying that wrong?” I noted these types of observations from every group in the cohort.

Some students, such as Quincy, deleted a recording and re-recorded it because he when he assessed his reading, it bothered him. He knew that he could do better and simply refused to allow that recording to stay in the audio file for me to hear. Quincy’s cognizance and concern for how he performed, illustrated a major shift in his attitude.

I learned from reviewing my notes that Britney and Aristotle, second-grade students, approached the new learning experiences without fear or preconceived notions. Some of the older students found this style of learning more challenging. As an example, Miguel only saw quotation marks as something you used to cite evidence.

Comparatively, Britney and Aristotle welcomed the idea to change their voices and sound silly. The malleability and risk taking was a more prevalent variable than I imagined it would be. All of the students made gains in their understandings and applications of the fluency dimensions we learned and practiced. The younger students embraced the experience which helped them grow as readers. The students found success in fluency tasks, received ongoing positive reinforcement and evaluated their learning. This demonstrated the power of Bandura's Social Cognitive theory and resulted in increased student self-efficacy.

Pikulski and Chard (2005), stated that fluency provided a bridge from decoding to reading comprehension. In order for students to benefit from the correlation between fluency and reading comprehension, fluency needed to be taught and become as automatic as decoding. The data demonstrated that the use of instruction in explicit fluency dimensions held promise for fluency instruction as a whole.

My notes, thoughts, and findings illuminated the need for fluency instruction. The students demonstrated a greater understanding of fluency in their discussions. While the vocal recordings did not always validate the application of these understandings, the language and conversation about the dimensions became significantly more robust. It also brought to light that younger students benefited from this learning and its relationship to other areas of literacy. The process of assimilating these fluency dimensions into the students' existing schema challenged me more than I anticipated. I believe if the dimensions were explicitly taught to students as early as kindergarten, the increased awareness would benefit the students throughout their literacy development.

The impact of early intervention in conjunction with the explicit teaching of these dimensions showed promise of an avenue that needs further investigation.

Chapter 5

Summary, Conclusion, Limitations, and Implications for the Field

Summary

As a result of the research, I discovered that students exhibited growth in the four dimensions of fluency when they received explicit instruction in the areas of accuracy, rate, expression, and punctuation. I taught each student a minimum of eight lessons to address the question: What happened when I taught the specific fluency dimensions punctuation, expression, rate, and accuracy to students that read below grade level? The students gained a new perspective of the various components of what fluency meant. The analysis of the data showed emerging themes of self-awareness, engagement, success, accomplishment, self-efficacy and a connection to classroom applications. In order to further analyze this data, I assigned numerical values to the rubrics completed by both the students and myself. Number values facilitated the research exploration, not for the purpose of quantitative analysis. The study participants exhibited an increase in their scores from their initial recording to their final recording. The summed score of the four fluency dimensions indicated improvement over the duration of the meetings. The trend for all the participants showed movement towards greater fluency as measured by the rubric on each dimension. The results indicated the instruction of specific fluency dimensions positively impacted not only fluency but also the students' self-efficacy.

The instruction improved students' understanding of fluency as indicated throughout the multiple data sources. They transferred these understandings into their oral reading exhibited during our small group time. The results indicated growth in the four dimensions of fluency, however, continued student development in reading fluency

required additional instruction. The positive feedback, in regards to both the student scores and the overall student enjoyment, demonstrated that this methodology for teaching these dimensions increased fluency, at least for the short time period measured in this study.

The observations from this research demonstrated that students responded very positively to the instruction as well as enjoyed the use of technology. The student self-assessment component increased their self-awareness of their own growth. While students initially struggled to critique their fluency, they overcame this obstacle. The obstacles proved beneficial, as all of the students felt successful and accomplished by overcoming the obstacles which helped improve their self-efficacy. Students experienced empowerment by being their own evaluators which increased engagement and honed students' ability to critique their own work, inside and outside of our small group.

In order to support growth, students needed additional time to gain a greater understanding of how to critique fluency and score it appropriately. Additionally, in subsequent lessons, I reviewed prior dimensions as well as taught additional dimensions to increase students' overall fluency in their literacy development.

Conclusions

The study benefited students because it assisted them in developing their fluency skills, an area not targeted for remediation. This study challenged the perception that fluency is a byproduct of a good reader. The study demonstrated that fluency contained teachable components and explicit instruction in these individual dimensions assisted students in becoming more aware readers. The research encompassed the use of

academic vocabulary, student reflection, repeated review, and autonomous learning, which this research propelled forward to push beyond outdated views.

Utilizing student rubrics and recordings empowered self-reflection in the learners and gave them autonomy. It encouraged students to constantly think about ways in which they could grow. This prompted the students to reflect more often. The students responded well to the gradual release model and felt supported during the lessons. The students' forum provided opportunities to discuss what dimension of fluency they wanted to improve and set specific goals. The impact of this research is not restricted to the growth demonstrated in the rubrics. Most importantly, it influenced the learners' emotional view of oneself as a reader.

Limitations

The forty-five minute pull-out time and the duration of time available limited the study. The study occurred in a separate room where students received Response to Intervention services, not the general education classroom environment. This environment eliminated the opportunity for the integration of targeted fluency dimensions during the students ninety-minute reading block with the classroom teacher. At the school administrative level, the principal deferred permission, and sent my request through different channels; this limited the length of time for conducting the study. Additional obstacles such as student absences and holiday breaks, affected the review and follow-up of lessons.

In the scope of this study, the population included only Response to Intervention students, which excluded students not receiving intervention services. One could argue since the students used in the study read below grade level, greater opportunity existed

for growth and improvement, and in the general population this instruction may not result in as much productive growth.

The accessible cohort limited the eligible candidates. The sample size was significantly lower than the average classroom, as only eight students provided permission to participate in the study. Being the Response to Intervention provider meant I serviced only assigned grades, thus, only students in second, third, and fifth grades participated. This meant that a specific grade level was not targeted. A specific grade would be targeted if the study took place in a general education classroom with students from a variety of skill ranges. The classroom setting provides more time to address each dimension and expands the instruction to overlap into content areas.

Implication for the Field

In examining the data and limitations of this study, there were matters that needed additional exploration. The amount of time and quantity of lessons received by the students required additional investigation. Teachers should consider increased number of lessons students' receive in order to provide greater exposure to the fluency dimensions. Teachers in their own classrooms could examine if increased length of instruction correlated with continued growth in these dimensions. Using the parameters from the study, the teacher could distill down if age and grade level altered the results. Using this approach in the classroom expands the targeted group to include students in the general population reading at or above grade level. In the general education classroom, students' exposure to more dimensions, over a longer period of time, provides opportunities for expanded and varied data collection. The classroom literacy expectations expanded to include these fluency dimensions and potentially integrated across content areas.

In implementing this research in the field, keep in mind that students struggled with completing the student rubric; however, this prompted students to reflect and alerted them of their progress. In the process of reflecting, students gained a greater understanding of expectations, which lead to more ownership and self-awareness. This helped students set goals and monitor their progress throughout their literacy development utilizing these fluency dimensions. With an increased amount of available time and lessons, more fluency dimensions could be explicitly taught and explored. This research utilized instructional level text per the individual student's reading level. In the classroom, the use of texts containing various reading levels needs exploration to determine the effect on the students' fluency and literacy development.

In conclusion, the study showed integrating explicit fluency instruction utilizing the dimensions of punctuation, expression, rate, and accuracy for students who read below grade level provided improvements in the given dimensions. This study suggested that if teachers provided students with explicit instruction in the individual fluency dimensions utilizing a gradual release model and student self-reflection, growth occurred in the dimensions. Utilizing fluency and its individual dimensions provides teachers another opportunity to help the learner's literacy development. Potentially fluency and its dimensions connect and link the different facets of literacy development.

References

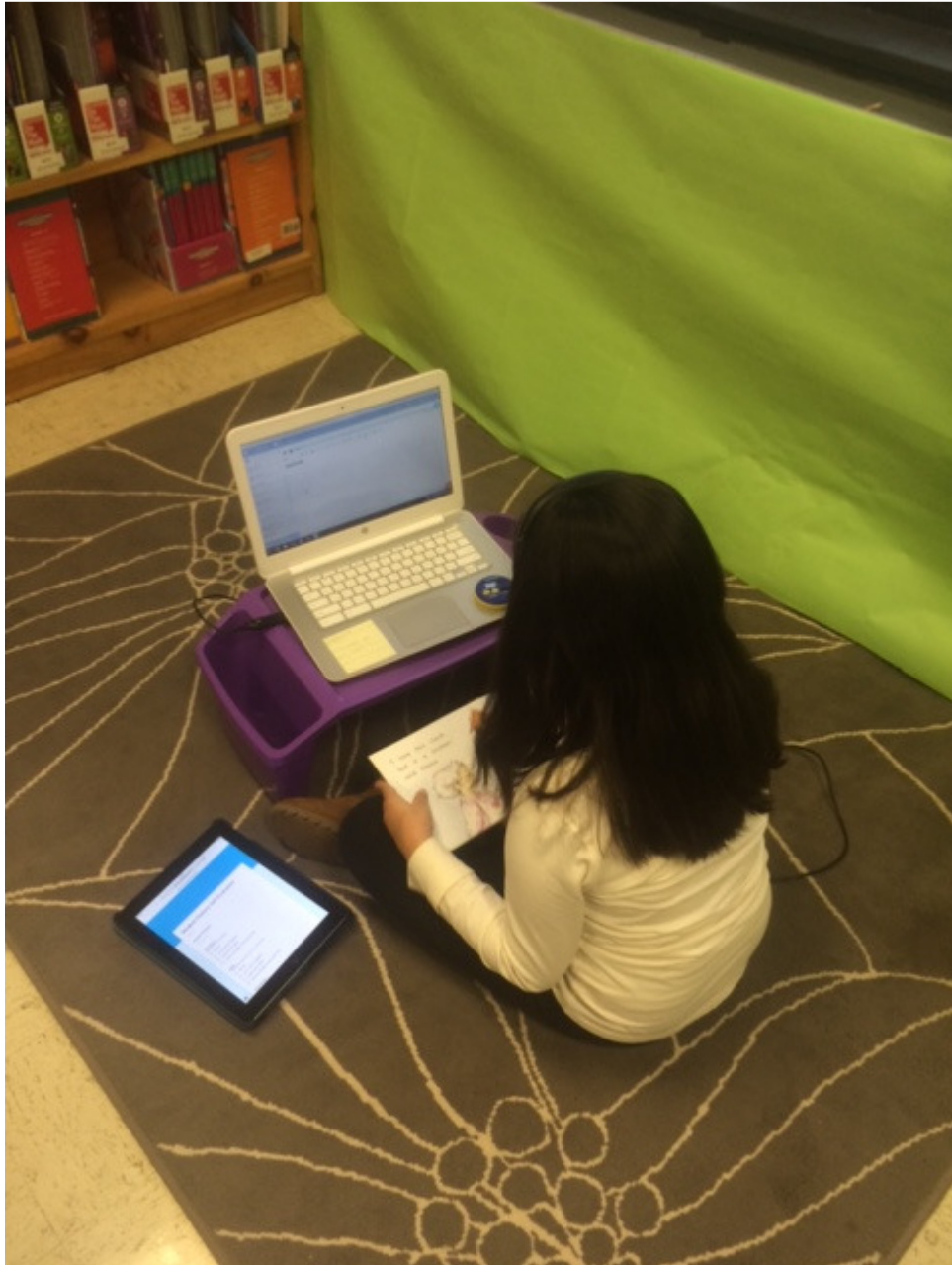
- Allington, R. L. (2009). *What Really Matters in Fluency: Research Based Practices Across the Curriculum*. New York: Pearson Education
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-287.
- Carver, R. P., & Hoffman, J. V. (1981). The effect of practice through repeated reading on gain in reading ability using a computer-based instructional system. *Reading Research Quarterly*, 16(3), 374-390.
- Chomsky, C. (1976). After decoding: What? *Language Arts*, 53(3), 288–314.
- Cochran-Smith, M., & Lytle, S. L. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York: Teachers College Press.
- Coulter, G., & Lambert, M. C. (2015). Strategic key word instruction: increasing fluency in connected expository text. *Reading Improvement*, 52(4), 133-141.
- Fountas, I. C., Pinnell, G. S., & Heinemann (Firm). (2009). *Fountas & Pinnell leveled literacy intervention*.
- Griffith, L. W. & Rasinski, T. V. (2004). A focus on fluency: How one teacher incorporated fluency with her reading curriculum. *The Reading Teacher*, 58: 126–137.
- Kamil, M. L. (2008). How to get recreational reading to increase reading ability. In *57th Yearbook of the National Reading Conference*. (pp. 31-40). Oak Creek, Wisconsin: National Reading Conference, Inc.
- LaBerge, D. & Samuels, S. A. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6, 293-323.

- Moll L.C. & Diaz, S. (1985) Ethnographic pedagogy: Promoting effective bilingual instruction. In E. Garcia & R.V. Padilla (Eds.), *Advances in bilingual education research* (pp. 127-149). Tucson, AZ: University of Arizona Press.
- National Center for Education Statistics.(2015). *The Nation's Report Card: Reading 2015*. National Center for Education Statistics, Institute of Educational Sciences, U S Department of Education, Washington, D C
- National Reading Panel (2000).Teaching children to read: An evidence based assessment of the scientific research literature on reading and its implications for reading instruction. Washington, DC: National Institute of Child Health and Human Development
- Noltemeyer, A., Joseph, L., & Watson, M. (2014).Improving reading prosody and oral retell fluency: A comparison of three intervention approaches. *Reading Improvement*,51(2), 221-232.
- O'Shea, L. J., Sindelar, P. T., & O'Shea, D. J. (1987). The effects of repeated readings and attentional cues on the reading fluency and comprehension of learning disabled readers. *Learning Disabilities Research*, 2, 103-109.
- Pikulski, J. J. and Chard, D. J. (2005), Fluency: Bridge between decoding and reading comprehension. *The Reading Teacher*, 58: 510–519.
- Pinnell, G.S., Pikulski, J.J., Wixson, K.K., Campbell, J.R., Gough, P.B. & Beatty, A.S. (1995).*Listening to children read aloud*. Washington, D.C.: National Center for Educational Statistics, Office of Educational Research and Improvement, U.S. Department of Education.
- Rashotte, C. A., & Torgesen, J. K. (1985). Repeated reading and reading fluency in learning disabled children. *Reading Research Quarterly*, 20, 180-188.
- Rasinski, T. V., & Padak, N. (2001). *From phonics to fluency: Effective teaching of decoding and reading fluency in the elementary school*. New York: Longman.

- Rasinski, T. V., Padak, N. D., McKeon, C. A., Wilfong, L. G., Friedauer, J. A., & Heim, P.. (2005). Is reading fluency a key for successful high school reading? *Journal of Adolescent & Adult Literacy*, 49(1), 22–27.
- Reutzel, D. R., & Juth, S. (2014). Supporting the development of silent reading fluency: An evidence-based framework for the intermediate grades (3-6). *International Electronic Journal of Elementary Education*, 7(1), 27-46.
- Saldana, J. (2013). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications.
- Shagoury, R., & Power, B. M. (2012). *Living the questions: A guide for teacher-researchers*. Portland, Me.: Stenhouse.
- Strickland, W. D., Boon, R. T. & Spencer, V. G. (2013). The effects of repeated reading on the fluency and comprehension skills of elementary-age students with learning disabilities (LD), 2001-2011: A review of research and practice. *Learning Disabilities: A Contemporary Journal*, 11(1), 1-33.
- Therrien, W. J. (2004). Fluency and comprehension gains as a result of repeated reading: A meta-analysis. *Remedial and Special Education*, 25(4), 252-261.

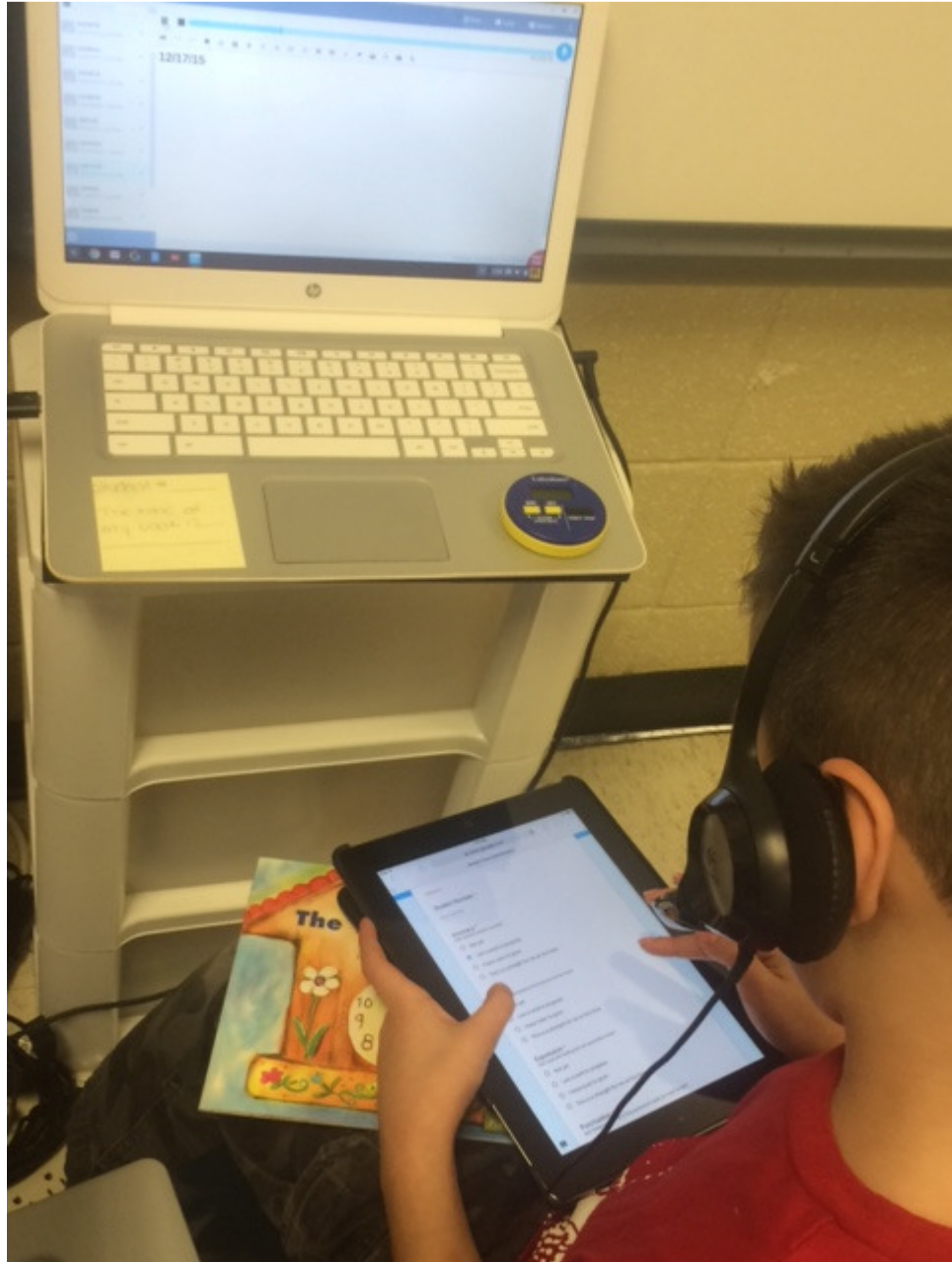
Appendix A

Research Environment 1



Appendix B

Research Environment 2



Appendix C

Rubric in Google Forms

Student Fluency Self-Evaluation

* Required

Student Number *

Your answer

Accuracy *
Did I read the words correctly?

Not yet

I am a work in progress

I have room to grow

This is a strength for me at this time

Rate *
Did I read the words not too fast, but not too slow?

Not yet

I am a work in progress

I have room to grow

This is a strength for me at this time

Expression *
Did I read with feeling and not sound like a robot?

Not yet

I am a work in progress

I have room to grow

This is a strength for me at this time

Punctuation *
Did I follow most or all of the punctuation marks as I read the text?

Not yet

I am a work in progress

I have room to grow

This is a strength for me at this time

What will your fluency focus be?

Accuracy

Rate

Expression

Punctuation

How will you work on your fluency focus?

Your answer

Never submit passwords through Google Forms.