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An investigation of how self-assessment impacts oral reading fluency

Lisle Duffey

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**AN INVESTIGATION OF HOW SELF-ASSESSMENT
IMPACTS ORAL READING FLUENCY**

by

Lisle Ann Duffey

A Thesis

Submitted to the
Department of Language, Literacy, and Special 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: Marjorie Madden, Ph.

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Abstract

Lisle Ann Duffey
AN INVESTIGATION OF HOW SELF-ASSESSMENT
IMPACTS ORAL READING FLUENCY
2014

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Master of Arts in Reading Education

The purpose of this study was to consider the impact of using rubrics to self-assess fluency on first graders. Qualitative sources of data included a teacher research journal with observation notes and reflections, audio recordings of students reading, and informal group interview responses. Numerical data included initial and final words correct per minute scores for each week, as well as initial and final phrasing and expression rubric scores for each week. The data was triangulated and analyzed to identify trends and draw conclusions. The findings suggested that the use of fluency rubrics for self-assessment and the use of ipads for voice-recording were both motivating for students. The data also indicated that students showed fluency growth over the course of the four weeks of the study, especially in regards to expression. The self-assessment process and personal goal setting helped the students to be more aware of their fluency and know specifically what they needed to work on as they practiced reading independently.

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Chapter 1

Scope of the Study

Introduction

As I conferenced with one of my most struggling readers about his fluency, a turning point occurred, that moment when I realized that I was really onto something! Ty has just moved into a guided reading level D. He receives LLI services daily and his mom is working with him every night. Despite many interventions, Ty's comprehension is weak. He had recorded himself reading the book, *Little Meanie's Lunch*, about a monster whose mom is offering him lots of foods that monsters would like. At the end she asks him what he really wants and he says, "a peanut butter sandwich". As we listened to Ty's reading, he said he thought he scored a one for expression on the rubric. "Why?" I asked. "Because it just sounds boring." I called his attention to the question mark at the end of a sentence. "What is this? What does it tell us? How do you think Little Meanie's mom said that sentence?" Ty said, "Her voice would go up at the end, like she's asking something." "Can you try it?" I asked. Ty reread the whole page and arrived at the sentence, "A peanut butter sandwich?" A wide smile spread across his face. "What is it?" I asked. "His mom thinks a peanut butter sandwich is disgusting!!!!" "You're right," I said, "How do you know?" Ty replied, "Because, she said a peanut butter sandwich? Like she can't believe he really wants to eat that. Like she thinks it's disgusting!"

I realized that Ty had not really understood the big idea of the text until that moment! Little Meanie was different from other monsters. He didn't like the food they

liked, he liked people food, and his mom just couldn't believe it. I made an assumption that Ty understood, but his fluency was holding him back. When he self-corrected and read with appropriate expression, the meaning became crystal clear to him.

This experience affirmed the value of my research study. Fluency impacts comprehension and thus is worthy of explicit instruction and assessment in our classrooms. Previously, my students misunderstood what fluent reading sounds like. They thought that reading fast meant reading fluently. Finding authentic ways to teach and assess all aspects of fluency and allowing students to take ownership of their own fluency development may have positive results.

Purpose

The specific aims of the study are to look at phrasing and expression rubric scores in combination with words correct per minute data to drive fluency instruction and determine student fluency growth over time. I also hope to identify possible motivational benefits of students listening to their own reading via voice recording technology and self-assessing fluency.

The theory of automatic information processing (LaBerge & Samuels, 1974) and the model of repeated reading (Samuels, 1979) set a framework for much of the fluency instruction and assessments that take place in many schools. The premise of the theory is that a reader's mind must use attention, visual memory, phonological memory, episodic memory (background knowledge), and semantic memory to process text. Although a person's mind can perform multiple tasks at one time, there is a limited capacity of cognitive energy. If too much of a reader's attention is focused on visual and

phonological cues, they have less attention to give to comprehension. Struggling readers must switch their attention back and forth between the two, decoding and comprehension. Automaticity implies that the reader is not dedicating too much of his brainpower to decoding, thus allowing more attention for creating meaning from the text. Therefore, fluent readers will have improved comprehension.

Although many schools use one-minute fluency assessments, these words correct per minute measures focus on rate and accuracy, but neglect reading prosody. Hudson, Lane, and Pullen (2005) suggest that there is a need for a wider range of assessments that include all aspects of fluency: rate, accuracy, and prosody. Teachers can observe their students reading and rate their prosody using scales, such as the National Assessment of Educational Progress Oral Reading Fluency Scale (Deeney, 2010) or the Multidimensional Fluency Scale (Zutell & Rasinski, 1991). By assessing all aspects of fluency, the teacher can identify the underlying cause of the dysfluent reading and determine the most effective intervention strategies (Murray, Munger, & Clonan, 2012).

Several other studies considered the use of multiple measures for the various aspects of fluency. Valencia, Smith, Reece, Li, Wixson, and Newman (2010) discuss the need to keep comprehension as a primary goal of fluency: “Comparing various models for assessing oral reading fluency, we found that a model composed of separate measures of rate, accuracy, and prosody accounted for a statistically significant increase in variance in comprehension scores across all grades compared with a single measure of wcpm.” (p. 285) Kuhn, Schwanenflugel, and Meisinger (2010) agree and state, “It is critical that we establish assessments, and instruction, that assist learners in becoming truly fluency readers rather than just fast ones.” (p. 246)

Many researchers have looked at how technology can be used to enhance fluency instruction. Vasinda and McLeod (2011) used repeated readings to rehearse readers theatre. Recording the student's voices allowed them to edit their fluency errors and share their reading performances with a wider audience, increasing motivation. Mitchell, Reardon, and Stacy (2011) used audio recordings to allow their students to listen to and analyze their reading of jokes. They found that this methodology resulted in increased prosody in their students. Montgomerie, Little, and Akin-Little (2014) implemented video self-monitoring as a fluency intervention. Students videos were edited to provide models of fluent, expressive reading. Repeatedly listening to their own fluent resulted in improved reading fluency.

Although rating scales have been used for teachers to assess all aspects of fluency, little research was found about the use of rubrics by students to self-assess. This will be the focus of this study. Based on the benefits of technology use that previous researchers have revealed, voice-recording technology will be used to allow students to listen back and self-assess their phrasing and expression.

Statement of the Research Question

This research study will consider: What happens when first graders use rubrics to self-assess themselves as fluent readers? Other considerations include: What information will self-assessment with rubrics provide to guide fluency instruction? Will self-assessment raise student's awareness of phrasing and expression and in turn improve their fluency? Will self-assessment of fluency and voice recording technology increase student motivation to read?

Story of the Question

Over the course of my career, I have seen many changes in literacy instruction. When I first started as a first grade teacher, my district used a whole language curriculum. Over time, the transition was made to a balanced literacy approach. When the National Reading Panel suggested the inclusion of phonemic awareness instruction in all schools, our curriculum was adjusted to increase the amount of time spent on phonemic awareness. Fluency was considered, but never made an instructional priority. I have always discussed components of fluency; phrasing, expression, punctuation, and rate with my students, but can't say that I dedicate as much time to it as I should. I use Reader's Theatre on occasion, but can't find the time to incorporate it as frequently as I would like.

Last year, our reading specialist proposed a need for increased fluency instruction in all of our classrooms. No instructional plan was established, but we were told that we should complete one-minute fluency assessments weekly to track student's reading rate. At the time, my colleagues and I followed those expectations. Soon, we were told that these fluency scores would be shared with parents and used as an indicator of need for remedial literacy instruction. Our students and their parents inferred the message that we were sending, loud and clear. They needed to read faster. This was a turning point for me. I didn't want to defy what was being asked of me as a professional, yet I was frustrated by the unclear message that we were sending to students. They thought that speed equaled fluency. They thought that reading fast was a priority. They didn't understand what fluency really meant.

I made a decision to investigate and implement new strategies in my classroom to improve fluency instruction. I did some research and some reflecting. I found some rubrics that could be used to assess all components of fluency. In my small guided reading groups, I began to explicitly teach each aspect of fluent reading by modeling and gradually releasing responsibility. On our CAFÉ menu, we added specific fluency strategies that had been learned as a constant reminder to use them during independent reading. After a group of students had worked on a component of fluency, I used the appropriate rubric to assess and provide feedback to them. I began to see some improvement in their understanding of what fluency is and how to work toward becoming fluent readers.

Over the summer, as I worked on my theory paper about S. J. Samuels, I read a vast amount of material about fluency instruction and assessment. I realized for the coming year that I wanted to develop a more systematic approach to fluency instruction and assessment. Based on the work I had done the previous year, I knew the fluency rubrics were a good starting point to head in the right direction. I thought about how effective self-assessment had been in other areas of classroom instruction. My students were self-assessing their effort, partner work, and writing tasks. This was having a motivational impact on their academic performance. I realized that self-assessment with the fluency rubrics might be the missing piece that I had been looking for to move instruction to the next level.

Pair this idea with the initiative in my district to incorporate technology into instruction in meaningful ways and my research idea was born. If I could use technology

to record my students' voices, they would be able to listen back to their reading and self-assess their fluency using the rubrics.

Organization of the Thesis

Chapter two of the thesis will review and analyze the literature of previous researchers who have studied fluency instruction and self-assessment. Chapter three discusses the research design and methodology used for the study. The data sources will also be described. In chapter four the data will be analyzed and the research findings will be shared. Chapter five, the final chapter, will include implications for classroom instruction and limitations for the research study.

Chapter 2

The Literature Review

“If readers read quickly and accurately but with no expression in their voices, if they place equal emphasis on every word and have no sense of phrasing, and if they ignore most punctuation, blowing through periods and other markers that indicate pauses, then it is unlikely that they will fully understand the text.” (Rasinski, 2004)

Introduction

Through an in depth review of literature and meta-analysis, it has been established that the use of the repeated reading model has a positive impact on student’s oral reading fluency. Furthermore, research suggests that multiple assessment measures positively impact oral reading fluency by providing valuable information that can guide instruction. Self-assessment and the use of technology are two components of promoting reading motivation as outlined by Gambrell (1996). This chapter focuses on current literature and research that supports and examines fluency and self-assessment.

The first section of this chapter will discuss the theory of automatic information processing. It defines this theory and its impact on fluency instruction. The second portion of this chapter explains the model developed to support the theory, repeated reading. Section three describes other instructional methods that have been proven over time to effectively improve fluency. Section four describes how technology can be used to enhance existing fluency instruction practices. The fifth section shifts to current research about fluency assessment. Elements of high-quality fluency assessments are outlined and alternate assessment tools are considered. The final section of this chapter looks at reading motivation. Self-assessment is established as a viable option for improving student’s motivation to improve their oral reading fluency. Throughout the

literature review, an argument will be made for the benefit of further research in the area of fluency self-assessment.

Theory of Automatic Information Processing

The theory of automatic information processing (LaBerge & Samuels, 1974) sets a framework for much of the fluency instruction and assessments that take place in many schools. The premise of the theory is that a reader's mind must use attention, visual memory, phonological memory, episodic memory (background knowledge), and semantic memory to process text. Although a person's mind can perform multiple tasks at one time, there is a limited capacity of cognitive energy. If too much of a reader's attention is focused on visual and phonological cues, they have less attention to give to comprehension. Struggling readers must switch their attention back and forth between the two, decoding and comprehension. Automaticity implies that the reader is not dedicating too much of his brainpower to decoding, thus allowing more attention for creating meaning from the text. Therefore, fluent readers will have improved comprehension (LaBerge and Samuels, 1974).

The theory of automatic information processing is the basis for making fluency instruction a priority in classrooms: Rasinski (2006) describes reading fluency as the ability to read the words in a text with sufficient accuracy, automaticity, and prosody to lead to good comprehension. By teaching students the value of automaticity, teachers can shift the focus from decoding to comprehension. The current study will consider how helping students to focus on all aspects of fluency can improve overall fluency and thus comprehension. The next section of this chapter will discuss the model of repeated reading that was developed to promote automatic information processing.

The Model of Repeated Reading

As an extension of their work, Samuels proposed a model to support the theory of automatic information processing in his piece, *The Method of Repeated Readings*, in 1979. He outlined a methodology that would change the face of classroom reading instruction and still plays a significant role in fluency instruction today. The procedure involves students rereading short, meaningful passages several times until they have reached an adequate level of fluency. The process is then repeated with a new passage. Samuels equated this methodology to that of an athlete. In order to master a skill, an athlete engages in repetitive practice until his speed and performance are satisfactory. Repeated readings are based on the same type of practice regime. Samuels measured fluency using reading rate and word recognition accuracy. Although the student's comprehension may not be strong on the first reading, it should improve with each additional rereading, as less attention is required for decoding. Samuels warns that this method is not an all-inclusive framework for reading instruction, rather it focuses primarily on fluency. Students require explicit phonemic awareness and phonics instruction in order to develop automaticity (Samuels, 1979).

Numerous researchers have gathered empirical data about the impact of repeated readings. Mitchell, Rearden, & Stacy (2011), Vasinda & McLeod (2011), Montgomerie, Little, & Akin-Little (2014), Mraz, Nichols, Caldwell, Beisley, Sargent, & Rupley (2013), Dowhower (1991), and Young & Rasinzki (2009) all looked at the impact of this practice in classrooms. They all agree that the model of repeated readings is a well-established methodology that has been tested time and time again. This will be a good starting point for the current study. Engaging students in the well-established practice of

repeated reading while simultaneously implementing a new methodology will ground the study. The next section of this chapter will discuss other methods for engaging students in fluency instruction.

Effective Methods for Teaching Fluency

Over time, other methodologies have been studied and deemed effective in improving oral reading fluency. Some of these strategies include: listening to models of fluent reading, paired repeated reading, echo reading and the use of Readers Theatre. Young and Rasinski (2009) and Mraz, Nichols, Caldwell, Beisley, Sargent, and Rupley (2013) both studied the impact of using Readers Theatre on students oral reading fluency. Both of these studies found that Readers Theatre provided students with a meaningful and engaging opportunity to practice repeated readings.

Rasinski (2003) discussed the value of performance reading. When using Readers Theatre, students are inclined to focus on their expression in an effort to entertain an audience. Ness (2009) considered another venue for performance reading. Students used joke books to practice repeated reading and then had an opportunity to perform their jokes for an audience, their classmates. Once again, she found that the performance component helped give students an authentic reason to focus on their prosody and positively impacted oral reading fluency. Based on these findings, the current study will consider aspects of performance reading. Students will be sharing their reading with an audience: the teacher, themselves, and eventually their classmates. The next section of this chapter will discuss how technology can enhance fluency instruction, especially performance reading.

The Use of Technology to Enhance Fluency Instruction

Many researchers have looked at how technology can be used to enhance fluency instruction. Vasinda and McLeod (2011) used repeated readings to rehearse Readers Theatre. Once rehearsed, the Readers Theatre was recorded and shared via podcasts. Recording the student's voices allowed them to depend on their voice to convey meaning, edit their fluency errors, and share their reading performances with a wider audience, increasing motivation.

Mitchell, Reardon, and Stacy (2011) used a similar approach. Audio recordings allowed the students to listen to their reading of jokes. Teacher modeling, rehearsal with repeated readings, and analysis of the audio recordings were used. They were able to self-assess their progress with reciting the jokes as they attempted to entertain their audience through comedy. They found that the technology not only enhanced instruction, but it also increased student motivation and resulted in increased prosody for their students. Hudson, Lane, and Pullen (2005) found the following:

Hearing one's own voice on audiotape can be an eye-opening experience. For struggling readers, having the opportunity to record, listen, and rerecord can be a powerful method for increasing reading fluency. This approach promotes independent judgment and goal setting, along with ownership of the process. (p. 711)

All of these studies provide evidence that the capability to listen back to one's own performance reading, through the use of technology, has a positive impact on student's prosody and overall fluency. The current study will consider how students can listen to their reading performance, self-assess their expression and phrasing, and set

personal goals to improve their fluency. The next section of this chapter will look at current research about fluency assessment.

Fluency Assessment

Although many schools use one-minute fluency assessments, these words correct per minute measures focus on rate and accuracy, but neglect reading prosody. Deeney (2010) cautions that they may be helpful in identifying at-risk students, but do not provide enough information to inform instructional decisions. One-minute fluency assessments may send unclear messages to students about what fluency is and why it is important. They may also neglect reader's fluency endurance, which is important for comprehension success.

Based on these shortcomings of one-minute fluency assessments, researchers have attempted to seek alternate measures that can provide valuable information to inform instruction. Hudson, Lane, and Pullen (2005) suggest that there is a need for a wider range of assessments that include all aspects of fluency: rate, accuracy, and prosody. By using assessments that account for all aspects of fluency, a clear message is sent to both teachers and students about the goal of fluency instruction.

Several studies have considered the use of multiple measures for the various aspects of fluency. Valencia, Smith, Reece, Li, Wixson, and Newman (2010) examined oral reading data and standardized comprehension test scores of second, third, and fourth graders. They discovered that using multiple measures of oral reading fluency provided a greater understanding of student's fluency needs and served as a better predictor of comprehension success. Kuhn, Schwanenflugel, and Meisinger (2010) state, "It is critical that we establish assessments, and instruction, that assist learners in becoming

truly fluent readers rather than just fast ones.” (p. 246). Pairing a comprehension component with fluency assessments can maintain the ultimate goal of comprehension. Looking closely at the types of miscues that students are making is also integral to determining further remediation needs. (Kuhn, Schwanenflugel, and Meisinger, 2010)

Based on a wide range of research (Deeney, 2010, Zutell & Rasinski, 1991, and Murray, Munger, & Clonan, 2012), the use of rubrics to assess all of these aspects is beneficial. Teachers can observe their students reading and score their rate, accuracy, and prosody using scales, such as the National Assessment of Educational Progress Oral Reading Fluency Scale (Deeney, 2010) or the Multidimensional Fluency Scale (Zutell & Rasinski, 1991). Benjamin, Schwanenflugel, Meisinger, Groff, Kuhn, and Steiner (2013) evaluated a new scale called the Comprehensive Oral Reading Fluency Scale (CORFS) for assessing children’s reading fluency. This scale looks closely at reading prosody features. This holistic approach enables teachers to assess aspects of fluency that cannot be represented numerically. The teacher can look at errors to identify the underlying cause of the dysfluent reading and determine the most effective intervention strategies (Murray, Munger, & Clonan, 2012).

Madden and Sullivan (2008) describe how rubrics can be used by students to evaluate their own fluency. After listening to or watching their own reading performance, they suggest using a list of characteristics that fluent readers possess. Students can rate themselves for each characteristic as they listen back to their reading. The current study will use multiple measures to consider all aspects of fluency. A words correct per minute measure will be used in combination with self-assessment rubrics to rate phrasing and expression. This decision was made based on the research that was

described in this section of the literature review. The final section of this chapter will discuss the impact of reading motivation theory on the current research study.

Fluency Motivation

In 2014, Guthrie and Wigfield suggest that: “reading motivation is the individual’s personal goals, values, and beliefs with regard to the topics, processes, and outcomes of reading. Under this rubric, we include motivational goals, intrinsic motivation, extrinsic motivation, self-efficacy, and social motivation” (p. 405). Gambrell (1996), a leading researcher in the field of reading motivation, identified familiarity with books as a motivational factor for young readers. In 2011, she discussed her seven rules of engagement. Several of these factors impact the current study and fluency motivation. She suggests two factors that go hand in hand, students having access to a wide range of reading materials and students having opportunities to choose what they read. These are all applicable to the current study. Students will choose familiar books from a wide range of books that they have been exposed to during small group instruction. Another factor of engagement that Gambrell (2011) recommends is giving students opportunities to socially interact with others about texts they are reading. Having the capability to share voice-recorded reading performances creates a social reading experience.

McMillan and Hearn (2009) discuss the use of student self-assessment and personal goal setting. They argue that self-assessment can promote intrinsic motivation and meaningful learning. Teachers must set clear learning targets so that students can evaluate their performance and make adjustments to improve future performances. Students feel empowered to take control of their own learning. This concept is the basis for the investigation about how the self-assessment process impacts the motivation of

first graders to improve their fluency. Students will have the opportunity to evaluate their oral reading performances, set personal goals, and make adjustments to improve their future reading performances.

Conclusion

As the review of available literature suggests, repeated reading and performance reading are effective methods for improving oral reading fluency. Self-assessment and the use of technology have a positive impact on student motivation. Currently, there has not been a significant amount of identifiable research in the field on implementing all of these methodologies simultaneously. Through a combination of repeated readings, voice-recording technology, and phrasing and expression rubrics for self-assessment; this study will look at student's fluency growth and their motivation to improve their own fluency. The research in this chapter provides theoretical references and empirical support. Chapter Three will outline the context as well as the research design and methodology of the study. Data sources and analysis will also be described.

Chapter 3

Research Design and Methodology

The framework of this study is qualitative teacher research. Qualitative research is typically conducted to answer questions that arise for teachers about instruction in their classrooms. Qualitative research techniques were appropriate for this study because it involved an inquiry about the impact of self-assessment on first grade students oral reading fluency. It was conducted in a natural classroom setting in which the students felt comfortable with the teacher and procedures. Numerical data was tracked over time to show wcpm and rubric scores.

Teacher research is unique in that the practitioner is taking on a dual role as both a teacher and a researcher. Being immersed in the classroom research process enables teachers to reflect on their own practice and make modifications to provide maximum benefits to their students. As the teacher researcher, I worked extensively with the individual student participants prior to the start of the study, a fact which allows for deeper understanding of their needs and gives insight into the reflection process.

Each week of the study, individual students selected a text one level below their instructional reading level. Since they are accustomed to self-selecting texts in the classroom, this was a logical way to choose texts for the study. Students learned early in the year how to choose books that are “just right” in terms of interest and readability. The decision was made to use books one level below their instructional level because the focus of the study is fluency. Students should not be laboring over the text or even focusing on using strategies during these fluency activities.

Every student recorded himself reading the same text two times throughout the week. Prior to the start of the study, the recording process was teacher-modeled using the Show Me application on the iPad. Students had an opportunity to practice using the voice-recording feature with close teacher guidance. Responsibility was gradually released until students were able to record their voice while reading independently. This was important since the recordings needed to happen during teacher led guided reading groups to minimize instructional time spent recording.

Once the first recordings for the week were finished, the teacher researcher conducted short individual conferences with each student. The student and teacher researcher listened back to the reading. The teacher assigned a words correct per minute score for each reading. The teacher asked the students if there was anything that they noticed about their fluency. Then, the students used a phrasing and an expression rubric to rate their reading fluency performance. Based on those scores, students set personal fluency goals. These goals were written on index cards and kept in their book boxes to be referred to during independent and partner-reading throughout the week. They continued to receive typical fluency instruction within their guided reading groups.

At the end of the week, students reread the same text and recorded their voices. Once again, the teacher conferenced with individual students. Words correct per minute scores were documented by the teacher. Students scored themselves using the phrasing and expression rubrics. During these post conferences, the teacher asked the students how their fluency improved from the first reading. They were asked if they thought they had reached their goals that they set. The teacher and students discussed how they had

practiced fluency during independent reading and what they might do the next week to work toward improved fluency.

This process was repeated for each of the four weeks of the study. At the conclusion of those four weeks, the students were interviewed in a small group to gain insight into their feelings about the self-assessment process and their motivation to improve fluency. Students were asked how they felt about using the fluency rubrics. They were also asked how they felt about listening to their own reading by using technology. Was this process helpful? Did it change how they felt about fluency? Conducting these interviews in a small group promoted a conversational tone which made participants feel comfortable and more willing to share honest feelings.

The teacher kept a research journal to record observations and reflections. This was used after conferences with individual students, during the conversational interviews, and as a place to reflect on teacher practice.

Data Sources

I implemented multiple qualitative research techniques to collect data for teacher research. In an effort to establish the relationship between self-assessment and fluency growth, I gathered observation notes throughout the study in a teacher research journal. Responses to student interview questions were used as another qualitative data source to determine how students were responding to the study and the influence that self-assessment was having on their motivation to improve fluency. The teacher research journal also includes a collection of reflections about observations and instructional

decisions. Numerical data was displayed in charts that tracked twice-weekly words correct per minute and fluency rubric scores.

Data Analysis

The data that was collected over the course of the study was used to draw conclusions about the impact of self-assessment on fluency progress and the relationship between self-assessment, technology use, and reading motivation. I hypothesized that listening to their own voice recordings and self-assessing those recordings would result in increased motivation and improved oral reading fluency. The data was analyzed in several ways. First, each week individual student's wcpm and rubric scores were compared to look for growth with repeated readings. Next, individual student's wcpm and rubric scores were compared over the course of the entire study to monitor fluency progress. The same data sources were evaluated to identify overall class trends. Reviewing observation notes and teacher reflections was a significant component of analyzing the qualitative data. I looked for patterns for individual students and whole class trends over time. The interview responses were used to determine the motivational impact of using self-assessment rubrics and voice recording technology.

Context of the Study

Setting – overview of the community. The Pine Hill neighborhood surrounding the Dr. Albert Bean School is in the suburban 08021 zip code, which is in the southwest region of New Jersey. Pine Hill has a total area of 3.9 miles and a population of 10, 233, according to the 2010 United States Census. The racial makeup of Pine Hill, includes: 67.47% White, 24.07% African American, 7% Hispanic, .26% Native American, 2.12%

Asian, .05% Pacific Islander, and 2.4% from other races. 30.2% of the households have children and 38.6% of the households consist of married couples. The average household size was 2.5 and the average family size was 3.1. The socioeconomic data shows that the median household income was \$53,236 and the median family income was \$71,789. About 11% of families and 13.8% of the population were below the poverty line. The district currently spends \$20,146 per pupil in expenditures.

Setting – overview of the school. The Dr. Albert Bean School is part of the Pine Hill Public School District in Camden County. It is a comprehensive pre-kindergarten through fifth grade school located in Pine Hill, New Jersey, United States. Sixty-two percent of the student population is eligible for free or reduced lunch. It is one of two elementary schools in the district, the other being the John H. Glenn School. Three hundred eighty seven students are currently enrolled at the Dr. Albert Bean School.

Setting – overview of the classroom. The classroom in which the study is taking place is a first grade, general education classroom. The class consists of 19 students, 11 girls and 8 boys. There are 11 white, 5 African American, and 3 Hispanic students. There are 15 participants included in the study. Four students are not participating due to lack of parental consent. These include: 1 white male, 1 African American female, 1 Hispanic female, and 1 African American male. All of the participants attended Kindergarten and all but 3 of the participants attended Pre-Kindergarten at the Dr. Albert Bean School.

Chapter four analyzes the data that was collected. Using a variety of sources to triangulate the data, trends are identified and conclusions are drawn. Numerical data presented in charts are included.

Chapter 4

Data Analysis and Findings

Introduction

As mentioned in previous chapters, this study looks at using rubrics to self-assess fluency. This chapter presents the analysis of the data and the findings. It is organized into sections based on recurrent themes found throughout the data. These themes include: student response to self-assessment, student response to technology, and impact on reading fluency. Chapter IV discusses conclusions that were drawn based on the data analysis.

Student Response to Self-Assessment

I began the study by having a conversation about ways that we self-assess ourselves every day in our classroom. We discussed our quick check-ins during Daily Five, the rubric we use to make sure we are working appropriately with partners or groups, rubric scores used to assess pieces during Writing Workshop, and our effort scores throughout the day. I explained that we would be using some new rubrics to score our fluency while reading. I told the students that they would learn how to record their voices on the ipad, so they could listen to their reading and assign scores for expression and phrasing. Since fluency instruction has been ongoing since the beginning of the school year, the terms fluency, phrasing, and expression were familiar to my students. I explained to the students that before beginning the voice-recordings, I would show them how to use both the ipad and the rubrics for this activity. I told the students that they would be setting personal fluency goals, much like we have done previously for math

facts and fix-up strategies during Guided Reading. I also asked the students why they thought we might be doing all of this. “How will this help us as readers?”

After this initial conversation, I recorded some parts of the conversation including student’s questions and comments in my teacher research journal. Caden knew, “We are going to do this to make our fluency better.” “You’re right,” I said, “Why do you think that’s important?” “So we sound better when we’re reading,” he responded. “What do you mean by better?” I asked. “Like more interesting,” Layla chimed in. “Or more exciting,” exclaimed Liz. I told them that they were all right. “Plus, when we read fluently do you think that helps us understand what we’re reading?” I asked. Caden said, “You always say that Mrs. Duffey, we have to understand the story.” “You’re right Caden, I do always say that, because it’s the most important thing readers do, right?” Jaya said, “I’m going to be good at this because I always give an honest score!” “I like that Jaya, what do we already know about giving ourselves a score on a rubric? Why is it important to be honest?” I questioned. “So you can get better at it,” said James. “What do you mean by get better at it?” I asked. Ty shared, “Well like in Writing Workshop, I used to write *I love my mom* every day. But I don’t anymore because if I do then my score will be low. So I work a little harder now.” “Good,” I said, “So you’re saying that having the rubric helps you work harder at whatever you are checking?” “Yep,” responded Ty.

I also asked, “How about personal goals? How might they help us?” Jayden said, “When I know what my goal is for math facts I try really hard to get that many right. Sometimes I even practice at home.” “I know just what I should do when I’m doing Read to Someone because I check my goal in my book box,” Keisha shared. Sara asked,

“Will you help us with our scores if we don’t know?” I explained that we would listen back to their reading together during conferences. In the beginning, I may help them if needed, but after a few times they would be experts at using the new rubrics just like they are with the other rubrics we use every day in our classroom.

This conversation indicated to me that my students had a firm background about what self-assessment is, how it is done, and its purpose. Self-assessment in general is not new to them, however using self-assessment for the purpose of reading fluency is. Over the next week or so, I conducted several mini-lessons in which I modeled using the expression and phrasing rubrics, had them listen to my reading on the ipad and score my expression and phrasing, and eventually listen to a partner read and practice using the rubrics more independently. Since I purposely did not have perfect phrasing or expression in the sample voice-recordings that I created, the students really enjoyed telling me what I needed to improve to “bump up my score”. “That sounds kind of boring Mrs. Duffey,” said Caden, “You have to sound excited at that part at the end.” Liz said, “You have to make sure you don’t stop after every word, especially if they are words you know in a snap, you have to just keep going and not stop. Except if there is a period, then you should stop.” I thanked them for their feedback and assured them that I would work on those things for next time and I would practice when I was reading other books as well. I was attempting to set the stage for the idea that these are things we need to do all the time as readers, not just when we are recording our voices on the ipad.

Small group interviews were conducted at the conclusion of each week. The purpose of these interview sessions was to gain insight into how the students were responding to different aspects of the study. Each session focused on a specific question

pertaining to one component of the study. These sessions were set up like a conversation among the students in the group. We called it our Fluency Chat. Therefore, once I posed the question, I stepped back to listen and recorded segments of the conversation in my teacher research journal.

Week one's question asked students, how did your personal fluency goal help you this week? I recorded some of the student's responses in my teacher research journal. Eight different students mentioned that they practiced either their expression or their phrasing during Read to Self or Read to Someone. Sara said, "I look at my goal before I start Read to Self and then I try to work on it and practice with all the books in my book box." "I made sure that I read this same book every day during Read to Self so I could really practice and do my goal better," Jaya said. Some students talked specifically about their fluency goals, in terms of expression or phrasing. Caden said, "I was trying to pay attention to not stopping between every word, every time I was reading." Alex, Katie, Sara, and Jayden all discussed their expression. Katie explained how she tried to "change her voice" when she was doing Read to Self. Jayden said he knew it was "important to show the feelings" when he was reading and when he recorded his voice. "You should hear my voice at the end!" said Sara, "It sounds really sad."

Week three's question asked students to think again about their personal fluency goals. The question was: what did you do differently as a reader to work toward your goal? Once again, many students talked about working toward their goal at Read to Self or Read to Someone during Daily Five. Jaya shared that when she was practicing during Read to Someone, Keisha reminded her to slow down so she could show how the characters were feeling. A few students talked about working on their fluency goals

outside of our classroom. Keisha told her group, “I practiced my goal at home with harder books and my mom thought I sounded really good.” Ty mentioned that he had practiced “having good expression” when he read *Green Eggs and Ham* at home to his little brother.

Some students started to make observations about their own fluency. Cade said, “I tried to think about which words should go together.” “I’m practicing using my voice to make it sound better,” Alex said. “I worked on putting the words together like I’m talking,” explained Liz.” A few of my most struggling readers made some unexpected connections. Katie said, “I have to get better at the words” and Sal said, “I think I have to use my strategies better so I won’t keep stopping when I’m stuck.” Without realizing it, they were beginning to understand that their decoding has an impact on fluency.

These comments all signified that the students were more tuned in to their fluency. They were paying attention to the goals they had set and were making conscious efforts to work toward them. Even though they knew what fluent reading sounded like and what they were striving for prior to the start of the study, now they know what they need to do to achieve it. Self-assessing with the rubrics is helping them to identify their fluency needs and focus on improving those weaknesses. Many of the students are taking on a greater responsibility for their fluency growth.

The interview question for week four asked the students how they were feeling about the whole process of recording and listening to their reading on the ipad and self-assessing with the fluency rubrics. The goal of this question was to really get a sense of how they were feeling and the impact this might have on their reading motivation.

Although many students talked about using the ipads, the majority of the students focused on their reading and how it sounds now, compared to a month ago. At this point in the study the majority of the students seemed to realize that this was really about working on reading fluency, the ipad is just the tool that we use to help us get there.

When responding to this final question, the majority of the students appeared to be very proud of their fluency progress. Many students commented with, “It’s fun!” Caden said, “Now I can read like I’m talking.” “I can hear that my reading is getting better,” Jaya stated. Ty thinks it is “fun” to listen to himself reading. Sal said, “It makes me happy when I’m reading and my voice sounds funny!” “I like when my voice sounds like the characters,” said Cade, “My dad is practicing too at night.” One student remained reluctant about the process. Sara said, “I’m a little shy. I wish I did it perfect every time.” Although Sara is reading at the highest level of any of my students, a guided reading level L, she is still self-conscious about reading orally. I found this very interesting. However, this reiterated a personality trait that I was already aware of, Sara tends to be a bit of a perfectionist.

Overall, the students’ comments indicate that the process of self-assessing fluency and setting personal fluency goals is having a positive impact on student oral reading motivation. As McMillan and Hearn (2009) described, self-assessment and personal goal setting can promote intrinsic motivation and meaningful learning. The conversational data that was collected in the teacher research journal indicates that the students engaged in this study seem to be taking an increased role in their own learning. The learning is individualized and students hold a greater responsibility for their own success. Their comments show that they are intrinsically motivated to work toward the goals they have

set and improve their fluency. The next section of this chapter will consider data about how the students responded to the technology component of the study.

Student Response to Technology

During the initial introductory lesson, I explained how the ipads would be used to record our voices while reading. Several students made comments or asked questions specifically about using the technology. Those comments and questions were recorded in my teacher research journal. Alex said, “I don’t know how to do that on the ipad.” I reassured him that I would model how to do it and they would have the chance to practice before being asked to do it on their own. “So we’re really going to hear our voices on the ipad?” asked Ty. “Yes,” I replied, “It’s going to be really cool.”

Following that initial discussion, numerous lessons were conducted prior to the start of data collection to teach the students how to utilize the technology. Students needed to learn how to open the ShowMe app on the ipad. Next, they needed to learn how to create a new file. I taught them how to start and end the voice recording. The final step was learning how to save the file. This was the most challenging component of the technology because there were multiple steps involved. Much like with the rubrics, I modeled first and then gradually released responsibility to the students. A few students needed additional instruction and practice with saving their files on ShowMe.

It was integral that every student was able to use the technology independently. Since students would be recording their voices during the time when I was taking small guided reading groups, I needed to ensure that the technology use would not be a disruption to our regular classroom instruction. The notes that I took in my teacher

research journal during this time indicate that the majority of the students could not wait to get started! A few students were nervous about using the technology, but I felt like the repeated and scaffolded practice that I had provided would be sufficient to ease their nerves. I reminded those students that if they made a mistake with the technology it was really no big deal. If their file did not save, we could just rerecord their voice.

During the first week of the study, my classroom was abuzz with excitement. My teacher research journal shows day after day how thrilled the students were to record their voices all by themselves. When it came time to listen to their reading on the ipad, the excitement grew. The students were full of smiles and giggles as they heard their voices reading. Some of them were truly amazed. Sal said, "I'm famous, like a singer." My journal indicates that at first, it was difficult for some students to focus on self-assessing during our conferences because they were so interested in hearing themselves read. By week two, they had settled in and were much more focused during our conferences.

Question four in the group interviews asked the students how they were feeling about the whole process of recording and listening to their reading on the ipad and self-assessing with the fluency rubrics. Some students said that they liked using the ipad all by themselves. They were proud of this accomplishment. A recurring theme from almost all of the students was that they thought recording their voices and listening to their reading was fun! They showed interest in continuing this process and doing it more often.

As students listened to their reading, they became anxious to share. A slightly unexpected finding was that the students were eager to have their classmates listen to

their reading on the ipad. In response to that desire, I set up an additional ipad that could be used for Listen to Reading during Daily Five. The notes in my teacher research journal indicate that students really enjoyed this activity. Listening to their peers reading serves as an excellent model for fluency. It also gives the students an opportunity to have a more social reading experience as Gambrell (2011) recommends.

Overall, the data shows that using technology positively impacted the reading motivation of my students. The use of technology enhanced the self-assessment process. The students were excited to read and listen to their reading using the ipad. Student engagement increased and reading became more social. Without the ipad, students would not have been able to listen to their own reading and effectively self-assess their fluency. The next section of this chapter will look at numerical data and discuss how the use of the self-assessment rubrics and technology in combination impacted student fluency growth.

Student Fluency Growth

Information was recorded using a data collection sheet (Appendix A) for each of the participating students. Students first recorded their voices reading a familiar text. Then, I conferenced with each student. During these conferences, we listened to the first reading of the text. The students assigned themselves a phrasing score and an expression score using the appropriate rubrics (Appendices B & C). I asked the students what they noticed about their oral reading and what they thought they needed to work on in an effort to improve their fluency. The data collection sheet includes: the title and guided reading level of the text, the wcpm score to determine reading rate, and the initial phrasing and expression scores. Students then set personal fluency goals. If they gave

themselves a low phrasing score, they set a goal that could help them improve their phrasing. If they gave themselves a low expression score, they set a goal that could help them improve their expression. The personal fluency goals were recorded on the data collection sheet and written on index cards for the students to keep in their book boxes. Students had the opportunity to practice oral reading frequently throughout the week before rereading the same text. Once the second recording was complete, another conference was held. Students self-assessed again using the same phrasing and expression rubrics. Once again, we discussed what they noticed about their reading. I asked what they had improved since their first recording of the text. I divided the data into three sections to identify how the study impacted fluency growth. The sections include: rate, phrasing, and expression. For each section, I included charts to display the data and quotations and notes from my teacher research journal.

A trend that could be identified across the data was that with repeated readings, students' reading rate typically increased. This supports the findings of many previous researchers about the impact of S. J. Samuels (1979) repeated reading methodology. When looking at samples for every student over the course of four weeks, reading rate increased 78% of the time.

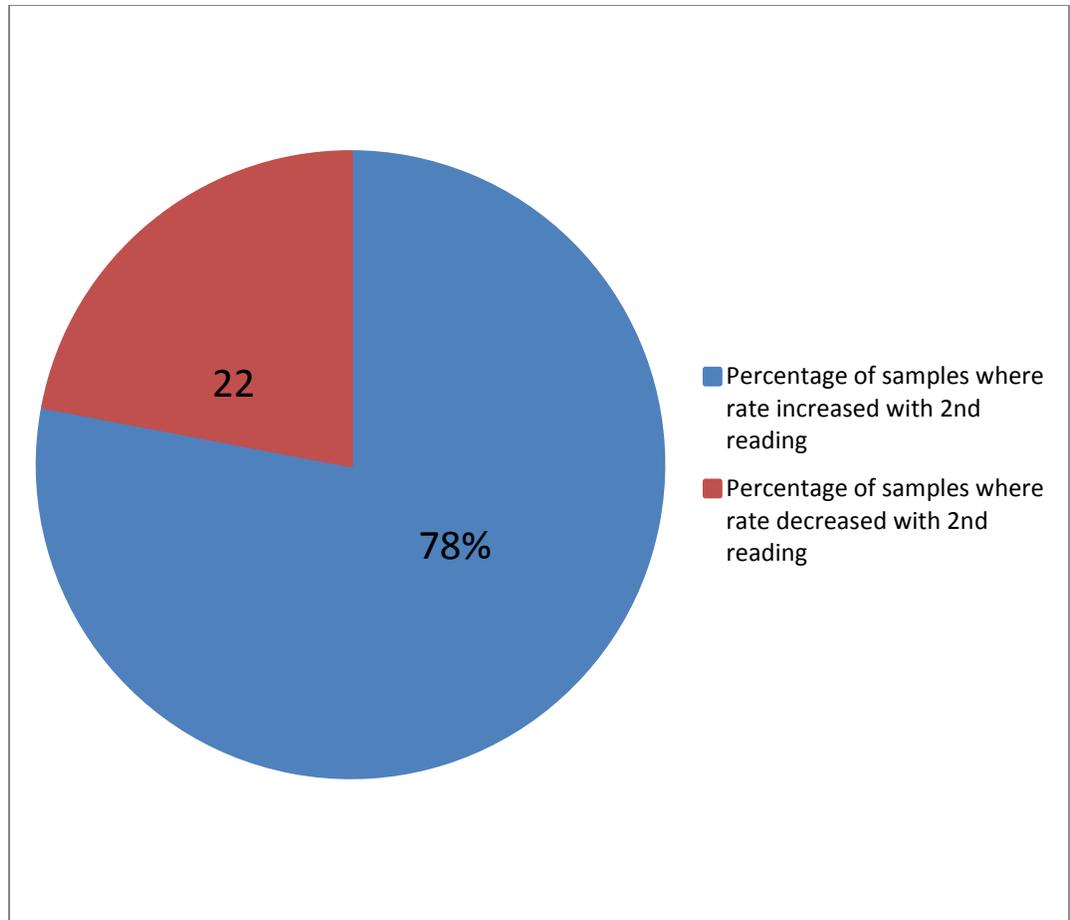


Figure 1. Reading Rate

I looked more closely at the samples that fell in to the 22% in which reading rate decreased with repeated readings. Student number one’s reading rate decreased from the first to second reading every week of the study. She is reading at a very high level, but tends to read so quickly that she is difficult to understand. Three of the four weeks, she set a personal fluency goal to “Slow down and show the feelings of the characters.” Her goal dictated a slower pace.

Fifteen out of seventeen of the other samples had one thing in common. Those students had set personal fluency goals that focused on expression. Many of them were working on “reading with feeling” or “showing the feeling of the characters”. The decreased wcpm scores indicate that these students were slowing down their pace in an effort to focus on their expression. In my teacher research journal, I wrote, “At first, I wasn’t sure why their rate score would go down with repeated readings. It didn’t seem to make sense. Then I thought about the personal goals they set. When I think about myself as a reader, I sometimes read something and then reread to improve my expression and clarify meaning. It appears that those students were slowing down so that they could focus on the feelings of the characters or the tone of the text, for example, an especially exciting or sad part. When students are reading with appropriate expression, their comprehension will also be enhanced.”

Next, I considered how my students’ phrasing had been affected throughout the course of the study. The numerical data is shown in the bar graph below.

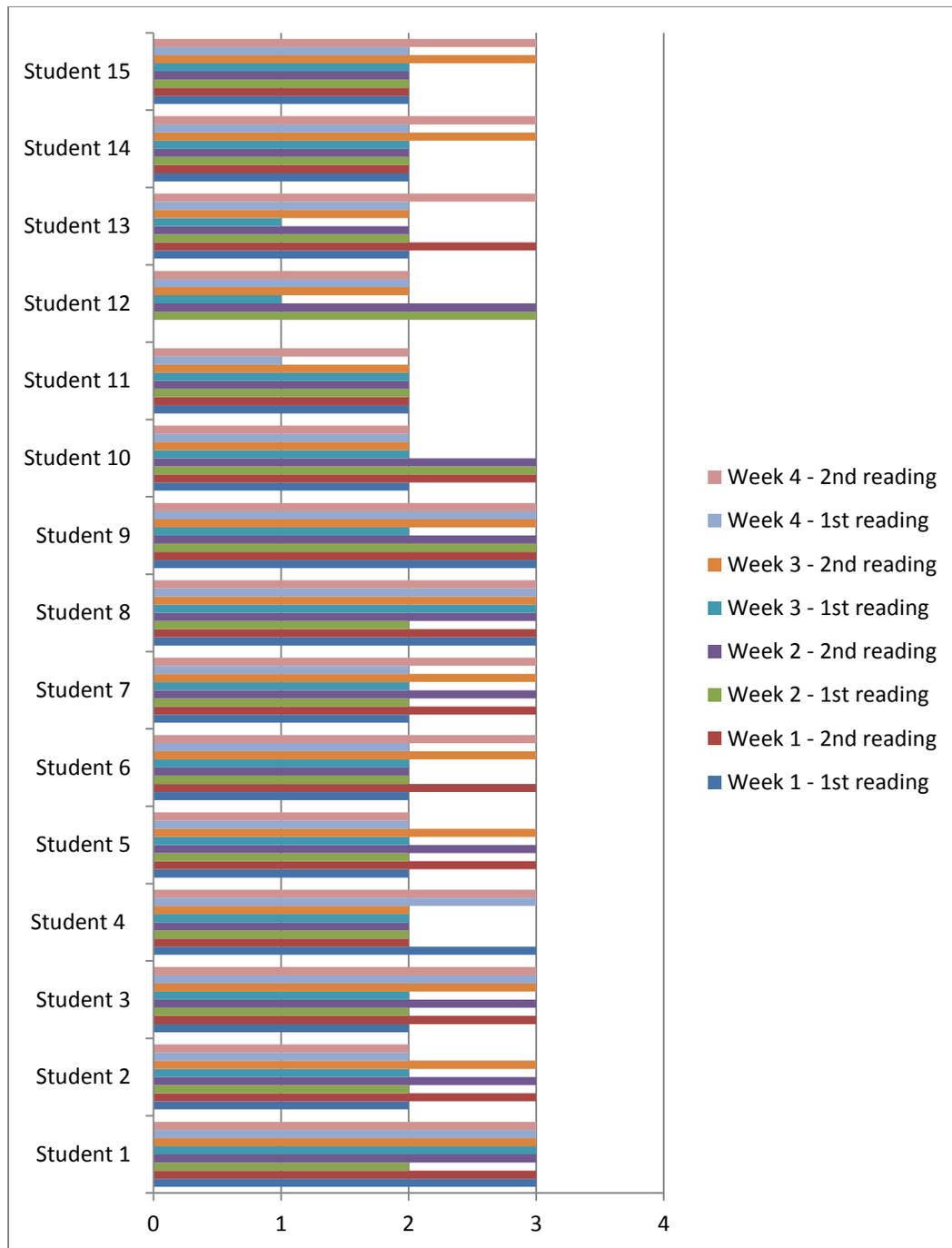


Figure 2. Phrasing Rubric Scores

When looking at this data collectively, there are a few trends that can be identified. Phrasing scores consistently increased or stayed the same from the first to second reading of any given text. There was only one sample throughout the entire study where a student's phrasing score decreased from the first to second reading. When I listened to that audio sample, I noticed a pattern. The student was struggling with decoding. Every time she approached a word that was not a sight word or a word that had a simple spelling pattern she knew, she stopped. She was not using fix-up strategies automatically. This brought me back to the theory of automatic information processing (LaBerge and Samuels, 1974). This student was dedicating too much of her brainpower to decoding and therefore lacked automaticity. She only had a small capacity of attention left to focus on comprehension. I wrote in my teacher research journal, "This is exactly what LeBerge and Samuels were talking about. Sal's reading wasn't fluent because she was still working on decoding some sections word-by-word. She couldn't really understand the text because it was so segmented. In order to improve her phrasing, Sal needs more phonemic awareness and phonics instruction. This will make decoding more automatic and in turn I will see growth in her fluency and probably her comprehension as well."

Another trend that I identified when looking at the numerical phrasing data was that phrasing scores typically stayed the same when the student's personal goal focused on expression. The scores typically increased when the student's personal goal focused on phrasing. This indicates that students were focused on their personal goals and their rubric scores align with that idea. The component that was not addressed in their personal goal became secondary.

A final trend that I noticed when looking at the phrasing data, was that although students often made gains in phrasing from the initial to final reading in a given week, their fluency scores would sometimes drop back down at the start of the following week. This may indicate that some students are not yet making the transfer to using their improved phrasing with any text. Rather their phrasing gains are specific to the text that they are listening to on the voice-recording.

The final consideration for fluency growth was expression. This was the area where I observed the most gains and my students exhibited the most interest and excitement. The numerical data is shown in the bar graph below.

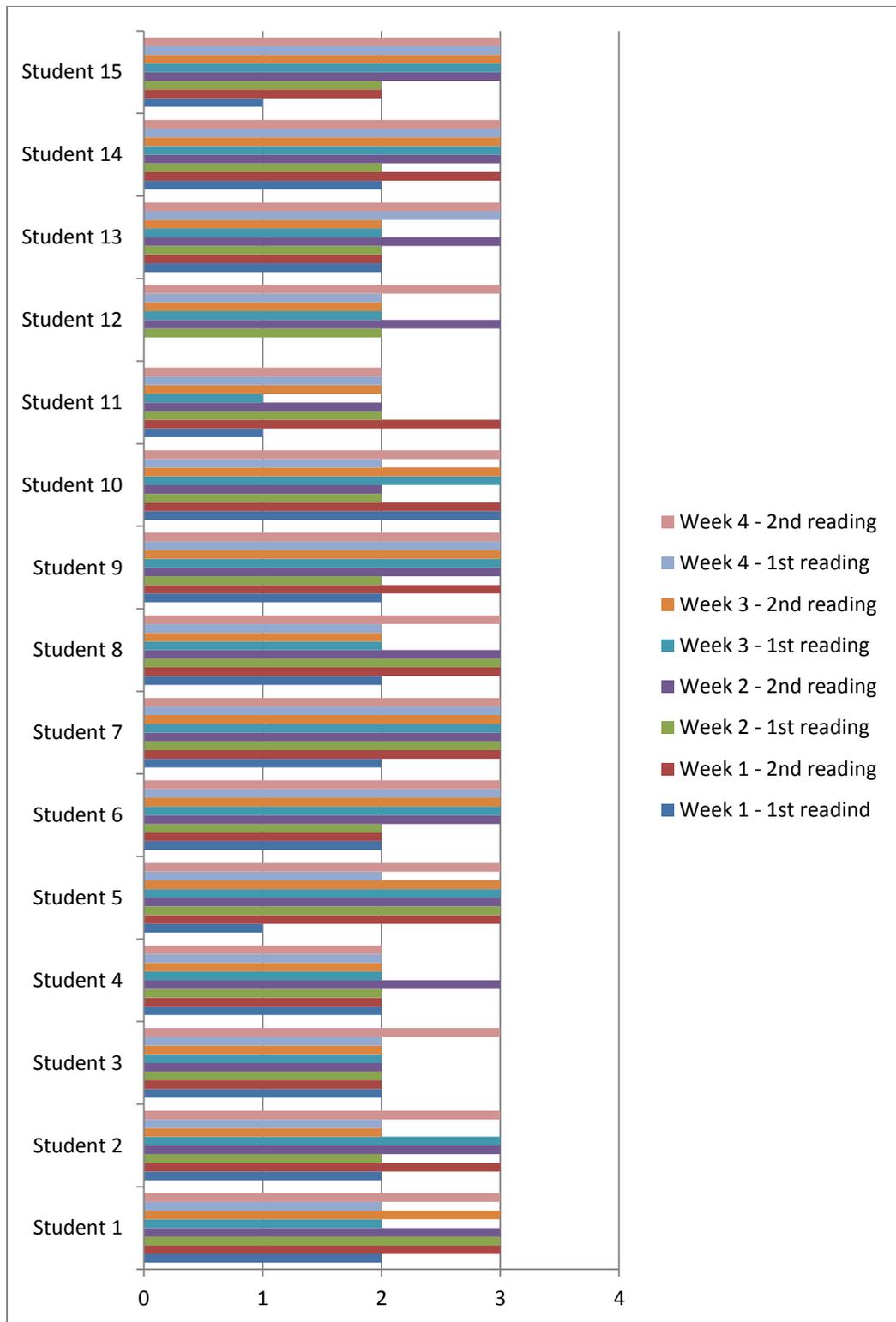


Figure 3. Expression Rubric Scores

Some of the trends identified for phrasing were very similar for expression. For example, expression rubric scores stayed the same or increased in every sample that was collected throughout the study. There were no instances in which a child's expression regressed from the beginning to the end of the week. Also, students who set personal goals that focused on expression tended to increase their expression rubric score over the course of the week. When personal goals focused on phrasing, expression scores sometimes increased, but often stayed the same from the beginning to the end of the week.

Although some students would increase their expression score from the beginning to the end of the week, there were many instances where the score dropped back down at the start of the next week. However, this was less common than it was with phrasing. For some students, it seemed as if once their attention was focused on expression, they seemed to pay attention to it fairly consistently. I wrote in my teacher research journal, "I hear them reading with better expression all the time now, especially when they have an audience, like in Read to Someone. I notice that they are experimenting with altering their voices with texts that are not being used for the voice-recordings. They seem to be applying what they are learning about expression. Other teachers have made comments to me about how good their expression is when they hear them in passing or when they are reading in the hallway. It's exciting to realize that others are noticing that change when they are unaware of the focus on fluency in our classroom."

I did take notes in my teacher research journal about a few specific students whose expression growth stood out for me. The first student was Alex. In week three, he set a personal goal focusing on expression. When I listened to his final recording for that

week, it was difficult to understand what he was saying. When we conferenced, I asked him about the voice that he used. He told me it was a “monster voice”. I asked, “Why did you choose to use that voice?” “I was trying to make it more interesting,” Alex responded. I had to make a quick decision during the conference to decide how to handle this. I wanted Alex to know that I was proud of him for trying to change his voice to make the text more interesting and show the feelings of the characters. At the same time, I wanted to make sure that his expression was appropriate for the characters and tone of the text. We had a conversation about matching your voice to the text. I modeled using a few different texts. We talked about who the character was, how the character was feeling, and the punctuation that we saw in each text. After I showed him a few, I had him try it with me. I read a sentence and he echoed me. This conference was very long in comparison to the typical conferences that I had been having, however I thought it was important to clear up his misconception that using a “silly voice” was not the way to improve his expression before it became a habit. The conference proved to be worthwhile, because he exhibited a great amount of improvement in week four.

A second student whose expression stood out was Jaya. In the first week of the study, she gave herself a one for her initial expression score and bumped it up to a three by the end of the week. I was really impressed by how hard she had worked to improve her expression and suspected that she had it in her all the time, but just wasn't thinking about it until she listened to herself reading on the voice-recording. Throughout the remainder of the study, she gave herself a three for expression for all but one of her voice recordings. She was consistently reading with expression. The problem was that Jaya's voice constantly sounded excited, like every sentence ended with an exclamation point. I

knew we needed to talk about this. I decided to record myself reading the way Jaya had been reading and have her listen to it. When I played it for her, I asked her what she noticed. At first she said, “It sounds good.” I asked her if my voice sounded the same for the whole story or if it changed during the story. She thought it sounded the same the whole time. “Do you think it would make the story more interesting if my voice changed at different parts of the story?” “Probably,” Jaya said. I then played for her another version of the story that I recorded. This time I varied my expression, only making my voice sound exciting during appropriate points in the text. “Oh that was better Mrs. Duffey,” said Jaya. “What was better about it?” I asked. “I’m not sure,” she said. “Do you think it started to get boring when my voice was exciting all the time?” I asked. “Maybe,” Jaya said. I told her, “Jaya, I want you to try paying attention to that when you read. Try to think about when your voice should sound exciting and when it shouldn’t. Can you try that?” “I think so,” Jaya responded. Although, Jaya is still overusing her expression a bit, I have seen improvement since our conversation.

The final student whose fluency stood out was Cade. He is a strong reader. He is reading at a guided reading level I and his comprehension is strong. When it came time to record and listen to himself read, he withdrew a little. Despite setting personal goals that focused on expression, three out of the four weeks, his scores were not moving. When I conferenced with Cade, I asked how he was feeling about the expression rubric. He didn’t want to talk much about the process and never said he was nervous, but I felt like that was what I was observing. Although I could never pull a meaningful conversation out of Cade about his expression growth, he did show signs of improved

confidence in the final week of the study. The only conclusion that I can draw is that he was nervous and just needed time to become comfortable with the process.

Although all three of these students were very different, they had one thing in common, their expression growth did not follow the same pattern as the other students in the study. The misconceptions about what good fluency is, was holding them back. What I learned from these three students was that although the data was indicating that the methodology was having a positive impact, it was not perfect and would not have the same results for every student.

General Conclusions

When considering all of the data sources, the findings suggest that the use of self-assessment rubrics and technology had a positive impact on reading fluency growth. Students' intrinsic motivation increased, they became more engaged, and they were eager to work toward their personal fluency goals. Students were also more aware of the fluency expectations and what they needed to do to reach those goals. As students completed repeated readings with familiar texts while focusing on specific fluency goals, consistent gains in rate, phrasing, and expression were observed.

The final chapter of the thesis will further discuss these conclusions. Implications for classroom practice will be outlined. Chapter five will also discuss the limitations of the study and recommendations for further research in the future.

Chapter 5

Conclusions

Chapter five of the thesis will begin by summarizing the findings of the study and drawing conclusions based on those findings. Limitations of the study will be outlined in this chapter. Also, implications for further research in the field will be considered.

Summary of the Findings

After concluding my research, I found that students demonstrated growth in a variety of ways as a result of the voice-recording and self-assessment process. The intervention created a positive opportunity for the participating students in which they could focus on their phrasing and expression while reading orally. The impact of the study improved fluency motivation as well as fluency performance.

The data collected, including student responses during small group interviews and observations in my teacher research journal, suggest that students responded positively to the self-assessment process. They were aware of the purpose and procedures for self-assessment early on in the study. Although assigning a score for expression and phrasing were important, setting personal fluency goals may have been the most powerful step in the process. These goals helped students to focus on specific aspects of fluency that they may otherwise have never paid much attention to. The students were motivated to “bump up” their scores and knew what they could do to work toward their personal fluency goals when practicing reading independently. When listening to their final recordings each week, the students were visibly proud of how their reading fluency sounded. I observed increased intrinsic motivation in terms of fluency.

The data suggested that the use of technology enhanced the self-assessment process. Being able to listen to their own reading was key to the self-assessment procedure. The students were eager to use the ipads and loved listening to their voices as they read. The technology also allowed for a more social reading experience, as the students could share their voice recordings with their classmates.

Numerical data was collected and analyzed to identify trends in the students' fluency growth. As expected based on the work of previous researchers, the students' reading rate typically increased with repeated readings. The only instances in which rate decreased were when students had set expression goals and were focused on improving in that area. The data indicated that in general, students' phrasing improved from the beginning to the end of each week. After four weeks, students were not yet consistently making the transfer from week to week in terms of phrasing. A few students who struggled with phrasing had significant accuracy issues. Expression was the area of fluency in which I observed the greatest gains by my students. Listening to their reading allowed the students to hear their lack of expression and they were eager to improve in that area. Numerous observations suggest that students were also beginning to transfer what they learned about expression into their reading outside of the study. During Read to Self and Read to Someone, students were working toward their personal expression goals.

Conclusions of the Study

After analyzing the data I collected, I returned to the literature I reviewed about fluency instruction and assessment, self-assessment, and technology use. Some of my

findings certainly support previous researchers' findings. First, the data suggested that some students who struggled with phrasing had significant accuracy difficulties. This finding is in line with LaBerge and Samuels' (1974) theory of automatic information processing. These students were using so much of their cognitive capacity to decode words that they had little left to focus on phrasing and building meaning. This indicates that these students would benefit from additional word study instruction.

The numerical data indicated that students' reading rate increased the majority of the time with repeated readings. Based on Samuels' (1979) work about the methodology of repeated readings and the work of others who followed him, I expected to see this trend. However, an unexpected trend was that when students were focused on expression, based on their personal goals, their reading rate tended to slow down.

Rasinski (2003) discussed the value of performance reading. I saw this firsthand throughout my study. When recording their voices while reading, students were no longer reading to themselves. They were performing for an audience. Whether that audience was a friend or just themselves listening to the recording, they were eager to improve the way their reading sounded.

Prior to conducting the research in my classroom, I was intrigued by Vasinda and McCleod's (2011) research about using podcasts with Reader's Theatre. They found that this was very motivating for their students to perform for an audience and their students were able to modify their fluency based on what they heard when listening to their own reading. One finding in my research that was a bit surprising was how social the students' voice recordings became. They were very eager to share them with classmates

and really began complimenting each other and use their classmates' recordings as models of fluent reading. I was able to see how my results were similar to Vasinda and McLeod's, despite the fact that our methodology was different. Hudson, Lane, and Pullen (2005) also discussed how powerful it could be for students to hear their own reading. It was so interesting to see how the students responded to hearing their voices. Whether they were being critical of their phrasing or proud of their expression improvement, their eyes were opened to considering how their reading sounded, which had never really happened before.

Kuhn, Schwanenflugel, and Meisinger (2010) state, "It is critical that we establish assessments, and instruction, that assist learners in becoming truly fluent readers rather than just fast ones." (p. 246). Returning to the work of these researchers, I am so excited about the direction that my students are now headed. In the past, I used one minute fluency assessments which provided no information to myself or my students about what they needed to work on in order to improve their fluency. The self-assessment rubrics have helped them to identify specific weaknesses and set goals based on those weaknesses. We now have a tool that gives us the information we need to move their fluency forward.

McMillan and Hearn (2009) discussed how self-assessment can promote intrinsic motivation and meaningful learning. Throughout the study I saw how setting personal goals allowed my students to take control of their own learning. They were eager to improve their fluency and willing to put in the work that was needed to get there. The motivational role had a significant impact on their overall fluency growth.

Limitations of the Study

As with any teacher research, there were some limitations to this study. The most significant limitation was time. Data was only collected over the course of four weeks. Although fluency gains were observed with almost all of the participating students, the potential for progress would be greater if the intervention was lengthened. Also, finding the time within the school day for students to record their reading and meet with students individually for fluency conferences, without detracting from other areas of instruction, was challenging. If I were a more experienced teacher researcher, I may have been more prepared to manage the time component of the study.

If I had more time, I would have used additional rubrics for other components of fluency. I would have started with a punctuation rubric since that can have an impact on both phrasing and expression. Adding a rate rubric at the end of the intervention would also help me to better see the link between prosody and rate. I would have focused on one rubric for all of the students per week before using them in combination. This would have allowed the students to focus on each component independently before attempting to use them simultaneously.

Another limitation was the data sources themselves. In hindsight, I would have added running records. This is a tool that I use every day in my classroom to monitor reading accuracy, but realized could be beneficial when considering fluency as well. After the students recorded their reading, I could have listened to them and complete a running record. This would have made it easier to identify reasons why some students were struggling with pace or phrasing. If decoding issues were holding their fluency

back, those errors on the running record would provide information about their specific needs. Once those needs were addressed, fluency progress would most likely come in turn.

The final limitation was the sample size. As one teacher researcher, I would not have been able to collect data on more than the fifteen participating students, in the time frame that I had. However, having a larger sample size would make the findings more reliable and easier to extrapolate to a wider population. It would have been interesting to see how students from varying classrooms and perhaps varying grade levels would have responded to the intervention.

Implications for the Field

Based on the findings and the conclusions that have been drawn, the voice-recording and self-assessment intervention has shown to be a viable option for all teachers to use in their classrooms. Teachers can expect to see an improvement in motivation to improve fluency as well as fluency growth from their students.

After analyzing the data collected throughout the course of the study in an effort to draw conclusions about the use of fluency self-assessment, I found that there were certain areas that could be investigated further. One area that is worthy of further investigation is how the results would change if the intervention was continued for a longer period of time. Future teacher researchers conducting a similar study could extend the study to span several months or even the entire school year. This would allow for a greater degree of focus on each component of fluency using a variety of fluency rubrics.

This would also give the teacher researcher a better understanding of how the students transfer what they have learned about improving their fluency to new texts.

It would be interesting to see how additional data from rubrics for other components of fluency, like punctuation use and rate, would alter the findings. Teacher researchers could also collect accuracy data via running records. Incorporating these additional data sources would give a more complete picture of each student's fluency. The relationship between these components could be considered to draw more conclusions about the impact of the intervention.

Another implication for future teacher researchers is the grade level of the students participating in the study. It would be interesting to see how older students would respond to the same intervention. Their self-assessment process may be more independent, therefore not requiring teacher conferences as frequently. It would be interesting to see the impact that greater independence could have on motivation for older students.

The final implication for future research would be using a similar methodology with different text types. In this study, students read familiar texts one level below their instructional level to use for voice recordings. It would be interesting to see how students would respond, especially older students, to the voice recordings and self-assessment process using other types of reading material. Some considerations would be song lyrics, jokes, and Reader's Theatre scripts. Based on the work of previous researchers, these text types have been successful for promoting prosodic reading. They have the potential to create a more social reading experience, which could enhance motivation.

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Appendix A

Data Collection

Data Collection Sheet for:

Week of 11/3

Title and Level	Initial wcpm score	Initial Phrasing Score	Initial Expression Score	Final wcpm score	Final Phrasing Score	Final Expression Score

Personal Fluency Goal:

Week of 11/10

Title and Level	Initial wcpm score	Initial Phrasing Score	Initial Expression Score	Final wcpm score	Final Phrasing Score	Final Expression Score

Personal Fluency Goal:

Week of 11/17

Title and Level	Initial wcpm score	Initial Phrasing Score	Initial Expression Score	Final wcpm score	Final Phrasing Score	Final Expression Score

Personal Fluency Goal:

Week of 11/24

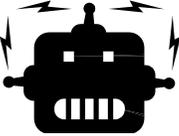
Title and Level	Initial wcpm score	Initial Phrasing Score	Initial Expression Score	Final wcpm score	Final Phrasing Score	Final Expression Score

Personal Fluency Goal:

Appendix B

Phrasing Rubric

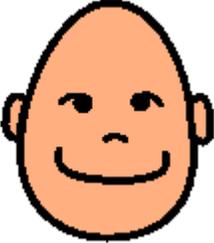
Phrasing Rubric

1	2	3
<p>I read one word at a time like a robot!</p> <p>I - like - to - read. - It - is - fun.</p> 	<p>I am trying to group words together as I read!</p> <p>I like - to - read. It - is fun.</p> 	<p>I put the words together the way the author wrote them. I sound like I am talking when I read!</p> <p>I like to read. It is fun!</p> 

Appendix C

Expression Rubric

Expression Rubric

1	2	3
<p>My reading sounds boring and doesn't really make sense because I have no expression!</p> 	<p>I am trying to read with expression. My voice shows some feeling!</p> 	<p>My reading sounds interesting. My voice shows the feelings of the characters!</p> 