EXPERIENCES WITH THE FUNDAMENTAL FLUENCY INTERVENTION: A

CASE STUDY WITH 3RD GRADERS WITH READING DIFFICULTIES

by

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ABSTRACT

This qualitative research study investigates the experiences of both students and parents in the way they respond to the Fundamental Fluency Intervention, which aims to help students improve fluency to bridge the gap between word call and comprehension. Although students reported positive experiences throughout the study and data revealed gains in fluency throughout the investigation in two cases, further research is needed to better understand any implications that may be associated with the researcher-created intervention and rubric. Phrasing was the main strategy used in the intervention. Both students and parents indicated that it was helpful. This may be worthy of future investigation. If the current study is repeated using a qualitative design, an additional recommendation would be that participant selection is made carefully.

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CHAPTER I: INFORMATION AND BACKGROUND

In any given classroom, student reading abilities are likely to be as diverse as their personalities. Especially with the push for inclusion and diverse learning environments, one teacher could very well have students who are only able to call a handful of words learning alongside students who are able to read complex texts (Zigmond et al., 2009). Not only should students understand a given text, but they should also be able to refer back to the text (which they may or may not be able to read) to support their answers (Tennessee State Board of Education, 2016). They must be able to infer meaning, compare and contrast, recall the order of events, and describe characters in a story (Tennessee State Board of Education, 2016). With all these demands for comprehension, many teachers spend the bulk of their allotted reading time focusing on teaching students strategies that hone their higher order thinking skills (Willingham, 2009). These are certainly skills that, once mastered, will positively serve students throughout life, but what about the students that are unable to read a text? The solution for many teachers is to provide students with a read aloud version of the text that is being used to teach comprehension skills (Li, 2014).

Texts that are read aloud are a viable solution for students who struggle with decoding words. These students (even those who are considered non-readers) are often able to easily understand a text that is read aloud to them (Rasinski, 2012). When teachers understand this, it provides them with an opportunity to teach and assess decoding and comprehension independently of one another. At the same time, it can inadvertently result in a classroom that focuses so intently on comprehension that little to no time is spent allowing students to read texts for themselves (Spear-Swerling et al.,

2010). Even when students are able to demonstrate background knowledge and listening skills, a gap often still exists between reading comprehension and listening comprehension simply because a student cannot read the text (Kim, 2017). Listening skills are of no benefit for students who do not have a profound reading deficit that they qualify for a read aloud accommodation when it comes time for state testing.

Despite being recognized as a skill that is vital to student comprehension, fluency is often neglected in the classroom (National Reading Panel, 2000; Rasinski & Smith, 2018; Chard, Vaughn, & Tyler, 2002). Especially when it comes to silent reading, fluency can be described as the necessary bridge between word recognition and comprehension (Pikulski & Chard, 2005). Not only does research indicate that there is a significant relationship between reading fluency and comprehension, it also indicates that a concerning number of students struggle with reading fluency throughout their school careers (Danne et al., 2005; Rasinski et al., 2005). Danne et al. (2005) reported that out of 1,779 of the NAEP participants who were evaluated for fluency, only 61 percent were considered to be fluent readers even though they were only asked to read a passage described as having "relatively few complex language structures, simple vocabulary, and a familiar topic" (p. 2). This means that 39 percent of those students were not able to fluently read grade level texts. Why then, is fluency so neglected in the classroom? To clarify the issue, fluency must be defined.

According to the National Reading Panel (2000), "fluent readers are able to read orally with speed, accuracy, and proper expression" (p. 11). Part of the problem with the lack of fluency instruction is the fact that even when teachers do focus on fluency as a part of instruction, they tend to focus exclusively on the automaticity of word call and

rate–emphasizing the speed in which students can call the words (Rasinski, 2006).

Automaticity cannot be discounted as fluency is very much dependent on word

recognition, and resources available in abundance that are research based to address

problems with word recognition (Chard, Vaughn, & Tyler, 2002). However, it seems that

teachers may not move beyond intervening to improve decoding skills and acknowledge

the fact that word recognition does not always produce fluency (National Reading Panel,

2000). The tendency to focus on rate alone as a measure for determining fluency should

be critically examined as well. Rasinski (2005) suggests that one reason teachers rely

solely on measuring fluency in terms of words per minute is that it is the easiest tool to

use. Furthermore, words per minute is an objective measurement. It is easy to use this

measurement as a way to diagnose gaps in word recognition as the expectation of

performance is often common knowledge among reading teachers in any given grade.

However, with such emphasis being placed on speed, students who already have already

mastered word call are at risk for reading too fast. Rasinski, Rikli, and Johnston (2009)

warn that "reading fast, without regard for internal and external, as well as explicit and

implicit punctuation, is also indicative of disfluent reading" (p. 352).

Whether students are struggling with disfluent reading that is either too slow or

too fast, the ultimate result is poor comprehension (Rasinski, Yildirim, & Nageldinger,

2011). When word recognition is the cause for the slow reading rate, teachers have an

endless number of readily available sources for curriculum. In recognizing the need for

fluency resources, the aim of this research is to help inform the possibility of providing

teachers with a fluency intervention that was developed to help students fill in fluency

gaps with direct instruction. The direct instruction is designed to teach students to read in

phrases and to use proper intonation and expression through repeated reading of a text. In order to determine if this type of curriculum would benefit teachers, the following research questions are being asked within the current study:

1. How do students perform on a researcher created fluency rubric over the course of a 9 week reading intervention?

2. How does fluency change qualitatively for students over time when they participate in the Fundamental Fluency Intervention?

3. What are student perceptions of experiences during the reading intervention sessions?

4. What are parent perceptions of experiences during the reading intervention sessions?

Beyond establishing the importance of fluency instruction and investigating the need for fluency-specific intervention, Chapter 2 of the current study thoroughly examined literature on teaching strategies that have been successfully used to improve reading fluency. The purpose of reviewing the strategies was to provide support for the Fundamental Fluency intervention, which was a researcher written intervention aimed at improving fluency through repeated reading along with direct instruction on phrasing and intonation. In an effort to ensure that a wide range of possibilities were explored, the literature review also examines interventions that were included as evidence-based interventions meeting What Works Clearinghouse and Best Evidence Encyclopedia's research criteria while reporting either positive or potentially positive impacts on fluency.

Chapter 3, the methodology section, will inform readers about the participants in the study and how they were chosen. Readers will also understand the mechanics of the

intervention after the development of the intervention had been vetted with current research. In an effort to more precisely measure fluency after the delivery of the researcher developed curriculum, a rubric to accompany the typical words per minute measurement was reviewed. Furthermore, a description is provided for data collection and analysis procedures before discussing limitations of the study. Chapters 4 is a reporting chapter in which the results of the data collection are reported. Chapter 5 will conclude with a discussion of the data and implications for future academic research.

CHAPTER II: LITERATURE REVIEW

This section begins with a description of strategies and instructional practices that have been recommended by reading experts for use as an avenue to help students improve reading fluency. The Fundamental Fluency Intervention is an intervention that employs the use of direct instruction to teach students to read sentences in phrases with prosody and intonation. Within each lesson, students may be asked to read the text chorally, and they are expected to read the text twice in an effort to ensure they are able to read with phrasing, prosody, and intonation. The researcher felt that each of these strategies held the potential to help students improve reading fluency. Therefore, they will be reviewed with multiple sources to understand the role they play in fluency. This will be followed by a description of interventions that are currently available for use in the classroom along with the corresponding research that has been published to establish empirical evidence of effectiveness in practice. Finally, the criteria will be presented that was used to determine what should be included in this review of literature.

Instructional Practices

Although fluency instruction has been limited in the classroom (National Reading Panel, 2000; Rasinski & Smith, 2018; Chard, Vaughn, & Tyler, 2002), there is a need for direct instruction when it comes to reading fluency (Allinder et al., 2001). With an abundance of standards to cover, fluency instruction (and likewise assessment) tends to focus on the speed at which a student is able to call off words within a text (Rasinski & Smith, 2018). Many teachers limit fluency instruction to encouraging students to pause for commas and stop at periods (Whalley & Hansen, 2006). Unfortunately, some students still have a learning gap between decoding and comprehension even after they learn to

pause at commas and stop at periods. Willingham (2009) speaks to this issue when he explains how common teaching and assessment practices begin to change between the third and fourth grade without giving proper credence to fluency:

> . . . reading instruction through third grade focuses mostly on decoding-figuring out how to sound out words using the printed symbols-so that's what reading tests emphasize. By the time the fourth grade rolls around, most students are good decoders, so reading tests start to emphasize comprehension (p. 37).

Regardless of how well or even how quickly students are able to decode words, reading is an act of futility unless meaning is created in the process. The knowledge that often eludes teachers is what fluency instructional practices should look like and what it should consist of. Although it requires researching several instructional practices independently, guidance is available in literature.

Phrasing. Rasinski (2006) indicates, "Readers must be able to decode words correctly and effortlessly (automaticity) and then put them together into meaningful phrases with the appropriate expression to make sense of what they read" (p. 704). The effect of reading sentences in distinct phrases is that students are able to chunk a sentence into a more manageable unit of meaning. Willingham (2009) indicates that chunking, particularly when reading, helps readers to see individual items (in this case words) as a unit (phrase). This is beneficial in freeing up space in working memory (Willingham, 2009), which only has a certain capacity to begin with (Brown, Roediger, & McDaniel, 2014). Chunking sentences into phrases is even more beneficial for students who are struggling readers as they tend to exhaust their working memory simply trying to decode the words (Rasinski, 2006; Kuhn et al., 2006; Stevens, Walker, & Vaughn, 2017).

Reading in phrases provides students with an opportunity to develop a mental picture that lends to comprehension with each phrase that is read (Lazarte & Barry, 2008). By the end of the sentence, they have a complete picture of who or what the sentence is about and what is happening broken down into just a few complete thoughts. Additionally, reading in phrases may reduce the pressure to read an entire sentence without making an error, which is often a source of stress when students are asked to read orally (Akyol & Kayabaşı, 2018). This can even be a strategy that is useful for students who are reading too quickly. By simply requiring students to pause between phrases, students are forced to slow down just enough to allow their brain to process a unit of meaning.

Repeated Reading. Although very few programs are currently on the market that are directed specifically at addressing fluency, those that are on the market include a component that requires students to read a text they have already read. In fact, as the term "repeated reading" might suggest, students repeatedly read the same text until an acceptable level of fluency is measured (Kuhn et al., 2006; Rasinski, 2012). Rasinski (2017) likens repeated reading to the practice habits of master musicians who spend countless hours repeatedly playing the same song. Could this same theory create a positive outcome for readers?

Kuhn (2005) did a comparison study that looked at both repeated reading and wide reading and found that they both produced gains in word recognition, rate of reading, and prosody. While both approaches seem to yield positive results, some degree of consideration must be given to the fact that they were compared to the gains of a control group (which received no treatment) and the gains of a group that participated by

choral reading (students read together at one time) and echo reading (students repeat after the teacher) rather than reading the text for themselves (Kuhn, 2005).

Other research indicates similar mixed results. When compared with reading that is scaffolded so that students receive additional support from the teacher, gains were similar for students receiving such support and students who were expected to repeatedly read a text (Kuhn & Stahl, 2003). Kuhn (2005) goes on to point out that, although several strategies have produced gains that are at least comparable to that of repeated reading, they are all better options than round robin reading.

In addition to being used as a tool to improve fluency, repeated reading is used as a tool to help students prepare for oral performances (Rasinski, 2017). Rasinski (2017) indicates that rehearsal is a legitimate reason for repeated reading. It changes the dynamic of the purpose for repeatedly reading a text, and students no longer see it as such a burden. This is when repeated reading begins to morph into a multi-layered strategy. Rasinski (2012) suggests that, when students are repeatedly reading a text for the sake of performance, they begin to recognize and may even begin to apply prosody. The opposite is actually true, however, when they are repeatedly reading for the sake of speed (Rasinski, 2012).

Prosody and Intonation. The theory behind prosodic reading is that students should be reading so fluently that it sounds like spoken language as they read (Stahl & Kuhn, 2002). Although it is not likely common practice during conversation to analyze sentences for prosodic elements, it is likely that the expression with which others speak is easily identifiable. One of the key elements in identifying expression in spoken language is being able to recognize intonation or "the rise and fall in pitch of the voice in speech"

(Merriman-Webster.com, 2019). It is also a key element in reading with expression. Even a slight increase in pitch, or tone of voice, when calling a word that is central to the meaning of a sentence can be a powerful tool in conveying meaning (Rasinski, 2012). While struggling readers understand the concept of intonation, they have a tendency to either read in a monotone voice, or they change their tone at unnatural points in the sentence.

Encouraging students to read with expression does more than just ensure they sound good while reading. Rasinski, Rikli, and Johnston (2009) rationalize that students must have some awareness of the meaning within a text before they can begin to properly demonstrate prosody. This may mean that teachers should be heavily involved in the early stages of prosody instruction (Rasinski, 2006). According to Rasinski (2006), prosody should be taught using explicit instruction. Particularly when it comes to intonation, students should be guided when emphasizing words as inferences can be made just based on a single word chosen for emphasis (Rasinski, 2012). For example:

- <u>Liz</u> jumped on my bed. (It was Liz and not anyone else in the room.)
- Liz <u>jumped</u> on my bed. (Liz didn't just bounce a little. She jumped.)
- Liz jumped <u>on</u> my bed. (She didn't jump beside the bed. She jumped on it.)
- Liz jumped on <u>my</u> bed. (It was not my brother's bed. It was my bed.)
- Liz jumped on my <u>bed</u>. (She didn't jump on the couch. She jumped on my bed.)

In order to do this well, of course, the reader would need to have at least a basic understanding of the text as a whole (Rasinski, Rikli, and Johnston, 2009). Even though the process is labor intensive, teachers may quickly learn that instruction aimed at

developing their students' prosody is worth the time spent when they begin to see improvements in comprehension.

Research confirms the theory that prosody contributes to higher levels of comprehension. Miller and Schwanenflugel (2006) found that speed, accuracy, and prosody were all contributing factors in comprehension. However, their study also indicated that prosody was the stand out skill responsible for producing the highest levels of comprehension, particularly for the students who were more dramatic in the rise and fall of their tone of voice. Rasinski (2012) also reported findings that demonstrated a relationship between prosody and silent reading. Although he cautioned readers that his correlational results should not be misconstrued as being a claim that prosody causes comprehension, he promoted instruction that was geared toward improving prosody and announced, "Greater proficiency in expressive or prosodic oral reading was associated with higher levels of silent reading comprehension" (Rasinski, 2012, p. 358).

Whalley and Hansen (2006) similarly discussed findings that suggest that prosody is closely linked with comprehension, but they also discussed the role punctuation plays in prosody. Their point effectively circles the discussion back to the discussion on phrasing when they point out that prosody when reading can easily become complex as longer sentences with less punctuation to indicate where students should pause and stop are introduced into texts (Whalley & Hansen, 2006). Without punctuation to indicate where students should pause in order to truly emulate spoken text (Whalley & Hansen, 2006), they must rely on their ability to identify phrases of text making it crucial that prosody instruction include a focus on phrasing in addition to instruction on intonation (Rasinski, 2006).

Choral Reading. Simply defined, choral reading involves two or more students reading the same text while synchronizing the words that are called (Rasinski and Smith, 2018) and the intonation with which they are called (Poore and Ferguson, 2008). For more fluent readers, intonation often comes naturally. For others, however, simply telling them to read with expression is not likely to produce the results teachers are looking for. One of the major benefits of choral reading is that it allows for direct instruction through teacher modeling so that students can hear appropriate prosody (Paige, 2011a). It also serves as an avenue for more fluent readers to support less fluent readers in that the less fluent readers have a tendency to copy the pace and intonation of their peers (Rasinski and Smith, 2018).

Choral reading can also take on multiple forms. It doesn't have to all be done in unison, where students read an entire piece together (Miccinati, 1985). Rasinski and Smith (2018) suggest that teachers can allow students to use refrain choral reading, where one student reads a sentence followed by the class repeating the same sentence. Another option is for the teacher to read followed by the students echoing what the teacher read, thus comes the term echo reading (Rasinski & Smith, 2018). Both of these methods allow students to hear a target before attempting it independently.

The advantage of refrain and echo choral reading, particularly over having students read in unison, is that both options help in reducing the number of reading errors (Poore & Ferguson, 2007), which may provide lower performing readers the opportunity to experience just a little of the success they need in order to maintain the status quo socially (Rasinski, 2017). Rasinski and Smith (2018) advance the social aspect by pointing out the sense of community students begin to build when they participate in

choral reading. Paige (2011b) speaks to this in his research when he reports that students who were asked to read chorally were observed participating more frequently and even seemed to be enjoying reading. The results of this study also indicated an improvement in the students' reading (Paige, 2011b).

Knowledge Rich Texts. The ultimate goal in reading any text is comprehension. Teachers often have a tendency to focus more on comprehension within the context of the elements that will be tested by the state such as author's purpose, main idea, and supporting details (Willingham, 2009). Whereas these are certainly skills that need to be addressed, Willingham (2009) also brings to light the need to be cognizant of how much time teachers spend on comprehension when he points to the fact that providing students with a curriculum that calls for an exorbitant amount of time being dedicated to practicing thinking does not ensure that students will actually be able to think. Instead he calls for providing students with more to think with - a curriculum that is rich in knowledge.

When combined with a knowledge rich curriculum, the teaching strategies discussed in the current review of literature (all of which individually show student gains) have the potential to positively affect student achievement. Table 1 summarizes how each of these strategies can be used to make this possible as previously discussed.

Table 1. Summary of How Each Strategy Facilitates Comprehension

Strategy	How the Strategy Facilitates Comprehension
Reading in Phrases	- Allows students to chunk individual words into meaningful phrases (and frees up working memory) - Allows students to pause long enough to develop a mental picture of what the sentence is about

Table 1. Summary of How Each Strategy Facilitates Comprehension

Strategy	How the Strategy Facilitates Comprehension
Repeated Reading	- Produces gains in rate of reading - Provides an additional opportunity to recognize (thus put into context) words within each sentence - Increases the likelihood of students using intonation
Prosody and Intonation	- Requires students to be aware of the context of each sentence - Encourages students to make inferences about a text
Choral Reading	- Provides support for less fluent readers - Allows less fluent readers to experience success - Builds a sense of community/makes reading social

Strategies as Used in Intervention. Although research is clear that fluency instruction is

needed, it may be that teachers are simply not trained on which strategies to use (Hudson

et al., 2020). Rather than randomly choosing strategies that may improve fluency,

however, the prudent action to take is to turn to research for guidance. Hudson et al.

(2020) reviewed several empirical studies and found that repeated reading, when used as

a part of a multiple strategy approach, has the potential to improve oral reading fluency.

A list of the studies that are relevant to the current review of literature are summarized in

Table 2 as reviewed by Hudson et al. (2020).

Table 2: Effect Size of Multiple Strategy Approach to Fluency Intervention

Strategies Used	Number of Participants (n)	Duration of Study	Duration of Intervention	Frequency of Instruction	Effect Size for Oral Reading Fluency (ORF) and Comprehension (C)
Repeated Reading, paired with Choral Reading	1) n =100 2) n =24 3) n =34 4) n =119 5) n =162 6) n =202	1) 36 weeks 2) 6 weeks 3) 36 weeks 4) 20 weeks 5) 15 weeks 6) 15 weeks	1) 10-12 minutes 2) 15-20 minutes 3) 10-12 minutes 4) 30 minutes 5) 30 minutes 6) 30 minutes	1) 3x per week 2) 3x per week 3) 3x per week 4) 4x per week 5) 4x per week 6) 4x per week	1) 1.06 (ORF) 2) .14 (ORF) 3) 1.12 (ORF) 4) No effect size (ORF) and .35 (C) 5) . 46 / .47 / .41 (ORF) 6) .46 / .53 (ORF) and .36 / .10 (C)

Table 2: Effect Size of Multiple Strategy Approach to Fluency Intervention

Strategies Used	Number of Participants (n)	Duration of Study	Duration of Intervention	Frequency of Instruction	Effect Size for Oral Reading Fluency (ORF) and Comprehension (C)
Repeated Reading, paired with Phrasing	1) n =59 2) n =21 3) n =30	1) 20 weeks 2) 20 weeks 3) 8 weeks	1) 10 minutes 2) 10 minutes 3) 30 minutes	1) 2-3x per week 2) 2-3x per week 3) 3x per week	1) 1.18 / .56 (ORF) and .70 (C) 2) .95 (ORF) and 1.12 (C) 3) -.06 (ORF)

Interventions Currently Marketed for Fluency

Six research based literacy programs showing evidence of effectiveness in fluency were reviewed to determine how currently marketed interventions are being used. Each intervention was examined to understand the focus of instruction, how progress or success is monitored, how much time is needed for the lesson, the level of effectiveness as reported by What Works Clearinghouse (WWC), and the program rating as determined by Best Evidence Encyclopedia (BEE). The elements that comprise these interventions were then compared to the elements found in Fundamental Fluency Intervention.

Intervention Rooted in Phonemic Awareness. According to the What Works Clearinghouse Intervention Report, *Earobics* is "a [computer based] program [that] builds children's skills in phonemic awareness, auditory processing, and phonics, as well as the cognitive and language skills required for comprehension" (U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, What Works Clearinghouse, 2009, p. 1). The report also mentioned two studies that found insignificant, yet positive effects on reading fluency as evidence for reporting *Earobics* to have a potentially positive effect on fluency with the justification that "both positive effects were large enough to be substantively important" (U.S. Department of Education, Institute of Education Sciences, National Center for

Education Evaluation and Regional Assistance, What Works Clearinghouse, 2009, p. 4).

Although such loose interpretation could very well bring into question the principles of

statistical design that were used to support this type of report, the most logical is to look

to other evidence.

Another study that examined the effectiveness of *Earobics* found a significant

positive effect as well, but the positive effect was limited to gains in phonemic awareness

(Pokorni, Worthington, & Jamison, 2004). Pokorni, Worthington, and Jamison (2004)

went on to specifically address how the intervention did not improve other skills

associated with word level reading skills. The National Reading Panel, however, may

help clarify where some of the discrepancy originates. Their report clarifies that

instruction in phonemic awareness can not be considered phonics instruction unless the

letter sounds are actually paired with letters (National Reading Panel, 2000). Thus is the

case with Earobics as it is highly focused on having the students segment sounds, blend

sounds, discriminate between consonant and vowel sounds, and recognize beginning and

ending sounds without associating the sounds with characters from the alphabet (Pokorni,

Wonthington, & Jamison, 2004). When the instruction inherent to the *Earobics* program

is analyzed at the level of sounds rather than a word or even a letter level, the question

could be asked whether results at the sentence (fluency) level should reasonably be

expected.

Phonics, Decoding, and Automatic Word Call. Before readers can become

fluent, they must be able to actually read the words within a text without being disrupted

in the middle of a sentence with unknown words. Even the most novice teachers

understand this, and intervention at the word call level is likely to be the prescribed first

line of defense for students who are struggling with reading. *Fluency Formula* has

recognized this requirement by allotting time to work on word call for struggling readers.

The second two days of instruction in *Fluency Formula* is spent allowing students who

are already on grade level to continue working on fluency independently while struggling

readers work on phonics and word level skills (U.S. Department of Education, Institute of

Education Sciences, National Center for Education Evaluation and Regional Assistance,

What Works Clearinghouse, 2007b). Once a decision is made to intervene at the word

level, however, teachers must then decide what the instruction should look like. Two of

the other interventions reviewed, *Leveled Literacy Intervention* and *Corrective Reading*

have specific protocols to follow in order to produce gains. Interestingly, they both use

explicit instruction to teach word recognition from two entirely different approaches.

     Leveled Literacy Intervention is an intervention that delivers instruction at the

word level and then allows students to practice reading passages at both instructional

level and at independent level (U.S. Department of Education, Institute of Education

Sciences, National Center for Education Evaluation and Regional Assistance, What

Works Clearinghouse, 2017a). The content features high frequency words that are used

repeatedly in the texts, which often makes the next word in a sentence predictable

(Murray, Munger, & Hiebert, 2014). While this may allow students to experience success

that they might not otherwise have during intervention time, it could also harbor a habit

of calling expected words in the general education classroom. At the same time, Murray,

Munger, and Hiebert (2014) point out that it also leads to gains in the automatic calling of

sight words.

The content of *Corrective Reading* is much different. This intervention emphasizes decoding skill, often presenting phonics so that many of the words within the texts rhyme (U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, What Works Clearinghouse, 2007a). Rather than presenting high frequency words that are predictable, Torgesen et al. (2006) draws attention to the way *Corrective Reading* lessons focus on quick phonics drills and structures texts in a way that prevents students from word predictions. In a sense, the students are almost forced to decode words as they will incorrectly call words if they develop a habit of predicting the next word.

Whether word level instruction is carried out with high frequency words or with decodable texts, the next logical skill for students to begin trying to master is stinging the words they call together in a fluent way so that they can make sense of the texts they read. Yet, Rasinski (2006) argues that this type of instruction is often overlooked. With many teachers, fluency instruction begins and ends with directions to pause at commas and stop at periods. What happens when students are able to call the words well but lack true fluency that promotes understanding?

Interventions Rooted in Repeated Reading / Oral Expression. There are interventions on the market that are either directly marketed as fluency interventions or have positive impact on fluency even when marketed for word call. *Fluency Formula* is a supplementary curriculum that specifically targets fluency relies on the use of repeated reading by having students read chorally with the class before reading along with an audio recording of the text, reading individually, or reading with a partner (U.S. Department of Education, Institute of Education Sciences, National Center for Education

Evaluation and Regional Assistance, What Works Clearinghouse, 2007b). This type of

approach is supported by the experts as well. Repeated reading has been known to help

students increase the rate at which they read, and it is a strategy that is commonly

associated with helping students achieve an acceptable level of prosody (Kuhn, 2005),

particularly when they are practicing to be able to read in front of an audience (Rasinski,

2017). Repeated reading not only encourages students to read with expression, but it also

facilitates the prosody that research indicates is a clear link to higher levels of

comprehension (Miller & Schanenflugel, 2006; Whalley & Hansen, 2006). Despite the

research that links expressive reading and comprehension, *Fluency Formula* was the only

intervention reviewed that mentioned spending time on oral expression (U.S. Department

of Education, Institute of Education Sciences, National Center for Education Evaluation

and Regional Assistance, What Works Clearinghouse, 2007b).

Another program that uses repeated reading, *Read Naturally*, is a supplementary

reading curriculum that is designed to help readers improve fluency by using teacher

modeling, repeated reading, and progress monitoring (U.S. Department of Education,

Institute of Education Sciences, National Center for Education Evaluation and Regional

Assistance, What Works Clearinghouse, 2013). When participating in this curriculum,

students are asked to read a passage to obtain a baseline words per minute score before

they practice reading along with an audiotape, which is followed by yet another reading

of the same text to arrive at a final words per minute score (Erickson, J., Derby, K. M.,

Fuehrer, K., & McLaughlin, T. F., 2015). Erickson et al. (2015) justifies this practice

with the theory that:

When a student reads the same passage more than once they are more apt to

recognizing the words in the story. The words they read repeatedly become words

that they automatically say when they come to them in various school settings (p.

5).

Beyond just the basic idea of having students read the same text more than once, Gutman

(2011) pointed out that *Read Naturally* was designed in a way that allows students to

work at their independent instructional level and progress only when an acceptable level

of fluency is achieved.

Although *Read Naturally* is reported to have inconsistent outcomes, the decision

to include it in this review of literature was made based on the fact that it is one of the

very few programs that is devoted solely to the improvement of fluency (U.S.

Department of Education, Institute of Education Sciences, National Center for Education

Evaluation and Regional Assistance, What Works Clearinghouse, 2013). Further

investigation into the research on which it is based helps to explain the reason for the

rating. The results of one *Read Naturally* research study indicated a significant gain in

words per minute from the cold read to the hot read of the text (Erickson et al., 2015).

However, a repeated study indicated that, although gains could be acknowledged from a

cold read to a hot read, they could not be affirmed for student participants when they

were asked to revert back to a cold read (Morgan, McLaughlin, Webe, & Bolich, 2016).

Cooperative Learning. *Success for All* is unlike the interventions reviewed in

that it is presented as a "whole-school reform model (that is, a model that integrates

curriculum, school culture, family, and community supports) for students in

prekindergarten through grade 8" (U.S. Department of Education, Institute of Education

Sciences, National Center for Education Evaluation and Regional Assistance, What

Works Clearinghouse, 2017b, p. 1). Granted, it does not fall within the scope of an

intervention or supplementary curriculum, but it is included in the review because (1) it

was one of the six that remained on the radar after all filters to eliminate programs had

been applied, (2) it is touted as being responsible for widespread success and (3) *Success*

for All has several elements that can easily be incorporated with any intervention or

curriculum in order to amplify the successes already realized by students. *Success for All*

provides one-on-one tutoring for 20 minutes each day (Chambers et al., 2008) using

certified and experienced teachers who have received intense training in validated,

research based strategies (Chambers, Cheung, Madden, Slavin, & Gifford, 2005). It is a

whole-school approach complete with teacher buy-in, parent involvement, and even

community involvement (Borman et al., 2007). While one-on-one time with the lower

students every day is not a reasonable expectation given the limited school budgets that

are a part of every school's reality. Fortunately though, teacher buy-in, supportive

communities, and parental involvement are not costly endeavors. They simply require

persistent and dedicated teachers.

In an effort to bring all of the elements together from interventions currently on

the market that address fluency either directly or indirectly, a summary is provided in

Table 3.

Table 3. Summary of Interventions Currently on the Market

Intervention / Curriculum	Focus of Instruction	Method of Measurement	Time Needed for Lesson	WWC Rating	Best Evidence Encyclopedia
Fluency Formula	Automatic word recognition, decoding accuracy, repeated reading, and oral expressiveness	Words Per Minute	15 minutes per day	*Mixed*: evidence that intervention's effect on outcomes is inconsistent.	No Qualifying Studies
Earobics (computer based)	Interactive (computer based) phonemic awareness - recognizing sounds, blending sounds, and word closures	Automated data collection and analysis	Game based - no specified time to progress through a lesson	*Potentially Positive*: evidence that intervention had a positive effect on outcomes with no overriding contrary evidence.	No Qualifying Studies
Success for All	Cooperative learning - getting families involved, one-on-one tutoring, and teacher training on reading strategies	Quarterly assessments	Not defined	*Potentially Positive*: evidence that intervention had a positive effect on outcomes with no overriding contrary evidence.	Strong Evidence of Effectiveness
Corrective Reading	Direct instruction that is scripted - decoding and passage reading	Words Per Minute	45 minutes per day	*Potentially Positive*: evidence that intervention had a positive effect on outcomes with no overriding contrary evidence.	Strong Evidence of Effectiveness
Read Naturally	Repeated passage reading	Words Per Minute	30 minutes per day	*Mixed*: evidence that intervention's effect on outcomes is inconsistent.	Limited Evidence of Effectiveness: Weak Evidence with Notable Effects
Leveled Literacy Intervention	Direct instruction in phonics, vocabulary, comprehension, and reading of leveled texts	Benchmark assessments		*Potentially Positive*: evidence that intervention had a positive effect on outcomes with no overriding contrary evidence.	Not addressed by BEE

Currently Marketed Interventions Versus Fundamental Fluency Intervention

The intent in the design of Fundamental Fluency Intervention is to provide

teachers and parents with a systematic and cost effective supplemental reading

curriculum that focuses solely on improving fluency. Students face a constant pressure to

read more words quickly. Teachers and parents have access to a multitude of programs

that provide direct instruction to help students speed up their word call, and almost every

reading program on the market has a component that provides direct instruction to help

students develop comprehension skills. Yet, direct instruction that will help students

bridge the gap between simple word call and comprehension remains largely untouched

beyond encouragement to read faster, pause at commas, and stop at periods. Fundamental

Fluency Intervention provides the direct instruction that is often missing in core reading

programs. The direct instruction is rooted in research that supports reading in phrases or

chunks (Rasinski, 2016), repeated reading (Kuhn et al., 2006; Rasinski, 2012), and

prosody with intonation (Stahl & Kuhn, 2002; Rasinski, Rikli, & Johnson, 2009;

Rasinski, 2012; Miller & Schanenflugel, 2006).

The review of literature revealed that there are programs currently on the market

that make use of the strategies supported by research. Evidence can be found that

repeated reading and prosody (oral expression) are being successfully used in core

reading programs and in intervention programs. However, no evidence can be found that

students are being taught to read in phrases. This single element is the one area that sets

Fundamental Fluency Intervention apart from other research based reading programs. A

summary of the instructional practices other reading programs use compared to the

instructional practices used in Fundamental Fluency Intervention is presented in Table 4.

Table 4. Other Interventions vs. Fundamental Fluency

Instructional Practice	Reading Programs that Use Instructional Practice	Included in Fundamental Fluency?
Repeated Reading / Oral Expression	Read Naturally Fluency Formula	Yes
Comprehension	Leveled Literacy Intervention	Yes

Table 4. Other Interventions vs. Fundamental Fluency

Instructional Practice	Reading Programs that Use Instructional Practice	Included in Fundamental Fluency?
Word Attack Skills (Phonics, Decoding, Automatic Word Call)	Fluency Formula Leveled Literacy Intervention Corrective Reading	No
Phonemic Awareness	Earobics	No
Cooperative Learning	Success for All	No
Reading in Phrases	**None**	Yes

Criteria for Inclusion

Several criteria were used in selecting the literature to be included in this review. An initial search was performed using the JEWL advanced search available through Middle Tennessee State University's Walker Library using keywords such as "phrasing", "fluency", "reading strategies", "struggling readers", "intervention", and "elementary school". Once results were returned from a keyword search, the results were filtered to include only scholarly, peer reviewed articles to add credibility to each source used. Once those articles were retrieved, read and annotated, references were scanned to both validate credibility of the articles chosen and to generate additional articles to be included.

Additionally, What Works Clearinghouse was used to determine which research based reading interventions were currently available on the market with positive outcomes. This was used due to the rigorous research requirements mandated for eligibility to be included in the What Works Clearinghouse database (WWC: Find What

Works!, n.d.). Filters were used to drill down to select the most relevant interventions to review using the following criteria:

- Interventions with a focus on Literacy

- Reading programs that spanned no lower than kindergarten and no higher than sixth grade but specifically included third grade

- Reading programs that had either positive or potentially positive results

- Reading programs that specifically addressed reading fluency

A total of six reading programs met the search criteria and were included in the review. As an added layer to the vetting process, each of the reading programs to be included in the literature review were cross referenced with John Hopkins University's Best Evidence Encyclopedia, which evaluates the strength of programs that target struggling students (Best Evidence Encyclopedia -- Empowering Educators with Evidence on Proven Programs, n.d.).

CHAPTER III: METHODOLOGY

The way students respond to intervention is often as unique as their needs are. The current study was performed during the nine weeks that followed the school's fall break to better understand how students experienced the Fundamental Fluency Intervention. Although progress can be tracked using quantifiable measures, it is possible to increase the effectiveness of an intervention by carefully examining a small group (Patton, 2002). Qualitative research allows for a broad approach to examine a phenomena for the positive and the negative experiences of the participants (Marshall & Rossman, 2016). In order to accomplish this type of in depth investigation, it is important to link specific research questions to the phenomena being examined (Marshall & Rossman, 2016). This chapter, therefore, will describe the research methodology that was used to answer the following research questions:

1. How do students perform on a researcher created fluency rubric over the course of a 9 week reading intervention?

2. How does fluency change qualitatively for students over time when they participate in the Fundamental Fluency Intervention?

3. What are student perceptions of experiences during the reading intervention sessions?

4. What are parent perceptions of experiences during the reading intervention sessions?

Conceptual Framework for the Intervention

Although research is clear about the positive relationship between fluency and comprehension, there is a gap when it comes to establishing a best practice with regard to

(1) the instructional practice teachers should use to help students improve fluency (phrasing vs. repeated reading vs. prosody vs. choral reading) and (2) measuring fluency (rate vs. correct phrasing vs. expression). The current study included an intervention in which each lesson consisted of students reading sentences in phrases until a desired level of fluency was achieved before being asked to add emphasis to words within the sentence (when appropriate) in order to produce a sentence that sounded like natural human speech. Many of the reading interventions found on What Works Clearinghouse, such as Fluency Formula, Corrective Reading, Read Naturally, and Leveled Literacy Intervention, are founded on instruction that is focused on decoding (WWC: Find What Works!, n.d.). Furthermore, three of these interventions (Fluency Formula, Corrective Reading, and Read Naturally) rely on a words per minute measurement tool to assess growth. The researcher's belief is that this type of treatment could lend itself to a continuous cycle of decoding intervention with words per minute being measured periodically only to receive more decoding intervention without producing significant gains (see Figure 1.)
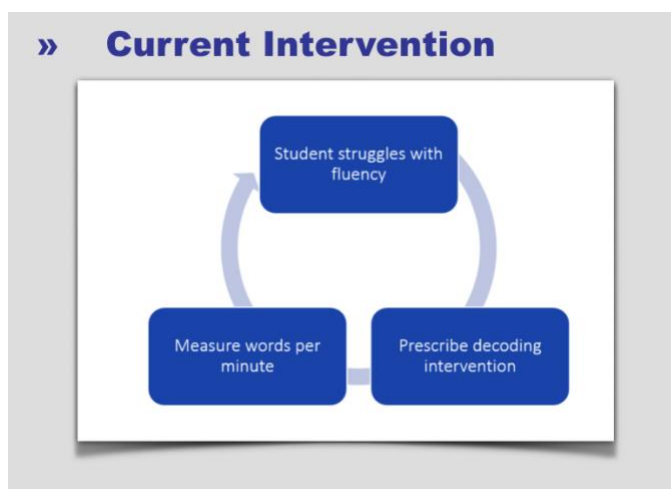
Figure 1. Representation of Standard Intervention Practices

In an effort to make the conceptual model of intervention more linear from the point that students enter the intervention process, the researcher investigated how students respond to a multi-strategy approach to include direct instruction on correct phrasing and intonation (expression) in addition to direct instruction on decoding. Furthermore, the assessment was considered a multi-layered measurement as well to (1) more accurately diagnose exactly where the student is struggling and (2) develop a more holistic picture of the reader with regard to fluency (see Figure 2.)
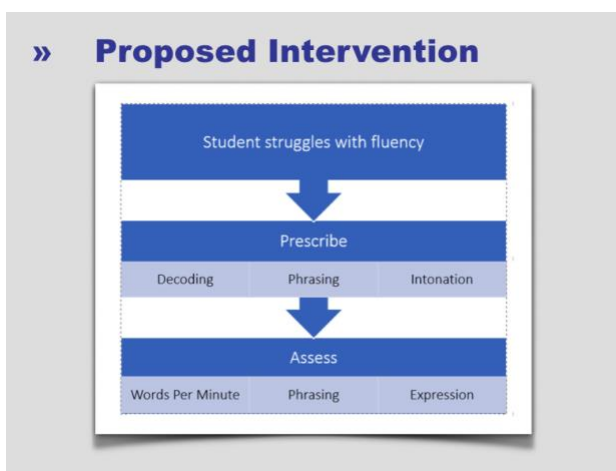
Figure 2. Representation of Intervention

Lesson Flow. Each lesson within the intervention flows as follows:

1. Warm up (2 minutes) - students read fry phrases based on their instructional level. This step reminds them what a phrase might sound like and gets them into the flow of reading phrases.

2. Phrasing (10 minutes) - students take 10 sentences and physically mark the phrases by connecting the first word and the last word of each phrase within the sentence. Words that should be read in isolation are denoted with a single line straight down underneath the word. Students understand that they may not end a

phrase with a word such as a, an, and the. They also know they must start a new phrase with each preposition, which also means they can not end a phrase with words like on, in, around, through, over, etc. Beyond that, each phrase must make sense as a logical thought.

3. Oral Reading (15 minutes)*

   a. Oral Reading #1 - students are simply asked to call each word to ensure they can accurately decode the words.

   b. Oral Reading #2 - students are asked to "scoop" their sentence. They understand that they should then trace their finger in one motion from the first word in the phrase to the last word in the phrase as they read the sentence one phrase at a time. The scooping is a multi-sensory approach that promotes fluid reading rather than choppy reading even at the phrase level.

   c. Oral Reading #3 - students are asked to choose the word or words they would choose for intonation and read the sentence one final time.

   *When students are struggling, echo (choral) reading should be substituted for Oral Reading #1. This will allow the teacher to model appropriate phrasing and intonation. This is also an option to provide students with a break in routine on occasion.

4. Question and answer (3 minutes) - students are asked to indicate to the teacher the inference that can be made based on the word or words that were emphasized in the lesson.

A sample lesson can be found in Appendix E, and a detailed curriculum map for the ten week intervention is available in Appendix F.

Theoretical Perspective and Methodology

The current research approached the investigation using a constructivist approach. This approach takes into account the notion that knowledge is constructed between the researcher and the participant (Hatch, 2002). Although absolute realities are not possible (Hatch, 2002), it is possible to attempt understanding from the points of view from those who experience it (Sipe & Constable, 1996). Thus, the current research attempted to develop understanding of how students experience the Fundamental Fluency Intervention and how their parents perceive their progress.

In further considering the most appropriate framework for this research, it is important to note the methodology so that the logic behind the research is clearly understood (Marshall & Rossman (2016). Creswell (2013) indicates that case study research is appropriate for use when the intent is to investigate a situation that is bound by time and place. Case study implores the use of multiple sources of data (Creswell, 2013) to provide evidence in support of the researcher's argument (Marshall & Rossman, 2016). As such the current research is investigated using a case study approach that takes into consideration how students responded to a 9 week intervention (bound by time) in a school located in the Southeastern portion of the United States (bound by place) using a researcher created rubric, student questionnaires, researcher observation, and parent interviews to fulfill the need for multiple data sources (Creswell, 2013).

Context

Sardis Elementary School (pseudonym) is a school that serves students in kindergarten through sixth grade and embraces a culture of engaging and empowering students to excel academically. The school was established in the 2019-20 school year, and it is the thirteenth school to be established in a district that accepts students based on a zone located within the limits of the city school district, which is located in a state in the southeastern portion of the United States. This school was selected for participation in the current study as qualitative research demands that the setting be one in which the researcher has unabated access to both the site and the participants (Marshall & Rossman, 2016). This setting allowed access to participants, and it was conducive to a positive, trusting relationship with the participants involved in the study. Furthermore, both the district and the school in which the study took place granted permission to access both the site and the participants. They also granted permission to collect data with a signed gatekeeper letter, which was included as an artifact in the Institutional Review Board's approval for study at Middle Tennessee State University.

Participants

Three students were purposefully selected to participate in the current study along with their parents. All three students had similar deficits in reading to allow for homogeneous sampling, which holds the potential for more information particular to the subgroup being studied (Patton, 2002). In addition to the three participating families, a trained research assistant was selected to assist the researcher in collecting data for the research. Such purposeful selection of participants was done with the intent to build an information rich investigation that will yield a great deal of understanding (Patton, 2002).

Student A. Tucker (pseudonym) was a 3rd grade male student at Sardis Elementary who presented with a deficit in reading that may be attributed to both a hearing impairment and a language barrier. Although Tucker wore hearing aids, he did on occasion ask for instruction to be repeated due to his hearing loss. Despite his deficit in hearing and his second language being English, he was able to decode most words without teacher prompting. However, he had a tendency to read through periods in a monotoned voice. Tucker had no evidence of understanding the concept of phrasing.

Student B. Xander (pseudonym) was a 3rd grade male student who exhibited little to no errors in decoding. Although he occasionally omitted suffixes, his decoding skills were solid, regardless of the text presented. His fluency skills were very basic in that he consistently stopped at periods. He rarely made attempts at intonation. However, when he did, it was often applied to words that did not warrant a change in tone. Xander did not demonstrate previous instruction in phrasing.

Student C. Trish (pseudonym) was a 3rd grade female who had significant deficits in reading words. She consistently showed very little progress toward meeting a goal to increase her words per minute on a first grade level test. Despite her decoding deficits, she was able to show an indication of understanding both intonation and phrasing prior to beginning of the intervention. However, it was difficult to fully gain a full understanding of Trish's fluency needs due to the severity of her ability to decode texts that were two grade levels below her expectations in the classroom.

Data Collection Assistant. In addition to the students and their parents, one educational assistant was asked to participate as a data collection assistant to eliminate the possibility of researcher bias in the collection of timed fluency data. This data

collection required training to ensure reliability. Discrepancies in score were reviewed together when students were close on pronunciation and/or when determining whether or not subtle changes in tone indicated that a student was reading with expression. The educational assistant was highly competent with at least one year of experience in working with children who have difficulties in the area of reading.

Data Collection Training. One training session was held for the educational assistant who served as data collection assistant. She was provided with a rubric to follow along as the researcher/participant explained the requirements for each measurement point. Following the general overview, the data collection assistant was provided with a written definition for intonation and for phrasing before being provided an audio example of both examples and non-examples of intonation and phrasing. The written definitions along with the examples and non-examples is provided in Appendix A.

The data collection assistant was then asked to score multiple recordings noting each instance of intonation. All differences in rubric scores were reviewed together to ensure reliability. A similar process was followed for the phrasing portion of the rubric. Although daily debriefing occurred with the data collection assistant, scores were only collected once per week.

Data was collected using a recording device that allowed both the researcher and the data collection assistant to rewind when necessary to hear words or sentences again. Following the data recoding, all timed readings were transcribed to ensure accuracy in the number of words read correctly.

In addition to allowing the researcher and data collection assistant to rewind timed readings, it also provided the opportunity to review discrepancies between the

researcher's rubric scores and the data collection assistant's rubric scores. In order to

check for reliability, the data collection assistant verified 30% of the scores that were

completed by the researcher, and all differences were reviewed with the researcher.

Data Sources and Collection

Multiple sources of data were used in the research to serve as a form of

triangulation and to provide multiple layers of support for possible findings. The sources

of data were as follows:

1. Weekly rubric scores from one minute timed fluency probes

2. Weekly student questionnaires

3. Parent interviews before and after the 9 week intervention

4. Observation / researcher reflection notes recorded after each session

Weekly Rubric. Fluency scores were collected once per week during the

intervention. This data collection was performed by recording and then listening to each

student read for one minute using an easyCBM passage where words per minute (rate and

accuracy), expression (prosody and intonation), and rhythm (phrasing) were recorded

using a researcher designed rubric as each area is an effective tool for measuring reading

fluency (Hudson et al., 2005; Rasinski & Smith, 2018). The purpose of this type of

measurement was to determine if growth occurred. Deeney and Shim (2016) indicate that

such monitoring of progress can be useful in determining the effectiveness of an

intervention. They further specify that such progress monitoring should be done at the

student's instructional level rather than grade level (Deeney and Shim, 2016). Therefore,

the data measurement tools were administered using below grade level reading probes for

both comprehension and fluency. Justification for each area of measurement is presented in the following paragraphs.

In addition to a review of current literature, the researcher relied on the eight years of interventionist experience. Furthermore, a pilot study was conducted using an action research approach prior to beginning this study after the researcher created the Fundamental Fluency Intervention as an interventionist in a k-5 school for three years. Although the pilot study results were not reported or used in any way during the current study, the action research was helpful in establishing the rubric. The creation of the rubric was a step that the researcher felt was necessary to help measure student growth that appeared to be occurring without a measurement tool to help in determining whether the growth was actually occurring or only perceived by the researcher. This was a step that was taken after the intervention had been used in practice for three years prior to the current study.

In the process of designing the rubric, the researcher was mindful that both reading too fast and reading too slow can be detrimental to comprehension (Rasinski, Rikli, & Johnston, 2009). As such, a score of 0 is designated for both extreme high word counts and extreme low word counts. The span of the words per minute is based on Hasbrouck and Tindal's 2017 reading norms update for 3rd grade expectations in the fall (see Figure 3.)

Words Per Minute: Correct WPM: _____		
134 or more		0
104 > 133		4
83 > 103		3
59 > 82		2
40 > 58		1
Below 40		0

Figure 3. Words Per Minute Measurement from Researcher Created Rubric

In addition to revealing how quickly and how accurately students read the passages, the rubric was used to show how well students were able to demonstrate expression by recording the number of instances that intonation was detected by the researcher and data collection assistant. Rasinski (2012) supports this type of data collection in his explanation that changes in tone of voice, when applied correctly in a sentence, can lend to the greater meaning. In the development of this rubric, the researcher was mindful that the readers were young and lacked instruction on where and how to correctly apply intonation. With that in mind, a minimum number of instances was established in increments of five (see Figure 4.)

Expression:		
Intonation 15 or more		5
Intonation 10 > 14		4
Intonation 5 > 9		3
Intonation 1 > 4		2
Monotoned		1

Figure 4. Expression Measurement from Researcher Created Rubric

The final measurement in the rubric was used to determine whether students read the passages with expression by marking where students paused during the passage. This portion of the fluency score was supported by Rasinski (2006) in his presentation of research that indicated that reading in phrases helps readers to make sense of what they read. The rubric was constructed based on several patterns that are known to the researcher based on experiential knowledge. Students who are struggling to read often do so in a word by word fashion. Thus the lowest score was assigned for this type of reading. Additionally, struggling readers tend to read through punctuation. Again, a low score was assigned for these readers. Students who are beginning to pause, however, often begin with pausing at commas and stopping at periods. These readers were assigned a midline score. The more advanced readers begin to read in meaningful phrases, so the higher scores were assigned to readers that attempted this type of reading along with those who successfully applied this skill as instructed (see Figure 5.)

Rhythm:

Phrases are clear with a pause / Phrases make sense		5
Phrases are clear with a pause / Phrases are awkward		4
Pauses at commas / Stops at periods		3
Reads through punctuation		2
Choppy / Word by word		1

Average Rubric Score: _____

Figure 5. Rhythm Measurement from Researcher Created Rubric

The individual scores on rate, expression, and rhythm were averaged together to paint a more holistic picture of the students' reading fluency. Each average was then

entered into a spreadsheet that was used to graph student progress. The difference between the beginning average score and the ending average score indicates growth for each student. Each growth score was then divided by the number of weeks (ten) that intervention was provided to arrive at a Rate of Improvement (ROI) for each student. The rubric may be reviewed in its entirety in Appendix B.

Each fluency data point was collected using easyCBM as a data measurement tool. Curriculum-based measurement (CBM) tools are evidence based tools (Nese et al., 2011) that are widely used as effective methods of capturing data that can be used to both attain benchmark scores and to help monitor student progress (Nese et al., 2012). In choosing easyCBM as an acceptable measure for the current research, it can be noted that easyCBM is norm-referenced using norms that were developed in 2013-14 and included students from across the United States, including the state in which the current research takes place (Anderson et al., 2014). Furthermore, easyCBM is backed by research indicating that the tests for passage reading fluency and for comprehension are valid (Tindal et al., 2009) and reliable (Alonzo & Tindal, 2009; Lai et al., 2012).

Student Questionnaire. The students were asked to complete a questionnaire following each timed reading probe. The purpose of this data collection tool was to understand what the students experienced during the intervention sessions (see Appendix C). In order to collect this data, students responded orally to a series of seven questions. Their responses were recorded using an audio recording device. It was later transcribed to allow the researcher to analyze the data. The data sets were analyzed in accordance with the recommendation of Marshall and Rossman (2016) for perceived attitudes toward the intervention.

The questionnaire also helped the researcher to understand student's beliefs regarding their own progress and to help take the focus off of the researcher's perspective. The researcher was also mindful in the creation of the questionnaire that teacher perception of student ability has the potential to influence how the students perceive themselves (Lezotte & Snyder, 2011) and how instruction is delivered (Begeny et al., 2008). Therefore, each question was asked in the same order while the researcher maintained a consistent, expressionless demeanor to capture the student responses. This data was also used to help measure the success of the intervention (Deeney & Shim, 2016).

Parent Interviews. One parent representing each of the three students was asked to participate in two separate interviews. The interviews took place once prior to the intervention and once at the end of the ten week intervention (see Appendix D). The parents were asked a series of six questions to help the researcher gauge their perceptions of their child's experience during the intervention sessions. In keeping with the argument from Marshall and Rossman, 2016 that the researcher must remain neutral in the investigation, each question was asked in the same order with the researcher withholding any affirming or disaffirming responses to the parents' answers.

Researcher Reflection and Observation. Observation is perhaps one of the most critical data sources that is used in case studies (Marshall & Rossman, 2016). During the initial phases of observation, it is important that more concrete observations be recorded (Marshall & Rossman, 2016). After social relationships begin to develop and familiarity with participants begins to take place, it may be possible to look more at habits and themes within the relationships (Marshall & Rossman, 2016). Therefore, observations

and researcher reflections were recorded at the end of each intervention session while the student behaviors were fresh in the mind of the researcher. The intent of this data was to capture student demeanor after each timed reading session with the researcher paying close attention to any changes that were noticeable throughout the sessions.

In addition to collecting observation data during timed readings, the researcher made notes regarding demeanor during intervention sessions when students appeared relaxed while reading or stressed when reading. The observation data that was was then analyzed by comparing student answers to comfort levels when reading in front of others with their demeanor during instances where they were asked to read aloud.

Data Analysis

An inductive approach was used to analyze the data in the current research. Inductive analysis begins with unique pieces of information that are collected and analyzed for connections to both literature and to other pieces of unique information to arrive at a whole, meaningful body of knowledge (Hatch, 2002). Hatch (2002) indicates that using an inductive approach to data analysis is appropriate for constructivist approaches to research that include both interview data and observation data. This type of data analysis allows the researcher to frame the analysis around specific words in participant responses to begin looking for patterns (Hatch, 2002). The student interviews allowed the researcher to analyze data for patterns in student responses to comfort levels when reading in front of peers, teachers, and parents.

Inductive analysis also allows the researcher to analyze observational data at both the word level and an overall description of the event being studied (Hatch, 2002). Several sources of data were analyzed at the word level. Both student interviews about

their reading goals and their comments about their most recent books read. Parent interviews were also analyzed at the word level.

In keeping with the inductive analysis protocols, organized data was read multiple times to look for semantic relationships among the data (Hatch, 2002). Once the researcher was able to establish a pattern in participant responses, specific domains were identified and assigned a code along with a record of where the information could be located again for future reference (Hatch, 2002). Each domain was then analyzed for themes, and specific examples were recorded to support each domain (Hatch, 2002).

All data collection sessions, including timed readings, student interviews, and parent interviews, were recorded using the cellular app TEMI and subsequently transcribed via the app. Once the transcription of each data collection session was complete, the transcripts were reviewed by the researcher for accuracy, and changes were made within the app before they were downloaded as word documents. Each word document was printed to be used for comparison when scoring for words per minute and for word level data analysis.

The researcher and data collection assistant scored each student for rate (words per minute), expression (intonation), and rhythm (phrasing) based on a researcher-created rubric, which was created using research as previously described. Scores were then compiled into tables and graphs. This collective data was analyzed for student growth as defined by the rubric.

The researcher also used student interviews to compare each week's answers to detect any changes in answers from one week to the next. All changes that were noted were also compared to parent data. For instance, the student whose parent did not

participate was noted to have low confidence when reading in front of family. Although

she gained confidence when reading in front of both teachers and peers, she never gained

confidence when reading in front of parents.

All of the notes made during data analysis was compared to the researcher's

observation

notes to see if there were similarities between the data and the researcher's observations

to search for themes. For instance, one of the researcher's observations was that a student

appeared nervous during timed readings. This was then compared to the student

interviews where the student reported during all student interviews that he was not

comfortable reading in front of teachers. Another example included several instances

where the student was asked to share thoughts with his peers, which he declined. Again,

this was compared to his weekly interview that indicated that he was not comfortable

reading in front of peers.

Parent interview data was compared to student interview data as well to see if

similarities existed between student reports and parent reports. Although parent interview

data was limited, very loose connections were possible. For instance, one student

reported being uncomfortable reading in front of peers while his parent reported that she

wanted him to be able to read in front of his class if the teacher called on him. Likewise,

the parent that withdrew from the study was loosely connected with the student who

reported each week being uncomfortable reading in front of her parents.

Codes were established solely by the researcher once corroborations of data could

be established. Each code was reviewed and compared with the data again to ensure that

a saturation of data had been established before the researcher began establishing themes. Once themes were established, the researcher began writing about the results of the study.

Validity and Trustworthiness

Validity and trustworthiness are critical components in research acceptance. One strategy that is commonly used to increase the validity of research finding is in the use of triangulation (Mathison, 1988). According to Mathison, 1988, using a multi-method design helps to reduce subjectiveness that may be found when only using one method of research, which lends itself to bias. Triangulation is rich in the present study as there are multiple sources of data used to develop common themes. Sources of data that serve as a measure of the triangulation strategy to establish validity include the use of weekly student progress monitoring, weekly student questionnaires, pre and post intervention parent interviews, and diligent researcher observations.

In addition to triangulation, Marshall and Rossman, 2016 suggest that a researcher use convergence and corroboration to establish research validity. The present study relies on both convergence and corroboration. Convergence has been taking place since work began on the research project with regular feedback and suggested revisions from a committee of four professors at the university in which the research took place who have a vested interest in the success of the research at hand. Furthermore, corroboration will be evident in the data analysis phase as theories will be established from existing peer reviewed research studies and other scholarly works. Having evidence of both convergence and corroboration serve to strengthen the validity of research finding.

Ethical issues. Marshall and Rossman, 2016 point out that ethical issues are inherent in qualitative research and should be addressed first with establishing respect for

the participants. In other words, the researcher must ensure the participants' privacy and make sure they understand their right not to participate (Marshall and Rossman, 2016). This issue was addressed in the current study through the use of a gatekeeper letter that specifically assures the district of privacy and anonymity. Further assurance of this ethical issue is addressed through informed consent letters that directly state that each participant has the right to anonymity and the right to opt out at any time they choose to end participation.

Another ethical concern is that of beneficence, which "means that the researcher does whatever she reasonably can to ensure that participants are not harmed by participating in the study" (Marshall & Rossman, 2016, p. 52). Safeguards were in place from the beginning of this research within the setting itself to address this concern. In order to ensure that each student had a safe environment in which they could freely express themselves, the investigator taught the Fundamental Fluency Intervention in a homogeneous group of students with similar reading abilities. Furthermore, all questionnaires were administered privately away from peers. This arrangement helpe to prevent any student from feeling like they were singled out as having either superior or inferior abilities.

Subjectivities. Peshkin (1988) suggests that researchers address their subjectivity. "When their subjectivity remains unconscious, they insinuate rather than knowingly clarify their personal stakes" (p. 17). In order to guard against insinuations of subjectivity, it is expressly acknowledged that the researcher does wish to see success in the implementation of the Fundamental Fluency Intervention. However, knowing that the interest is inherent in the investigation has provided an avenue to mitigate against such

subjectivity through the planned use of routine procedures during student questionnaires and parent interviews. Doing so aids in the researcher being able to bracket or suspend personal understandings (Creswell, 2013).

Limitations

All research involves certain limitations that are inherent despite having a carefully planned design (Marshall & Rossman, 2016). One limitation that exists is the fact that the participants in the study were all aware that they were being asked to participate in a study (Marshall & Rossman, 2016). Knowing that the purpose of the research was to determine whether the Fundamental Fluency Intervention could potentially produce responses that were either in favor of or counter to a claim of effectiveness simply because of the relationship with the researcher. In particular, the researcher was aware that the possibility existed that participants could have chosen to answer in a way that they feel the researcher would desire.

Additionally, the researcher was the sole coder with regard to the themes identified within the study. Although a research assistant was used during the current study, her assistance was limited to the timed readings. All themes were solely developed by the researcher. Data triangulation was used to ensure trustworthiness, documents were limited to those collected by the researcher (Mathison, 1988).

Participant data was also limited due to the withdrawal of one parent. In addition to a parent withdrawal, the researcher faced the challenge of a language barrier with a parent participant where no translator was available. Parent information was also limited with the third parent who was asked to participate in the amount of data that was collected. This parent expressed shyness in answering questions. Although the data

collected was included in the findings, it was appropriate to include this as a limitation to the study.

Another relevant limitation was the existence of Covid-19, which created a global pandemic that forced the researcher to divert the research protocol from the one that was originally planned. The alternative investigation, although systematically planned and carried out, was much more narrow in scope than originally planned. In addition to impacting methodology, student quarantine impacted data collection.

Another limitation that existed was that one of the parent participants had a language barrier, and no translator was available. While some information was clear, a translator would have made more information retrieval possible. Because of the limited parent information, it was not possible to isolate any improvements in student data to attribute them to the intervention being studied as only a quantitative study with a larger sample size would make this possible.

Finally, the nature of case study research is that it is bound by time and place (Creswell, 2013), which also means that any findings and conclusions that were revealed are also bound to the same particular time and place in which the investigation took place (Marshall & Rossman, 2016). This limitation further means that, although transferability may be possible, findings are not generalizable (Marshall & Rossman, 2016).

CHAPTER IV: FINDINGS

This chapter presents the findings of the case study that examined how third graders with reading difficulties responded to the researcher created Fundamental Fluency Intervention. Each of the three students that were purposefully selected for participation is discussed individually as student responses to the intervention were noted to be unique throughout the entirety of the study. All three students were strategically placed in the same group for intervention purposes based on similar reading deficits, the most notable of which was fluency. In the examination of each student's response to the intervention, the intent was to answer the following research questions:

1. How do students perform on a researcher created fluency rubric over the course of a 9 week reading intervention?

2. How does fluency change qualitatively for students over time when they participate in the Fundamental Fluency Intervention?

3. What are student perceptions of experiences during the reading intervention sessions?

4. What are parent perceptions of experiences during the reading intervention sessions?

Tucker

Tucker was a third grade male at Sardis Elementary School who presented with mild difficulties in decoding and fluency. Most of Tucker's word call errors were noted when he read words with suffixes. He had a tendency to omit the suffix -ed. For instance, the word "hoped" was called "hope", and the word "loved" was called "love". He also had a tendency to leave off the suffix -s. In one instance, he was presented with the word

"hours", which he called 'hour". Although Tucker was a student in the English Language Learner (ELL) program in addition to being a student identified as having reading difficulties, his omission of suffixes was corrected by the third week of the intervention.

Timed Readings. Fluency was a much more difficult task for Tucker to show progress in. It was also a difficult area to measure due to his ELL status and his hearing impairment as the researcher was unable to determine whether improvements were due to his time with the intervention or time he spent participating in ELL interventions. Although he had a high rate of correct words called during his one minute timed reading assessments, he had a tendency to read without phrasing or expression. In fact, he read through several commas and periods during his first three data collection readings with a few points of notable intonation and even fewer points of notable phrases. He was able to show some improvement in expression / intonation during week five, and he was able to demonstrate mastery of his rhythm / phrasing at week seven.

Despite his slow growth shown in data collection, Tucker was able to demonstrate both phrasing and intonation very early on during intervention. Because of the marked difference in the way he was reading during intervention sessions and data collection sessions, an additional question was posed to him after the third data collection point to assess his perception of the objective during assessment. His answer revealed that he believed his objective during one minute readings was to read (or call) as many words as possible during that period. It seemed, at that point that, that he placed a higher value on the rate at which he could call words than he placed on expression and rhythm. His detailed data is summarized in Table 5 and Figure 6.

Table 5. Tucker's Summarized Timed Reading by Week

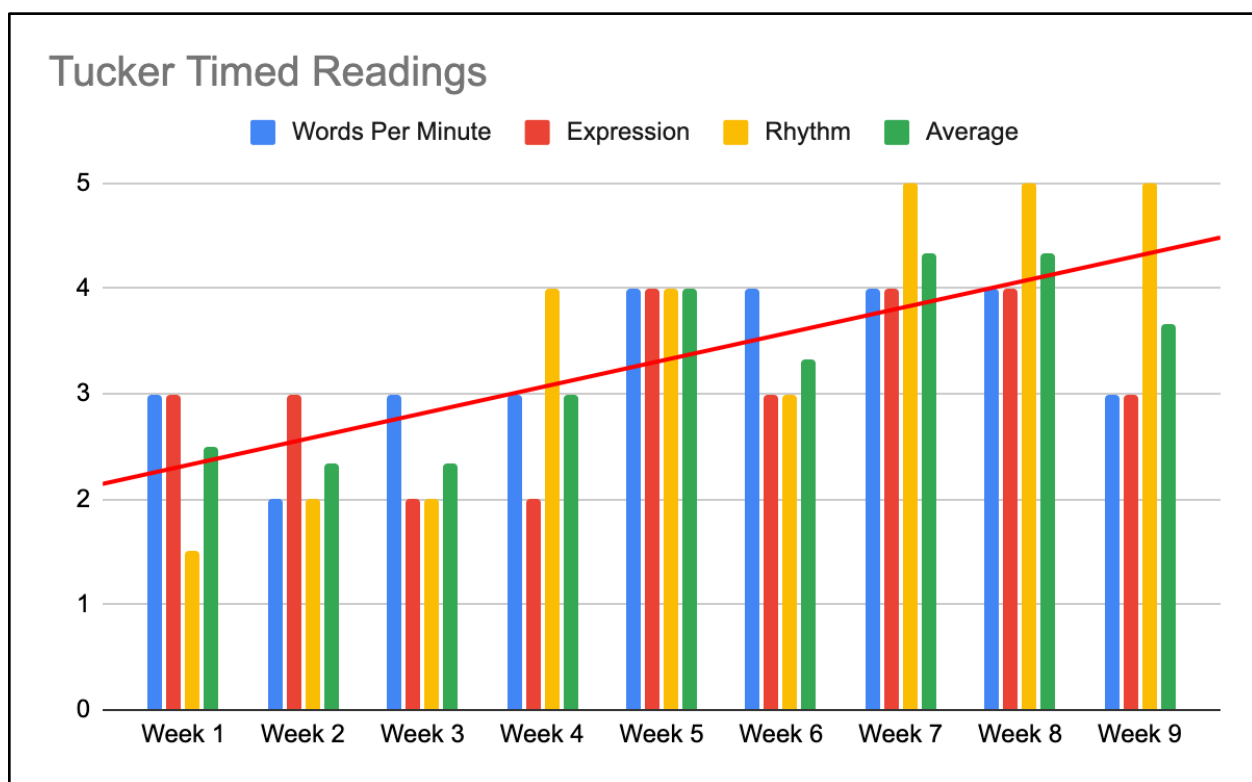| Tucker	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Words Per Minute	3	2	3	3	4	4	4	4	3
Expression	3	3	2	2	4	3	4	4	3
Rhythm	1.5	2	2	4	4	3	5	5	5
Average	2.5	2.3	2.3	3.0	4.0	3.3	4.3	4.3	3.7

Figure 6. Tucker's Timed Reading Chart

Student Interviews. Tucker set several lofty goals for himself. In the first week of interviews, his goal was to read a lot of books. His second goal was to create stories. For several weeks, he indicated that his reading goal was to be able to read all of the

words in the entire world. During his last week of data collection, however, he scaled his

goal to being able to read a chapter book. His confidence in being able to reach his

reading goal never waivered. He consistently answered, "yes" when asked if he believed

that he had the ability to meet his reading goal.

Tucker was also asked if he was comfortable reading in front of his peers, his

parents, and his teachers. With regard to reading in front of his peers, he indicated in all

but one week that he was not comfortable reading in front of his peers. Week eight of

data collection was the only week where confidence was noted with reading in front of

peers. When asked about how he felt about reading in front of his parents, Tucker was

quick to respond that he was comfortable reading in front of them during all nine weeks.

Quite the opposite was true when asked how he felt about reading in front of his teacher.

Again, his answers were consistent throughout the study. Despite his growth in the data

that was collected in the timed readings, he was not able to gain confidence in his ability

to read for his teachers.

Tucker was also asked about reading for enjoyment. Although he indicated during

each week of data collection that he enjoyed reading books that he was allowed to

choose, he was unable to recall the last story he read during four of the nine weeks where

he was asked about his most recent story. During four of the other weeks, his answers

were very brief, and during one week, he referred to a story that was read during

intervention rather than a story that he chose for himself. A summary of his interview

answers is summarized in Table 6.

Table 6. Tucker's Summarized Interviews

Tucker	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Goal	Read a lot of books	Create stories	Read every word of everything	Read all the words in the entire world	Read all the words in the entire world	Read the whole word - all the words in the entire world	Read all the words in the entire world	Read all the words in the entire world	Read a chapter book
Ability to Meet Goal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Peers	No	No	No	No	No	No	No	Yes	No
Parents	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Teachers	No	No	No	No	No	No	No	No	No
You Choose	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Last Story	I don't remember	I don't remember	A math pizza (fractions)	Dogman and his fight with a bad guy	About Dogman	About Dogman	Hank had to sell things to get money for fuel for his car	I don't remember	I forgot

Xander

Xander was a third grade male at Sardis Elementary School who demonstrated mastery of word call after only two weeks of corrective action. His initial errors were much like Tucker's errors in omitting the suffix -ed. One of his errors was noted when he called "wash" for a word that was written in the text as "washed". One additional issue in word call for him was his tendency to skip insignificant words. One example was a sentence that was written in the text as, "They were going to get a puppy." When reading this sentence, he omitted the word "a". Once word omissions were called to his attention, Xander was able to correct himself without further redirection.

Timed Readings. When considering expression, Xander was able to demonstrate an appropriate understanding of intonation in his first week. He improved this area quickly, and by week five, he had mastered intonation. He consistently changed his pitch on the last word of each sentence and before each comma. As the intervention progressed, he was consistently emphasizing words within sentences that indicated his understanding. An example of this skill being applied in the moment was the sentence, "When Matt finally told the teacher he felt bad, she sent him to the school nurse." In

reading this sentence, Xander emphasized the word "finally", he indicated that the sentence continued beyond a comma at the word "bad" with a rise in pitch, and he signified the end of the sentence with a drop in pitch when he read the word "nurse".

In addition to quickly mastering both rate and expression, Xander was able to quickly show mastery of his rhythm. Beginning with the third week of monitoring progress, he was consistently demonstrating appropriate phrasing with distinct pauses throughout each sentence. The following example is denoted with a | between each distinct phrase. "Tom lived with his parents | in a small house | in a quiet neighborhood." A summary of Xander's data points follows in Table 7 and Figure 7.

Table 7. Xander's Summarized Timed Reading Data by Week

Xander	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Words Per Minute	4	2	1	2	2	3	2	2	2
Expression	3	4	4	4	5	5	4	5	4
Rhythm	3	3	5	5	5	5	5	5	5
Average	3.3	3.0	3.3	3.7	4.0	4.3	3.7	4.0	3.7
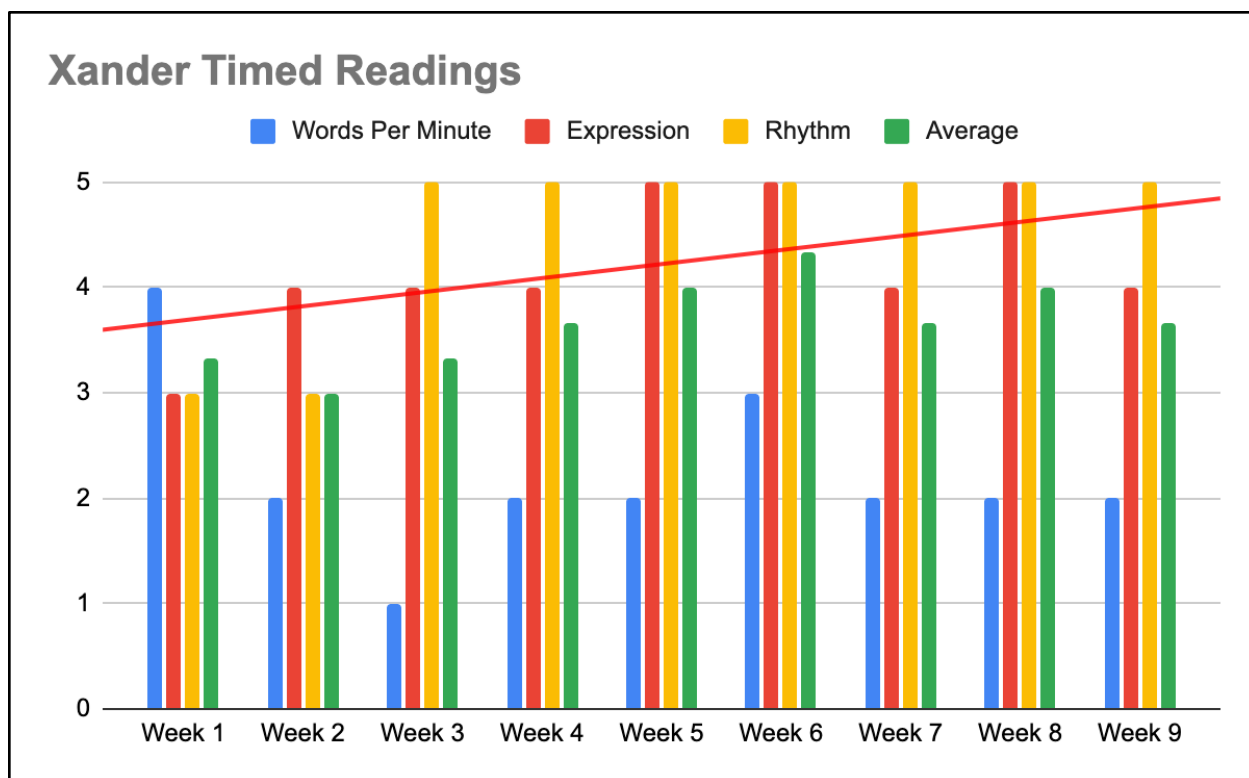
Figure 7. Xander's Timed Reading Chart

Student Interviews. Xander had very brief answers during his interviews. He would often answer in incomplete sentences, but his topics were very clear. For instance, during week 7, when asked what his current reading goal was, his answer was, "read the first page." When prompted for more information regarding what he wanted to read the first page of, he responded, "about how carrots grow." The information that Xander shared regarding his reading goal was then compared to the information he shared about the most recent book (or story) he read. During three of the weeks he was interviewed, his reading goal was aligned with the last book he read. For instance, when his reading goal was to read about how carrots grow, his answer regarding the last book he read was, "So, you put seeds and the carrots grow, but you gotta put water, and then you put

carrots. No. Wait. You put carrot seeds and then put water, and then it will grow." In addition to the observation of a connection between the reading goal and the most recent book read, a pattern developed in the topics that were reported. During three consecutive weeks, Xander reported both reading goals and the last book read as being related to how plants grow.

With regard to Xander's confidence levels in reading, he consistently indicated that he was not comfortable reading in front of his peers with the exception of the fourth week of the study. During that same week, he also reported for the only time that he was not comfortable reading in front of his parents while all other weeks, it was clear that he was comfortable reading in front of his parents. His responses to his comfort level when reading in front of his teachers varied from week to week. During the first two weeks, he stated that he did not want to read in front of his teachers. During the third through the sixth week, his confidence appeared to improve with indications that he was comfortable reading in front of his teachers. However, the last three weeks of the study pointed to a lack of comfort. During all nine weeks of the study, Xander reported that he did enjoy reading books that he was allowed to choose for himself. His student interview data follows in Table 8.

Table 8. Xander's Summarized Interviews

Xander	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Goal	Read a book - Star Wars	Read about dolphins	Read the beginning of a book	Read all stories (about rocks)	Read books about plants	Read every page of a book	Read the first page about how carrots grow	Read all the pages about how apples grow	Read all the books I have
Ability to Meet Goal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Peers	No	No	No	Yes	No	No	No	No	No
Parents	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Teachers	No	No	Yes	Yes	Yes	Yes	No	No	No
You Choose	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Last Story	I can't remember	Dolphins jumping	Pumpkins that have seeds inside them	Jason, and he drew a picture	Plants grow when you plant seeds and water them	A moth that had orange wings	You put seeds and then put water and then carrots will grow	Apples grow on trees	Ellie grew into an adult that drives

Trish

Trish was a female third grade student at Sardis Elementary School who struggled with both decoding and fluency. She was identified early during the study as having the most severe reading difficulties. In fact, during the first week of the study, she was only able to correctly call nine words in her one minute timed reading fluency assessment. At the same time, Trish was also immediately able to demonstrate the most drive to overcome her deficits. Her work ethic and interest in learning to read were apparent from the first day of the study.

Timed Readings. As previously noted, Trish began the current study with a word call of only nine words in her one minute timed reading. After receiving intensive intervention for decoding in addition to the Fundamental Fluency Intervention, she was able to correctly read 32 words in her timed reading test. This growth was attributable to the student's obvious hard work at attaining her reading goals. However, the researcher-created rubric did not indicate growth, which could be an indication that the rubric was not aptly sensitive in this case.

In connection with Trish's words per minute examination, her intonation was scored according to the same researcher-created rubric. Based on the rubric scores, the researcher again questioned the sensitivity of the rubric. Even in the situations where words had to be provided to her because of decoding deficits, Trish consistently repeated the word supplied and did so with appropriate intonation. Despite the unwavering nature of intonation, the rubric used for scoring did not highlight this skill.

Trish's abilities in phrasing were much more difficult to determine. Although intonation was apparent, the severity of her deficit in word call made many phrases she

may have otherwise been able to demonstrate undetectable by the researcher. Additional support for this weakness was noticed when the student was able to perform this skill without flaws during repeated readings, where she already knew each word in a given sentence. Interestingly, Trish was still able to answer comprehension questions even when multiple words had to be prompted by the researcher in most sentences.

In addition to having a difficult time measuring growth according to the rubric for this student, she attended school virtually during the first week of data collection, and she did not attend school in any fashion during the last two weeks of data collection due to a mandatory quarantine caused by the COVID-19 pandemic and a possible lack of available technology. Thus, the first week of data collection was difficult to attain, and the last two weeks of data were impossible to collect. As a result of issues with data collection, it can be noted that her scores may have been higher or lower if the circumstances had been different. Her timed reading data is presented in Table 9 and Figure 8.

Table 9. Trish's Timed Reading Data by Week

Trish	Week 1 (Data collected virtually)	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Words Per Minute	0	0	0	0	0	0	0	NA	NA
Expression	2	2	2	2	2	2	2	Quarantined	Quarantined
Rhythm	1	1	1	1	1	1	1	due to	due to
Average	1.0	1.0	1.0	1.0	1.0	1.0	1.0	COVID-19	COVID-19
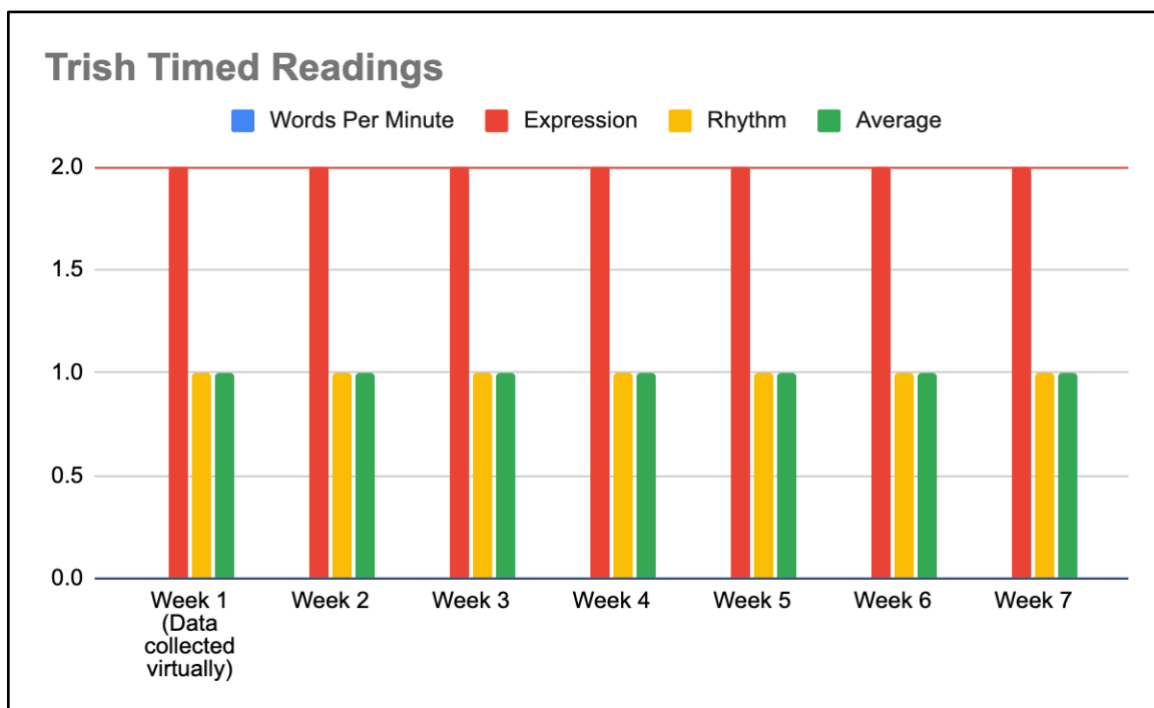
Figure 8. Trish's Timed Reading Chart

Student Interviews. Trish's reading goals differed each week. During four of the weeks she was available for interviews, she mentioned wanting to improve her writing along with wanting to have the ability to read better. During two of her interviews, she expressed wanting to be able to read in front of other people including her friends, teachers, and family. Although this was the first interview question each week, it is unknown whether her recall of the weekly questions about reading in front of others influenced these two reported goals. Her last week of data collection revealed a more aggressive goal of being able to read Harry Potter books. During all weeks of data collection, Trish expressed her confidence in her ability to meet her reading goals, and she even used the word "definitely" during one of those weeks. Additionally, during

week five of data collection, she felt the need to expressly communicate that the reason she felt so confident in being able to meet her reading goal was the trust she had developed with her friends.

When asked about reading in front of her friends, Trish professed during all but the last two she was available for data collection that she was not comfortable reading in front of them. Her answer to this question was "no" even during the week that she talked about how she and her friends trusted each other during the times they were asked to read. This answer happened to coincide with one of the two weeks where her reading goal was to be able to read in front of everyone in her classroom. During this interview, she expressed her desire to be able to read in front of others by saying, "I want to read in front of everybody in the classroom, which I cannot do because I'm too afraid. When I did it this morning. I'm like . . . I started getting the hiccups."

When asked whether she was comfortable reading in front of her parents, Trish claimed during each week that she was not comfortable. Although four out of the seven weeks she was interviewed, she indicated she was not comfortable reading in front of teachers, there were two weeks where her answer changed to, "kind of." During her final week, Trish was finally able to share that she was comfortable reading in front of her teachers.

Trish was also asked if she enjoyed reading books that she was allowed to choose. Her answer to that question was consistently, "yes." In addition to her consistent answers with that question, Trish also showed excitement when she allowed to share about her most recent story each week. It was apparent that she enjoyed reading books despite the severity of her difficulty in decoding. In addition to noticing her excitement, it was

apparent that she was consistently able to tell me what each story was about in detail. Without pressing for details regarding how she was able to understand the books, Trish was asked if she agreed that her reading was improving during week three. Although she mentioned that she had a tendency to become nervous when her general education teacher asked her to read in class, she talked about how she "kind of" felt like she was improving when she mentioned, "I only read in my head." The student was not pressed for more details on this as she already appeared nervous during the interview. A summary of her responses is included in Table 10.

Table 10. Trish's Summarized Interviews

Trish	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Goal	Read a book and write **(Student attended virtually this week)**	Write stories and read books	Read out loud and write better	Read and write to the end of my life	Read to everyone in my classroom	Read in front of my friends, my teachers, my dad, and my sister	Read the Harry Potter books	**NA**	**NA**
Ability to Meet Goal	No	Yes	Yes	Definitely	Yes (trust)	Yes	Yes	**Student**	**Student**
Peers	No	No	No	No	No	Yes	Yes	**was**	**was**
Parents	No	No	No	No	No	No	No	**quarantined**	**quarantined**
Teachers	No	No	Kind of	Kind of	No	No	Yes	**due to**	**due to**
You Choose	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**COVID-19**	**COVID-19**
Last Story	Harry Potter	A little tiny girl	Knights vs. dinosaurs	About this dinosaur	A grey wolf	A mantis - there were 10,000 of them	Music - two people lost their guitars	**No data collection was possible**	**No data collection was possible**

Follow Up Student Interviews

In an attempt to gather additional information, a one time follow up interview was conducted. The following two questions were asked:

1. Is there something you remember from our time together that helped you the most?

2. What was helpful about the phrasing?

When these questions were posed to Tucker, his response was that learning new words helped him the most. After prompting with the benefits of phrasing, he was able to

tell me that phrasing helped him with being able to read sentences better since he did not have to read as many words at once. Xander required prompting to answer both questions. His response to what helped him the most (given the option of decoding, phrasing, or intonation, along with a reminder of the benefits of each) was phrasing. Again, with prompting, Xander indicated that phrasing helped him with being able to fewer words at one time.

Trish's responses to the follow-up questions produced unique answers. Although she was extremely low in word call, her understanding of phrasing and intonation were evident. As such, she did not need prompting to answer the questions. When asked what helped her the most, she referred to direct instruction in intonation by saying that she understood that her voice should change at both commas and periods. However, she did not mention voice changes that occur within a sentence that is related to words that are appropriate for emphasis. When asked what helped her by learning to read in phases, she spoke to the reduction in stress she felt by saying, "It helps me to read better in front of my friends."

Parent Interviews

Although parent interviews were less informative than student interviews, there were several things worth mentioning. Two of the three original parents who were asked to participate did so with several thoughts to share. One of the parents withdrew from the study. Both of the parents who did participate provided information that exemplified a high level of care for their children and a desire to see them succeed.

Tucker's Parent Interviews. Tucker's mother was profoundly committed to her son's education. She made her commitment clear through her willingness to interview

with the researcher despite a language barrier and lack of access to a translator. Her involvement in his reading was particularly apparent in both the pre and post interviews in the way she directed her responses to reflect both her concerns and her goals to the way Tucker pronounced his words. She indicated that she provided him with a computer to assist him in learning to pronounce unfamiliar words. She also mentioned that the computer was available to help him understand the words he was attempting to read. She was also able to communicate that her biggest concern in his reading is that he had a tendency to read through periods. Additionally, she mentioned that she felt like his comprehension was stronger when he was reading something that piqued his interest and when he understood the words he was reading.

Tucker's Follow Up Parent Interview. As a result of the language barrier, the researcher made the decision to ask two follow up questions that were more direct:

1. What specifically have you seen improve with your child?
2. How much time do you read together at home?

Several things were mentioned when Tucker's mother spoke about his improvement. First on her list of things that improved was his pronunciation of words. She was also excited to share that she was hearing him say new words and that she had noticed an improvement in his confidence. When specifically asked about improvements in her concerns that were mentioned in an earlier interview, she indicated that he does, on some occasions, stop at periods. However, she felt like he needed more practice to master this skill.

With regard to the question about how much time was spent reading at home, Tucker's mom indicated that they read until he is sleepy. This was something that seemed

to be important to her as she went to specifically share that reading time typically lasted approximately two hours per night with exception to holidays, which she would allow Tucker to have rest. At the end of the follow up interview, she indicated that her biggest concern was that she would like to see him gain the confidence to seek clarification when he needs help.

Xander's Parent Interviews. Xander's mother was eager to participate in the study along with her son. Although she was readily available for interview questions, the data the researcher was able to collect was limited. Several times, during each interview, she seemed unsure how to answer the questions posed. For instance, when asked to describe how Xander decodes words, she asked for clarification. After the researcher clarified what was meant by decoding, Xander's mom indicated that he "breaks them apart and then reads them." When asked for other descriptions, such as how Xander reads words he does not know and what his comprehension skills are like, her responses were limited to describing them as "really good."

When the questioning changed to identifying what her goal for Xander was, much more information was obtained. During one of the interviews, she talked about how she wants him to be able to read well. She mentioned that she would like for him to be able to do some of the things she was too shy to do during school, such as being able to read when a teacher calls on him to read aloud during class. She also spoke of how she wanted him to be able to read big words, which she felt would serve him well as an adult.

Xander's Follow Up Parent Interview. Based on the limited information collected from the pre and post interviews, the decision was made to do a follow up interview with Xander's mother. During this interview, she seemed much more relaxed.

This interview was also conducted after the researcher had made multiple contacts with the parent, including several phone calls and Zoom meetings to assist the student in getting set up for two weeks of virtual learning due to a mandatory quarantine created by a COVID-19 policy that was initiated for his classroom. Despite the obvious shift in comfort level in talking with the researcher, relationship development was not addressed.

During this interview, Xander's mom mentioned that his reading had improved and that she noticed how he was reading in phrases after her son explained to her what phrasing was. When asked to identify one way her son had improved in fluency, she described how he had started "reading in character." She went on to describe how he had been reading to his younger brother in various tones where it seemed like the characters in the story were talking rather than him. The researcher noted this as an indication that the student was using intonation at home in addition to being able to demonstrate this skill during the intervention.

An additional note made during this interview was the excitement that was apparent in the mannerisms of Xander's mother. In addition to speaking about how he was reading to his younger brother at night, she talked about how he was continuously reading something. She gave examples of him reading signs while traveling and papers he found inside their home. Her level of excitement was most noted when she mentioned that he was finally able to read big words.

Themes

The intent of the research questions was to unveil whether the participants positively or negatively responded to the intervention based on both timed reading data and interview questions that were intentionally written to understand whether the

participants and their parents were able to notice a positive or negative change in both

fluency and confidence in reading (Patton, 2002; Marshall & Rossman, 2016). The

multiple data sources were carefully selected to serve as a method of data triangulation,

which Mathison (1988) indicates can reduce subjectiveness. After reviewing the data

multiple times as suggested by Marshall and Rossman (2016), several themes became

obvious. The following themes will be discussed based on the collection of data in

context of how they help answer the research questions as summarized in Table 11:

Table 11. Themes, Supporting Data, and Research Questions

Theme	Supporting Data	Research Question
Student Performance on the Researcher Created Rubric was Subjective	-The rubric showed overall gains in the two students despite obvious changes in words per minute and fluctuations in rhythm and expression. -The rubric did not account for changes in any measure for one student despite growth. -Two students increased words per minute, while one decreased. -Expression fluctuated and was difficult to definitively measure in each student. -Rhythm increased with two students while it was immeasurable in one student.	How do students perform on a researcher created fluency rubric over the course of a 9 week reading intervention? and How does fluency change qualitatively for students over time when they participate in the Fundamental Fluency Intervention?

Table 11. Themes, Supporting Data, and Research Questions

Theme	Supporting Data	Research Question
Limited Student Perception Occurred During Latter Intervention Sessions	-All students indicated belief in their ability to meet reading goals in all weeks. -One student indicated growth in confidence reading in front of peers, but interviews were interrupted by COVID-19. -One student was not confident with reading in front of teachers while two others indicated improvement in only a few weeks.	What are student perceptions of experiences during the reading intervention sessions?
Student Perceptions of Direct Instruction Targets Were Clear with Prompting	-Two students indicated that phrasing helped with chunking sentences. -One student indicated that phrasing helped with providing an opportunity for teacher support.	What are student perceptions of experiences during the reading intervention sessions?
Students Showed Consistent Interest in Books With Similar Themes	-One student consistently mentioned books about plants. -One student consistently mentioned books with mythical themes -One student consistently talked about Dogman	What are student perceptions of experiences during the reading intervention sessions?
Students With Parental Support had More Confidence	-Two students were consistently confident reading in front of parents while one was consistently uncomfortable reading in front of parents.	What are student perceptions of experiences during the reading intervention sessions?

Table 11. Themes, Supporting Data, and Research Questions

Theme	Supporting Data	Research Question
Parent Perceptions Were Difficult to Define	-One parent withdrew from the study. -One parent gave limited information. -One parent had a language barrier.	What are parent perceptions of experiences during the reading intervention sessions?

CHAPTER 5: CONCLUSIONS/REFLECTIONS

The final chapter in the current study discusses the findings through the lens of attempting to understand the experiences of the third graders while participating in the Fundamental Fluency Intervention. Throughout the course of investigation, the researcher was mindful that the data collected should be reviewed multiple times to more fully develop an awareness of any themes that developed as a result of the study (Marshall & Rossman, 2016). After using a constructivist approach to qualitative research to design and collect data, focus of the study then turned to analyzing the data to answer the following research questions:

1. How do students perform on a researcher created fluency rubric over the course of a 9 week reading intervention?

2. How does fluency change qualitatively for students over time when they participate in the Fundamental Fluency Intervention?

3. What are student perceptions of experiences during the reading intervention sessions?

4. What are parent perceptions of experiences during the reading intervention sessions?

In reviewing the data for themes as suggested by Marshall and Rossman (2016), there were several that were apparent based on both timed reading data, student interviews, and parent interviews. Each will be discussed in relation to the research question answered. The themes were as follows:

1. Student performance on the researcher-created rubric and fluency changes were subjective

2. Limited student perceptions occurred during latter intervention sessions

3. Student perceptions of direct instruction targets were clear with prompting

4. Students showed consistent interest in books with similar themes

5. Students with parental support had more confidence

6. Parent perceptions were difficult to define

Subjective Student Performance and Fluency Changes

Although two of the students were able to show growth on the researcher-created rubric, all three students actually had growth. One of the students who was able to demonstrate growth in words per minute and immediately show an understanding of both intonation and phrasing actually showed no growth according to the rubric. This was the first indication that the rubric created to measure growth in fluency needs to be adjusted should it be used in the future. An additional issue that indicated the need for adjustment in the rubric was the fact that decreases in words per minute and fluctuations in both rhythm and expression were not detected because the rubric was not sensitive to those changes.

Rasinski (2018) recommended an approach to measuring the same details with a scale that was a little more sensitive 3rd graders with a rubric that simply has a checklist that includes descriptions, such as "reads with just-right, meaningful expression" and "reads with rhythm, phrase by phrase" (p. 314) The opposite end of the spectrum includes descriptions, such as "struggles with a lot of words" and "pace is too slow. Words are not read automatically" (Rasinski, 2018, p. 314). Although it may be more subjective, perhaps a more simple approach would be sensitive to student growth.

In addition to being unable to determine whether the rubric was valid and reliable due to the qualitative research design, the researcher was unable to determine whether the rubric should be adjusted or whether the intervention itself should be adjusted. For instance, perhaps more time should be spent developing intonation than phrasing. A randomized controlled trial study would necessary to determine the true effectiveness of both the rubric and the intervention.

Limited Student Perceptions

Student perceptions were limited in the information that was attainable. Both of the male students were extremely shy and typically replied with very limited information. The female participant, who yielded the most information during interviews was quarantined due to COVID-19 for the last two weeks of the study. Despite this limitation, it was obvious that students were confident in their abilities to meet their reading goals throughout the study.

One of the highlights of the study was revealed when one student indicated a gain in confidence reading in front of peers. Again, this student's interviews were halted due to a mandatory COVID-19 quarantine, but Trish did show growth in her confidence with reading in front of her peers. Although student confidence was not addressed in the literature review, student confidence may have influenced the way Trish experienced the intervention.

Clarity With Direct Instruction and Prompting

Schmoker (2011) claims that clarity precedes competence. To add to this argument, Hattie (2012) speaks to the importance of teacher clarity. Despite a barrier of shyness on the part of two participants, two participants were able to communicate that

their direct instruction in phrasing helped them in chunking sentences into smaller parts, while one reported that it provides an opportunity for teacher support. Although these students often required prompting to recall which strategy helped them with their experiences, they were able to express the things they were taught during intervention sessions.

Although the researcher was mindful of subjectivity when prompting the students, the argument to continue the questioning despite the delays in response is supported by Hattie (2012), of which these students received nine weeks. As such, the students were familiar with the benefits of phrasing. Additionally, the students were prompted with their learning targets at the beginning of each intervention period. Therefore, their understanding of phrasing and the benefits was familiar to them at the time these questions were posed. After positive feedback from the students regarding phrasing, this is a practice that will be continued by the researcher. Furthermore, with the limited research, it is recommended for future research on a deeper level using a quantitative methodology.

Student Interests

Student perceptions were perhaps most clear when it came to their choices in optional reading. Although Willingham (2012) recommends knowledge-rich texts, Hattie (2012) recommends student centered teaching. With one student showing clear interest in mythical fiction, one student showing interest in plants, and one student showing interest in a series of books that is popular among the age group that was studied, student interests may be worthy of further investigation.

Albeit an opportunity to continue research with regard to student reading choices, the caution would be that differentiating for students with reading difficulties could quickly become complex. One of the participants, for instance, showed particular interest in the Harry Potter series. While likely providing an entertaining plot for this particular student, it is unknown how many words she would be able to read. Although there may be benefits to allowing student choices in reading, text complexity must be considered when it comes to the ultimate goal of ensuring student comprehension of the materials they are reading (Raskinski, 2018).

Parental Support

One of the most interesting responses among the students in the current study was the way they consistently answered either yes or no with regard to their comfort reading in front of their parents. While two of the students professed comfort reading in front of their parents, one of the students actually expressed growth in comfort reading in front of peer but never was able to gain the confidence to read in front of her parents. She even expressed interest in getting to a point in her reading abilities to be able to read in front of siblings. The deepest connection made in the study of the student-parent confidence level was that the student who did not feel comfortable reading in front of her parents was the same student whose parent chose to withdraw from the study. Despite multiple attempts to make contact for various reasons (including parent-teacher conferences, teacher concerns, and a meeting to plan for the student's individual needs), the parent was unavailable for communication beyond signatures granting permission for participation in the study.

In stark contrast were the parents who were eager to participate in the study. Two of the parents were consistently available for comment within a day of requesting contact. These two students were much more advanced in word call, and their parents indicated that reading was a priority at home. Hattie (2012) points out that parental involvement is important. As such, a recommendation for further study is called for in this respect.

Parent Perceptions

The perceptions of the parents was challenging due to the various responses. Not only was each response unique, but much of the data collection was limited due to non-participation, lack of verbiage, or a language barrier. Although both participating parents indicated that they believed their children made gains, it was not clear through their interviews whether they perceived the intervention in a more positive light than the school and the researcher.

In light of the limited information that was attainable, the recommendation for future research is that participants in qualitative research be vetted for selection through a pilot study. Although the relationships with the parents involved were positive, obtaining information is critical when investigating a phenomena. Marshall and Rossman (2016) encourage careful management of silence. However, when working with participants who have difficulty communicating, a break in silence may be necessary in order to obtain the information needed. As such, parental information provided can not be deemed as unguided or unbiased. Therefore, the growth in both word call and phrasing that was reported by the participants was received with subtlety and deemed to be difficult to support. Any future research qualitative research would need translator support.

Future Research and Limitations

Several calls for future research are warranted based on the current study. A viable, easy to administer rubric would be worthwhile when it comes to measuring fluency. Although this investigation provided a resource from which to begin, there were obvious issues with using the researcher-created rubric as a reliable tool for measurement. Further research would be needed before relying on this particular rubric.

As the main entry point of this study was phrasing with support from the students who participated who perceived this practice in a positive light, an opportunity exists to continue research on this strategy. This strategy is supported through previous research (Rasinski, 2018), but more concrete evidence is needed to be able to establish causation. The recommendation is that future research be conducted using a quantitative research design so that inferences may be drawn should they be uncovered during the course of investigation.

The final recommendation is that any future research on the topics of investigation that involve interviews as a source of data be done with careful participant selection. Participant selection, particularly when interviews are involved should be done in a manner in which data collection provides a solid source of understanding. One of the benefits of qualitative research is the purposeful selection of participants (Marshall & Rossman, 2016). However, this type of research also requires dialog that supplies information in sufficient quantities to aid in the development of themes. A quantitative study could isolate variables such as English Learners to ensure full understanding of the impact of the fluency intervention.

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APPENDIX

Appendix A

Intonation and Phrasing Defined, Examples, and Non-examples

Intonation - a slight rise or fall in voice; a slight change in tone; particularly noticeable at the end of a phrase, after a comma, and at the end of a sentence.

Phrasing - a slight pause after a phrase within a sentence; particularly evidenced by beginning at a preposition.

- Examples of correct placement of intonation (the word intonated is bolded):
    - The dog ran **quickly**.
    - The water was **so cold** after the **rain**.
    - Mom said she wants her flowers **planted**.
- Non-examples of correct placement of intonation (the word intonated is bolded):
    - **The** dog ran quickly.
    - The water **was** so cold after the rain.
    - Mom said **she** wants her flowers planted.
- Examples of phrasing:
    - The girl counted | all of the cars | on the train.
    - There were four dogs | on the bed | with the cat.
    - When should we ask | if we can go | swimming?
- Non-examples of phrasing:
    - The girl counted all | of the | cars on | the train.
    - There were four | dogs on | the bed with the | cat.
    - When should we | ask if | we can go swimming?

Appendix B

Holistic Fluency Rubric

Student: _____   **Date:** _____

Words Per Minute: WPM: _____ - Errors: _____ = Correct WPM: _____

134 or more		0
104 > 133		4
83 > 103		3
59 > 82		2
40 > 58		1
Below 40		0

Expression:

Intonation 15 or more		5
Intonation 10 > 14		4
Intonation 5 > 9		3
Intonation 1 > 4		2
Monotoned		1

Rhythm:

Phrases are clear with a pause / Phrases make sense		5
Phrases are clear with a pause / Phrases are awkward		4
Pauses at commas / Stops at periods		3
Reads through punctuation		2
Choppy / Word by word		1

Average Rubric Score: _____

Appendix C

Student Questionnaire

1. What is your current reading goal?

2. Do you feel like you have the ability to meet your reading goal?

3. Do you feel comfortable reading in front of your friends?

4. Do you feel comfortable reading in front of your parents?

5. Do you feel comfortable reading in front of your teachers?

6. Do you enjoy reading books that you are allowed to choose?

7. Can you tell me about the last story you read?

Appendix D

Parent Interview Questions

1. How would you describe the way your child decodes words as he or she is reading?

2. How would you describe the way your child reads when he or she knows all of the words?

3. How would you describe your child's comprehension skills when he or she reads independently?

4. How would you describe your child's comprehension skills when someone else reads to him or her?

5. How would you describe your child's current reading habits when he or she is at home?

6. What are your goals for your child and his or her reading habits?

Appendix E

Sample Lesson (from Week #1)

Phrases to read:

in the water	by the park
under his bed	behind the chair
over the box	after he saw it
because it was good	before the test
to get to the other side	for his mom

Sentences to read:

1. A little girl and her mom went to the store to get some food for lunch.

2. Her mom wanted to get hotdogs, but the little girl did not like hotdogs.

3. She wanted chips and cookies.

4. Her mom said, "We can get chips and cookies, but you still have to eat a hotdog.

5. Hotdogs will help you get bigger."

6. The little girl was sad, but she knew her mom was right.

7. She wanted to be bigger.

8. When they got home, mom cooked hotdogs and gave one to the little girl.

9. The little girl ate all of her hotdog.

10. Mom thinks she really does like hotdogs.

Appendix F

Curriculum Map

Table F1: Curriculum Map for Fundamental Fluency Intervention Weeks 1, 2, and 3

Curriculum Map	Week 1	Week 2	Week 3
Reading Focus:	Shopping	Community	State
General Description	Students will read sentences that are geared toward building background knowledge about shopping for groceries, clothing, souvenirs, school supplies, and toys.	Students will read sentences that are geared toward building background knowledge about the post office, emergency medical workers, the police, the mayor, and teachers.	Students will read sentences that are geared toward building background knowledge about the state from which the current research takes place.

Table F2: Curriculum Map for Fundamental Fluency Intervention Weeks 4, 5, and 6

Curriculum Map	Week 4	Week 5	Week 6
Reading Focus:	Nation	Historical Figures	Recreation
General Description	Students will read sentences that are geared toward building background knowledge about the United States of America.	Students will read sentences that are geared toward building background knowledge about John F. Kennedy, Martin Luther King, Jr., Rosa Parks, Eleanor Roosevelt, and Christa McAuliffe	Students will read sentences that are geared toward building background knowledge about camping, swimming, riding bikes, playing in the park, and picnics.

Table F3: Curriculum Map for Fundamental Fluency Intervention Weeks 7, 8, and 9

Curriculum Map	Week 7	Week 8	Week 9
Reading Focus:	Sports	Native Americans	Farmers
General Description	Students will read sentences that are geared toward building background knowledge about baseball, soccer, basketball, football, and golf.	Students will read sentences that are geared toward building background knowledge about Native American culture and lifestyles.	Students will read sentences that are geared toward building background knowledge about planting crops and raising farm animals.