

THE EFFECT OF PERFORMANCE FEEDBACK
ON ORAL READING FLUENCY

by

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I dedicate this research to my son, Owen, and I hope I inspire you the way my mother
inspires me.

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ABSTRACT

This is a mixed methods study of the effect of feedback on oral reading fluency. Focus groups, observations, and weekly assessments are used to compare and contrast growth patterns, perceptions, and explore if there is a triangulation between feedback and oral reading fluency. Eighteen 3rd graders in a suburban elementary school participated and were informed the number of words correct, number of words incorrect or told no feedback on a weekly oral reading fluency assessment. There were 6 students in the group that received correct, incorrect, and the group that did not receive feedback. Student growth patterns were analyzed to determine if one type of feedback had a particular positive or negative effect. Students were randomly assigned to one of three focus groups: Spanish-speaking English language learners, struggling readers, and highly performing readers. The study provided evidence that incorrect a word per minute had the greatest effect on oral reading fluency growth patterns. There was also evidence of a triangulation and a positive relationship between correct words per minute, student emotions, and growth in oral reading fluency.

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CHAPTER I

INTRODUCTION

“Our current assessment system leaves teachers and parents frustrated and lacking information that could help students learn,” states Arne Duncan, United States Secretary of Education (2010). Educators across America find the use of formative assessment a difficult task. This is particularly the case in elementary schools, where teachers are responsible for feedback in many different disciplines. Teachers spend countless hours giving feedback on formative assessments. Faculties complain of a lack of family time, high levels of stress, and discouragement when students do not meet expectations on assessments (Overman, 2012). Many students are angry at the amount of time spent testing and some students get so upset that they refuse to take the assessments (Gorski, 2014; Manning, 2015).

There is a need in elementary schools for teachers, students, and parents to improve feedback strategies, which come after an assessment. One way to increase the quality of an assessment is to improve feedback practices. While improving learning and assessments are the focus, it is essential educators determine which feedback methods are most effective and efficient. Educators nation-wide are experimenting with strategies involving feedback to make assessments manageable. Student learning is more easily achieved and less time is spent testing when educators use the best practices in feedback. Over the past fifteen years the laws have changed the way teachers and students interact. Pressure on teachers for all students to excel has created an urgency for improving feedback strategies.

Policymakers are concerned with the current situation teachers and students are facing, and educational improvements are a high priority. The No Child Left Behind Act (2001) turned the focus in education to increasing learning for disadvantaged students and English Language Learners (NCLB, 2002). The act also turned the attention in education to “preparing, training, and recruiting high quality teachers and administrators” (NCLB, 2002). Furthermore, accountability became another focus for educators. Teachers, schools, and administrators were held accountable for the learning of every child by the United States Department of Education. Many states also adopted the Third Grade Reading Law beginning in 2012, and now fourteen states have some type of reading law (Rose & Schimke, 2012). The law requires students to be retained if they do not score at a certain level of reading proficiency on the end of third grade literacy assessment. Then, on December 10, 2015, more reform arrived for educators when President Obama signed the Every Student Succeeds Act (2015). This act sought to build upon some aspects of No Child Left Behind while providing support needed for every student eliminating the negative characteristics associated with demographics, race, first language, or income. The ESSA removes the task of maintaining accountability from the federal government and places it in the hands of the state department of education.

One way states are monitoring accountability is to check the progress of student learning in oral reading. There is a direct correlation between oral reading proficiency and reading comprehension (Pikulski & Chard, 2005; Rasinski, 2005; Talaba, 2007; Williams, Skinner, Floyd, Hale & Neddenriep, 2011). There are two popular research based programs used to monitor student oral reading fluency, and they are AIMSweb and

the Dynamic Indicator of Basic Literacy Skills (DIBELS). Students are typically monitored every two weeks or monthly depending on the state or district requirements.

When a student engages in an oral reading assessment, as illustrated in table 1.1, the student reads a grade level passage to the teacher for one minute. After the student finishes reading, the teacher records the number of words read correctly and the number of words read incorrectly. A hesitation over 3 seconds, substitution, or skipping a word is counted as a miscue. Next, this data is graphed to determine the student's oral reading rate. The rate of improvement decreases as the student progresses up the grade levels. This is one reason it is important to get students reading proficiently early in their elementary school career. If a child is not making progress, the intervention program is changed or the student may be engaged in further assessments to determine their area of deficit in their reading ability.

Table 1.1

Common Steps for Assessing Oral Reading Fluency

1. The student reads a passage for one minute.
2. The teacher times the student.
3. The teacher records the number of words read correctly and number of words read incorrectly on an assessment sheet.
4. The student score is graphed.

Nationally students are reading at a very low level of proficiency. In 2002, the National Assessment of Educational Progress NAEP (2002) reported an oral reading assessment, and found 61% of fourth graders were fluent where as 39% of the fourth

graders were not fluent readers. According to the Nation's Report Card in 2015, only 36% of fourth graders scored proficient or advanced on the (NAEP) in reading. This means 64% of fourth graders are reading at the basic or below basic level. Nationally there is a great concern that most of the students in the United States are not able to read proficiently.

These national trends are consistent with trends in Tennessee. In 2015, the Tennessee Department of Education released the TCAP yearly assessment, which showed 48% of Tennessee students were proficient or advanced in reading. The greater concern is 52% of students read at the basic or below basic level. Both NAEP and TCAP assess reading comprehension, but there is a correlation between oral reading fluency and reading comprehension (Pikulski & Chard, 2005; Rasinski, 2005; Talaba, 2007; Williams et al., 2011). When students have a deficit in oral reading fluency, they are unable to comprehend text and perform better on assessments.

There is a positive correlation between correct words per minute and reading composite and between reading speed and reading composite on standardized assessments such as the Woodcock-Johnson III Test of Achievement (WJ-III) (Williams et al., 2011). The study reported a statistically significant correlation, .64-.70, for both comparisons (Williams et al., 2011). There is also a significant positive correlation coefficient, .60-.73, between words read correctly and the Tennessee Comprehensive Assessment of Program (TCAP) (Williams, et al, 2011). If a child struggles to read fluently, they simply cannot comprehend the passage because the child is focused on decoding instead of comprehending. For each grade level, students are expected to read a certain number of words per minute to be able to comprehend a text. When a child reads

fluently, it frees up their mind to concentrate on the content of the text. When students are unable to read fluently, they are often unable to understand text. It is the responsibility of the teacher to implement the most effective strategies to help students increase their oral reading fluency so they can understand what they are reading.

Implementing the most effective feedback strategies after an oral reading is important because the consequences associated with being unable to read are detrimental to the future of the child. When a child fails to reach proficiency by third grade, they are less likely to graduate high school by age 19 (Sparks, 2010). If students are not proficient readers by third grade, they are going to struggle because in third grade teachers stop teaching students how to read (Hernandez, 2011). Beginning in third grade, students are expected to know how to read proficiently and apply their reading skills to tasks.

There are reasons why students struggle learning to read. One reason students tend to struggle in reading comprehension is due to their oral reading fluency deficit (Pikulski & Chard, 2005; Rasinski, 2003; Stanovich, 1991). Being able to read at a specific speed is a sign that the student is not spending time decoding or having difficulty identifying grade level appropriate vocabulary. One of the challenges associated with reading is developing automaticity within sight words and phonemic awareness (National Educational Psychological Service, 2012). The reader's mind needs to be focused on comprehending, but when focusing on decoding, the reader cannot understand what they are reading (Williams et al., 2011). Becoming automatic in sight word recognition and phonemic awareness are two essential skills necessary to being able to comprehend a text (National Institute of Child Health and Human Development, 2000). When reading

deficiencies are identified and targeted in the primary grades, students are more likely to overcome the negative consequences associated with struggling to read.

Statement of the Problem

Various strategies are identified as having a positive effect on oral reading fluency. The National Reading Panel (2000) claims repeated reading or guided repeated oral reading which include neurological impress (Heckelman, 1969) and paired reading (Topping, 1987) have a positive effect on oral reading fluency. Each of these popular reading strategies involves some component of feedback to the reader. The issue is researchers really do not know which of the feedback combined with these reading strategies are the most effective.

Repeated reading or guided reading involves the teacher listening to a child read a text or different texts multiple times. Reading different texts daily opposed to the same text everyday has a higher effect on reading comprehension (Kuhn, 2005, 2000; Schreiber, 1980). During repeated or guided reading, the teacher often tells students words they misread, explains unfamiliar vocabulary, helps students decode unknown words, offers feedback regarding prosody, and shares miscues regarding fluency. Repeated reading is an activity that combines the application of phonemic awareness, speech, prosody, syntax, and comprehension.

Neurological impress is an activity where the teacher or audio recording reads the text aloud. In the case where the teacher is reading the text aloud, the teacher is often seated behind the child while the child reads the text aloud along with the teacher. If the child quits reading aloud, it is acceptable to allow them to listen while tracking and begin reading when they choose. This an assisted reading strategy combining auditory support

for the reader as a model as the reader practices reading along. Neurological impress has a positive impact on the reader's attitude and confidence (Chomsky, 1976; Hollingsworth, 1978).

Paired reading is a reading strategy where a teacher pairs two students and they take turns reading a text. The students are traditionally seated shoulder to shoulder and the students take turns practicing reading aloud. It is recommended the teacher does not pair a low reader with a low reader due to the fact that this strategy involves a modeling component. One student is more proficient and able to provide modeling and feedback to the other if the student arrives on an unfamiliar word. Allowing students to select their own partner has shown more positive effects on reading than the teacher assigning the student a partner (Meisinger, Schwanenflugel, Bradley & Stahl, 2004).

There are multiple performance based feedback strategies known to have a positive impact on oral reading fluency (Little, 2015; Rasinski & Hoffman, 2003; Shaywitz & Shaywitz, 2004). These include word supply, phonics, correct words per minute, incorrect word per minute, verbal, and visual feedback (Ardoin & Christ, 2006; Arthaud & Ranin, 1996; Little, 2015; McCurdy & Shapiro, 1992; Watson, Fore & Boon, 2009). Much of this work has been tested in the special education setting with a small number of students. Even though the research is limited to small case studies, there is evidence performance feedback does have a positive influence on oral reading fluency.

The reading deficit of children in the United States and a lack of research available regarding the effect of performance feedback on oral reading fluency suggest there is a need for further research regarding the effects of specific types of performance feedback at the classroom level (Arthaud, 1996; Eckert, Ardoin, Daly & Martens, 2002; Eckert, Dunn & Ardoin, 2006; National Reading Panel, 2000; Rasinski et al., 2003). Researchers also suggest more research is needed at the primary or classroom level on the effect of feedback (Hattie, 2009; Kluger & DeNisi, 1996). The available research is limited to studies with a great deal of variance in their methodologies, grade level, population, kind of feedback, combinations of performance-based strategies implemented, and the implementation of the experimental practice (Arthaud, 1996; National Reading Panel, 2000). The idea that oral or written performance-based feedback influences oral reading fluency merits further research.

There are reasons explaining why students tend to increase performance after receiving performance-based feedback. One reason is that when the teacher informs students of their level or performance as a score, correct or a number incorrect, the student begins to pay attention to their performance level (Kluger et al. 1996; Rasinski, 2005). As the student attends to the task, they are motivated to improve and start to focus on the process. Likewise, the student then begins to set a personal goal toward increasing the level of performance. By informing learners of the level of performance, they are driven to focus on the score and set goals. This is a preliminary theory, Feedback Intervention Theory (FIT), which is evolving in the literature on feedback or knowing the results (Kluger et al., 1996).

There are two specific types of performance feedback known to have a positive effect on oral reading fluency. These feedback strategies include: correct words per minute and incorrect words per minute. Providing students with the correct number of words they read correctly is considered correct words per minute (Ardoin et al., 2006; McCurdy et al., 1992). An incorrect word per minute is classified as when the assessor informs the student about the number of incorrect words read per minute (Ardoin et al., 2006; Eckert et al., 2006; Neddenriep, 2011; Thorpe, Chiang & Darch, 1981).

Informing the student the number of words read correctly in a minute is known to have a positive effect on oral reading fluency (Ardoin et al., 2006; McCurdy et al., 1992). There are different ways of providing students with the correct number of words they read in a minute. Teachers often verbalize the correct number of words read, graph the number of words correct on a bar or line graph, and record the students score on a piece of paper to document the number of words read correctly (Eckert et al., 2006). Another strategy used to inform students about the number of words read correctly involves the student self-scoring, or a peer informing the student the number of words read correctly (McCurdy et al., 1992). Although the teacher is recognized as the most accurate at providing the number of correct words read in a minute, peer and self-assessment are similar in accuracy. Another way to have a positive effect on oral reading fluency is providing students with the number of correct words read, graphing the number of correct words, and then setting a goal for their oral reading fluency (Conte & Hintze, 2000). Although, it is challenging to determine the effect providing the correct words per minute has on oral reading since it is paired with graphing and goals.

Just as stating the correct number of words per minute increases oral reading fluency, providing the incorrect number of words per minute increases oral reading fluency (Eckert et al., 2006; Neddenriep, Fritx & Carrier, 2011; Thorpe et al. 1981). There is evidence to suggest providing students with the number of incorrect words per minute has a greater effect on oral reading fluency than providing the correct number of words (Ardoin et al., 2006; Ates, 2013; Chafouleas et al., 2004; Guzel-Ozman, 2011; Neddenriep, 2011; Spencer & Manis, 2010; Thorpe et al., 1981). The teacher listens to the student read and then orally informs the student the number of words read incorrectly. Another way teachers may provide feedback on the number of incorrect words read is by verbally informing the student the percent of incorrect words read.

Numerous studies combine performance feedback strategies and skill based assessment strategies. These studies often measure multiple independent variables upon the dependent variable, oral reading fluency. Several of these studies include repeated reading as an independent variable. One combination known to have a positive effect on oral reading fluency is providing the number of incorrect words, rewards, and implementing repeated reading to increase student oral reading fluency (Chafouleas, Martens, Dobson, Weinstein & Gardner, 2004). In another study, Guzel-Ozmen (2011) uses a single subject design, listening preview, feedback, and repeated reading. The issue is when multiple independent variables are in place; it is challenging to determine the effect that each independent variable has on oral reading fluency. One other combination includes repeated reading, correct words per minute, and incorrect words per minute, and concludes the combination has a positive effect on oral reading fluency (Ates, 2013).

Information Processing Theory and Cognitive Load Theory

There are theoretical explanations for why students tend to struggle learning to read. This work is based on two well-known educational theories and two specific reading theories. The theory of information processing explains why an individual has to process certain lower level skills prior to a higher-level skill (McLoed, 2008). Likewise, the cognitive load theory explains the process of acquiring knowledge from the most basic to advanced level (Sweller, 1988; Sweller, 1999). With many similarities, Ehri (2005) and LaBerge and Samuels (1974) explain reading theories related to the process of learning to read.

One theory suggests a reason some students experience low proficiency in oral reading fluency. Student struggle because they are focused on a higher-level task, such as semantics, before mastering a lower level skill, such as letter sounds. Treisman's theory of attenuation explains why readers must begin reading at the knowledge level before they can advance on to semantics (McLoed, 2008; Treisman, 1964). When students are attempting to understand more than one thing at a time, the student's mind automatically places more importance on one of the two things. This theory suggests students attend to the simplest level, identifying physical characteristics of words, before moving to understanding their meaning. For example, a student must first identify certain physical characteristics of letters, syllable patterns, and words before finally begin to understand what the words mean (McLoed, 2008).

The cognitive load theory (CLT) is a process of learning and understanding information (Sweller, 1999; Sweller, 1988). According to the CLT, learning begins by developing a schema, which allows a learner to free up their working memory. The

development of schema is the process of learning new information and organizing this information for future use. As the schema gets larger, there is more working memory available to deal with cognitive problems or learning. When learning new information, the learner is in a state of controlling the process, but as the learner moves toward automaticity, there is no conscious control. With practice and interacting with new knowledge, the information becomes more automatic. When learners are automatic in oral reading fluency, the reader reaches their full intellectual potential and is able to concentrate on understanding the text.

Consistent with Hirsch (1988), Ehri (2004) and LaBerge et al. (1974) explain a process for learning from the most basic to complex level of reading (1974). A reader cannot fully comprehend a text until their decoding becomes automatic. It is more challenging for a reader to determine the meaning of words when they are trying to decode. The learner must not have a great deal of difficulty at one time, which supports the idea that learning to read is a systematic process identified by Ehri (2004) and Samuels (1974).

Statement of Purpose

The purpose of this study is to explore the effect of performance feedback on oral reading fluency and to gather students' perceptions of feedback. Some of the types of performance-based feedback shown to have a positive effect on oral reading fluency in experimental studies are the number of correct words read per minute and incorrect number of words read per minute. In table 1.2, the studies exploring correct words per minute, incorrect words per minute, and a variety of strategies affecting oral reading fluency are listed.

Table 1.2

Previous Research

Variables	Reference
correct words per minute	Eckert, 2006 McCurdy & Shapiro, 1992
correct words per minute, rewards	Ardoin et al., 2006
incorrect words per minute	Eckert et al., 2013 Neddenriep, 2011 Eckert, et al., 2006 Thorpe, et al., 1981
repeated reading (skill based), correct words per, incorrect words per minute	Ates, 2013
listening passage preview (skill based), repeated reading (skill based), and words read incorrectly	Guzel-Ozman, 2011
repeated reading (skill based), rewards, incorrect words per minute, and correct words read per minute	Chafouleas et al., 2004
goal, graph, correct words per minute	Conte et al., 2000

The research in the past has focused on providing incorrect words or correct words as feedback. In other studies, researchers have paired reading strategies with feedback. These previous research studies on feedback and the student perceptions of feedback lead the researcher to the research questions that guide this study.

Questions

1. How does student growth patterns compare and contrast for student receiving different feedback?
2. How do different students perceive different types of feedback regarding oral reading fluency?
 - A. How do struggling readers and proficient readers perceive different types of feedback regarding oral reading fluency?
 - B. How do students who speak Spanish as a first language perceive different types of feedback regarding oral reading fluency?

The first hypothesis is based on the work of Eckert (2006) and McCurdy et al. (1996). The researchers state performance feedback and the correct number of words read have a positive effect on oral reading fluency. Thorpe et al. (1981) and Spencer et al. (2010) conducted a study where the students are informed the number or percent of words they read incorrectly and are given feedback. The students in this study calculate their slope of improvement by focusing on the errors made in each reading. The hypothesis states: Informing students of the number of words read correctly or incorrectly has an effect on oral reading fluency for struggling readers. The null hypothesis states: There is no effect on oral reading fluency when teachers inform students the number of words read correctly.

$$H_0: \mu_{\text{correct}} = \mu_{\text{incorrect}} = \mu_{\text{nofeedback}}$$

The second research question is based the research of Kluger et al. (1996). One reason students improve performance after receiving feedback is because when the teacher informs students of their level of performance as a score, correct or a number incorrect, the student begins to pay attention to their performance level (Kluger et al. 1996). As the student attends to the task they are motivated to improve and start to focus on the process. Likewise, the student then begins to set a personal goal toward increasing the level of performance. By informing learners of the level of performance they are driven to focus on the score and set goals. This is a preliminary theory, Feedback Intervention Theory (FIT), which is evolving in the literature on feedback or knowing the results (Kluger et al., 1996). The FIT proposes that when a student receives feedback they begin to place attention on the skill or task in which they received feedback (Rasinski,

2005). By simply placing attention on the task the students begin to improve performance.

Definitions

Curriculum Based Measurement- a valid and reliable assessment process used to inform educators and students of their level of proficiency on a specific skill (Martson, 1989).

Decoding- Decoding is the process of sounding out words and breaking them down into syllables (Crowe, 2005).

Oral Reading Fluency- Oral reading fluency is the measurement of the number of words a student reads in one minute on a passage (Rasinski & Hoffman, 2003).

Performance-based assessment- a performance-based assessment is a measurement of a student's performance during an assignment. These assessments are often in the form of a rubric.

Performance-based feedback- any type of information given to a student based on their performance on a task is considered performance-based feedback (Eckert et al., 2000).

Reading curriculum-based measurement (R-CBM-A R-CBM)- A curriculum-based measure of student oral reading fluency (Ardoin & Scott, 2009).

Skill based assessment- Skill based assessments are based on mastery of a skill which includes benchmark assessments, multiple choice assessments, matching, or true/false assessments (Faye-Rollings Carter, 2010).

Limitations and Delimitations

Threats to the internal validity of the study are limited. In a previous pilot study the researcher established the teacher to be reliable in assessing the students. In the pilot study the researcher randomly selected three students out of one hundred twenty students each week, during the four weeks, to collect a video recording of their reading assessment. Then the researcher emailed the recording to another CITI trained researcher who scored the students. The researcher compared the scores of both researchers and found a correlation coefficient of .99 when $p < .01$. A random sample of the group was completed to determine the impact on the population. Additionally, a random sample, including sixty students and sixty parents, were surveyed to determine the impact this research might have on the population.

Delimitations in the study include the population of third grade students in the researchers classroom at Holbrook Elementary School. There is an attempt to generalize the findings of the study on the population of third graders at the research site. The results in the study only reflect the population at the experiment site, but provide evidence for the need to research a larger population. The teacher is certified and highly qualified. The teacher is following a consistent curriculum guide designed by appointed teachers across the district. The teacher does use small group guided reading instruction, but implementing any feedback intervention is avoided for the 10-week study.

This study adds to the body of knowledge available about the effect specific performance feedback strategies have on student oral reading fluency. Educators are in need of refining their practices and improving assessment practices in an effort to increase student oral reading fluency. The strategies identified to have a positive effect on

student learning need sharing among teachers so others can employ practices that have a positive effect on oral reading fluency. Practices having a negative effect on student learning need to be acknowledged in order to avoid the use of less effective strategies.

There is a clear reading deficit for many students living in the United States based on reading assessments (NAEP). One reason students struggle in reading comprehension is they have a deficit in oral reading fluency (Williams et al., 2010). LaBerge and Samuels (1974) theory claims students must be automatic at decoding in order to comprehend a text. Students must read fluently in order to understand what they read. Educators need to know specific things, which can improve oral reading for students. The second chapter in this study provides a synthesis of the different performance feedback strategies. More specifically it is about the positive effects of providing students the number of correct words per minute, number of incorrect words per minute, and the students' perceptions of feedback. The third chapter explains the procedures and evaluation tools of the study.

CHAPTER II

LITERATURE REVIEW

Introduction

Oral reading has evolved over the years. Oral reading has historically been an important part of entertainment in the American culture. Years ago only one person in the home may have been able to read, and reading aloud served as a means of entertainment for the entire family.

During the early part of the 20th century until about 1950, educators began focusing on behaviorism in research. Behaviorists were avoiding reading theories such as learning skills or decoding to develop reading fluency. It was during the 1970's researchers began to explore ideas such as letter recognition. Then, in 1974 LaBerge and Samuel's theory evolved explaining the need for a reader to be automatic in decoding and vocabulary to understand a text. In 1990, researchers began studying students who may lack cognitive resources (Cunningham & Stanovich, 2001). Finally, in 1997, Logan's instance theory explored the idea about how a reader may see a word only once and develop automaticity in reading the word. The evolving study of reading has changed drastically over the past century.

As society has changed we are now facing a culture that depends on reading as a means to an end. In the 21st Century everyone must read according to legislation, and underrepresented populations are targeted to ensure their reading proficiency. Monitoring student learning is a strategy educators use to predict oral reading fluency, and it is a way to determine when students are not making progress. There are a variety of strategies (repeated reading, choral reading, echo reading, decoding feedback, performance based

feedback) known to help struggling learners improve their oral reading fluency. This literature review synthesizes the literature about how teachers can use performance assessment feedback to have a positive impact on oral reading fluency.

Oral Reading Fluency

Oral reading fluency is a basic level skill, which is measured by the number of words a student reads correctly in one minute. The ability to automatically read words is a predictor of reading comprehension, achievement on high stakes assessments, and future success. Automaticity is one of the foundational skills required to free up the working memory and fluently read a text (Rasinski, 2012). The National Reading Panel (2000) describes fluency as the ability to automatically state words without stopping to sound them out. There are three categories associated with reading fluency (2012). The first is the accuracy in reading words with minimal errors. Secondly, the reader has automatic processing, which frees up the working memory to comprehend (La Berge & Samuels, 1974). The third category of oral reading fluency is prosody, which is the ability to use syntax and semantics to understand a text (Rasinski, 2004). Syntax refers to the reader using expression in their voice and recognizing punctuation in a text. Semantic is the ability to develop meaning based on vocabulary and punctuation. Fluent readers recognize punctuation, respond appropriately, and develop meaning based on the structures within a text.

Traditionally fluency has not been recognized as having a positive impact in learning to read (Gibson & Levin, 1975; Smith, 2002). Teachers did not realize the importance of automaticity and prosody. In the past, teachers have focused on decoding to teach students to read. Therefore, programs focusing on improving reading fluency

have not been a topic in reading instruction, professional development, or teacher educational programs (Rasinski & Zutell, 1996). With recent research and publications by the National Reading Panel (2000) on reading fluency, educators are becoming more aware of the impact fluency has on the ability to read (Chard et al., 2002; Kuhn & Stahl, 2000; Rasinski & Hoffman, 2003). Such research reports a correlation between students who struggle with fluency in the fourth grade and a 30% variance in achievement on a high school assessment (Rasinski, 2004). This suggests struggling with fluency in the elementary school has a negative impact on high school achievement.

There are a set number of words recommended for students at each grade level to read in a minute to be considered a fluent reader in that grade level text. In table 2.1 there is a list of such reading expectations (Fuchs & Fuchs, 2001; Hasbrouk & Tindall, 2006; Rasinksi, 2004; Shapiro, 1996). At the kindergarten level students are expected to become fluent in letter sounds, but by the spring of first grade students need to read 53 words in a minute. In second grade, students need to read 89 words a minute, where as third graders should read 107 words a minute. Fourth graders should read 123 words a minute to be considered fluent. By fifth grade, the oral reading level of expectation is 139 words a minute. The student should not miss more than 90% of the words. If there is a greater percent error, the student needs to be assessed and practice reading a lower level text. The following chart illustrates the grade level expectations for kindergarten through fifth grade.

Table 2.1

Oral Reading Proficiency Levels (Housbrouck & Tindal, 2005)

Grade level	Number of Words Per Minute at the Spring Assessment	Accuracy
K	40 letter sounds	90-95% < 10 errors
1st	53 words per minute	90-95% < 10 errors
2nd	89 words per minute	90-95% < 10 errors
3rd	107 words per minute	90-95% < 10 errors
4th	123 words per minute	90-95% < 10 errors
5 th	139 words per minute	90-95% < 10 errors

Correlation Between Oral Reading Fluency and Reading Achievement

There is a strong relationship between oral reading fluency and reading comprehension among first through third graders (Fuchs, 2001; Jenkins et al., 2003; Neddenriep, 2011; Pinnell, 1995; Spear & Swirling, 2006). In one study, a 0.91 correlation is found between oral reading fluency and student achievement (Fuchs et al., 1988). The study involves students in middle school with a reading disability. Oral reading fluency scores are measured to determine the relationship between oral reading fluency and achievement on the Stanford Achievement Test. This suggests a high oral reading fluency is associated with a high reading achievement. Likewise, a low reading fluency is often paired with a low reading achievement.

Achievement Data

In the achievement data section, specific studies are compared to explore the relationship between oral reading fluency and reading achievement. There is evidence a correlation exists between oral reading fluency and reading achievement on high stakes assessments (Buck & Torgesen, 2002; Kloo, 2006; Riedel, 2007). Since there is a positive correlation between oral reading fluency and reading comprehension, many states use oral reading fluency in elementary schools to predict student achievement on achievement tests. More specifically, this correlation between oral reading fluency is evident on such achievement tests: Terra Nova, Program for International Student Assessment (PISA), Florida Comprehensive Assessment Test- Sunshine State Standards (FCAT-SSS) Reading, and the Stanford Achievement Test, Tenth Edition (SAT-10) Reading. When teachers know this correlation exists, teachers can predict student achievement. If progress monitoring is maintained on oral reading fluency, teachers can

even intervene and provide the additional support needed to avoid low achievement test scores.

Most of the studies looking for relationships between oral reading fluency and achievement used the Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Good, Kaminski, 2002), but Devena (2013) uses DIBELS and the System to Enhance Educational Performance Witt, 2007) to find evidence there is a correlation between oral reading fluency and scores on reading achievement assessments. Both of the achievement assessments, Arizona's Instrument to Measure Standards (AIMS DPA), which is an assessment developed by the Arizona State Department of Education, and SAT 10, are found to have a medium to high correlation to oral reading fluency. The correlation for grades 1, 2, and 3 on AIMS DPA is 0.64 whereas the correlation for Sanford Achievement Test 10th edition is 0.59. The benefit of knowing this correlation is to assist teachers in predicting the achievement of students. By knowing a predictor of achievement, teachers can prepare to intervene and help those students struggling before the achievement assessment is taken.

Performance Feedback

Currently, there are few studies evaluating the effect of different types of performance-based feedback on oral reading (National Reading Panel, 2000). There are only 14 studies meeting the acceptable criteria during a study conducted on the topic of oral reading fluency (National Reading Panel, 2000). Only two of these studies involve feedback with oral reading fluency. One reason for the lack of research is due to the fact that reading research about curriculum based measurements just began to evolve in 1970, and feedback associated with these assessments began at the same time. Likewise, the

curriculum based measurement instruments such as DIBELS was created in the 1970's and another instrument, AIMSweb, was just published in 2012.

When researching, the search terms shown in figure 2.1 are used: incorrect words per minute, oral reading fluency, and performance feedback. The search engines used are Educational Research Information Center, Academic OneFile, Academic Search Premier, Dissertations and Theses on the James Walker Library database, Google, and Firefox. The researcher also refined the search with a selection of only dissertations related to elementary education when on the James Walker Library in the Dissertation and Theses database. When selecting the articles for research on correct words per minute and incorrect words per minute as feedback the researcher also limited the search to peer reviewed articles. There were only two studies found researching the effect of correct words per minute on oral reading fluency and five studies exploring the effect of incorrect words per minute on oral reading fluency.

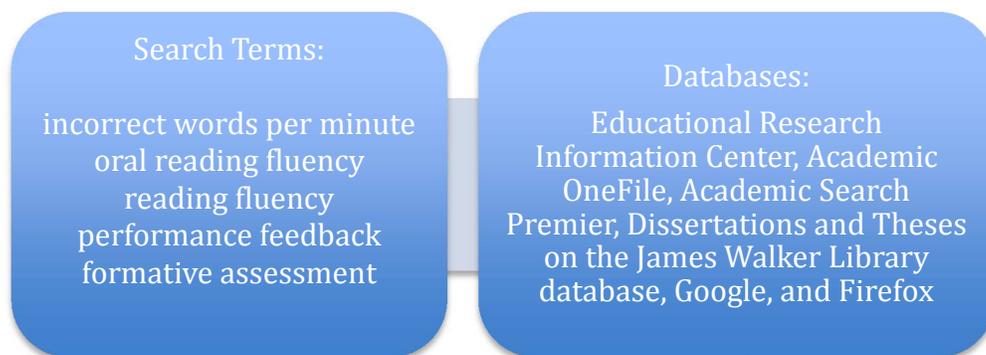


Figure 2.1

Search Terms and Databases

Performance feedback is one strategy, which helps students understand their current level of automaticity and schema in oral reading. Using performance feedback after an assessment is one way known to have a positive effect on oral reading fluency (Ardoin et al., 2006; Eckert et al., 2013; Eckert, 2006; McCurdy & Shapiro, 1992; Neddenriep, 2011; Thorpe et al., 1981). There are two types of performance-based feedback synthesized in this literature review, and they are correct and incorrect words per minute. These two types of feedback are additionally paired with other strategies to improve oral reading fluency. All studies in this literature review consider feedback to occur when the teacher or a peer listens to the student read a passage and informs the reader the number of correct or incorrect words read in one minute.

Performance Feedback as Correct Words Per Minute

Informing students, about the number of words read correctly in one minute has a positive effect on oral reading fluency for students with reading difficulties (Chafouleas, 2004; Eckert, 2006; McCurdy et al., 1992). Showing verbal or visual performance based feedback in the form of correct words per minute does increase student oral reading fluency (McCurdy, 1992). One study showing this positive impact lasted ten weeks with instruction for 20 minutes twice a week (Eckert, 2006). Typically assessments are administered weekly or biweekly giving the students feedback on their performance. The students in the study by Eckert (2006) are assessed weekly, but McCurdy and Shapiro (1992) assess the students twice a week. These studies only implement one treatment providing the correct words per minute, but other studies combine multiple combinations as treatments.

Performance Feedback as Incorrect Words Per Minute

Informing students the number of words read in one minute has a positive effect on oral reading fluency for students living in rural locations, urban locations, and students with a low socioeconomic status. Students in 2nd grade classified as receiving free and reduced lunch increase oral reading fluency after receiving feedback on the number of words read incorrectly in one minute (Eckert, 2000). Feedback as the incorrect words per minute is also successful at improving oral reading for older students with different demographics. The oral reading fluency of struggling fourth grade readers living in a rural setting increases with feedback on the number of incorrect words read in one minute (Neddenriep, 2010).

Combinations of Performance Feedback and Skill Based Feedback

There are a variety of combinations including performance-based feedback known to have a positive effect on oral reading fluency. Repeated reading is one treatment known to have a positive effect on oral reading fluency. It is a skill-based intervention strategy, where as correct or incorrect words per minute are performance-based feedback. Repeated reading with performance-based feedback as one treatment and repeated reading with performance-based feedback and rewards are also found to be effective strategies for increasing oral reading fluency.

Ruya Guzel-Ozmen used a single subject design (2011) to study different intervention combinations on oral reading fluency for one third grade student and three fourth grade students with reading difficulties. The different combinations are: listening passage preview and repeated reading, repeated reading and performance feedback; and listening passage preview, repeated reading and performance feedback. None of the

students in the study met the desired score, but this is possibly due to their low baseline score. Two of the students in the study did improve their oral reading fluency using the combination of listening passage preview, repeated reading, and performance feedback; but there was no statistical significance. The other two students' growth in oral reading is credited to listening passage preview and repeated reading.

Performance feedback in the form of correct words per minute, incorrect words per minute, and combinations of performance feedback are known to have a positive effect on oral reading fluency. This feedback is used to guide the student toward progress. Since oral reading fluency has a relationship with reading comprehension and student achievement on standardized assessments, teachers may use their weekly progress monitoring of oral reading fluency to determine which students need additional help with oral reading fluency. Intervening early by informing students about the number of words read correctly or incorrectly is one strategy to increase student oral reading fluency.

As educators attempt to meet the needs of all students regardless of demographics, there must be a consideration of the research based strategies known to increase oral reading fluency. In the cognitive load theory, Ehri, and LaBerge suggest breaking learning to read down into a process requiring the most basic skills to be transferred into the working memory before moving on to a more advanced skill. Monitoring the learning progress of each child is the way teachers determine when the child has developed the schema necessary to move to the next step in the process of learning to read.

When educators consider the culture of the 21st Century, there must be awareness of the need for each child to learn to read. Legislation requires and holds each teacher

accountable for teaching every child in the classroom to read. When educators implement the most efficient strategies when assessing oral reading fluency, there is a positive impact on oral reading fluency.

Oral Reading Assessment Tools

One way educators assess oral reading is using curriculum based measurement instruments, which is based on the original work of Deno. Curriculum based measurements are assessments designed to measure a performance task and solve a problem a student has in learning. There are four components to the curriculum based measurement model (Deno, 1993). The first component is using instructional material as the assessment. The second criterion requires the test administrator to conduct direct observations and record the student performance. The third part of curriculum based measurement instruments is the reliability of the information based on inter-observer agreement. The fourth component is establishing social validity by having a justifiable reason to gather information (1993). Deno began researching curriculum based measurement while working at the University of Minnesota Institute for Research and Learning Disabilities. Deno and colleagues pioneered the idea of using these assessments to monitor student learning.

The goal for a curriculum based measurement is for teachers to have a tool to accurately measure student learning, determine the quality of instructional programs, and allow teachers to plan more effective instruction (Deno, 2001). Curriculum based measurements are direct observations of a student and using the information gathered to make a decision about the path for that student (Deno, 2001). In 2012, the newest curriculum based measurement, AIMSweb, evolves out of the work of Shin and Shin at

the University of Oregon. AIMSweb is by far the leading progress monitoring instrument used in the 21st century to monitor student learning and predict student achievement (Gaber, 2009; Pearson, 2012). The National Center on Response to Intervention (RTI) evaluates ten responses to intervention programs, and Pearson's Assessment and Intervention Department (AIMSweb) receives the recognition as being exemplar regarding reliability and validity (Pearson, 2012). The department uses data from 2007-2010 to establish oral reading norms for students in grades K through 8.

Like AIMSweb, DIBELS has three benchmark assessments beginning in the fall with an intermediate assessment in the winter and ending the year with a spring benchmark. Unlike AIMSweb, DIBELS only has measurement tools for reading up through the sixth grade. AIMSweb has progress monitoring in reading and math through the 8th grade. Each of the programs benchmark assessments allows the student to read three passages, and the assessment administrator records the median score for measurement purposes. Weekly progress monitoring probes are provided for weekly assessing.

Ardoin and Christ (2009) question reliability in the passage difficulty levels when oral reading fluency is assessed. Many passages include a set of vocabulary students at the specific grade level are expected to know. There must be many passages using similar vocabulary to ensure the assessments are reliable. If one text includes a complete different level of vocabulary, the student score may decline drastically on their progress monitoring assessment. When designing passages, which are the measurement instrument, the authors must have many forms of the same level passage. Passage difficulty is measured using a readability index. The readability index assesses the

number of one-syllable words per 100, the number of syllables per 100 words, semantics, syntax, and the percentage of words in the passage not included in a word list (Ardoin et al., 2009; Powell-Smith et al., 2010). AIMSweb used these procedures to determine passage readability, but the group took one more step. AIMSweb selected a group of 20 students to test the passage difficulty and then the passages deemed too easy or challenging are eliminated from usage (Howe & Shinn, 2002).

DIBELS and AIMSweb are the two reliable progress-monitoring programs used by educators. The extensive research on passage reliability gives AIMSweb an advantage on the progress monitoring market.

Summary

The ultimate goal of the research is to identify strategies known to have a positive effect on oral reading fluency in order to help readers in the third grade improve oral reading proficiency. Considering learning to read is a survival skill for all students living in the 21st century, there must be a focus among educators regarding what the most effective strategies are related to oral reading fluency. There is a need for more research in the area of what strategies have a positive effect on literacy skills (The National Reading Panel, 2000).

When providing students the number of correct words, number of incorrect words, and a variety of combinations using performance-based feedback, educators are showing evidence of a positive impact on student oral reading fluency. When students are informed about the level of proficiency, both the teacher and student are aware of the working level of schema or automaticity regarding decoding and vocabulary. When both the teacher and student are aware of the student level, both can work together to build

upon the current state of proficiency. There is a correlation between oral reading fluency and reading comprehension and oral reading fluency and student achievement on comprehensive assessments, and oral reading fluency is an area where teachers can focus and intervene before students perform poorly (Buck & Torgesen, 2002; Kloo, 2006; Riedel, 2007).

This literature review synthesizes two strategies known to have a positive effect on oral reading fluency. These strategies, performance based feedback, as correct words per minute and incorrect words per minute are known to have a positive impact on oral reading fluency. The next section of this document explains one study aimed at determining the effect these strategies have on oral reading fluency for third grade students. The second goal is to determine the effect the strategies of correct words per minute and incorrect words per minute have on oral reading fluency. The third goal is to identify student perceptions of feedback.

CHAPTER III

METHODOLOGY

Current legislation, national oral reading scores, and local reading achievement scores suggest there is a need to improve practices in education related to reading (ESSA, 2015; NAEP, 2002). More specifically, high impact teaching strategies that help students reach a proficient level of oral reading fluency must be identified and implemented in the elementary school, because there are negative consequences associated with students who do not read proficiently by the third grade such as low achievement on high school exams and failure to graduate from high school (Allington, 2010; Sparks, 2010; Hernandez, 2012). This study was designed to determine the effect of two specific feedback strategies on oral reading fluency.

This was a mixed methods study designed to learn the effect of two performance-based feedback strategies on student oral reading fluency. The two types of performance-based feedback shown to have an effect on oral reading fluency in past studies were correct words read per minute and incorrect words read per minute. This study measured the effect of feedback on student oral reading fluency (dependent variable). The independent variable was the type of feedback (correct words per minute, incorrect words per minute, and no feedback) that the child experienced during the probing session only.

In between the weekly probing sessions the students were engaged in the typical reading instruction for most 3rd grade classrooms. At 9:45 AM the whole group reading lesson began. During the daily whole group lesson the teacher identified the lesson goal, introduced skills, pre-taught vocabulary, and decoded new words. The teacher used materials and words recommended from the district curriculum guide, which all-3rd

grade teachers in the district used for instructional resources and pacing. Then small group reading instruction began, and each group lasted 20 minutes. During the small ability groups, there were 6-7 students meeting with the teacher engaged in a guided reading lesson, which included reading passages, vocabulary, and decoding words. While the small group was taking place the other groups were working on an I-Ready reading lesson, Myon, or doing station work. I-Ready and Myon are computer programs for reading instruction. Station work consisted of book studies, phonemic segmentation practice, and the reading of leveled books with questions.

In addition to the quantitative data, focus groups were formed to explore the qualitative aspect of the affect of feedback on oral reading fluency. The focus groups were formed based on the data from the first probe. A computerized randomizer was used to select 4 students from the top 25th percent to participate in the focus group classified as highly performing. Likewise, the same tool was used to select 4 students from the bottom 25th percent to participate in the focus group classified as struggling readers and 4 students who were Spanish-speaking English language learners to participate in that group.

The researcher was unable to locate any evidence of qualitative research regarding student perceptions of feedback on oral reading fluency. ERIC and JEWL were searched to locate studies and there were none identified. Additionally, Tim Rasinski and Tanya Eckert were contacted by email to explore the topics of qualitative studies. Both researchers were unaware of any qualitative studies. This design was intended to provide evidence on the effects of feedback on oral reading fluency as well as explore a means for triangulation of the results.

There was reason to add qualitative research to the study of feedback and oral reading. The National Reading Panel suggested student learning regarding oral reading fluency over a period of time needs further investigation, opposed to a comparing a pre and post-test. The pattern of change was more easily identified when analyzed repeatedly over an extended period of time. Other recommendations from the National Reading Panel (2000) were to explore a specific feedback treatment related to oral reading fluency, which was one component of the qualitative portion of the this study. The focus groups were designed to explore student perceptions of feedback at three different points during the study. These spaced focus groups allowed the researcher to gain insight about the different perceptions of struggling readers, proficient readers, and Spanish-speaking English language learners.

This chapter begins in table 3.1 by identifying the variables, research questions, hypothesis, and explaining the research design. Then there is an explanation of the experimental setting, instruments and procedures for the treatment, and methods of data collection follow. The quantitative methodology is followed by an explanation of the qualitative research methods. The chapter concludes with an explanation of the role of the researcher in the experiment and a summary of the methodology.

Table 3.1

Comparing Incorrect and Correct Words per Minute

Study Design	Variables	Population	Reference
<ul style="list-style-type: none"> • Experimental • Twice a week performance based feedback as correct words per minute • Comparing feedback by teacher, peer, self 	correct words per minute	43 students with learning disabilities	McCurdy & Shapiro, 1992
<ul style="list-style-type: none"> • Experimental, compare rate of improvement • Students were told the correct words per minute • 20 minutes, twice a week, 9 weeks 	Correct words per minute, incorrect words per minute	6 students with a reading fluency deficit	Eckert, 2006

Educators need to know which strategies they are using help students increase oral reading the most, because there is a clear reading deficit for many students living in the United States based on reading assessments (NAEP). Furthermore, there is a correlation between reading comprehension and oral reading (Williams et al., 1988). Students must be automatic at decoding in order to comprehend a text (Samuels et al., 1974).

Some of the types of performance-based feedback shown to have a positive effect on oral reading fluency in other studies are correct words read per minute, incorrect number of words read per minute, and repeated reading. Several of the studies combine the different feedback strategies and compare the effectiveness of the combinations. The majority of the current literature available combines performance based feedback with skill based feedback interventions. There is very no literature available researching the student perceptions of oral reading fluency from a qualitative perspective (Ates, 2013; Chafouleas et al., 2004; Guzel-Ozman, 2011; National Reading Panel, 2000, Thorpe et al., 1981). Most studies of oral reading fluency have been quantitative and include students with special needs.

Table 3.2 lists and describes several studies on correct words per minute, incorrect words per minute, and combinations including both.

Table 3.2

Past Studies Involving Performance Feedback

• Study Design	Variables	Population	Reference
<ul style="list-style-type: none"> Independent t-test Compare differences of treatment and control group 	Incorrect words per minute	16, 5 th graders with and without learning disabilities	Thorpe et al., 1981
<ul style="list-style-type: none"> Students told incorrect words per minute 	Incorrect words per minute	4 th grade struggling readers	Neddenriep, 2011
<ul style="list-style-type: none"> Students engage in repeated reading 10 minutes a day. Feedback on prosody and incorrect words per minute Pre-test and post-test 	Incorrect words per minute, repeated reading, prosody	60 struggling middle school students	Spencer, S. & Manis, F., 2010
<ul style="list-style-type: none"> Case study 	Repeated reading (skill based), correct words per, incorrect words per minute	1, 10 year old	Ates, 2013
<ul style="list-style-type: none"> Words read correctly 25 min./day for 5 weeks Listening passage preview with performance feedback, listening passage preview, repeated reading, and performance feedback 	Listening passage preview (skill based), repeated reading (skill based), and words read incorrectly	3, third graders 1, fourth grader Low reading proficiency	Guzel-Ozman, 2011
<ul style="list-style-type: none"> Single subject design Students are told goals, shown bar graphs, and the incorrect number of words read Compare student reading rate 	Repeated reading (skill based), rewards, incorrect words per minute, and correct words read per minute	3, 8-9 year old struggling readers	Chafouleas et al., 2004
<ul style="list-style-type: none"> Dynamic goal, static goal, and control 	Goal, graph, correct words per minute	18, 2 nd graders	Conte et al., 2000

The previous research involving oral reading fluency and feedback support the need for the following research questions.

Research Questions

1. How does student growth patterns compare and contrast for student receiving different feedback?

a. Alternative Hypothesis: Informing students of the number of words read correctly Or incorrectly has an effect on oral reading fluency in struggling readers.

b. Null Hypothesis: There is no effect on oral reading fluency when teachers inform Students the number of words read correctly.

$$H_0: \mu_{\text{correct}} = \mu_{\text{nofeedback}} = \mu_{\text{nofeedback}}$$

2. How do students perceive different types of feedback regarding oral reading fluency?

A. How do struggling readers and proficient readers perceive different types of feedback regarding oral reading fluency?

B. How do students who speak Spanish as a first language perceive different types of feedback regarding oral reading fluency?

Research Design

The researcher received IRB approval from Middle Tennessee State University prior to the beginning of the study. All parents were given consent forms from their child's teacher. The student signed assent forms. Any students or parents who declined to participate were exempt from participation. The researcher received permission from DIBELS (Appendices C) and AIMSweb (Appendices D) to use the resources in research.

This was a mixed methods study involving one independent variable measured over a 10-week time frame. Many similar studies used 6 to 10 weeks of progress monitoring to determine the effect of an intervention (Eckert, 2006; McCurdy & Shapiro, 2002; Neddenriep, 2011; Thorpe et al., 1981). There were two groups receiving a treatment and one control. The two treatments are oral feedback on correct words per minute, and oral feedback on incorrect words per minute. The dependent variable is the oral reading fluency rate for third grades. There were three groups of 7 students involved in the study. Each group was progress monitored weekly over ten weeks to determine the effect of each feedback strategy in relation to oral reading fluency. One group was the control group, and there were two treatment groups.

Descriptive statistics were used to determine if the treatment had an effect on oral reading fluency. This decision was based on the fact that there were three groups. There were actually ten data points collected per child. Each student's oral reading score was gathered once a week by the researcher. The research questions and the measurement tools are displayed in figure 3.1.

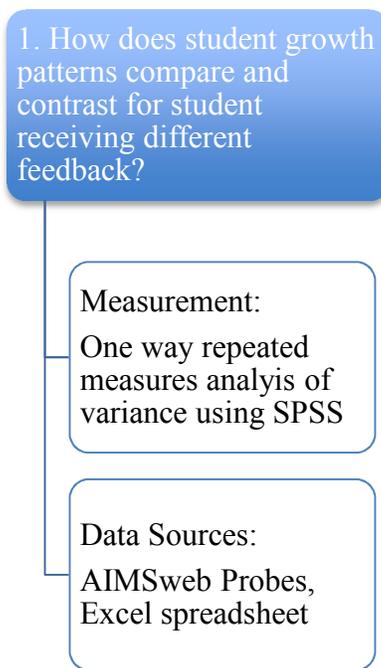


Figure 3.1

Process

Experimental Setting

The setting was Holbrook Elementary School, which was a suburban school. The school had a 90.5% free or reduced lunch population and was classified as a Title One School. There were 42.9% Caucasian, 16.2% African American, 35.1% Hispanic students. The third grade consisted of 41.3% Caucasian, 36.4% Hispanic, 19.8% African

American, and 1.7% Multi race students. The school population consisted of about 680 pre-kindergarten through fifth grade students.

Sample Size

The demographic information of the participants included 8 Spanish-speaking English language learners, 6 African Americans, and 7 Caucasian students. There were 10 males and 11 females in the study.

There were more Hispanic English language learners in the class than the other race, which is consistent with the demographics for the other classrooms in the school. Two of the Spanish-speaking English language learners were in the United States for only 3 years. The other English language learners were in the United States longer, and were less likely to be struggling with learning a new language. Students new to the United States might be struggling with learning a language which was one barrier the other students in the study were not experiencing. Likewise, the students understanding of the questions in the focus group and answers may have be affected by their understanding of English. Neither of these students in their first 3 years in the United States was included in the focus groups. The Spanish-speaking English language learning focus group included 1 male and 3 females. The male received no feedback, two females received incorrect word per minute feedback, and 1 female received correct words per minute.

The focus group consisting of highly performing readers included one male and three females. There was one male African American, two female African Americans, and 1 Caucasian female in the group. The male received incorrect words per minute

feedback, and the African American female received incorrect words as feedback. The 2 female Caucasian students received feedback as correct words per minute.

The third focus group consisted of struggling readers. There was 1 African American male, 1 Spanish-speaking English language learner who was male, and 2 Caucasian females in that group. The Spanish-speaking English learning male received no feedback, the African American student received no feedback, 1 Caucasian female received correct words per minute, and the other female received incorrect words per minute.

There were three groups of 7 students involved in the study, $n=21$. The group of participants was selected based on convenience. Random assignment was used to determine which child was in each group. The names were placed in a random generator with 7 students beginning with the correct word per minute, incorrect word per minute, and the control. The researcher monitored each child in a quiet place in the classroom using a curriculum based measurement tool, AIMSweb probe. The scores for each child were recorded on a spreadsheet weekly and placed in a specific Response to Intervention Notebook. Table 3.3 shows the spreadsheet that was used. After each probe the students either were told the correct words per minute, incorrect words per minute, or given no feedback. The full copy of this is located in the appendices (Appendices A).

Table 3.3

Data Collection Spreadsheet

Student	treatme	Probe 1 Number of words correct	Probe 2 Number of words correct	Probe 3 Number of words correct	Probe 4 Number of words correct	Probe 5 Number of words correct	Probe 6 Number of words correct	Probe 7 Number of words correct	Probe 8 Number of words correct	Probe 9 Number of words correct	Probe 10 Number of words correct
Ex:											

The data for this study was collected from students over 10 weeks. The purpose of the study was to explore the growth patterns and student perceptions of different types of feedback. During the first week of the study participants were selected based on those students in the researchers third grade classroom.

Materials and Equipment

The AIMSweb data site was used to electronically house all benchmarks and probes for each student. Ten oral reading probes were needed for weekly progress monitoring. Scores were recorded on a spreadsheet by hand and maintained in a RTI notebook, which stayed in the researcher's classroom. The researcher was the only person in the study assessing the students and providing the treatment.

AIMSweb instructional procedures were necessary to train the teacher who was conducting the initial benchmark and weekly assessments. The researcher also received electronic permission to use the checklist from DIBELS Next to assess the accuracy of the researcher in procedures.

Quantitative Data Collection Procedures

The three groups were progress monitored weekly by the researcher on a probe selected from the AIMSweb database. The teacher seated the child in a quiet place in their classroom. Both the child and the teacher had a copy of the text, but the teacher copy was placed so the child could not see the teacher marks. The teacher asked the child to begin reading and when they did the timer was set for one minute. Each mispronounced, skipped, or word they hesitated for over three seconds to pronounce was counted as an incorrect word. When the timer stopped the child was told they might stop reading. Then the student received one of the two treatments based on the group assignment, and the control group received no feedback. To ensure the student received the correct feedback the researcher had a box beside the child's number on the spreadsheet and places a check on the feedback type immediately before providing the feedback.

To ensure fidelity in the assessment procedures, the researcher administering the probe was observed twice by another researcher in a pilot study. A rubric was used to measure the accuracy of procedures for assessing oral reading. This rubric is included in the appendices (Appendices C). The rubric was created by Kelly Powell-Smith, Roland Food, and Trent Atkins (2010) and the Assessment and Integrity Rubric is used by DIBELS Next to determine fidelity of implementation. The researcher conducts weekly fidelity checks to ensure data collection and monitoring follows as planned. These fidelity checks were documented on a spreadsheet and occurred every Friday at 8:40 AM, during the researchers planning time. The spreadsheet is included in the appendices and was monitored to ensure the data collections were conducted weekly. There was a box for the number of students with scores noted on the spreadsheet and names of students who were missing scores. Any student missing a score was scored the next day if absent or scored during the next class if the reason for no score was unknown.

Inter-rater reliability was established as 20 assessments during the pilot study in the form of an audio recording using the researcher's personal iPhone, and watched by another teacher who was trained in administering the AIMSweb oral reading assessment. The inter-rater reliability was calculated using Intraclass Correlation Coefficient. If the inter-rater reliability was below expectations, .80, the researcher planned to reread the AIMSweb training manual and continue monitoring the process weekly.

In order to control for other factors that may impact student oral reading performance, the researcher refrained from beginning any new oral reading strategies. The sample size was the population of students the researcher taught daily. Additionally, students who were engaged in pull out programs such as English language learners,

students attending Title One pull out, and students who received Special Education Services were eliminated from the study to control the type of instruction the students received.

Qualitative Research Design

After one probe, student scores were analyzed by the researcher to determine which students were in the top 25th percentile and which students were in the bottom 25th percentile. The second probe was used to begin the treatment. The scores were used to form three focus groups for the purpose of gathering evidence about how struggling readers perceive feedback in regard to oral reading fluency. The research question is: How do struggling readers and proficient readers perceive different types of feedback regarding oral reading fluency?

Four students scoring in the bottom 25th percentile were randomly assigned to participate in a focus group to further investigate the student perception about how learning the correct words read or incorrect words read after an oral reading assessment was affecting their oral reading fluency. Four students from the top 25th percentile were assigned to the other focus group to investigate their perception of the effect or performance based feedback on oral reading fluency. The focus groups took place during the students' regular reading class while students were working in stations.

There was an additional focus group consisting of students who spoke Spanish as their first language. These students were selected using a computer-generated randomizer. The focus group was designed to answer the following research question: How do students who speak Spanish as a first language perceive different types of feedback regarding oral reading fluency?

The focus groups met three times during the study. They met after the third, sixth, and ninth oral reading probe. The group memberships stayed the same even if they move from the top or bottom 25th percentile. If a student left the school, a new student was placed in the focus group using the computer-generated randomizer. The meetings were held in the researcher's classroom, and the researcher used an iPhone to audio record the meeting. The researcher asked the students the questions listed (found in Appendices B), but deviated from the list if necessary to investigate a question. The questions were the same for all 3 focus groups. The researcher transcribed verbatim the focus group discussion in a word document and coded it to determine student opinions or beliefs about performance feedback and oral reading fluency. In Vivo coding was used in this grounded theory and action research to explore views or perceptions of a group of students (Saldana, 2016).

Memos were written on Friday of each week by the researcher in a notebook. These memos were based on observations in comments, body language, and emotions the researcher noticed throughout the probing session and immediately after probing. The researcher also did observation of the students after the probing session. The student comments and behaviors were written down on a sticky note.

Data Analysis Procedures

A randomly assigned number identified each child. Scores were tabulated and uploaded into an electronic spreadsheet in Excel. From there, the data was integrated into SPSS. There was one independent variable, feedback, which consisted of two different treatment groups. The groups, correct words per minute and incorrect words per minute, and no feedback were analyzed separately to determine the effect on the dependent

variable. The oral reading fluency rate of improvement as a mean for the entire ten weeks was collected for each experimental and control group. The group oral reading fluency score from the 1st probe to the 10th probe was compared to determine effect of the treatment on each group.

The In Vivo coding from the focus groups revealed a set of codes that provided insight into the perceptions student had about feedback. These codes were analyzed to see if there was a triangulation between the effect of the feedback treatment and student perceptions.

Summary

The research methods used in the study include both quantitative and qualitative measures in an attempt to triangulate the evidence relating to the effect feedback had on oral reading fluency. Descriptive statistics were used to compare and contrast the patterns in student growth related to different feedback types and oral reading fluency. In Vivo coding was the method used to determine the student perceptions on feedback from the focus groups. The results collected through scores and the focus groups were used to triangulate the answer regarding how feedback in the form of incorrect or correct words affect oral reading fluency in third graders.

CHAPTER IV

RESULTS

Introduction

Chapter Four reports the research results from this mixed methods study of a third grade class in a suburban public elementary school. This section provides a detailed report of the effect feedback has on third graders at the research site. Student patterns in performance and perceptions regarding the effect feedback has on oral reading fluency are explained in this chapter. The chapter begins by describing the participants in the study. Second, the process used to code the observations, focus groups, and memos is explained. The third section displays and explains a detailed report of the quantitative and qualitative findings. Fourth, there is a description of the triangulation between the quantitative and qualitative portion of the study. The chapter is organized by the research questions and the results related to each method are explained after the question. The final section of the chapter summarizes the overall results from the study.

Data Analysis

The quantitative data (Appendices H) was analyzed using SPSS, and descriptive statistics were generated. Students' growth patterns based on the type of feedback received in the study were explored. The mean provides a more clear measure of the central tendency for each group. Likewise, the mean for each treatment and the control were analyzed to determine patterns based on the specific type of feedback the group received. The mean of the first probe for the treatment or control group of 6 participants was compared to the final probe to explore if there was growth and how much occurred.

The final mean of each treatment and control was compared to analyze which group had the highest mean for oral reading fluency.

The qualitative data underwent 3 cycles of coding employing the In Vivo Coding scheme. The first cycle involved the researcher reading the transcribed focus groups (Appendices I), observations (Appendices L), and memos (Appendices K). Then the researcher recorded codes in the margins of the documents looking for evidence to describe the students' perceptions of feedback. During the second cycle (Appendix J) the researcher looked for themes within the codes listed in the margins. In this cycle the researcher identified 4 categories. The third cycle involved the researcher rereading the focus groups transcripts, memos, and observations for evidence to confirm the students' perceptions (Appendix J). The students' beliefs were compared and contrasted based on beliefs about feedback.

Finally, the researcher looked to see if there was an overlap in the findings from the quantitative and qualitative portions of the study. Student comments, observations, and researcher memos were explored to see if there were any similar or contrasting instances. For this reason the focus groups, observations, and memos evidence are described under each research question. The evidence was separated in a chart to show the similarities and differences in the findings.

RQ#1 Growth Patterns

How do student growth patterns compare and contrast for students receiving different types of feedback?

Descriptive statistics were used to compare the mean of each treatment group: correct words per minute, incorrect words per minute, and the group that was supposed to

receive no feedback. The mean of each group was compared and contrasted to explore growth patterns in oral reading fluency over the ten weeks of the study. The data collected describes the influence of feedback on the growth patterns related to oral reading fluency.

There was a difference between the average mean and the words read per minute for the students who received incorrect or correct words as feedback and the students who received no feedback. Table 4.1 shows the mean in words per minute on probe 1 for each treatment group, 105.8, for students who received correct words and a mean of 107.5 for the students who received incorrect words as feedback. But, the mean for the students receiving no feedback was 63.3. This data showed a large difference between the mean for students who were in the treatment groups and students who received no feedback. The groups were assigned using randomization, thus the initial mean of the group that received no feedback happened to be much lower than the other treatment groups.

Table 4.1

Probe 1 Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Correct	6	90	114	105.83	9.087
Incorrect	6	51	116	87.50	26.994
None	6	8	140	63.33	47.873
Valid N (list wise)	6				

All groups of students who received feedback during the study had a higher mean number of words read correctly at the completion of data collection, and that data is evident in table 4.2. The group that received correct words per minute had a mean of 132.7, and the group that received incorrect words per minute received 119.0 words per minute. But, the group that received no feedback had a score of 96.7 words per minute.

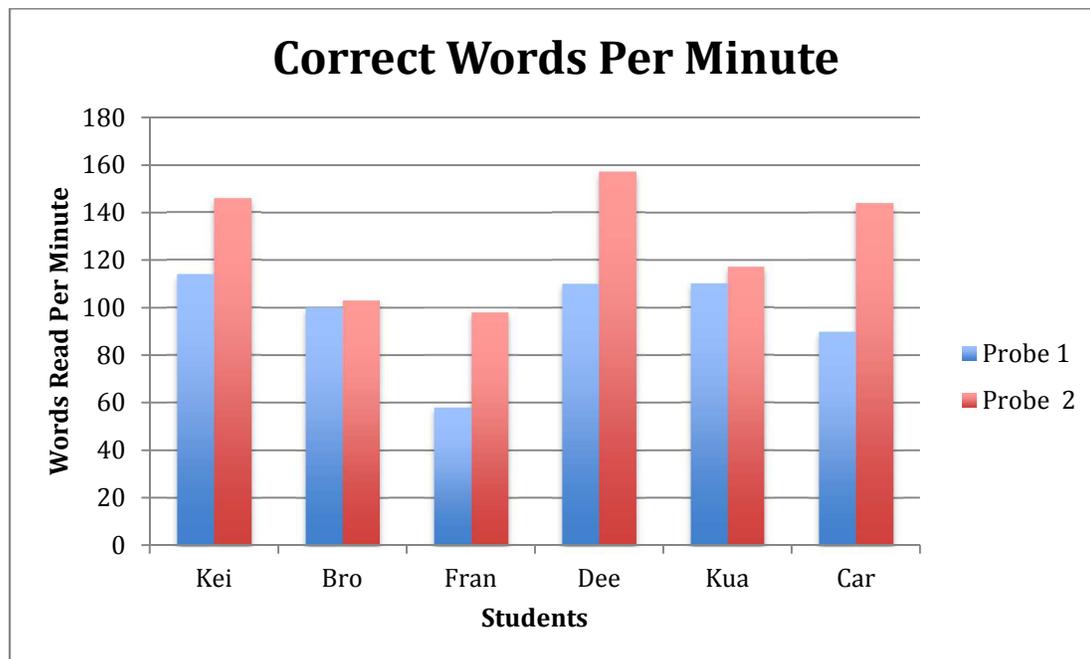
Table 4.2

Probe 10 Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Correct	6	103	157	132.67	20.186
Incorrect	6	87	171	119.00	30.040
None	6	47	198	96.67	56.860
Valid N (list wise)	6				

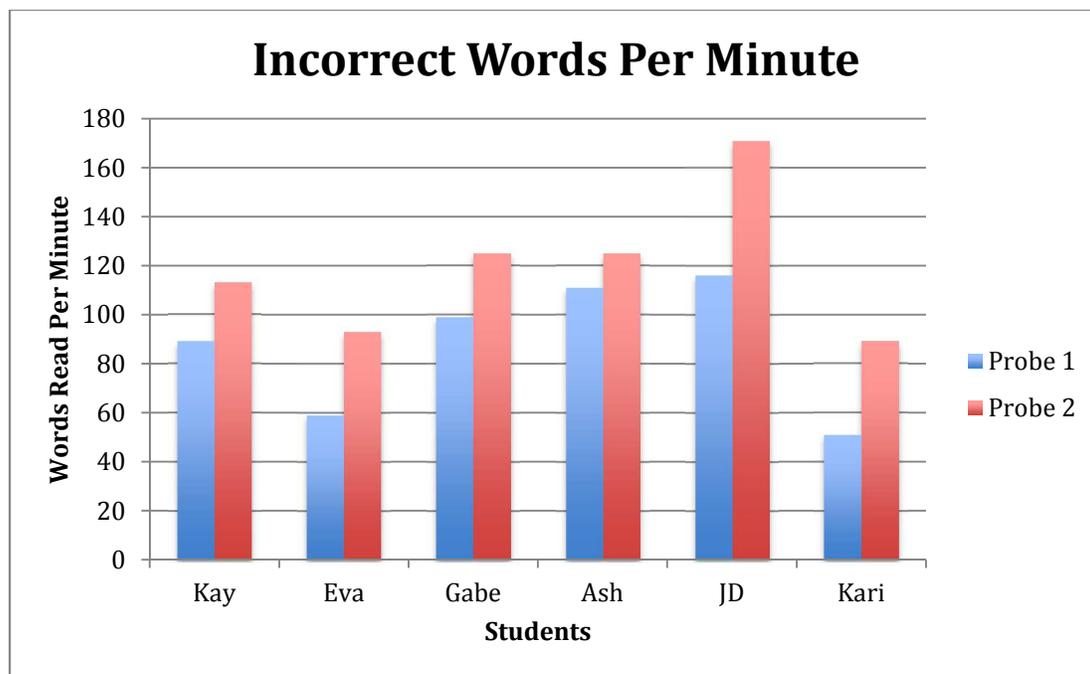
There was a change from the first probe to the final probe for each group of students, but the students that received correct words per minute had the greatest mean at the completion of the study. This group also started the study with the highest mean. There was an increase in the mean for the correct word per minute group by 26.9 words per minute. Table 4.3 shows the growth for each child in the ten-week study. Dee, Kei, Kua, and Car had the greatest growth, where as Bro and Fran had less growth. Those with less growth still grew, so 100% of the participants assigned to this group improved in performance.

Table 4.3

Words Correct Per Minute

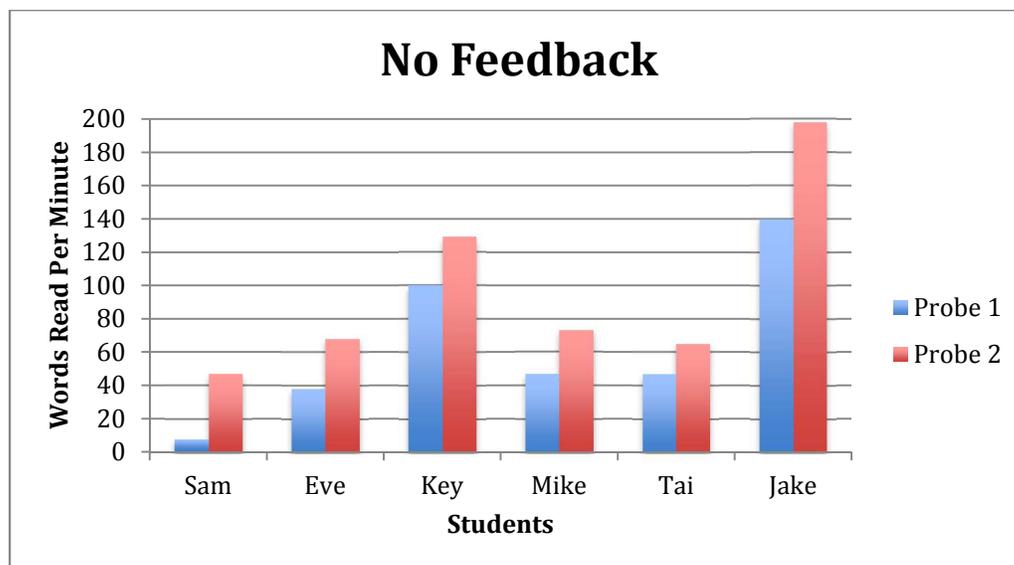
All students in the incorrect words per minute group increased the number of words read per minute. The group that received incorrect words per minute had a mean of 87.5 on the first probe and 119.0 on the tenth probe. This was an increase of 31.5 words per minute over the ten-week study. Table 4.4 showed the growth for each child in the study. JD and Kari had the most growth in the group, but all students increased in the number of words read correctly per minute.

Table 4.4

Words Incorrect

The group that received no feedback had a mean of 63.3 on the first probe and a mean of 96.7 on the tenth probe, which was an increase of 30.4 words per minute. This group had the greatest growth over the ten weeks. Four students had a score of 50 or below on the first probe, which is seen on table 4.5. Only one student scores 50 or below on the final probe. There was one highly performing reader, Jake, in the group who began reading at 140 words correct per minute and completed the study reading 198 words correct per minute. There were 3 struggling readers in this group, and each of the struggling readers began the study reading in the bottom 25th percentile for the class. Randomization led this group to be overall lower performing at the outset of the study. Nevertheless, each individual student in the no feedback group increased their oral reading fluency.

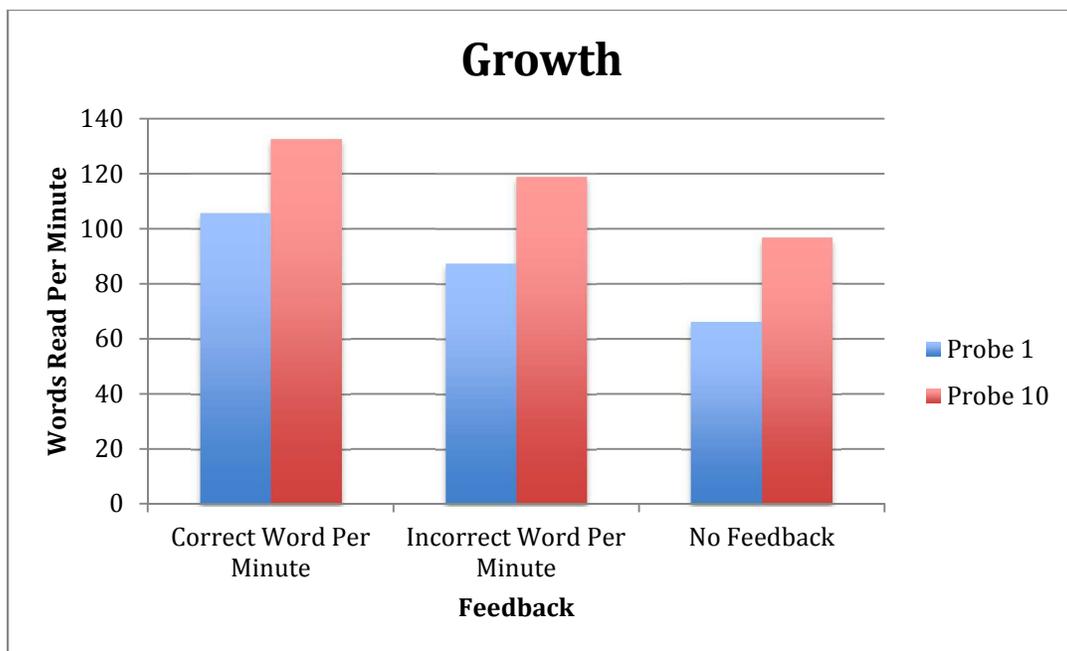
Table 4.5

No Feedback Growth

All students in the study increased in the oral reading fluency. Table 4.6 shows the growth for each group over the ten weeks. The greatest change was for the group that received incorrect words per minute as feedback. This growth was measured by change in the mean from probe 1 to probe 10. This provided evidence-suggesting feedback as incorrect words per minute had a the largest quantitative effect on oral reading fluency compared to correct words and students receiving no feedback in this study.

Table 4.6

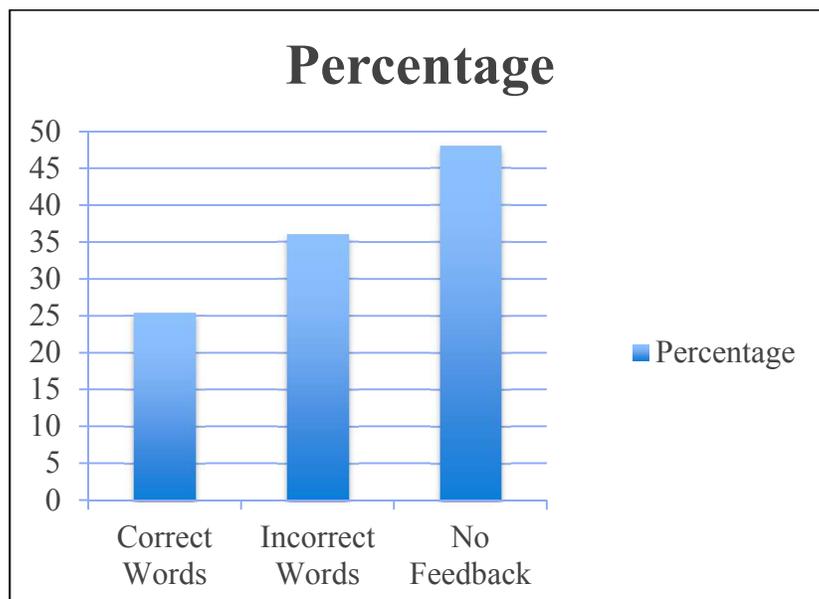
Growth



The student growth in percentage gained is shown in table 4.7 and has different results, compared to the gain in mean words per minute for each group. The group that received no feedback had 48% growth, which is the highest percent for each treatment group. The second highest percent gain is 36% in the group that received incorrect words per minute. The group that received correct words grew 25.4%.

Table 4.7

Percentage Gained



Each child in the study improved in oral reading fluency during the ten-week study. The students in the no feedback group increased the most. The group that received correct words per minute had the highest mean at the beginning and end of the study. The groups that received incorrect and correct words per minute had a higher mean of words read correctly per minute at the completion of the study.

RQ#2 Student Perceptions

How do different students perceive different types of feedback about oral reading fluency?

Highly performing, struggling, and Spanish-speaking English language learners had a desire to be informed about the number of words read correctly. The student responses to the questions in table 4.8 were asked to allow students to share their perceptions. These questions were used in a pilot study and modified based on construct and content experts.

Table 4.8

Focus Group Questions

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?
2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affect your reading fluency? (The researcher will state the form of feedback the student receives in the question.)
3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency? 3a. Why?
- 3b. How does feedback affect your performance?
4. How do students perceive feedback regarding oral reading fluency?
5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?
6. How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?
7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?
8. After you turn in work or perform a task, how would you like your teacher to respond?
9. What should your teacher say of write on your paper?
10. What should your teacher tell you about your work?
11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?
12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?
13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?
14. How does knowing your level of performance or score motivate you to want to learn?
15. Does knowing your level of performance or score help you set goals? If so, how?
16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Students had a desire to know their score. Once informed of a number the students felt positive. Student comments, behaviors, and body language were evidence stating that the students felt good when they knew their level of performance. Even when

the students did not improve their score from the previous reading the student seemed positive in regard to understanding the number of words they read correctly. Table 4.9 includes student responses from the focus groups, memo data, and observational data connected to the category, positive feelings.

Table 4.9

Happy Emotions

Categories related to student perceptions of feedback-Positive Feelings: Focus Group Data	
“High, struggling, and ELL want feedback as correct words per minute.”	
I feel: JD (high): good, Gabe (struggling): happy Eve (ELL): glad	Why: JD (high) said, “I tried my best. It makes me feel good.” Gabe (struggling) says, “I know the words I need to improve on.” Dee (high): “I know what to study.”
Categories related to student perceptions of feedback- Happy: Memo Data	
Students felt: Positive	Evidence: Students asked how many words they got correct. They would say, “Yes!”
Categories related to student perceptions of feedback- Happy: Observation Data	
Students felt: Positive	Evidence: Mike returned to his station and said, “Fern, what did you get?” Fern replied, “I went higher!” They both smiled and went to work. After receiving feedback, Tia said, “Yay!”

Highly performing, struggling, and Spanish-speaking English language learners felt motivated to improve when informed of the number of words read correctly. All twelve students made comments connecting to happy feelings and the desire to improve when they were told the number they read correct. JD said, “I actually feel happy.” Then Fern excitedly stated, “I went higher.” Likewise, Eve replied, “It makes you want to do better.” Table 4.10 shows data collected from focus groups, observations, and memos evidencing how students were motivated to improve when given feedback. The students desired feedback and all students stated feedback helped them determine how much more they needed to study. When students did not improve they were given the opportunity to adjust their efforts. This motivational process is in line with research as it relates to allowing students to engage in a continuous cycle of improvement towards meeting their goals (Bandura, 1991; Dweck & Leggett, 1988; Locke & Latham, 1990).

Table 4.10

Motivation

Categories related to student perceptions of feedback- Motivation: Focus Group Data	
“High, struggling, and ELL appear motivated to improve when informed of the correct words per minute.”	
<p>I would: Dee (high): I would correct what I got wrong. Sam (struggling): Correct it. Kay (high): Do more. Eve (ELL): Work more. Kei (high): Improve. JD (high): Keep reading. Tai (struggling): Practice. Gabe (ELL): Read better.</p>	<p>Evidence: High JD said, “I actually feel happy. I feel happy, because mistakes help you. Mistakes do help you. If you get a little high and a little low it makes you have because you know how you have been doing.” Dee stated, “It kind of effects me cause it helps me know if I need to practice more. If you don’t tell me them I would not know if I need to practice more.” Kay said, “The score if you got high tells you to practice a little. But if you get low you need to practice a lot. It helps you improve. “ Struggling Sam said, “So we can practice. So you can get better at words and pass third grade. Then in 4th grade you will know it. We can read more books. To help you.” Gabe said, “To tell you what you need to get better.” Mike replies, “You can remember the words. So you can practice the words every week.” Tia said, “To help you get better.” ELL Eve (ELL) said, “If students get a bad score I study more. You correct them back. You work on the mat or something and fix it. Then we do it all over again.” Eva (ELL) said, “You correct it at home.” Gabe (ELL): “We do it all over again and get it right. Then you put a new grade on it.” Eve (ELL): “It makes you want to do better. It makes me want to read more.” Fern said, “ Knowing the number I get right makes me want to improve.” Kei said, “Me too.”</p>
Categories related to student perceptions of feedback- Motivation: Memo Data	
<p>Students felt Motivated Dee (high): I tried my best. Mike (ELL): practice every night Tai (struggling): become a better reader</p>	<p>Evidence: Student expression and body language expressed motivation. They looked at their graph and compared their scores. All students tried hard on the assessment. Students monitor their progress and are focused on improving. Students practice every night, keep reading, engage their parents in helping them. Mike, Dee, and Carla and voluntarily stated after the assessment that they practice every night. All students believed the score was a progress monitoring point they used to set a baseline to improve. Dee (high) said, “I tried my best.” Mike said, “Practice every night.” Tai said, in response to how does feedback affect you, “I become a better reader.”</p>
Categories related to student perceptions of feedback- Motivation: Observation Data	
<p>Students felt: Motivated</p>	<p>Evidence: JD (High) said, “Okay, it says I missed 0 on the others too. I love reading!” Fern (ELL) stated, “I went higher.” Students looked at their graph as they colored it in and inform the researcher when they went up or down. In both situations the students were monitoring their learning with motivation to improve.</p>

When students received a high score the student knew they did not need to study as much, but if they scored low the students believed they needed to study. Dee said, “The score you got, if its high, tells you to practice a little. But if you get low you need to practice a lot. It helps you improve.” Knowing the level of performance motivated the students to improve. Knowing the current level of performance, which was what

happened in this portion of the study, is the first step in the four phases of motivation (Hattie, 2012).

High readers differed from struggling and Spanish-speaking English language learners, because they did want to be informed the number of words they read incorrectly. The higher students already had the knowledge of what to do with the incorrect words and how to learn them. The metacognitive level of learning was higher for the more highly performing readers. Therefore, they knew how to set a goal, strategies to meet the goal, and received weekly feedback to check their progress. Dee, a highly performing reader, said, "I try to get 5 more correct each week." Then JD, a highly performing reader, added, "I try my best and try to get more each week." The students stated the plan they used to sound out the words. Dee said, "I sound the words out in syllables." Key, a highly performing reader, added, "I slow down and reread." Kei, a Spanish-speaking English language learner, said, "I use sound boxes and decode the words." These strategies included rereading, sounding them out, spreading the word out, and putting the words into syllables.

Spanish-speaking English language learners and struggling readers felt sad when they were informed the number of words they read incorrectly. When asked why they felt sad the Spanish-speaking English language learners said it was because they wanted to do well, and if they missed words they had to take another test. Mike, a Spanish-speaking English language learner said, "If you miss them, you have to take more tests. Then if you miss more, you have to practice more. This makes me tired." The researcher asked him if practicing is really that awful, and he replied with expression, "Yes!" If students

scored low on an oral reading fluency assessment as a benchmark they are placed in Response to Intervention, which means they are tested weekly.

One struggling reader said she was punished in a previous class for low scores. At one point during a focus group the struggling readers stated her class would often not get candy or lose recess if they had low scores. Struggling students stated in past experiences they were punished for low marks by teachers and parents. For instance, Sam, a struggling reader said, “One time at another school I had to miss recess, because I missed so much. Sometimes my dad punishes me if I miss too many on a test. I get in trouble.” This pattern of comments led the researcher to the conclusion struggling readers do not prefer feedback as incorrect words per minute.

Over the course of the 10 weeks students’ perceptions changed as they engaged deeper into the feedback experience. On the first focus group meeting students replied on a scale of 0-10 (0 being none and 10 being a lot) in relation to how feedback affected their oral reading performance. All 12 students with the exception of Mike, a Spanish-speaking English language learner, stated feedback was a 10. Mike rated feedback as a 9. But on the second focus group the highly performing readers decreased their ratings of feedback. Ash and Kay rated it a 5, Dee scored it a 10, and JD rated it a 7. The group of struggling readers decreased their perception of feedback as well. Mike and Tia gave it a 0, Gabe had no response, and Sam rated it a 6. The Spanish-speaking English language learner group rated feedback with similar scores. Car, Fran, and Eve gave it a 5, but Kei still scored it a 10. On the final focus group the highly performing readers increased their ratings. Ash, JD, and Kay rated it a 10, but Dee scored it a 9. The group of Spanish-speaking English language learners scored it similar to their previous rating. Eve, Car,

and Kei rated feedback as a 5, but Fran scored it a 10. The group of struggling readers scored feedback much higher than their previous rating. Sam and Tia rated it a 10, Mike gave it a 5, and Gabe rated it a 4. The scores in the initial focus group were much higher than the score in the middle focus group. But most all ratings increased from the middle to the final focus group. Gabe and Mike are the only two students who decreased their rating of feedback from the first to the third focus group. Both students were struggling readers, but this is the only commonality identified between the students. There were no other instances where students decrease their rating of feedback from the first to the final focus group.

The descriptive quantitative data suggested that for those in this study, feedback as incorrect words had a greater gain than those in the correct words per minute group, and the group that received no feedback. All children in the no feedback group asked for feedback at some point during the study. The dates and type of feedback requested is located in table 4.11. This led the researcher to the conclusion that the quantitative evidence for the no feedback group was not valid, because students were exposed to feedback.

Table 4.11

Feedback Requests

Group/ Student	Probe Numbers	Feedback Requested
Kay (Correct Words)	2	How many did I get right? How many did I miss?
Fav (ELL) (Incorrect Words)	8	How many did I get right?
JD (Incorrect Words)	2	How many did I miss? How many did I get right?
Eve (No Feedback)	2 3 5	How many did I miss? Did I miss any words? How good did I do?
Key (No Feedback)	8	I want to know my score (correct words per minute).
Mike (No Feedback)	9	I want to know what I got (correct words per minute).
Tia (No Feedback)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	How many did I miss?

Eve asked her mother to time her at night and giving her feedback. Tia asked for feedback as incorrect words at every assessment. Additionally, JD and Kay asked how many they missed and how many they read correct. One of the conditions of the study was that at any point in the study the researcher provided feedback if the student asked for feedback. It was ethically the correct decision to provide feedback, but this situation may account for the increase in oral reading fluency growth for the no feedback group.

Nevertheless, all students in the study were exposed to feedback and all students increased their words read correctly.

RQ#2 A Struggling and Proficient Readers

How do struggling readers and proficient readers perceive different types of feedback regarding oral reading fluency?

Struggling readers and proficient readers differed in the feelings they had about feedback. One area where struggling and proficient readers were different was in the emotions evoked by incorrect words per minute feedback. High readers appreciated the feedback as incorrect words per minute, but struggling readers felt sad when given the number of errors. The high readers were at a much more independent level of learning and more capable of learning without as much teacher assistance. The high students could regulate themselves, slow down, decode syllables, use context clues, and this led them to have a different perception of incorrect words per minute as feedback.

Highly performing readers appreciated feedback as incorrect words per minute and used this feedback to set goals to improve. Jay tried to do better each week, Dee wanted to improve by 5 words a week, and Key agreed she wanted to improve each week. The highly performing readers also believed 100 words a minute was a proficient oral reading fluency score for the month of September in third grade. In the focus group Dee stated 100 words per minute was a good score, and the other students agreed. Then the researcher asked the students where they learned this and they were unsure. This was not a number the researcher had told the students in a lesson. The highly performing readers developed the understanding of the proficiency level on their own. The researcher asked the students in a focus group to confirm where they learned 100 words per minute

was proficient. The students said the researcher did not inform them 100 words a minute was a proficient score, and they did not know where they got that idea. The researcher never did discover where the highly performing children developed this belief. Struggling readers did not know what a proficient score was in oral reading. They did not state a number when asked what a proficient score was in oral reading. Some students asked the researcher for clarification if the score they were told was good when they were given feedback. For example, after an assessment Sam, a struggling reader, asked, "Is that good?" Then Tai, another struggling reader, asked, "That's good, right?" This trend in questioning showed the students were unsure of what a proficient oral reading score was for their grade level.

Struggling readers wanted the researcher to inform them the words they missed as opposed to a number. Table 4.12 shows the category for metacognition and has direct quotes from the students. Tia explained and the other students in the struggling reader focus group agreed that knowing a number does not help them improve. She said, “Telling me the number of words I got wrong does not help me. I need you to teach me the words.” The other children in the focus group agreed. The students wanted the researcher to go over the miscues with them immediately after the error in the assessment. Students needed to be taught the misconceptions or the words they missed in the text (Higgins, 2001). Otherwise the students felt the feedback was not helpful (Hattie, 2012).

Table 4.12

Metacognition

Categories related to student perceptions of feedback- Metacognition: Focus Group Data	
“High readers felt happy when told the number of words read incorrectly, but struggling students feel sad. Struggling students want to be taught the words they missed.”	
High Readers I need: JD: To learn how to read so they don't get messed up on stuff. Kei: So the kids can learn more reading. JD: To become a better reader. Struggling Readers I need: Tia: You to teach me the words.	High: These students want to be informed of the number of words they missed, and they have a plan to learn those words. Dee says, “By sounding them.” JD states, “Spreading the words out.” Kei claims, “Ugh putting them into syllables, so you know.” Struggling Readers: Tia says, “You to teach me the words. Knowing the number I missed does not help me unless you teach me the words.”
Categories related to student perceptions of feedback- Metacognition: Memos	
High Readers Setting goals Struggling Readers I feel: Unclear	High: JD says, “I set goals to miss less. Students are setting goals. Dee says, “I try to do better each time.” Struggling: Sam asks, “Is that good?” Sam said, “That's not bad. What do you think?” The students do not know what proficient is for their age and grade. They do not know skills to improve.
Categories related to student perceptions of feedback- Metacognition: Observations	
High Readers have: Understanding of levels of proficiency and a plan to improve. Struggling Readers felt: Unclear about what was proficient.	High: The high readers are motivated and set goals to improve based on their previous number of incorrect words. Students are setting goals to improve based on the number of errors. High students seem to believe 100 words a minute is a proficient score. Struggling: Tia says, “I got 2 wrong. What were they?” On another assessments Tai said, “What is the words I missed?” The struggling students are unclear about what is proficient. (Tia was immediately informed the word he missed.)

RQ#2 B Spanish Speaking Students

How do students who speak Spanish as a first language perceive different types of feedback regarding oral reading fluency?

Receiving feedback as incorrect words per minute brought negative feelings to the Spanish-speaking English language learners. Table 4.13 shows student quotes and categories related to the negative emotions the children had related to incorrect words per minute as feedback. The students had a desire to do well and get all of the words correct or have no errors. Gabe, a struggling reader, said, “We want to get them all correct.” But, the struggling readers did not mention strategies such as decoding, or separating words into syllables as strategies to learn the words. The highly performing readers did state they decoded words, separated them into syllables, and reread the text. But, the Spanish-speaking English language learners did state that they would read with their parents at home to improve. For instance, Dee, a highly performing reader, said, “ I try to do better each time.” Then, JD, a highly performing reader, replied with, “I set goals to miss less.”

Table 4.13

Negative Feelings

Categories related to student perceptions of feedback- Negative Feelings: Focus Group Data	
“ELL feel sad when they learn the number of words they read incorrectly.”	
I felt: sad, unhappy	Gabe said, “We want to do well and get them all correct.” Eve said, “We want to do a good job?”
Categories related to student perceptions of feedback- negative feelings: Memos	
Students felt: disappointed	Students appeared sad when told the number of words read incorrectly.
Categories related to student perceptions of feedback- negative feelings: Observations	
Students felt: disappointed	Eve asked, “How many did I get right?” (Eve was immediately informed the number of words she read correctly) The students looked sad as they left the table after hearing the incorrect words per minute, even if they missed only 1-2.

Motivation

Highly performing, struggling, and Spanish-speaking English language learners were motivated to make their scores better. Those receiving incorrect words per minute attempted to decrease their errors, while those receiving correct words per minute wanted to increase their number correct. The students used the score they received to set goals to improve. The highly performing students knew the level of proficiency and had a specific number they want to improve each week. JD, a highly performing reader said, “I try to do better each week.” Dee stated, “I try to get 5 more words correct each week. I want to beat my goal.” The struggling readers and Spanish-speaking English language learners had a goal to improve each week.

The greatest difference between the groups was the level of metacognition between the highly performing readers and the struggling and Spanish-speaking English language learners. Figure 4.1 shows the metacognition for each group and the strategies the students knew to improve. Highly performing students knew how to improve and wanted incorrect and correct word per minute feedback. The struggling students and Spanish-speaking English language learners wanted to receive correct words per minute only. The incorrect words per minute caused them negative emotions. Some of the reasons are that they have experienced negative things in the past because when they had many errors.

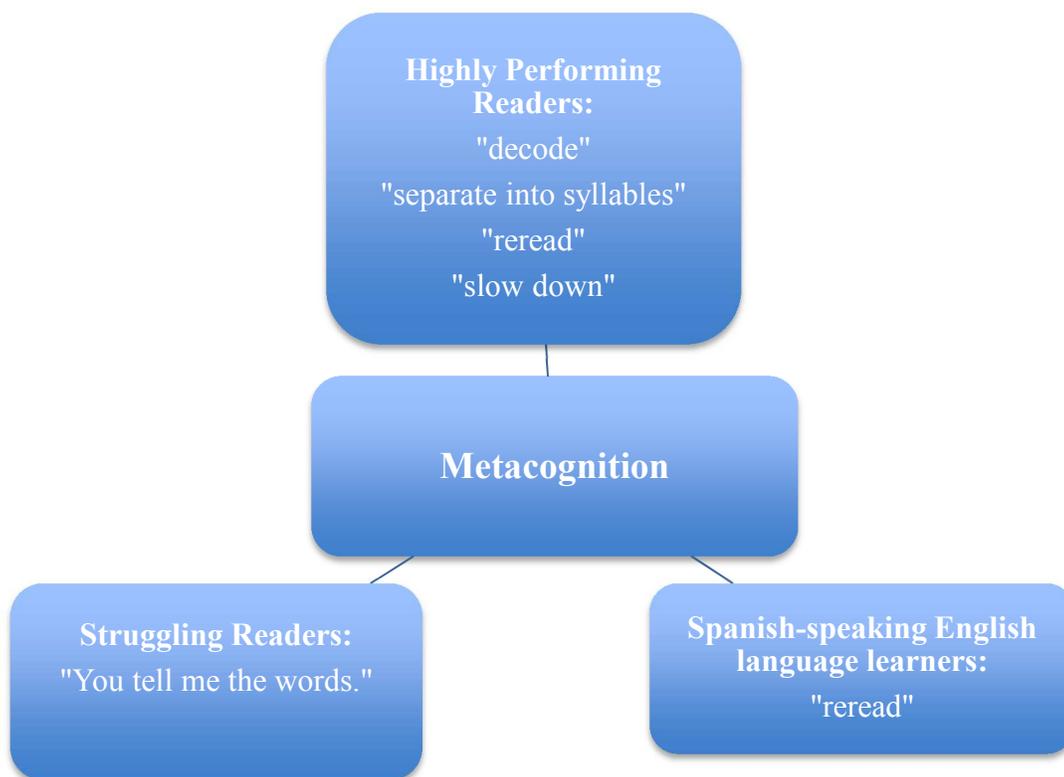


Figure 4.1

Metacognition

All 12 students who participated in the focus group meetings stated correct words per minute as feedback made them feel happy. The mean for the group of students who received incorrect words per minute was the highest compared to the other groups in this study. Although, incorrect words as feedback had a 30.4 growth in words per minute it had negative emotional consequences for Spanish-speaking English language learners and struggling readers. Correct words per minute had a growth of 26.9 words per minute and created positive emotion for highly performing, struggling, and Spanish-speaking English language learners. This suggests there was evidence of a triangulation between student perceptions and the effect correct words per minute as feedback had on oral reading fluency. Figure 4.2 shows the connection between student perceptions and student growth patterns.

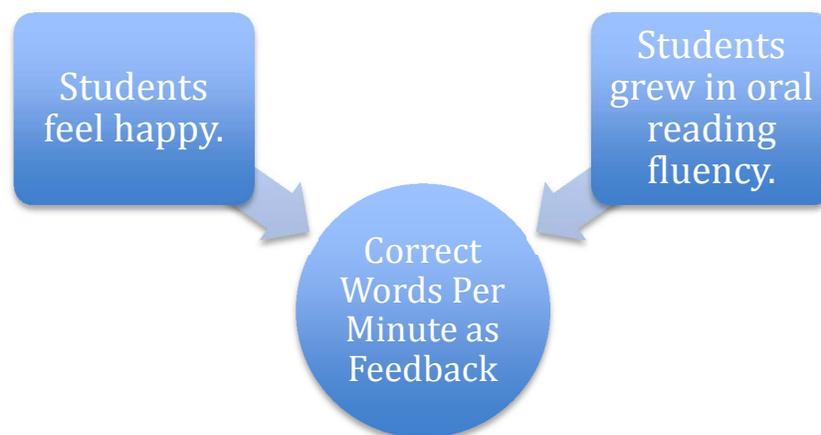


Figure 4.2

Student Perceptions and Growth Patterns

Spanish-speaking English language learners and struggling readers felt sad when informed the number of words read incorrectly. The growth for the students receiving incorrect words per minute, as feedback, was higher than the growth for students who received correct words as feedback. This provided evidence suggesting incorrect words per minute, as feedback was more motivating in this study.

Summary

All students in the ten-week study increased in the number of words read correctly per minute, and were motivated to improve when provided the number of incorrect and correct words as feedback. The students in the no feedback group had the most growth, but the students in the incorrect and correct words per minute feedback groups had the highest mean at the completion of the study. Only highly performing readers wanted feedback as incorrect words per minute. Struggling learners and Spanish-speaking English language learners wanted feedback only as correct words per minute, because incorrect words per minute made them sad.

This chapter stated the findings in the study from a quantitative and qualitative research study. The quantitative findings led the researcher to the conclusion that feedback did motivate students to improve. Students with different metacognitive levels perceived feedback differently. These findings and future implications are explained in Chapter 5.

CHAPTER V

DISCUSSION

Introduction

The final chapter in this mixed methods study provides a summary of the study, conclusions, and recommendations for future research about the growth patterns and perceptions students had related to feedback on oral reading fluency. The first part of this chapter reiterates the original problem in the study and explains the reasoning behind the research design. The next portion of the chapter is a summary of the results, which connects to the literature and theoretical framework. Then, additional limitations are addressed and ideas to improve the study are suggested. The final section of this chapter offers future research questions, and specific implications for practice derived from this investigation.

Summary

Many children in the United States are struggling with a reading deficit. Although, there are many reading strategies and policies aimed at improving the reading proficiency of children in the United States. Policies such as 2001 No Child Left Behind (NCLB, 2002), the Third Grade Reading Law (Rose and Schimke, 2012), and the Every Student Succeeds Act (ESSA, 2015) are designed to increase accountability in a effort to improve the reading abilities of children, but the 2015 National Assessment of Educational Progress reported only 36% of fourth graders are proficient or advanced in reading. Despite such large-scale legislation and the existence of empirically supported reading research strategies, the majority of students are not reading at a proficient level nationally.

Furthermore, there are many different reading strategies known to improve oral reading fluency, but one specific strategy, feedback, is often paired with these reading strategies. Some strategies paired with feedback are repeated reading, neurological impress, paired reading, and multiple performance based feedback strategies (Chomsky, 1976; Hollingsworth, 1978; Kuhn, 2005, 2000; Little, 2015; Rasinski et al., 2003; Schreiber, 1980; Shaywitz et al., 2004). The effect that feedback as correct words per minute or incorrect words per minute has on oral reading fluency has not been heavily researched quantitatively or qualitatively (Arthaud, 1996; Eckert et al., 2002; Eckert et al., 2006; Hattie, 2009; Kluger et al., 1996; National Reading Panel, 2000; Rasinski et al., 2003). In the few studies about feedback and oral reading there is evidence suggesting that providing students the correct words per minute has a positive effect on oral reading fluency (Ardoin et al., 2006; McCurdy et al., 1992). Likewise, informing students the incorrect words per minute also has a positive effect on oral reading fluency (Eckert et al., 2006; Neddenriep et al., 2011; Thorpe, 1981). There is evidence suggesting that when students are provided the number of incorrect words per minute there is a greater positive growth pattern than when informed the correct words per minute (Ardoin et al., 2006; Chafouleas et al., 2004; Guzel-Ozman, 2011; Neddenriep, 2011; Spencer et al., 2010; Thorpe et al., 1981). This investigation began as an attempt to build off these findings and explore the effects of feedback on students through both a quantitative and qualitative lens. Through this approach this chapter will provide some initial contributions to the scholarship on feedback and its relationship to student perception as well as through the measuring of learning growth.

Limitations

One of the limitations of this study and others researching the effect size or growth rate of treatment groups receiving feedback as incorrect or correct words per minute is the number of participants. Most studies are single subject design case studies with less than 30 participants. Studies with a sample size of less than 30 are unable to meet the assumptions of normality. Because of the Central Limit Theorem, researchers know that if there are at least 30 participants, the distribution approximates normality, and the assumption of statistical inference is met. In order to run an inferential statistics test, such as ANOVA, and assume normality, there needs to be 30 or more participants in each treatment group. The size of this study is, likewise, small with 7 students serving in each treatment group. This of course limits the opportunity to generalize any of the statistical output. However, given its alignment with past research and the parallel quantitative findings the study seems to be comparable within the findings of other context while adding the qualitative research to inform future research.

Originally each treatment group in this study had 7 students, but 3 children in this study were removed from the study. There was one child in each treatment group that was removed from this study. Two students were truant, and absent over a week. This eliminated the possibility of getting a score for each child for one week of this study. Another child is identified as having an Individualized Education Plan (IEP), and his growth was impacted by his IEP. He received weekly speech classes and his oral reading rate was affected by his speech. However, the researcher seeks to place emphasis on the descriptive data as a means for illustrating the findings more clearly in light of the potential problems of running an inferential test on a sample failing to meet this criterion.

Another limitation of the study was the inability to control all variables, such as student experiences. One student, Eve, reported that her mother was timing her and providing her incorrect words per minute feedback at home. She is a Spanish-speaking English language learner and was using the strategies she saw in class to improve at home. Eve was in the group that was supposed to receive no feedback. The number of days and times she did this were unknown. Additionally, when students were asked the number they missed or read correct after a reading assessment during this study the researcher told the children the number, because it was unethical to withhold information. There were multiple times, the students in the group that was supposed to receive no feedback, asked for the number they read correct and incorrect. Additionally, in these instances the children were provided this information. This was one condition in the consent to participate agreement; if children or parents wanted to know their score they were informed.

Likewise, other students had strong negative beliefs towards incorrect words per minute because of past negative experiences. One reader in the struggling reader group, Sam, admitted he received punishments by teachers and parents when he missed “too many.” The researcher did not clarify how many was “too many.” Sam and Eve provided evidence suggesting it was not possible to control all feedback experiences during the 10 week study, even though the feedback type the students were exposed to in the researcher’s classroom was controlled.

Qualitative Research

The qualitative portion of the study added to the body of literature connecting to oral reading fluency and feedback. There was limited qualitative research on feedback in

connection to oral reading fluency (Arthaud, 1996; Eckert et al., 2002; Eckert et al., 2006; Hattie, 2009; Kluger et al., 1996; National Reading Panel, 2000; Rasinski et al., 2003). Student focus groups allowed the researcher to engage students in exploring their feelings, and the opportunity to understand how feedback affected students. The focus group questions were created by the researcher, but revised based on feedback from content and construct experts. By conducting focus groups at the beginning, middle, and end, the researcher was able to analyze student perceptions over the entire study. The focus groups included a group of 4 Spanish-speaking English language learners, 4 struggling readers, and 4 highly performing readers. So, the children answered the questions in focus groups before they experienced the effect of correct words per minute, incorrect words per minute, and received no feedback. The children were engaged in the oral reading assessments with feedback or no feedback for 10 weeks with 1 assessment each week.

Additional information was gathered through observations of students during the treatment process. Notes were made on sticky notes and sorted by categories to help the researcher understand the students' perceptions. Memos allowed the researcher to reflect on student growth, motivations, perceptions, and to make connections over the course of the 10 weeks. The qualitative portion added to the body of literature by directly engaging students in a feedback experience, and it allowed students to express their perceptions, feeling, and beliefs as they related to feedback.

The focus groups, observations, and memos were coded using 3 cycles employing the In Vivo Coding scheme, because it allowed the researcher to explore all possible student perceptions (Saldana, 2009). The first cycle of coding led to the creation of four

different categories. These categories included: metacognition, motivation, positive emotions, and negative emotions. Once the categories were determined, the second cycle of coding allowed themes to emerge. These themes included a variety of beliefs students had about feedback. The third cycle involved finding evidence as quotes from the student observations, memos, and focus group answers to support each theme.

Students find feedback helpful, because they were engaging in a process that is motivational and rewarding in relation to their self-efficacy (Mc Neil, 1987). Students are motivated and driven to improve as they naturally set a goal that they believe is appropriate. This goal may be based on past experience or based on their current learning progress. The second part of the process of developing metacognition that is motivational is evaluating progress. The final step for children is the activity of correcting their errors. In this study, the children desired to be taught the words, and they planned to reread the words.

Questions

This case study of a third grade class in a suburban elementary school allowed the researcher to find evidence to describe the changes in oral reading growth patterns and perceptions of feedback for Spanish-speaking English language learners, highly performing readers, and struggling readers.

RQ#1:Growth Patterns

How do student growth patterns compare and contrast for students receiving different types of feedback?

This study supports the research of previous studies in that there was an increase in student learning when the students received performance feedback (Ardoin et al., 2006; Eckert et al., 2013; Eckert, 2006; McCurdy & Shapiro, 1992; Neddenriep, 2011; Thorpe et al., 1981). This study provided evidence suggesting that children who are Spanish-speaking English language learners, struggling readers, and highly performing readers increased their oral reading fluency when given feedback as correct and incorrect words per minute.

Additionally, this research study had similar results as other studies in that there was a greater increase in words per minute for the group that received incorrect words per minute as feedback compared to students who received correct words per minute (Eckert, 2000; Neddenriep, 2010). The group that received incorrect words per minute in this study grew 31.5 words on in the group mean over the 10 weeks. The students in this group grew 3.2 words a week. This rate of improvement is in the 95th percentile based on AIMSweb oral reading improvement rates. An ambitious 3rd grader typically grows 1.5 words a week in oral reading, but an ambitious 1st grader grows at 3 words a week (Fuchs & Fuchs, 2005). The children in this group were growing in oral reading fluency at an ambitious rate.

The group that received correct words per minute in this study had similar results as previous researchers (Eckert, 2006; McCurdy, 1992). The students in the group that received correct words per minute as feedback grew 26.5 words a minute over the 10

weeks, which is 2.7 words a week. This was 5 words less a week than the group that received incorrect word and .5 words less a week than the group that received incorrect words. Although, this study did not include students who had a disability, like some past studies. This study did follow the similar patterns in that the students were provided treatment weekly over 10 weeks.

Unlike other studies of growth patterns in oral reading fluency, this study attempted to provide a control, but the students asked for feedback and were informed feedback. So, there was no true control group that received no feedback. The three outliers in the study included, Sam, who increased 39 words per minute from 8 words per minute to 47 words per minute during the study. Mike increased 26 words per minute, and Eve increased 30 words per minute. There were 4 struggling readers in the group that was given no feedback, and this was unintentional. A computer-generated randomizer was used and assigned students to the groups. Tia, Mike, Eve, and Sam were in the bottom 25th percentile in oral reading when the study began. Two of the students, Eve and Tia, in this group also asked for feedback repeatedly. Since, the starting oral reading scores were so low, and students in the no feedback group received feedback; this group does not represent a set of students that actually received no feedback. The group receiving incorrect words per minute had only 2 struggling readers. Where as, the group receiving correct words per minute as feedback had no students reading below the 25th percentile on the AIMSweb oral reading fluency assessment.

The lower the oral reading score, the easier it might be for children to increase their score. When children already read at a high performing number in oral reading it is not realistic to improve at such large amount. It is possible the students who have the

greatest growth were exposed to a much higher text complexity than their actual independent reading level during Tier 1 instruction. Where as, the children who already read proficiently were not challenged as much by the grade level curriculum. But, all students in the study experienced the same reading curriculum, although that curriculum was less challenging for the students who were closer to the independent reading level of the grade level text. It is a possibility the more proficient readers were not exposed to challenging enough text to grow in oral reading fluency at the growth rate of the struggling readers.

RQ#2 Student Perceptions

How do different students perceive different types of feedback about oral reading fluency?

RQ#2A Struggling and Proficient Readers

How do struggling readers and proficient readers perceive different types of feedback regarding oral reading fluency?

Student perceptions were analyzed and compared to determine how feedback affects students. The research findings suggest Spanish-speaking English language learners, highly performing, and struggling readers believed feedback helped them improve their oral reading fluency from some degree to a lot. When asked to rate feedback on a scale of 1-10 (1 none and 10 a lot) for how much it helped them, all students in the focus groups replied stating feedback was between 4 and 10 in the final focus group. In the highly performing group, Dee, JD, and Kay rated feedback a 10, where as Ash scored it a 9. In the Spanish-speaking English language learners group,

Eve, Car and Kei rated feedback as a 5, and Fern rated it as a 10. In the struggling reader group, Tia and Sam rated feedback as a 10, Mike gave it a 5, and Gabe rated it a 4.

The students in the struggling reader group had four responses stating they used feedback to improve on the first focus group. But, the final focus group of the struggling reader group included a different response. Sam said, “You have to read more.” Then Gabe added, “Practice, read every morning, night, and every day.” Gabe and Sam, children in the struggling reader group, had similar responses to the first focus group response. But, Tia had a new perspective and said, “It (feedback) doesn’t help us improve. You have to teach us the words.” It seemed Tia might appreciate instruction on the skill he was learning instead of being told the number of his errors. In the first focus group Dee, a reader from the highly performing reader group, told the researcher she wanted the researcher to inform her how well she did and practice the words with her after an oral reading assessment. But, in the final focus group she wanted more specific feedback and explained that the researcher needed to help her with the words she missed using sound boxes, decoding, and sounding it out.

The Spanish-speaking English language learner group also changed their opinion after experiencing the feedback. On the first focus group meeting, 2 students responded stating they felt “happy” and “glad” after receiving feedback as the incorrect words per minute, but on the final focus group meeting the students had a different opinion. One student said they felt “kind” or “happy,” but 2 students responded stating they felt “sad” when informed the number or words they missed. Mike informed the researcher that he had negative feelings associated with incorrect words per minute, because he wanted to

get them all correct. So, it seems the students' opinions changed and they deepened their understanding of their feelings about feedback in relation to oral reading fluency.

One myth in education is the idea that students actually know what is best for them and which strategies help them learn the most, which is not true (Kirchner & Merrienboer, 2013). Children do not have the training, knowledge, or maturity to engage in self directed learning tasks, which allow them to select an instructional choice. The belief that assumes children "know best" is called the preferential model. One example that really helps prove this point is allowing children to choose which food they eat. Allowing children to select chocolate over vegetables for dinner is not the most nutritional choice. The idea that preference overrides the empirical research of cognitive scientists is absurd. In one study, a researcher found student preference of instructional strategies was negatively correlated or not correlated as all to improvements to student learning (Clark, 1982).

After receiving feedback children experience an emotion, positive or negative, that directs their attention to the task or skill they are learning (Phelps, 2006). When the child receives the feedback, they automatically perceive their effort as appropriate if they are making progress, or they determine they need to work more. The children decide how much effort they put into reading based on their weekly feedback. They either practice more or less depending on the feedback. So, monitoring the child's progress and informing them of their scores inspires the child to practice more or pay closer attention to their oral reading.

It might be more realistic to reframe this question in the focus group and ask the students, "How much does feedback motivate you to improve your oral reading fluency?"

Of course, the students must understand the definition of motivation, but it could provide the researcher with a clearer picture of student perceptions if the students can clarify if feedback simply helps or more specifically motivates them. When being influenced by motivation students are driven to improve performance intrinsically and focus on a set goal by choice (Schunk et al., 2008). The students in this study were driven to improve and set goals based on the weekly feedback, and the students admitted to seeking effective instruction. Tia, a struggling reader, asked the researcher to teach him the words. Dee, a highly performing reader, and Eve, a struggling reader, got their parents to help them. Other students employed strategies such as rereading, decoding, and sounding out words. There was clear evidence of motivation in the student behavior and comments during the focus groups and memos.

The students appear motivated to improve based on the feedback. Although, the highly performing readers had the metacognition to learn the words they missed, and they want incorrect words per minute as feedback in addition to correct words per minute. Dee, a highly performing reader stated, “I practice the words I get wrong.” On another focus group meeting Dee says, “Study them if you get them wrong.” The struggling readers wanted immediate feedback, and the teacher to teach them the words they missed after reading the passage. For instance, Tia says, “What word did I miss?” He also told the researcher, “Feedback does me no good if you don’t teach me the words.” Tia was seeking effective instruction, which is one of the features of the motivation theory (Schunk, 2015).

It would be beneficial to deepen the understanding of this phenomenon of Spanish-speaking English language learners and struggling readers perception of

incorrect words per minute as making them sad. In future investigations with the same group the researcher may examine those, but for future researchers it would be interesting to see if this is a pattern with Spanish-speaking English language learners. This particular type of feedback, incorrect words per minute, had the largest gains in student achievement in this study. Perhaps investigating mitigation approaches to avoid the “sad” feelings these students reported to have felt could lead to understanding how to best accommodate Spanish-speaking English language learners, since incorrect words has the highest empirical growth (Eckert et al., 2006; Neddenriep et al., 2011; Thorpe, 1981).

Students classified as struggling, Spanish-speaking English language learners, and proficient readers had a desire to acquire metacognitive awareness. The children wanted to know their score. For example, 3 of the 6 students in the no feedback group asked 3 times during the study for feedback. On the 3rd and 4th probe Tia, a struggling reader who was in the no feedback group, replied, “Did I get any wrong?” and “How many did I miss?” It was ironic that he asked for incorrect words per minute, because this type of feedback made him sad. Nevertheless, the researcher replied with, “You missed two.” Next, Tia asked for more specific information by stating, “What was the one I missed?” The researcher explained the word was, “Switzerland.” Finally, Tia laughed and said, “Switzerland, that’s not bad.” Another example of metacognition was seen on the 2nd and 3rd probe by Eve, who was also a struggling reader in the no feedback group, as she asked, “How many did I miss?” Again, a struggling reader asked for feedback as incorrect words per minute, and this type of feedback brought her negative emotions. She stated in all 4 focus groups that learning the number of words she missed made her sad. Moving on, the students in all groups were driven to improve and had a desire to know

the number they missed. Since each child was informed the number of errors upon each request, their scores may be impacted by the feedback.

RQ#2B Spanish Speaking English Language Learners

How do students who speak Spanish as a first language perceive different types of feedback regarding oral reading fluency?

Students who speak Spanish were motivated by feedback. Fern and Mike were two Hispanic students, who were also struggling readers. They illustrated motivation during the researcher observations after an oral reading assessment. Immediately, after reading Fern exclaimed, “I went higher!” then he quickly walked to Mike’s desk and asked him, “So, how many did you get?” During the focus group discussions Mike shared what he does after hearing his score and stated, “I practice every night.” Car, who was a proficient reading Spanish-speaking English language learner, told the researcher after hearing her score that she practiced every day. Students had a desire to receive a positive experience, and students were sharing their positive experience with their peers (Rogers, 1959). Students often believe if their peer can succeed, then they can as well. This creates a momentum and positive feeling about themselves. The students were showing examples of the motivation and the momentum the feedback was instilling in them.

Students who speak Spanish as a first language were motivated to set goals as well. Three of the Spanish-speaking English language learners commented that they set goals based on the score the teacher told them. When the researcher asked if he sets goals, Mike, a struggling reader said, “do 5 more a week.” Fern, another struggling reader said he tried to improve each week. He said, “Knowing my number makes me want to improve.” When the researcher asked in the focus group about whether or not she set

goals, Car, a highly performing Spanish-speaking English language learner said, “Just go up.” Students were exhibiting behaviors of motivation as they intrinsically set goals, and the children were acting in ways they believed helped them meet their goals (Schunk, 2015).

The students who were Spanish-speaking English language learners also had a desire to know their score as incorrect and correct words per minute. The students seem to desire a metacognitive awareness for their scores. Car, a proficient reader told the researcher, “I want to know my score.” Eve, a struggling reader, asked the researcher on three different occasions, “How many did I miss?” This suggested that students who were Spanish-speaking English language learners had a desire to know their score. Students were working on the task of oral reading and they had a desire to know their score, because if the score was positive it added to their self-efficacy (Rogers, 1959; Schunk, 2015). Since the children were in the process of practicing based on motivation and placing attention to the task of improving their oral reading fluency there was a desire to seek feedback on their progress in hopes of a positive score and being perceived in a positive way by others.

Spanish-speaking English language learners like struggling readers, had negative emotions associated with the number of words they read incorrectly. This was interesting, because one Spanish-speaking English language learner, Eve, asked 3 times for the number of words she missed after reading. Eve, Kei, Mike, Gabe, and Kei stated they were sad when informed the number of words they read incorrectly. The researcher asked the students in a focus group why they felt sad and Mike said, “We want to do good and get them all right.” Eve, Mike and Gabe were struggling readers, but Kei and Car were

proficient readers. This suggested both proficient and struggling readers who speak Spanish as a first language had negative emotions toward feedback as incorrect words per minute. It might be possible, that some of the Spanish-speaking English language learners had experienced a series of goal setting experiences where they did not meet their goal. When children successively meet a goal there is an increase in their sense of self-efficacy, just as when a child does not meet a goal in repeated attempts there is a negative sense of self-efficacy (Wentzell, 1992). To deepen the researchers understanding, future focus groups and interviews are needed to investigate why these students felt sad when informed the incorrect words per minute.

Implications for Theory

This research supports the preliminary feedback motivation theory and the motivation theory (Kluger et al., 1996; Schunk, 2015). When students are provided feedback, they become more motivated to improve. Students asked for feedback as incorrect words per minutes multiple times, and the group that received incorrect words per minute as feedback had greater growth compared to correct words per minute in this study.

There are four stages of motivation, and the first stage involves identifying a gap between what the learner knows and is supposed to learn (Winne & Hadwin, 2008). The second state is goal setting, and the third stage includes acting on strategies to improve. Where as, the last stage is a self-reflecting stage, which involves the students learning if they improved to the desired level of proficiency. All students, highly performing, struggling, and Spanish-speaking English language learners, in this study increased in oral reading fluency and had the desire to improve when informed the number of words

read correctly. But, the students did not know the desired level of proficiency in this study. The highly performing readers assumed 100 words per minute was a proficient score, and Spanish-speaking English language learners believed they needed to read all words correctly. This was interesting, because the researcher never informed the children of a set level or number of proficiency or accuracy. The focus group with the highly performing readers confirmed this, because the researcher asked the children where they learned 100 words per minute is proficient and they did not know.

All students did set goals, but the researcher never influenced goal setting. The students intrinsically set their own goals. All of the high performing readers wanted to improve, but the Spanish-speaking English language learners set a goal for either 5 or 5-10 words more a week. The problem for the struggling and Spanish-speaking English language learners was met at stage 3, because the students did not know strategies they needed to use to improve. Eve, stated her mother listened to her and told her how many words she missed; but none of the struggling readers knew any strategies to improve based on the feedback. The highly performing readers used decoding, sounding out syllables, and repeated reading to improve. Additionally, when asked to rate feedback on a scale from 1-10 (1 being very little and 10 being a lot) all of the students gave feedback a score of 4 or above. This informed the researcher that the students in this situation perceived feedback to be helpful and motivating toward improving their oral reading fluency.

Implications for Practice

This research study provides evidence, which suggests feedback as correct words per minute and incorrect words per minute had greater gains in oral reading fluency

(Eckert, 2006; McCurdy et al., 2006; Thorpe, 1981; Spencer et al., 2010). In this study the students experienced exposure to feedback as correct words per minute and incorrect words per minute. Highly performing, struggling, and Spanish-speaking English language learners increased their oral reading fluency scores from the beginning to the end of this study.

Based on the findings from this study it seems that educators would be wise to focus on how practitioners might leverage what leads to the highest levels of improved learning, but in a manner that does not give students this negative sense of feedback. While it did not hinder the students' learning, clearly they did not "like" to receive that news; and practitioners would rather leverage strengths and increase motivation as opposed to giving learners a negative attitude about what is being shared. The feedback needs to be specifically related to the task or a process (Sadler, 1989). This is particularly supported from the focus group when Tia said, "Telling me the number of words I missed does me no good. I need you to teach me the words." The other three children nodded their heads in agreement. But, highly performing readers like Dee, Ash, and J.D. claimed during the focus groups they used rereading, decoding, and sound boxes to learn the words they missed. This particular study on the effect of feedback on oral reading fluency identified a significant gap between the metacognition of highly performing readers and struggling and Spanish-speaking English language learners. Many struggling readers and Spanish-speaking English language learners need to be taught the skills to learn words at their learning level. Based on the motivation theory, children seek effective instruction. Unfortunately, struggling readers and Spanish-speaking English language learners did not know what they could do to improve or which words they read correctly and incorrectly.

Ehri (1988) and LaBerge et al. (2004) state that learning to read occurs in stages and the struggling readers and Spanish-speaking English language learners were not at the same stage as the highly performing readers. Students need to be taught to read in a progression. Mike, who represented the ELL group, sadly said, “If I miss a lot I have to practice more.” When asked if this was awful, he replied, “Yes!” The cognitive load was too much for some Spanish-speaking English language learners (Sweller, 1999; Sweller, 1988). Thus, Mike was developing a sense of negativity toward learning. This emotional experience provided drive for the students in the highly performing reader group, but it had the opposite effect on Spanish-speaking English language learners. Furthermore, children who have a negative attitude toward learning experience a “learning block” that inhibits them from improving in their oral reading (Sylwester, 1994).

Educators have the opportunity to make conscious choices to help struggling or Spanish-speaking English language learners grow in oral reading. Creating a classroom and school environment where students feel routines are predictable, there are patterns, and the teacher uses clear signals to communicate, helps children reduce their stress level (Trujillo, 2012). These decisions relate to classroom environment and culture. Some strategies that help develop routines are maintaining a schedule and activities, so students know what to expect. For example, the classroom schedule needs to be consistent and the routines for daily tasks should remain similar.

Students develop a sense of self-efficacy based on positive experience working toward a goal, and it seemed the goals Mike, or those in charge of Mike’s learning, were setting was too challenging. It might be beneficial to teach Spanish-speaking English language learners strategies to control their emotions, so they do not develop a sense of

negativity. By conducting classroom meetings where children are allowed to express their feelings, and learn strategies to improve learning, self-efficacy can improve.

Classroom meetings are one time when children can talk about frustrations, and the teacher can offer lessons to help children overcome frustrations (Sylwester, 1994).

Games that include socialization, cooperative learning, field trips, and engaging children in socialization are just a few strategies that help improve self-efficacy.

This study suggests students, parents, and teachers may benefit from training in how to use the strategy of informing students about their errors in a safe environment. Punishments do not improve learning, but proper use of error exposure in a safe environment does improve learning (Hattie, 2009; Heimbeck, Frese, Sonnentag, Keith, 2003). Punishing children for errors does not improve learning and has negative emotional consequences. For instance, Sam informed the researcher in a focus group he was punished in a previous setting by teachers and parents for missing “too many” words. Tia cried and said he is going to be in trouble with his dad if he missed too many words. This strategy only creates negative emotions for children, which is not a good practice. Children need to be taught the growth mindset, which happened to be a characteristic of the highly performing readers in this study (Dweck & Leggett, 1988). JD, Dee, and Kay stated they wanted to know the incorrect words they read, because this told them what they needed to learn.

Children may work very hard and still not meet their goals. When children do not meet their learning goal, they often become frustrated; but when they are informed of specific strategies they can use, their learning improves. Many educators teach the idea that increased effort improves learning, but the increased effort has to relate to the skill or

task. Strategy instruction combined with feedback often improves learning (McNeil, 1987). High achievers tend to naturally engage in what they believe will enable them to improve, but struggling readers do not always have this natural understanding of what strategy will help them. They need help understanding when or where the strategy needs to be used. The strategies that were natural to the highly achieving readers were decoding, syllabication, and rereading. How to apply these strategies, in addition to when and where they should be used needs to be taught to Spanish-speaking English language learners and struggling readers.

Implications for Future Research

This study lays a foundation for research relating to student growth patterns and student perceptions related to feedback and oral reading fluency. The In Vivo Coding system identifies four categories for future research to connect. These categories included: motivation, metacognition, positive emotions, and negative emotions. These four categories emerged during the coding and more specific questions in each category are suggested.

One question connected to metacognition that still needs to be answered is: How did highly performing readers determine 100 was a proficient score? Could it be the fact that their grades are based on a 100-point scale and they are transferring oral reading feedback to a 100-point scale? Do they understand the questions?

Since there was a difference in the metacognition levels for the highly performing readers and the struggling readers and Spanish-speaking English language learners, future researchers might investigate how the highly performing readers developed their level of metacognition. Where did they learn the strategies: decoding, syllabication, and

rereading? Who taught them these strategies? How did they learn to apply these strategies? Why do highly performing readers have a higher level of metacognition? All of the students in this study have attended a public school for three years, prior to this study, and most curriculum in kindergarten through second grade includes instruction involving all of the strategies the highly performing reader are using to improve. Why did the highly performing readers learn to apply the strategies the teachers explained, and struggling readers and Spanish-speaking English language learners did not learn to apply these strategies? Have the struggling readers and Spanish-speaking English language learners experienced something that created stress, which inhibited them from learning the strategies?

Another interesting component of this study is that struggling readers and Spanish-speaking English language learners felt sad when informed the number of words they read incorrectly, but feedback as incorrect words per minute had the highest growth. Were the students more motivated by the negative emotions they felt when they were told their errors? Did the students find learning the number of words they read incorrectly more motivating than learning the number of correct words per minute? Do students really know what causes them to feel a certain way? It is quite possible students do not know what made them feel “sad.” Maybe these students began the study with a low sense of self-efficacy, and already had negative emotions toward learning to read. Future researchers need to consider the students perceptions to learning at the beginning of the study, because feedback as incorrect words may not be what is actually making them sad.

This research opens a door for future researchers to engage in qualitative research methods such as interviews and more focus groups to explore the perceptions and growth

patterns for students receiving feedback over a longer time period than 10 weeks. There has been little research of a qualitative nature on oral reading and feedback (Arthaud, 1996; Eckert et al., 2002; Eckert et al., 2006; Hattie, 2009; Kluger et al., 1996; National Reading Panel, 2000; Rasinski et al., 2003). Focus groups and observations have not been used to determine student perceptions related to oral reading fluency in previous research. Most research regarding the growth patterns of students has been in a quantitative nature. But, this study gives students a voice and tells the story of 3 groups of students who have been classified as highly performing, struggling, or Spanish-speaking English language learners? It would be interesting to conduct focus groups of Spanish-speaking English language learners and ask what motivates them to improve their reading skills. Exploring the past goal setting experience of Spanish-speaking English language learners and struggling readers might provide a better understanding of why these groups have negative emotions toward incorrect words per minute. Nevertheless, feedback does motivate all students in this study, based on the focus groups. But, what other factors motivate students to improve their reading skills?

Additional recommendations for future research include restructuring the groups. The groups in the quantitative portion of the study need to be leveled. For example, the average oral reading fluency for each treatment group needs to be the same. Students reading at a very low level may increase at a higher rate, since the reading curriculum is more challenging. But, the students reading independently on grade level, who are exposed to 3rd grade text may not increase at such a rate. For example, to improve fluency students should miss at least 5-10 out of every 100 words (Hasbrouck & Tindal, 2006). If the children who are considered proficient miss 0 out of 100 words on a 3rd grade leveled

passage, then their growth will probably be less, if the curriculum is on the 3rd grade level. The children reading below or well below the 3rd grade, the struggling readers have the potential to grow the most. This is because of the exposure to challenging text.

Conclusion

This research study explored the growth patterns and perceptions of highly performing, struggling, and Spanish-speaking English language learners in the 3rd grade on a 3rd grade leveled oral reading fluency assessment. This was a mixed methods study that used descriptive statistics, focus groups, observations, and memos for 10 weeks. Using multiple methods allowed the researcher to see if there were similarities and differences between any of the data. There happened to be a triangulation between an increase in oral reading fluency, positive emotions, and correct words per minute for highly performing, struggling, and Spanish-speaking English language learners. All students increased in oral reading fluency and had positive emotions regarding correct words per minute as feedback, but this type of feedback did not have the highest growth in oral reading fluency.

Highly performing readers had a higher metacognition than the other two groups, struggling readers and Spanish-speaking English language learners, in regard to how to improve their oral reading fluency. The highly performing readers knew and practiced strategies such as decoding, syllabication, and rereading based on the feedback they received. But, the struggling readers and Spanish-speaking English language learners did not know any strategies, besides rereading, that they might use to improve their oral reading fluency.

Another difference between the groups was that higher performing readers had positive emotions connected to the number of correct words and the number of incorrect words as feedback. But, struggling readers and Spanish-speaking English language learners had negative emotions associated with incorrect words per minute as feedback, and it made them feel sad. The struggling readers and Spanish-speaking English language learners connect their self-efficacy with the feedback, unlike higher readers.

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APPENDICES

APPENDIX B

FOCUS GROUP QUESTIONS

The Effect of Performance Feedback on Oral Reading Fluency**Researcher Introduces Students to the Focus Group**

The researcher says, "I am researching the effect of feedback on oral reading fluency. What you discuss in this focus group is going to help me understand how you think feedback is affecting your oral reading. Anything you say is private and I will not tell anyone. I am simply trying to learn based on what you think. So, this is going to be a group interview and discussion about the feedback you received on your oral reading assessment. I am asking question, and recording what you say on a device. Remember anyone can speak after a question, and I won't tell anyone."

Focus Group Questions

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? (The researcher will state the form of feedback the student receives in the question.)

3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?
 - 3a. Why?
 - 3b. How does feedback affect your performance?

4. How do students perceive feedback regarding oral reading fluency?

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

- 6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

8. After you turn in work or perform a task, how would you like your teacher to respond?
9. What should your teacher say or write on your paper?
10. What should your teacher tell you about your work?
11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?
12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?
13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?
14. How does knowing your level of performance or score motivate you to want to learn?
15. Does knowing your level of performance or score help you set goals? If so, how?
16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

APPENDIX C

DIBELS ORAL READING FLUENCY (DORF) ASSESSMENT ACCURACY
CHECKLIST

Consistently	Needs practice	Does the assessor:
		1. Position materials so that student cannot see what is being recorded?
		2. State standardized directions exactly as written? I would like you to read a story to me. Please do your best reading. If you do not know a word I will read the word for you. Keep reading until I say, "stop." Be ready to tell me all about the story when you finish. (Place the passage in front of the student.) Begin testing. Put your finger under the first word (point to the first word of the passage). Ready, begin. Begin testing (2nd and 3rd passages). Now read this story to me. Please do your best reading. Ready, begin.
		3. Start the timer when the student reads the first word of the passage?
		4. Score student responses correctly according to the scoring rules?
		5. Use reminder procedures correctly and appropriately?
		6. Say the word and put a slash over it if the student fails to say it correctly within 3 seconds?
		7. Write "sc" above a previously slashed word if the student self-corrects within 3 seconds?
		8. Discontinue if the student does not read any words correctly in the first row of the passage?
		9. Place a bracket (]) after the last word the student read before the minute ran out and tell the student to stop?
		10. Correctly calculate the total number of words read (correct and errors) and record it on the scoring page?
		11. Correctly add the number of errors and record it on the scoring page?
		12. Correctly subtract the errors from the total words and record the words correct on the scoring page?
		13. Record both scores on the front cover of the scoring booklet?

APPENDIX D
AIMSWEB CONTRACT

PEARSON

ALWAYS LEARNING

December 8, 2016

Regan Aymett
aymettr@gmail.com

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APPENDIX E

RASINSKI EMAIL

Email

Hi Regan -- sorry for my delay in responding. Are you looking for specific and recent studies on performance feedback? I'm not sure I really know of any that are in the past ten years.

My literature review for the handbook of reading research on reading fluency does include a section on guided oral reading - the notion of guidance suggests teacher feedback. I am attaching. Hope you might find it helpful and might send you looking for other materials.

Best wishes on your important work,

TR

Timothy Rasinski, Ph.D.
Professor, Reading and Writing Center
Kent State University

"Some days there won't be a song in your heart. Sing anyway." --- Emory Austin

www.timrasinski.com

@timrasinski1

APPENDIX F

ECKERT EMAIL

Email

Hi Regan,

Thanks so much for your email message. Unfortunately, all of my current research has focused on performance feedback in the content area of written expression. I have not conducted any additional studies focusing on reading because my work has shifted from single case designs to randomized controlled trials. I'm attaching three of my recent studies, but again, these were conducted in the content area of writing. I really haven't kept up with PF studies in reading. I'm really sorry.

Best of luck with your dissertation work,
Tanya

APPENDIX G

DIBELS

26/10/2016

Dear Kelly Powell-Smith, I am a doctoral student at Middle Tennessee State Un...

Joshua Wallin <jwallin@dibels.org>

27/10/20
16

to Michele, me, Kelly

Hi Regan,

Kelly forwarded your e-mail to me.

We would be happy to grant permission for this study using the Assessment Accuracy Checklists in DIBELS Next, but I noticed that you used the term "Assessment Integrity Checklist" below, which is the title we used in the older DIBELS 6th Edition.

Could you tell me which version of DIBELS your research site is using? If they are using 6th Edition, is there any chance you can work with a DIBELS Next school instead? DIBELS Next came out in 2010, and we really wouldn't recommend spending research time on an outdated version of the assessment.

Please let me know if you have any questions,

--

Joshua Wallin
Director of R&D Operations
Dynamic Measurement Group, Inc.

APPENDIX H

STUDENT TREATMENT

Student	Treatment	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10
1	1	114	105	141	119	124	121	141	136	142	146
4	1	100	67	79	81	57	85	93	94	86	103
10	1	110	114	93	106	79	97	95	115	97	117
13	1	110	114	120	96	118	128	114	162	141	157
18	1	111	118	94	63	70	100	72	76	81	129
21	1	90	114	97	126	123	128	111	149	136	144
2	2	89	124	96	140	118	121	114	126	111	113
5	2	59	79	76	96	60	92	72	111	103	93
17	2	99	100	93	101	74	97	110	110	100	125
19	2	111	100	92	124	125	128	114	137	117	125
20	2	116	100	125	141	125	128	141	150	131	171
22	2	51	100	79	81	69	75	85	113	93	89
23	3	8	52	53	45	35	29	46	52	37	47
3	3	38	44	52	61	62	53	59	56	65	68
6	3	100	101	85	102	83	81	81	123	116	129
9	3	47	28	63	58	47	57	71	59	65	73
12	3	47	71	52	59	49	40	45	70	71	65
15	3	140	124	153	152	155	163	173	204	176	198

APPENDIX I

FOCUS GROUP QUESTIONS

08 August 2017**High Readers**

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?

Dee: 10, like if you get them all right it is a 10

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? (The researcher will state the form of feedback the student receives in the question.)

(Students sat quietly and did not respond)

3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

¹Dee: 10

¹JD: 10

¹Kay: 10

¹Ash: 10

¹ high effect

3a. Why?

(not sure)

3b. How does feedback affect your performance?

(blank faces and students are unsure of this process)

4. How do students perceive feedback regarding oral reading fluency?

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

Dee: Sad, but good I ²know what I need to work on

JD: It makes me ³feel good to know what I need to work on

²metacognition

³happy

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

8. After you turn in work or perform a task, how would you like your teacher to respond?

Dee: That you did good

JD: It is good ⁴I tried my best

Ash: I see you ⁴tried you best

⁴motivation

9. What should your teacher say of write on your paper?

JD: 100, 100, 100, Even if you got it wrong you tried hard

10. What should your teacher tell you about your work?

Dee: You did good and got them all right

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

Dee: That she can tell you how well you got and the teacher can practice more with you

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

We could say that ⁵we are happy to know what we got right or wrong. We tried our best

⁵ happy

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

Dee: The words you got right, and the words you get wrong you can ⁶practice more than the words you got right

⁶ motivation

14. How does knowing your level of performance or score motivate you to want to learn?

Dee: ⁷If you get them wrong you need to study

⁷ motivation

15. Does knowing your level of performance or score help you set goals? If so, how?

Ash: Yes, I set to be good

JD: Yes, ⁸try our best

Ash: Yes, if you miss a big word then you can practice at home with your mom and at school

⁸ motivation

16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Ash: I don't know. Show me where I am if I get lost tracking. The teacher can like if

the other people are doing something you can get the person that needs help the most you can take them over here when the others are practicing the stations.

Focus Group Questions
08 August 2017
Struggling Readers

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?

Gabe: I don't know

Sam: So you can ¹learn how like to spell more and it teaches you

¹metacognition

Mike: So people can ²know

² metacognition

Tia: To see how you read

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? (The researcher will state the form of feedback the student receives in the question.)

Gabe: If you help us we can write it down and get all of them right

Sam: To ³learn how to read so they don't get messed up on stuff

³ metacognition

Mike: So the kids can learn more reading

Tia: To ⁴become a better reader

⁴ motivation

3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

⁵Gabe: Ugh, 10

⁵Mike: 9

⁵Tia: 10

⁵Sam: 10

⁵ high effect

3a. Why?

All: Not sure

3b. How does feedback affect your performance?

Gabe: By sounding them

Sam: Spreading the words out

Mike: Ugh ⁶practice (read)

⁶ metacognition

4. How do students perceive feedback regarding oral reading fluency?

5. Why do you think your teacher tells you the number of words you get correct or

⁷ motivation

number of words you get incorrect after an oral reading test?

Mike: So you know which ones you got wrong, so you can ⁷practice them every night

Gabe: So you can ⁷practice over the weekend

Sam: So you don't get the words wrong

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

⁸Gabe: Happy

⁸Mike: Happy

⁸Sam: Happy

⁸happy

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

⁹Gabe: Sad, mad,

⁹Mike: Unhappy

⁹Sam: Not important

⁹sad

8. After you turn in work or perform a task, how would you like your teacher to respond?

Sam: Happily, like good job

Mike: Happily

Gabe: Happy

Tai: Happy

⁸happy

9. What should your teacher say of write on your paper?

Gabe: Good job try harder,

Mike: Good job

Sam: I believe in you, you can get better next time

100

10. What should your teacher tell you about your work?

Mike: You need to try harder, you can do better, be smarter

Tia: You need a little bit practice

Gabe: You need to work harder

Sam: I believe in you

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

Tia: What we are reading, what we are doing

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

Sam: You be quiet and say thank you

Mike: Say, thank you

Mike: I a little bit ⁹happy. I read a lot more

Sam: I take the paper and home and read it again

⁹happy

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

Gabe: I don't know the answer

Mike: So you can practice the words every week, every year

Sam: To help you

Tia: To help you ¹⁰get better

¹⁰motivation

14. How does knowing your level of performance or score motivate you to want to learn?

Sam: It means you are a better reader

Tia: You gonna be a really fast reader

15. Does knowing your level of performance or score help you set goals? If so, how?

¹¹Tia: Yes, I try to do 5-10 more a week

¹¹Gabe: I do 5 more a week

¹¹Mike: 5

¹¹goal

16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Sam: Not that I know of, I am not that good at things

Mike: Sometimes teachers and students get things wrong

Tia: Sometimes the students help the teachers

ELL Readers 08172017 Focus Group Questions

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?

Fernando: I don't know

Carla: To be respectful

Keilin: To listen

Interviewer: to get you to listen

Eve: Yes, because you miss those words. You can be respectful, responsible and ready.

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? (The researcher will state the form of feedback the student receives in the question.)

Eve: My mom sets a timer on the phone and circles the words I get wrong. ¹It makes me want to read more.

¹motivation

Fernando: Knowing the number I get right makes me want to improve.

Kei: Me too.

3. On a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

²Keilin: It helps me a lot

Fernando: A lot

Carla: 10

Kei: 10

Fernando: 10

Eve: 10

²high effect

3a. Why?

All: Not sure, (shrug shoulders)

3b. how does feedback affect your performance?

4. How do students perceive feedback regarding oral reading fluency?

³happy

Eve: ³Good kinda, when I get them wrong I sound them out, my mom helps me and I sound them out.

Fernando: I feel ⁴happy when they tell me the right words.

⁴happy

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

⁵Carla: Happy

Fernando: Happy

Eve: Glad

Kei: Happy

⁵happy

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

⁶Keilin: sad

Fernando: sad

⁶sad

8. After you turn in work or perform a task, how would you like your teacher to respond?

Carla: Tell me ⁷how much I get right

Kei: ⁸happy

⁷Correct words
per minute

9. What should your teacher say of write on your paper?

Carla: A good number

Kei: Not a bad number

Fernando: Good

⁸ happy

10. What should your teacher tell you about your work?

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

Carla: I have nothing

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

Carla: You be quiet and say thank you

Kei: Say, thank you

Fernando: I a little bit ⁹happy. I read a lot more

Eve: I take the paper and home and ¹⁰read it again

⁹Correct words
per minute

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

Carla: I feel happy

¹¹Keilin: I read more

Eve: I read a lot

Fernando: Keep on reading

Carla: Practice every day

Eve: Practice 15 minutes a day because mom tells me to

¹⁰Correct words
per minute

¹¹ motivation

14. How does knowing your level of performance or score motivate you to want to learn?

Carla: Like count up, go.

How much do you want to go up every day?

Carla: Every day I want to go up.

15. Does knowing your level of performance or score help you set goals? If so, how?

¹²Carla: Yes, I try to do 5-10 more a week

¹² goal

Kei: I do 5 more a week

Eve: 5

16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Tia: You could learn more better, time learning about us too.

Focus Group Questions 9 September 2017 High Readers

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?

Dee: So, you can ¹know what score you got. So you can know if you have improved or if you need to practice more. You can tell your parents and they can help you more. My momma helps me.

¹ metacognition

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? (The researcher will state the form of feedback the student receives in the question.)

Dee: It kinds effects me cause ²it helps me know if I need to practice more. If you don't tell me them I would not know if I need to practice more.

² motivations

How do you know if your score is good?

Ash: You know how many words you missed and you can practice those at home.

³ metacognition

If you only got 57 correct then you know you need to practice.

3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

⁴Dee: 10

Ash: 5

JD: 7

Kay: 5

⁴ some to high effect

3a. Why?

3b. How does feedback affect your performance?

4. How do students perceive feedback regarding oral reading fluency?

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

Dee: She wants you to know how good you have been doing and if you need to ⁵practice.

⁵ motivations

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

Dee: ⁶If I got a low grade I would feel disappointed.

⁶ sad

JD: I actually feel happy. I feel happy because mistakes help you.

Mistakes do help you. If you get a little high and a little low it makes you have because you know how you have been doing.

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

8. After you turn in work or perform a task, how would you like your teacher to respond?

Dee: I would like her to tell the truth or 100. If like I got a low grade I would not like my teacher to tell me I got a high grade.

Interviewer: If you miss a lot would you want your teacher to write like -50 on your paper?

Dee: No

JD: Your parents could go over the problems you got wrong with you.

9. What should your teacher say of write on your paper?

10. What should your teacher tell you about your work?

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

⁷ metacognition

Dee: That I think if I miss a math problem I want her to go over it with me. She could tell me how to add and minus the numbers. ⁷Help me with the words I do not know.

I use sound boxes. It helps me decode. Sound boxes if you are spelling words you can sound it out.

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

Ash: I would be happy if she told me I got 100 and my goal is 100. For instance, if I got 2 or 3 words wrong. If I got 100 I would be proud. If I got 3-4 wrong I would go over them every night. If I finish my work here I can go over them. I would be happy

if I got 2-3 wrong.

Do you go home and read?

Ash: Yes

Do you read because of the score you got at school.

JD; I like reading.

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

14. How does knowing your level of performance or score motivate you to want to learn?

15. Does knowing your level of performance or score help you set goals? If so, how?

Kay: The score if you got high tells you to practice a little. But if you ⁸get low you need to practice a lot. It helps you improve.

⁸ motivations

JD: 100

Why would you set it too 100? How did you know 100 is okay for now in 3rd grade.

Dee: If my goal is 1000 it would be hard to get, but if you set a goal to 100 you can do 150 and 200.

So, you increase by 50 each time?

Kay: Yes

16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Kay: Help me sound out words and tell the teacher words you do not know.

Focus Group Questions

9 September 2017

Struggling Readers

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment?

Gabe: So we can ¹practice. So you can get more better at words and pass third grade. Then in 4th grade you will know it. We can read more books.

¹motivation

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? (The researcher will state the form of feedback the student receives in the question.)

Tia: It doesn't.

Interviewer: So what do you have to do to get better?

²Tia: Practice, read morning, night and every day, read when you are having a hard time

²motivation

3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

Tia: 1000

Mike: 0

Tia: It does not help you at all? It doesn't.

Sam: He means it helps you but it doesn't help you.

Sam: 146

You have to pick a number between 1 and 10, like 1, 2,3,4,5

6

3a. Why?

3b. How does feedback affect your performance?

³Tia: It doesn't unless the teacher goes over the words you missed

³metacognition

4. How do students perceive feedback regarding oral reading fluency?

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

⁴Sam: Great

Tia: awesome,

Eve: impressed

Mike: 100, I don't know

⁴happy

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

Sam: So you can get it right, happy, I keep on trying, it does affect me. It affects me because my brother tells me to give up, but I usually give up and start crying.

8. After you turn in work or perform a task, how would you like your teacher to respond?

9. What should your teacher say of write on your paper?

10. What should your teacher tell you about your work?

Sam: Good job, keep trying, some teachers when I was in second grade and I had a paper I missed a little bit and she said it is okay. I had a teacher and if we got one wrong she put us in time out.

Interviewer: Where on Earth was that?

Sam: Eastside, Me and my brother lost recess, because my momma was sick and would not sign a paper. That is bad!

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

Sam: I ⁵take it home and practice.

5 motivation

Gabe: I erase it and correct it.

Eve: I put the words I got wrong and I read it and I get it right. I give it to my mom.

⁵Do you read more?

Yes, yes

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

Tia: No, you have to ⁵practice to get better. I practice the words I get wrong. ⁶I need to know what to do.

⁶ metacognition

Gabe: You can write it down on piece of paper. You can probably put a timer and read it, so you can get better.

When you read a passage you can sound it out at home with a timer.

14. How does knowing your level of performance or score motivate you to want to learn?

Sam: I don't know how.

Eve: 100%, you can practice every day.

Having a score makes you want to do better?

Sam: Kinda,

15. Does knowing your level of performance or score help you set goals? If so, how?

16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Sam: Your teacher reading more doing math more. Your teacher can tell you like you are reading too fast and you might skip a word. When you go a little bit slow and a little bit high you won't skip words.

ELL

29 September 2017

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment, like a passage you read to me?

Mike: Happy

¹happy

Why does your teacher do that?

Fran: So, we can ²read better.

Car: So, we can read words better.

Eve: To help you learn.

Kia: To help higher grades.

²motivation

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? Does it make you do something? (The researcher will state the form of feedback the student receives in the question.)

Fran: Um, like we can get a paper and get As and Bs.

Mike: It makes me tired.

Kia: Get a higher grade.

What feedback do you get? I don't know.

Fran: I will look it up.

You get the number of words correct.

3. On a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

³Fran: 5

Car: 5

Mike: A plus,

Interviewer: 10 is a lot, 1 is not at all, 5 is some

Mike: 10

Eve: 5

³some to high effect

3b. How does feedback affect your performance?

Group: (Laughs in possible confusion)

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

⁴Mike: Good

Fran: Happy

Eve: Excited

⁴happy

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

Mike: So, whenever you give us our skills we can listen and do better grades.

⁵Car: Sad,

Fran: kind of happy

⁵Eve: sad

⁵sad

8. After you turn in work or perform a task, how would you like your teacher to respond?

Say nice things. Say you are getting better at reading. Be gentle to others and make sure you don't bump people and do it on purpose.

Are you saying you want your teacher to talk to some people about being more respectful? Yes

Okay

9. What should your teacher say of write on your paper?

Mike: 100

Fran: good,

Eve: 100

Should your teacher write the number correct?

Fran: Yes, yes

⁶Should your teacher write the number wrong?

Mike: No

Why?

Mike: Because it will not be able to read it. Some people might be sad.

⁶sad

10. What should your teacher tell you about your work?

That like a middle grade or number like 10s and hundreds and stuff. And if we do really good we can get something.

So, you want to know how proficient your oral reading score is.

⁷Do you also want a plan?

Yes, yes, yes

⁷want plan

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

Gabe: You correct them back. You work on the mat or something and fix it. Then we do it all over again. Then we do it right and you put a new grade on it.

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

14. How does knowing your level of performance or score motivate you to want to learn? How does it make you want to get better or worse?

Eve: ⁸It makes you want to get better.

⁸motivation

15. Does knowing your level of performance or score help you set goals? If so, how? Like if you set a goal we have one of those things and you time us and we get higher and higher and higher.

What kind of goal do you set after your first reading or a passage?

⁹Eve: I set 57 or 100.

How did you know to set it to 100?

Gabe: I read and went back up to the top with my partner.

Have you been timing yourself?

Eve: Yes, that's how you get to learn more. Sometimes my mom times me.

⁹goal

16. Your teacher has been giving you immediate feedback on your oral reading assessment. Is there anything you think your teacher needs to know or can do differently to help you increase your oral reading fluency?

Focus Group Questions

9 October 2017

High Readers

1. Why do you think your teacher tells you the number of words you read correctly or incorrectly after an oral reading assessment?

¹metacognition

Ash: So, you can um ¹know what words you got correct.

²metacognition

Dee: So you can ²know if you are improving. If you are like low you need to do more stuff to get higher.

2. How does it help you when your teacher tells you the number of words you read correctly or incorrectly after an oral reading assessment?

Dee: ³It tells me if I need to practice more.

JD: It tells me if I got them wrong.

Interviewer: What are you going to do if you got them wrong?

Ash: I am going to try to improve and keep reading more until you get better at reading.

³ motivation

3. On a scale of 1-10, 1 not much at all, 5 some, 10 a lot, how much do you think feedback effects your oral reading fluency?

⁴Destiny: 9

JD: 10

Dee: 10

Kay: 10

⁴high effect

Why does it help you a lot?

Dee: It tells me what I got and if I got a bad score I know I need to work more. I feel sad if I get a bad score.

Interviewer:

If you get a bad score you feel sad. What would be a bad score? Is that lower than last time?

JD: I don't know

4. How does it make you feel if you get a low score?

JD: If it were in math I would just ⁵go home and learn it.

Dee: I would tell my mom and ⁵we would practice, but I would feel a little sad.

JD (icwpm): I would ⁵correct what I got wrong?

Interviewer: How will you get better?

JD: Get your parents to time you.

Dee: Practice the words with you afterwards.

JD: Know that you are improving and take your time.

Interviewer: If you miss a lot you mean that would mean you are careless.

⁵motivation

5. How do you feel when your teacher tells you the number of words you get correct?

JD: Good happy. I would be happy if I got them wrong, because I tried my best.

Dee: I would be happy.

6. How do you feel when your teacher tells you the number of words you get incorrect?

⁶Ashanti: happy

Kay: happy

Dee: Like if you tell me the number I read incorrect I feel good, because I know the words I need to improve on.

JD: happy

⁶happy

7. After you do a performance task like oral reading what would it be helpful for your teacher to say or do?

JD: I would like her to say yes or no I tried my best.

⁷Dee: I would like her to say the number of words I got wrong and right. I want them to write something nice.

Interviewer: You want your teacher to write or say something immediately. Is that what I am hearing.

Dee: yes

Kay: I did good.

Interviewer: What if you did bad? Do you still want your teacher to write you did good?

Kay: No

Interviewer: So, what I am hearing is you want praise and encouragement?

Kay: Yes

Dee: I don't want my teacher to be like, "You got everything wrong." I just want her to say I need to practice more and I tried my best.

⁷correct and incorrect

8. What do you do when your teacher tells you the number of words you read correct or incorrect?

JD: My parents would be happy and help me with the words I got wrong. I would study the words I got wrong.

Dee: I tell my mom and dad, and if they thought I got low I would ask my mom and dad to help me. I would come back and show you.

Kay: I would ⁸practice until it was good.

Ash: I would tell my parents and we would practice.

Dee: My parents would not get mad. They would help me.

⁸motivation

9. How does knowing your score motivate you to want to learn?

JD: If I got none wrong I would be happy.

Interviewer: Would you want to keep missing none?

JD: I would keep wanting to get them right and work on my ⁹goal I set.

⁹goal

Ash: I would keep reading until my average gets better.

Dee: It tells me that if I got a lot wrong or right I would keep learning. I want to show my teacher how good I have been doing.

I: So, it does motivate you.

¹⁰goal

10. How does it motivate you to set a goal? How did you set a goal?

JD: If we have uh a short test and I got all of them wrong I would set a ¹⁰goal to not do that again.

¹⁰Ash: I set my goal to read more. If I got 3 words wrong I would practice those words. I would be happy.

Dee: I would set my goal if I got a lot wrong. I would tell my mom and dad. They would probably buy me those books for school and we would practice.

Interviewer: So, I am hearing you set a goal to improve and get better. Not necessarily a certain amount better.

Dee: Y'al, I don't want to get high then super low.

11. Is there anything you want your teacher to do or know that can help you improve your oral reading fluency?

Dee: I want my teacher to tell me the number wrong and right. If I got some wrong I can learn more about the words.

JD: Just be happy with what I got, if I read a lot of words right be happy.

Ash: If I only got 3 correct I would ask my teacher to tell my parents and get me a story book to read more better. If I come back the next day I would do very good on my reading.

ELL

1. Why do you think your teacher tells you the number of words you read correctly or number of words you read incorrectly after an oral reading assessment, like a passage you read to me?

Fernando: Happy

Why does your teacher do that?

Car: So, we can read better.

Kei: So, we can read words better.

Eve: To ¹help you learn.

Kei: To help higher grades.

¹metacognition

2. Describe how your teacher telling you the feedback (the number of words you read correctly/ incorrectly/ no feedback) affects your reading fluency? Does it make you do something? (The researcher will state the form of feedback the student receives in the question.)

Eve: Um, like we can get a paper and get as and BSc.

Kei: It makes me tired.

Car: Get a higher grade.

Interviewer: What feedback do you get?

²correct words

Car: I don't know.

Kei: I will look it up.

²Fran: You get the number of words correct.

3. One a scale from 1-10 (10 highest, 1 lowest), how much do you think feedback effects your reading fluency?

³Eve: 5

Car: 5

A plus,

10 is a lot, 1 is not at all, 5 is some

Fran: 10

Kei: 5

³ some (3) to a lot
(1) of help

3b. How does feedback affect your performance?

Car: Laugh.

5. Why do you think your teacher tells you the number of words you get correct or number of words you get incorrect after an oral reading test?

6.b How do you feel when your teacher tells you then number of words you got correct after an oral reading assessment?

⁴Eve: Good,

Mike: Happy

Car: Excited

⁴ happy

7. How do you feel when your teacher tells you the number of words you get incorrect after an oral reading assessment?

Eve: So, whenever you give us our skills we can listen and do better grades.

⁵Car: Sad,

Mike: kind of happy

⁵Keilin: sad

⁵ sad

8. After you turn in work or perform a task, how would you like your teacher to respond?

Kei: Say nice things. Say you are getting better at reading. Be gentle to others and make sure you don't bump people and do it on purpose.

Are you saying you want your teacher to talk to some people about being more respectful? Yes

Okay

⁶correct (good)

9. What should your teacher say of write on your paper?

Fran: 100, good, 100,

⁶Should your teacher write the number correct?

Fran: Yes, yes, yes

Should your teacher write the number wrong?

⁷Car: No

Why?

Car: Because it will not be able to read it. Some people might be ⁸sad.

⁷incorrect (no)

⁸incorrect sad

10. What should your teacher tell you about your work?

Eve: That like a middle grade or number like 10s and hundreds and stuff. And if we do really good we can get something.

Interviewer: So, you want to ⁹know how proficient your oral reading score is.

Do you also ¹⁰want a plan?

Fran: Yes, yes, yes

⁹metacognition

¹⁰plan

11. When your teacher talks about your reading fluency, what would be helpful to you for them to discuss?

12. What do you do after your teacher tells you the number of words you got correct or incorrect after a reading assessment?

Kei: You ¹¹correct them back. You work on the mat or something and fix it. Then we do it all over again. Then we do it right and you put a new grade on it.

¹¹motivation

13. How do you use the information (number of words correct and incorrect words) to help you become a stronger reader?

14. How does knowing your level of performance or score motivate you to want to learn?

How does it make you want to get better or worse?

Fran: It makes you want to ¹²get better.

¹²motivation

15. Does knowing your level of performance or score help you set goals? If so, how?

Kei: Like if you set a goal we have one of those things and you time us and we get higher and higher and higher.

Interviewer: What kind of goal do you set after your first reading or a passage?

Eve: I set 57 or 100.

How did you know to set it to 100?

Eve: I read and went back up to the top with my partner.

Have you been timing yourself?

Eve: Yes. That's how you get to learn more. Sometimes my mom times me.

Struggling Readers

1. Why do you think your teacher tells you the number of words you read correctly or incorrectly after an oral reading assessment?

Sam (incorrect)-So you can ¹³get better

Gabe (incorrect)- To tell you what you need to get better

Mike (no)- you can remember the words

¹³motivation

2. How does feedback help your fluency?

Sam: If you tell us we can practice it every night.

3. On a scale of 1-10, 1 not much at all, 5 some, 10 a lot, how much do you think feedback effects your oral reading fluency?

¹⁴Sam: 10

Why?

Sam: So, I can get it right next time.

Tia: 10

Why?

Tia: It helps me know how much I need to study or I don't need to study.

Mike: 5

Why?

Mike: I forget to take it how, because I have to take care of my baby brother. He does not know how to walk or talk.

Interviewer: What does your mom do?

Mike: She clean the floor.

Gabe: 4

Why: Sometimes when I read it I don't understand it.

Interviewer: Because it is not focusing on your comprehension.

Gabe: yes

¹⁴some effect (2)
a lot (2)

5. How do you feel when your teacher tells you the number of words you get correct?

Sam: Butterflies because you never know if you are gonna say you got some right or wrong. I could get in trouble, so am scared I will get a bad mark.

¹⁵Tia: Angels

Interviewer: What do you mean?

Tia: Like Heaven angels

Interviewer: is that good?

Tia: yes

Mike: If I get a lot I feel happy. If I get a little I feel sad.

Interviewer: so, How many is a lot

Mike: 100

Interviewer: 100 words in a minute

¹⁵some effect (2)
a lot (2)

¹⁶sad

6. How do you feel when your teacher tells you the number of words you get incorrect?

¹⁶Sam: Plum sad

Why: Because sometimes you can get in trouble.

¹⁷Tia: Happy, because it is showing me how to learn and how much I need to study.

Sam: He is trying to say you can practice.

Mike: ¹⁸sad, if I get them wrong I have to do another test. If I get it wrong again I have to practice it more.

Interviewer: Is practicing that awful?

Mike: Yes, it makes me tired.

Gabe: I feel nothing.

Interviewer: Aren't you a little bit curious about the words you missed?

Gabe? Yes

¹⁷happy
motivation

¹⁸sad

7. After you do a performance task like oral reading what would it be helpful for your teacher to say or do?

Sam: That you did bad or good. "You can do better"

Mike: You could write I need to practice more and tell my mom and dad.

Tia: I want you to write he has been doing good, but needs practice.

Gabe: Smiley face

8. What do you do when your teacher tells you the number of words you read correct or incorrect?

Sam: Practice the words I got right and wrong

Tia: Practice

Mike: I practice on the bus.

9. How does knowing your score motivate you to want to learn?

Does it motivate you to want to do better?

Sam: yes you can practice and get better grades

Interviewer: So, you are motivated by grades

Sam: yes

Tia: no

Mike: yes

Gabe: yes

10. How does it motivate you to set a goal? How did you set a goal?

11. Is there anything you want your teacher to do or know that can help you improve your oral reading fluency?

Sam: you can help us read

APPENDIX J

CYCLE 2

4 Categories: Metacognition, Motivation, Happy, Sad

MetacognitionHigh

So, you can um ¹know what words you got ¹correct.

JD (icwpm): I would ⁶correct what I got wrong?

JD: ⁶Get your parents to time you.

Dee: ⁶Practice the words with you afterwards.

JD: Know that you are improving and ⁶take your time.

¹⁵I would tell my mom and dad. They would probably buy me those books for school and we would practice.

Struggling

Tia: It helps me know how much I ²need to study or I don't need to study.

Gabe: Sometimes when I read it I ³don't understand it.

ELL

Eve: ¹So, we will know

Eve: You ⁴correct it.

Gabe: ⁴Read it at home.

MotivationHigh

Destiny: So you can know if you are ²improving. If you are like low you need to ²do more stuff to get higher.

Destiny: It tells me if I ³need to practice more.

Ashanti: I am going to try ⁴to improve and keep reading more until you get better at reading.

Destiny: It tells me what I got and if I got a bad score I know I need to ⁵work more. I feel sad if I get a bad score.

Jay: I would like her to say yes or no I ⁹tried my best.

Destiny: I tell my mom and dad, and if they thought I got low I would ¹¹ask my mom and dad to help me.

Jay: I would keep wanting to get them right and ¹²work on my goal I set.

Struggling

Sam: If you tell us we can ¹practice it every night.

ELL

Eve: ¹So, we will know.

Eve: You ⁴correct it.

Kei: Put it my binder.

Gabe: ⁴Read it at home.

Happy

High

(correct wpm)

JD: Good happy. I would be ⁷happy if I got them wrong, because I tried my best.

Dee: I would be happy.

(incorrect wpm)

Ash: ⁸happy

Kay: happy

Destiny: Like if you tell me the number I read incorrect I feel good, because I know the words I need to improve on.

Jay: happy

Destiny: I want my teacher to ¹⁶tell me the number wrong and right.

Struggling

(correct words per minute)

Tai: Like ⁵Heaven angels

Interviewer: Is that good?

Tai: yes

Milo: If I get a lot I ⁵feel happy.

ELL

(Correct wpm)

Happy

Glad

Exciting

Sad

High

(not sad)

Struggling

(incorrect wpm)

Sam: ⁶Plum sad

Milo: sad, if I get them wrong I have to do another test.

ELL

³Sad

³Sad

³Unhappy

³Sad

Cycle 3

Metacognition

“High and ELL believe they need to learn the words they missed.”

High: Jay (icwpm): I would ⁶correct what I got wrong?

Eve: You ⁴correct it.

High: To learn how to read so they don't get messed up on stuff

High: So the kids can learn more reading

High: To become a better reader

H: By sounding them

H: Spreading the words out

H: Ugh putting them into syllables so you know

“High and ELL engage their parents in their learning.”

Destiny: I tell my mom and dad, and if they thought I got low I would ¹¹ask my mom and dad to help me.

JD: ⁶Get your parents to time you.

Fav: ⁴Read it at home.

“Struggling use the feedback to determine if they need to study or not.”

Tai: It helps me know how much I ²need to study or I don't need to study.

Sad

“ELL and struggling readers feel sad when they learn the number of words they read incorrectly.”

Struggling

(incorrect wpm)

Sam: ⁶Plum sad

Milo: sad, if I get them wrong I have to do another test.

ELL

³Sad

³Sad

³Unhappy

³Sad

Happy

“High, ELL, and struggling readers feel happy when told the number of words read correctly.”

High

(correct wpm)

Jay: Good happy. I would be ⁷happy if I got them wrong, because I tried my best.

Destiny: I would be happy.

(incorrect wpm)

Ashanti: ⁸happy

Kay: happy

Destiny: Like if you tell me the number I read incorrect I feel good, because I know the words I need to improve on.

Jay: happy

Destiny: I want my teacher to ¹⁶tell me the number wrong and right.

Struggling

(correct words per minute)

Tai: Like ⁵Heaven angels

Interviewer: Is that good?

Tai: yes

Milo: If I get a lot I ⁵feel happy.

ELL

(Correct wpm)

Happy

Glad

Exciting

Good, Happy, Excited

Sad, sad,

Motivation

“All believe they need to practice more based in their feedback.”

Destiny: So you can know if you are ²improving. If you are like low you need to ²do more stuff to get higher.

Destiny: It tells me if I ³need to practice more.

Ashanti: I am going to try ⁴to improve and keep reading more until you get better at reading.

Destiny: It tells me what I got and if I got a bad score I know I need to ⁵work more. I feel sad if I get a bad score.

Destiny: I tell my mom and dad, and if they thought I got low I would ¹¹ask my mom and dad to help me.

So you know which ones you got wrong, so you can practice them every night

So you can practice over the weekend

So you don't get the words wrong

I take the paper and home and read it again

Struggling

Sam: If you tell us we can ¹practice it every night.

ELL

Eve: ¹So, we will know.

Eve: You ⁴correct it.

Kei: Put it my binder.

Fav: ⁴Read it at home.

ELL: You correct them back. You work on the mat or something and fix it. Then we do it all over

APPENDIX K

MEMO DATA

	¹ ELL correct words
8 August 2017	
FERN: ¹ How many did you get?	² expect feedback
The students who get no feedback stare at me until I say, "Thank you for reading to me. You can go back to your station." ²	
EVE: ³ did I do well?	³ level of proficiency
<p>Most students expected feedback of some number. When they did not get it they asked me for it. Most wanted to know how many they missed. Their focus was on errors. They also wanted to know if they did "good." There seems to be a desire for the development of metacognition. The students want to know what is proficient in oral reading and they do not know.</p> <p>It seems the students also want to be accurate and praised.</p>	
12 August 2017	
EVE: ⁴ How many words did I get?	⁴ struggling correct words
JD: ⁵ How many did I get?	⁵ correct words
The students ask how they did and the number of errors they are getting on the reading passage. ⁶	⁶ incorrect words
I am wondering if the children are trying to be more accurate when they hear the number of errors.	
19 August 2017	⁷ correct words per minute
I don't know why most kids went down. Feedback as correct words per minute ⁷ seems to have the greatest effect this week. Students want feedback ⁸ and seem to expect it. If I do not give them feedback, they stare at me or ask me for feedback. They ask for the number they missed and the number they got correct. They also want to do "good." They do not know what a proficient score is for a 3 rd grader, so they are asking if they are doing well. They seem to know if they do poorly they need to practice more. It seems students need help in understanding their level of proficiency, but they are motivated to understand. ⁹	⁸ want feedback
	⁹ motivated

7 September 2017

157
¹⁰ incorrect
words

We have been on a ten-day break and most of the students grew. More students grew in incorrect words per minute¹⁰ this week. Students in the no feedback group are confused when I am not immediately giving them feedback¹¹. It seems they want immediate feedback.

¹¹ immediate
feedback

14 September 2017

The students in correct words per minute did improve¹² more this week. The no feedback group seems to underperform the treatment groups. Students are still asking for feedback immediately and they want to know how they are doing. Feedback seems to be motivating¹³ them to improve. This makes me think of the “feedback motivation theory.”

¹² correct
words per
minute
grew

¹³
motivating

22 September 2017

Most children in the treatment groups grew, but the control group had fewer students improve. Students in the no feedback group are disappointed¹⁴ when they do not get to color the graph and do not get immediate feedback. The students want immediate feedback, and to know the level of proficiency.

¹⁴disappointed

29 September 2017

I am noticing a difference in the metacognitive awareness¹⁵ between the ELL, struggling, and high readers. Struggling and high ask for feedback, but the ELL is reluctant to ask. Now, incorrect feedback does seem to be less motivating than correct based on student body language. All students seem to be growing at equal rates.

¹⁵metacognition

I wonder how students know they should ask for feedback. Are they just intrinsically motivated? High readers seem to prefer correct and incorrect words per minute. Struggling readers want encouragement¹⁶. The ELL say learning the number they get wrong makes them sad¹⁷. If the ELL get a low score on a 100-point scale they are sad. Their facial expressions are clear. They also are asking each other if they did better on their fluency after their friends test. They smile and discuss their scores.

¹⁶struggling
readers want
encouragement

¹⁷ ELL sad
incorrect words

8 October 2017

All students are requesting feedback. They want to know¹⁸ a score. If I do not tell them a number they just sit at the table and stare at me. Then, when I tell them their score they get up and leave. They are expecting a number. I have asked them if they want to know their score and they say, “yes.”

¹⁸want to know

¹⁹ ELL struggling
lack
metacognition

The ELL and struggling students¹⁹ do not have a great deal of metacognition around how well they are doing or how to set goals. The high students set goals weekly and believe 100 wpm is a good score for a 3rd grader. I wonder if I told them this as some point. I need to ask this in the focus group.

I am seeing a desire to understand the level of proficiency²⁰. They ask if the score is good or bad. But the high students never ask ²⁰ level of proficiency if the score is good or bad. They seem to know.

15 October 2017

The ELL says the incorrect words per minute make them sad²¹. The high students seem to be motivated by both types of feedback. All students seem to find value in feedback and believe it motivates them to improve.

²¹ ELL sad
incorrect words

²²
motivating

The ELL wants a plan²³ to improve.

²³ ELL want
plan

The struggling students said feedback doesn't help²⁴ unless the teacher does something like go over the words. They want the teacher to decode the words using elkonin boxes for the words they miss. So, the struggling students want to be taught immediately the words they do not know.

²⁴ struggling
doesn't help

Cycle 2

ELL

want plan
want correct words per minute
sad incorrect words
want level of proficiency
lack metacognition
motivating
expect feedback
want feedback

Struggling

want encouragement
no feedback disappointed
feedback no help
want taught
expect feedback
lack metacognition
motivating
want feedback

Proficient

have metacognition

appreciate incorrect and correct
 motivating
 expect feedback
 want feedback

Metacognition

“ELL, struggling, and high readers value, want, and expect feedback after an oral reading fluency assessment.”

I am noticing a difference in the metacognitive awareness¹⁵ between the ELL, struggling, and high readers. Struggling and high ask for feedback, but the ELL are reluctant to ask. Now, incorrect feedback does seem to be less motivating than correct based on student body language. All students seem to be growing at equal rates.

The ELL and struggling students¹⁹ do not have a great deal of metacognition around how well they are doing or how to set goals. The high students set goals weekly and believe 100 wpm is a good score for a 3rd grader. I wonder if I told them this as some point. I need to ask this in the focus group.

“Struggling and ELL lack metacognition, but value feedback.”

Students in the no feedback group are disappointed¹⁴ when they do not get to color the graph and do not get immediate feedback. The students want immediate feedback, and to know the level of proficiency.

FERN: ¹ How many did you get?

The students who get no feedback stare at me until I say, “ Thank you for reading to me. You can go back to your station.”²

Motivation

“ELL, struggling, and high readers want immediate feedback and believe feedback is motivating as correct words per minute.”

They seem to know if they do poorly they need to practice more. It seems students need help in

Sad

“ELL and struggling readers find incorrect word per minute feedback makes them sad.”

The ELL is saying the incorrect words per minute make them sad²¹.

“Some low student prefer to be taught the words rather than just told the number they missed.”

The struggling students said feedback doesn't help²⁴ unless the teacher does something like go over the words. They want the teacher to decode the words using elkonin boxes for the words they miss. So, the struggling students want to be taught immediately the words they do not know.

Happy

“High readers are the only group that believes incorrect words per minute feedback is good, and they use it to improve.”

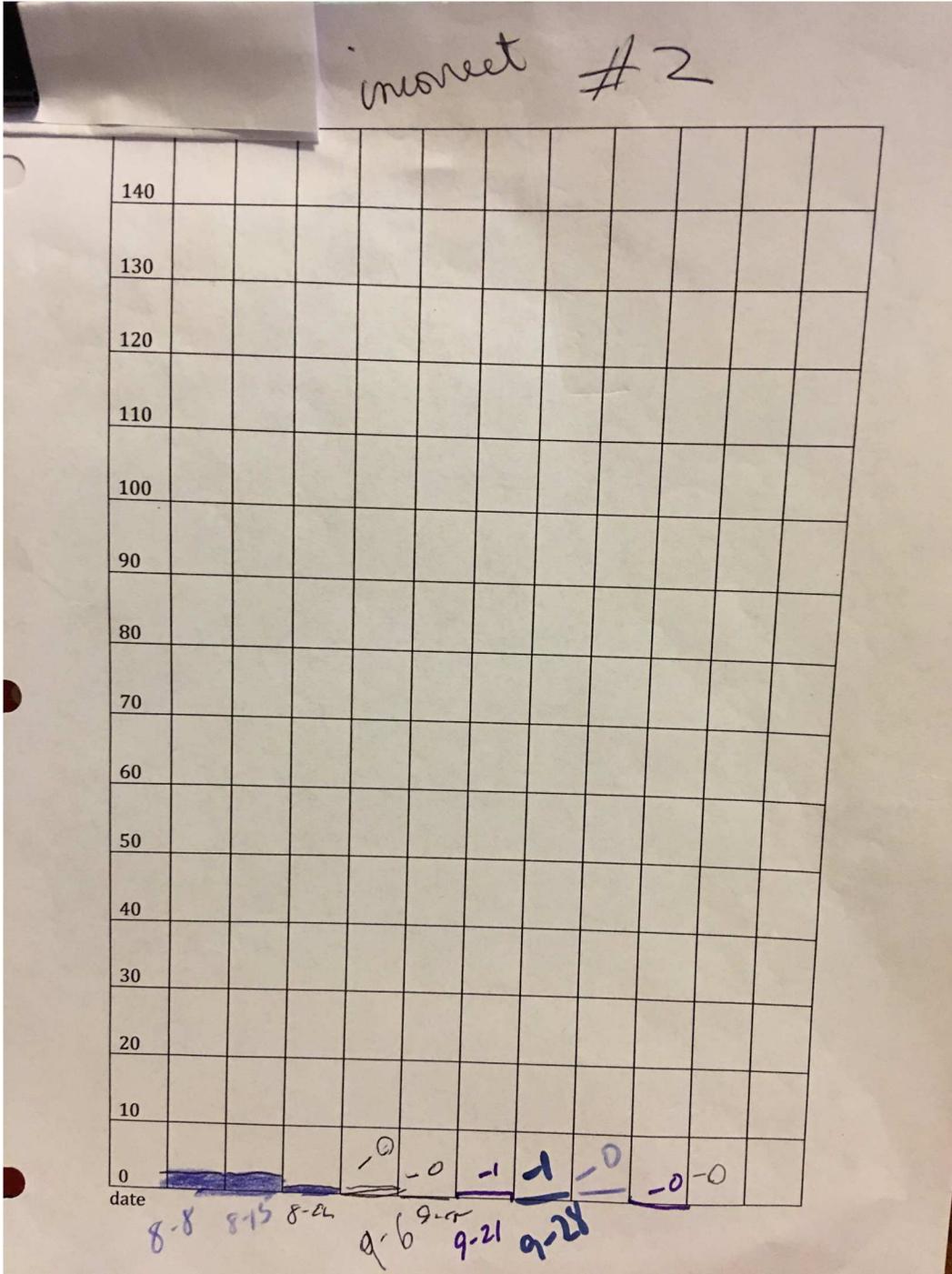
The high students seem to be motivated by both types of feedback.

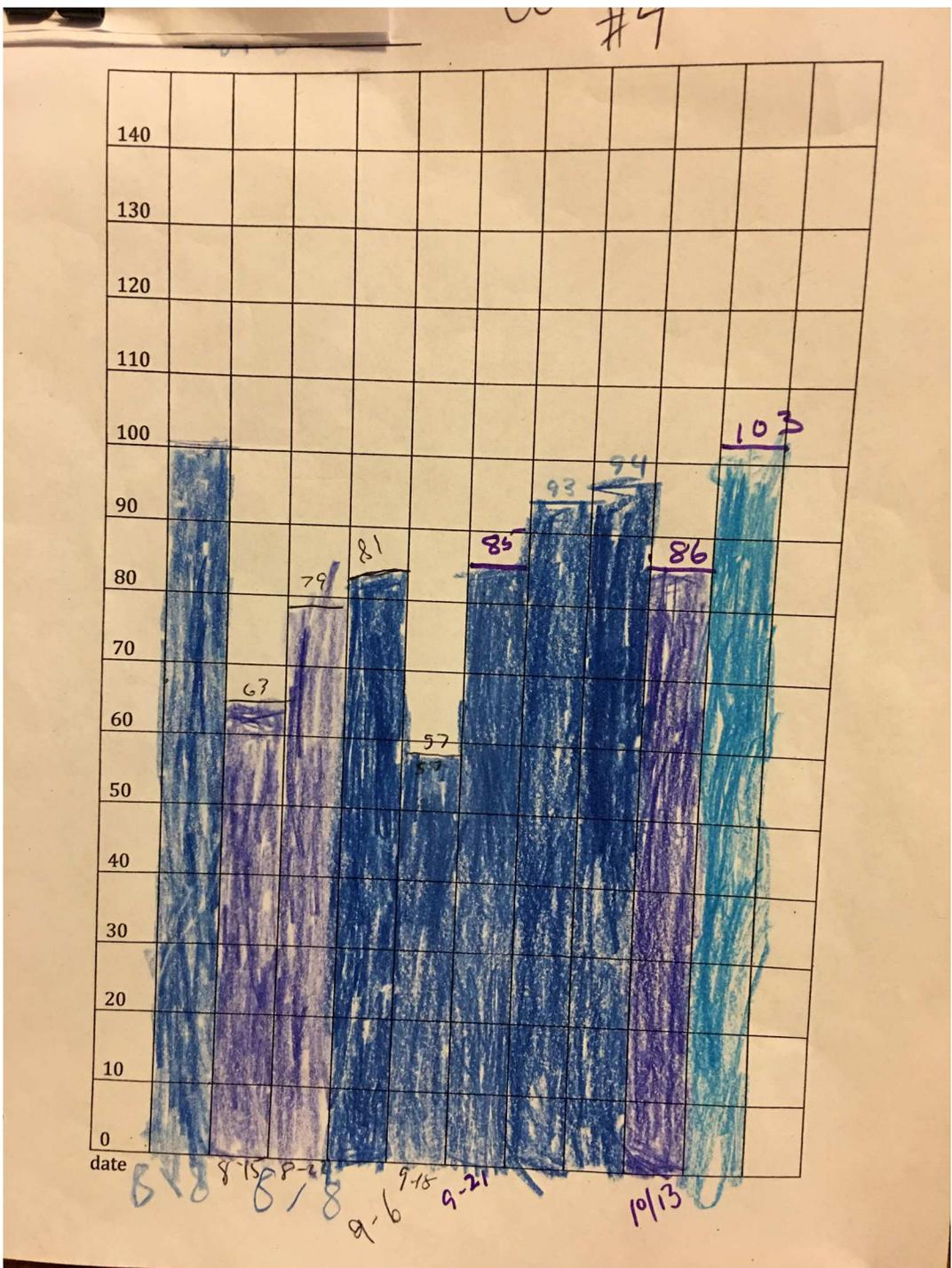
APPENDIX L

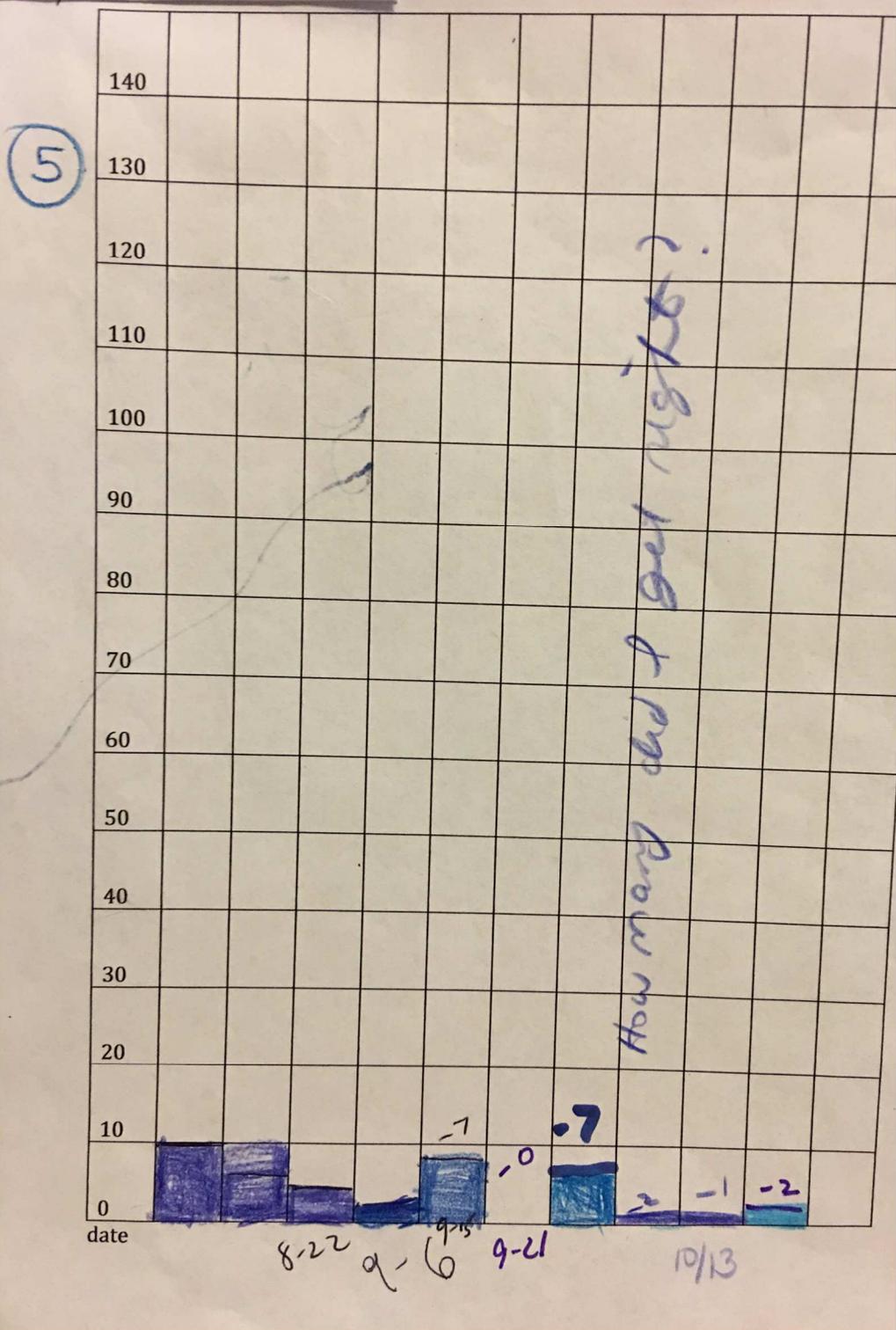
OBSERVATION DATA

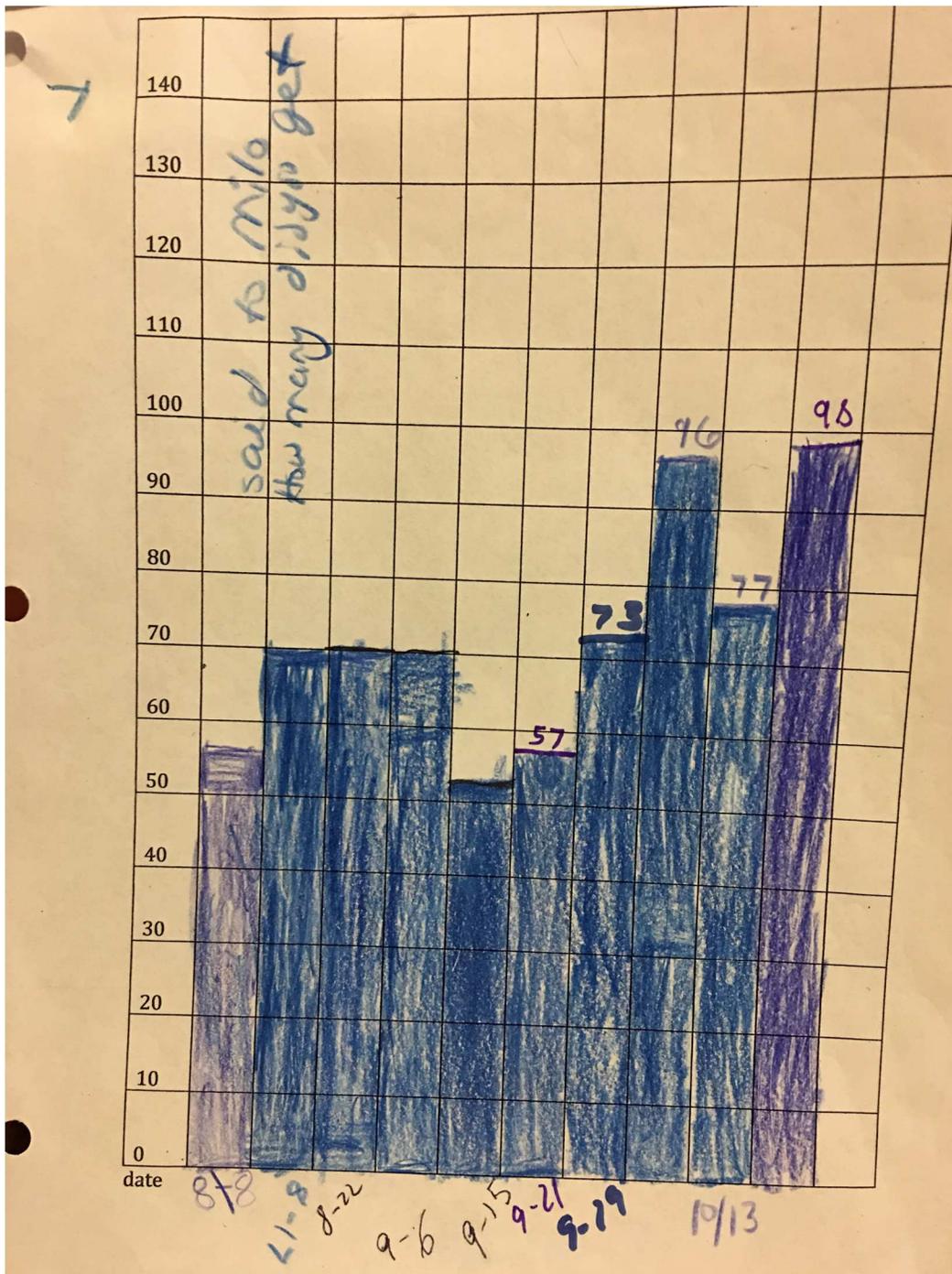
How many did I get right? (ELL) ¹	¹ want to know how many correct
How many did I get right? (High: incorrect, no feedback) ¹	
What did I read to? (High: incorrect) ¹	
I want to know my score? (High: no feedback) ¹	
I went higher. (Struggling) ¹	
What did you get right? (ELL, Struggling) ¹	
How many did I miss? ²	² want to know how many missed:
Did I get any words wrong? ²	
Two words. haha, Switzerland. Not that much wrong. ²	
I got 2 wrong. ²	
What is the one I missed? ³	³ immediate feedback
What words did I miss? ³	
Yay, I only missed 1. ³	
Did I do good? ⁴	⁴ level of proficiency
Ok, it says I missed 0. I love reading. ⁴	
That's not bad. What do you think? Researcher, "yes." ⁴	
How good did I do? ⁴	
	⁵ disappointed
Awe, I don't get to color stuff. ⁵	

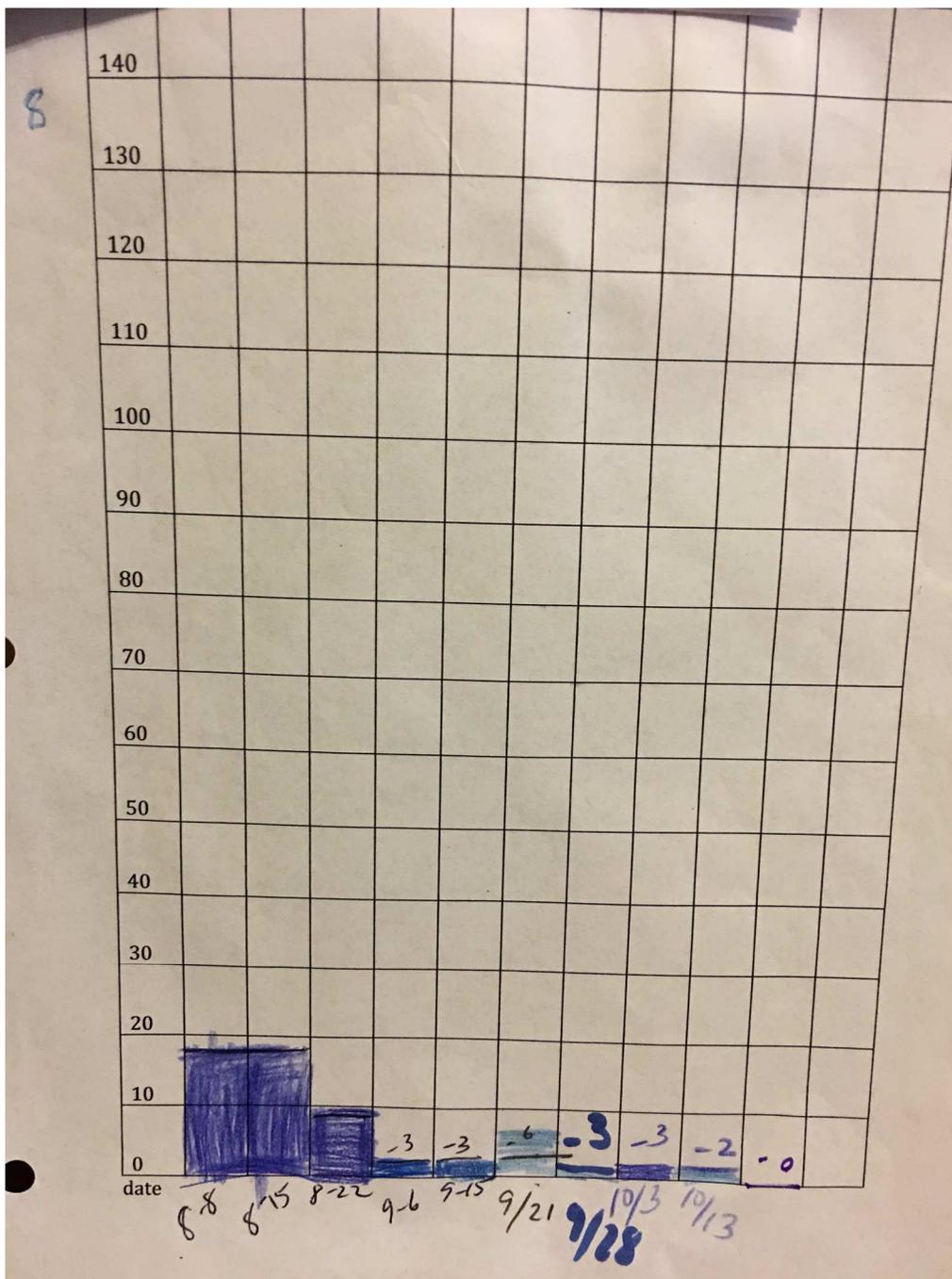
APPENDIX M
STUDENT GRAPHS



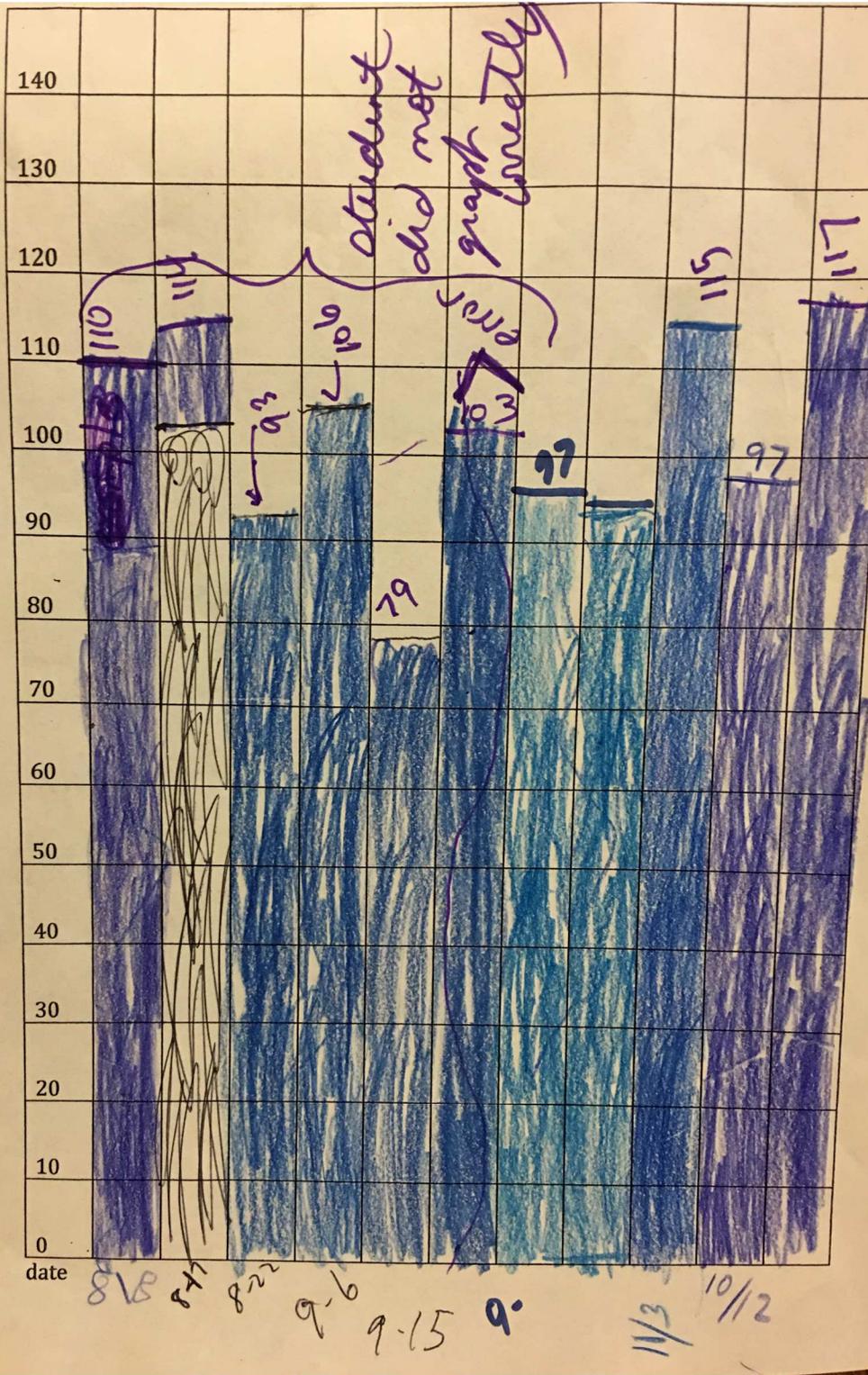


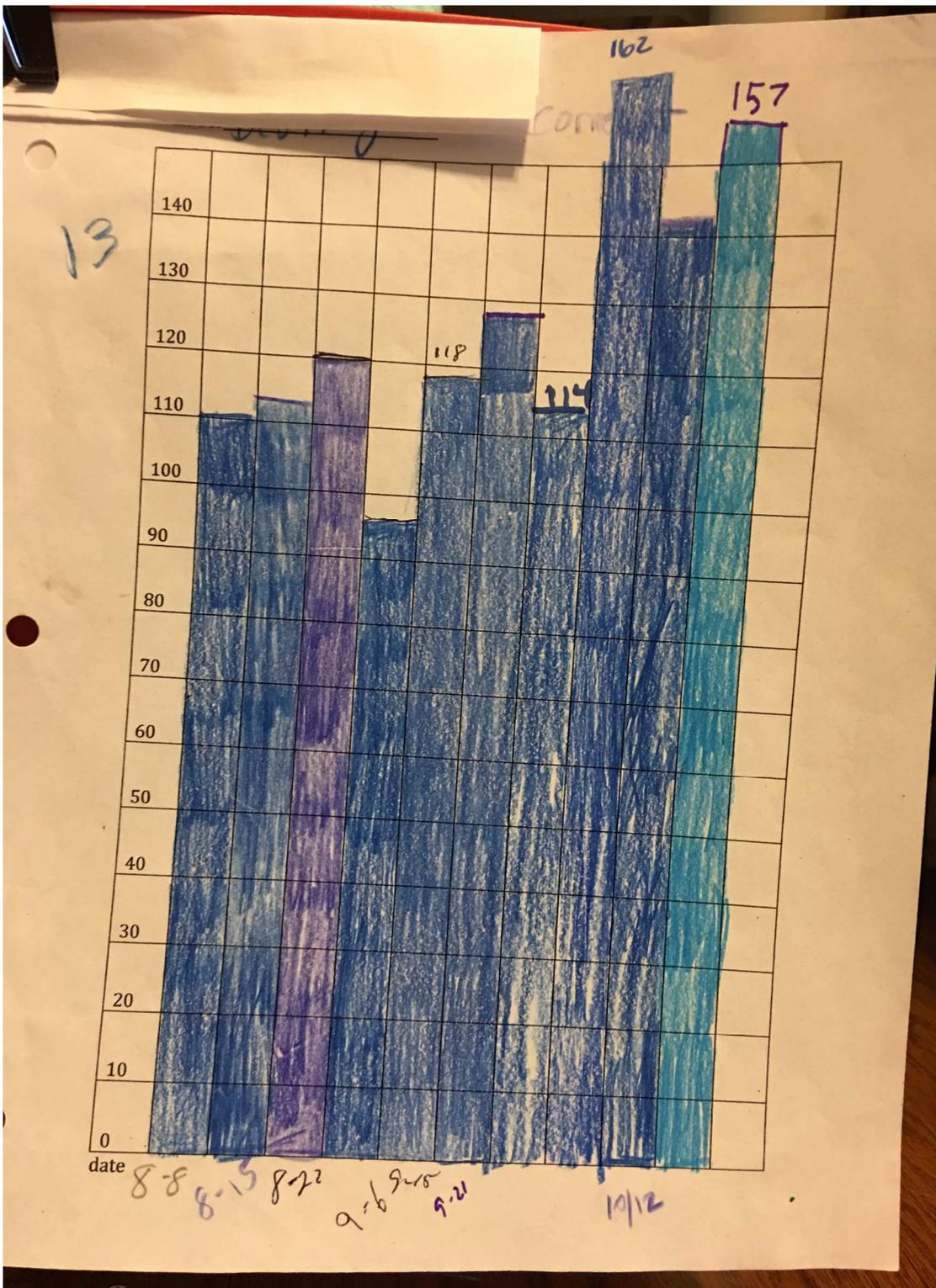


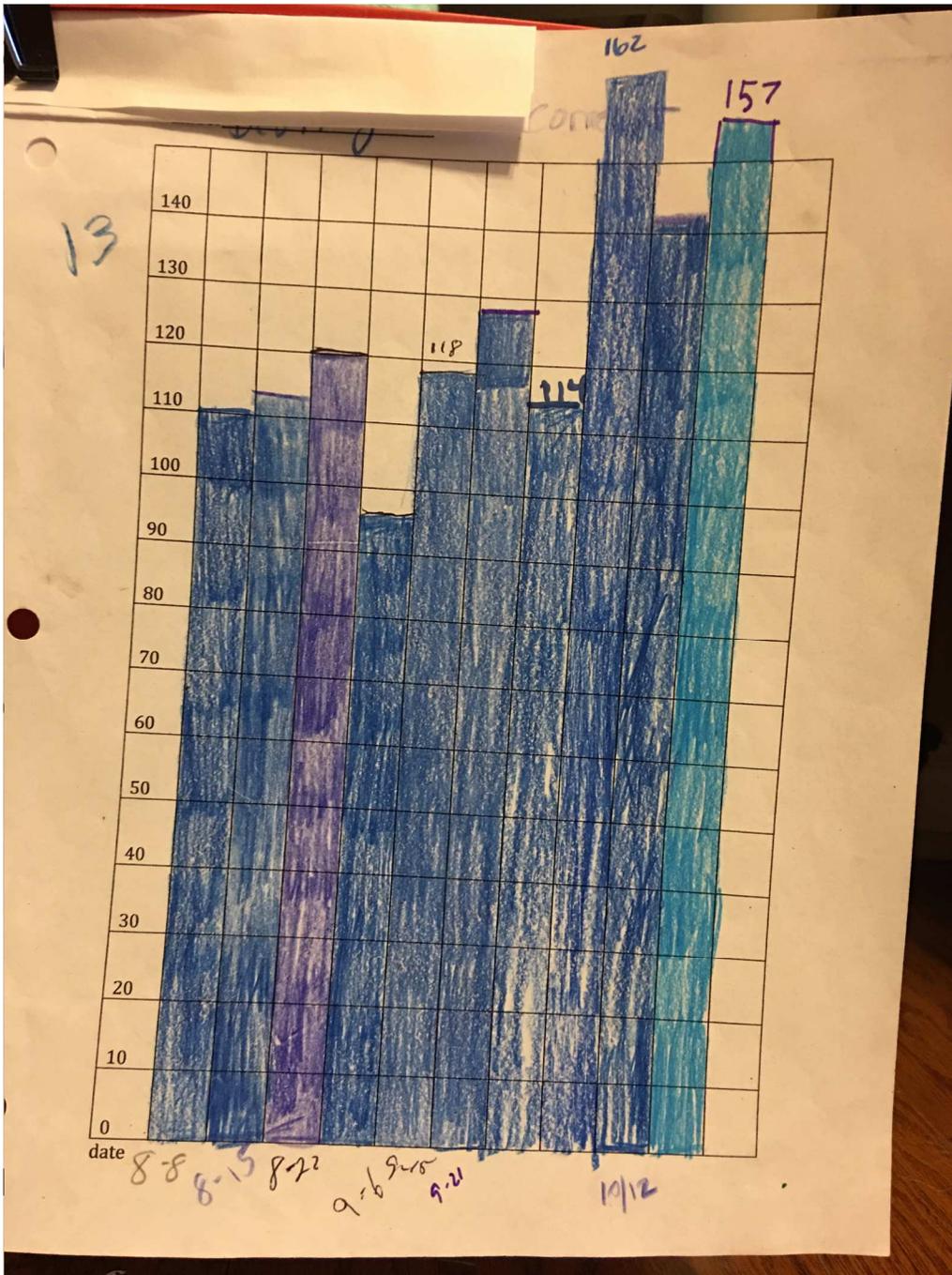


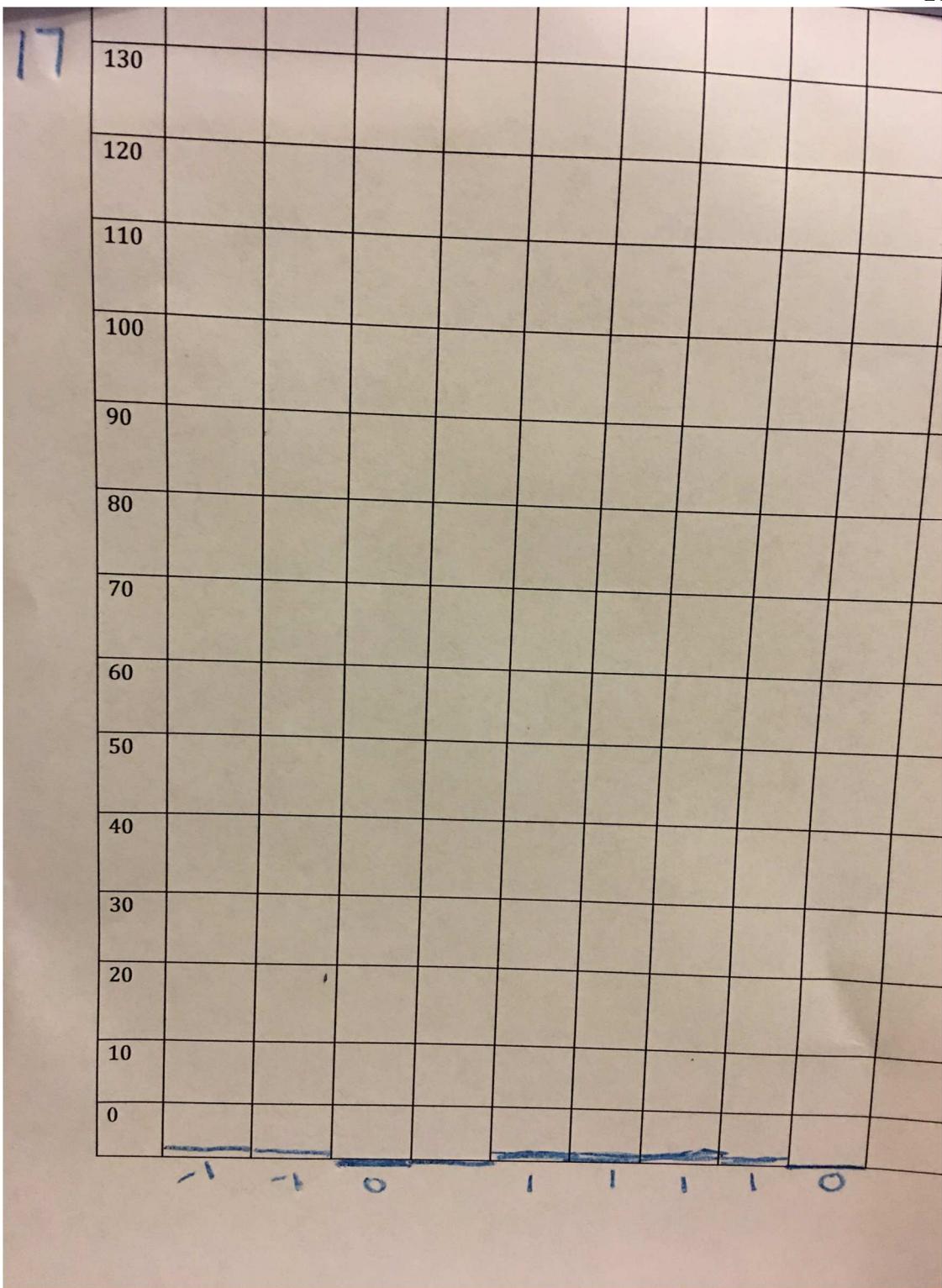


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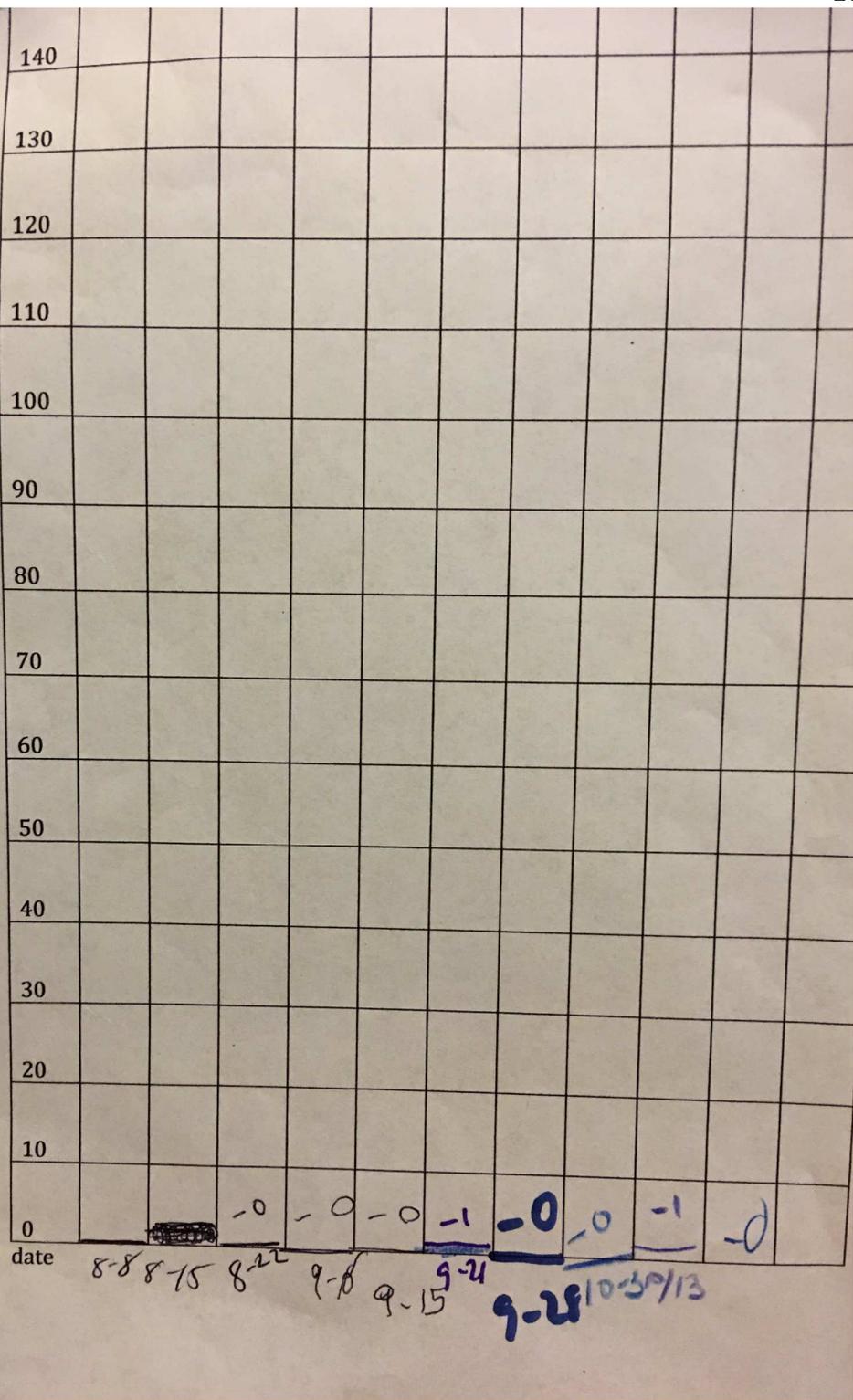


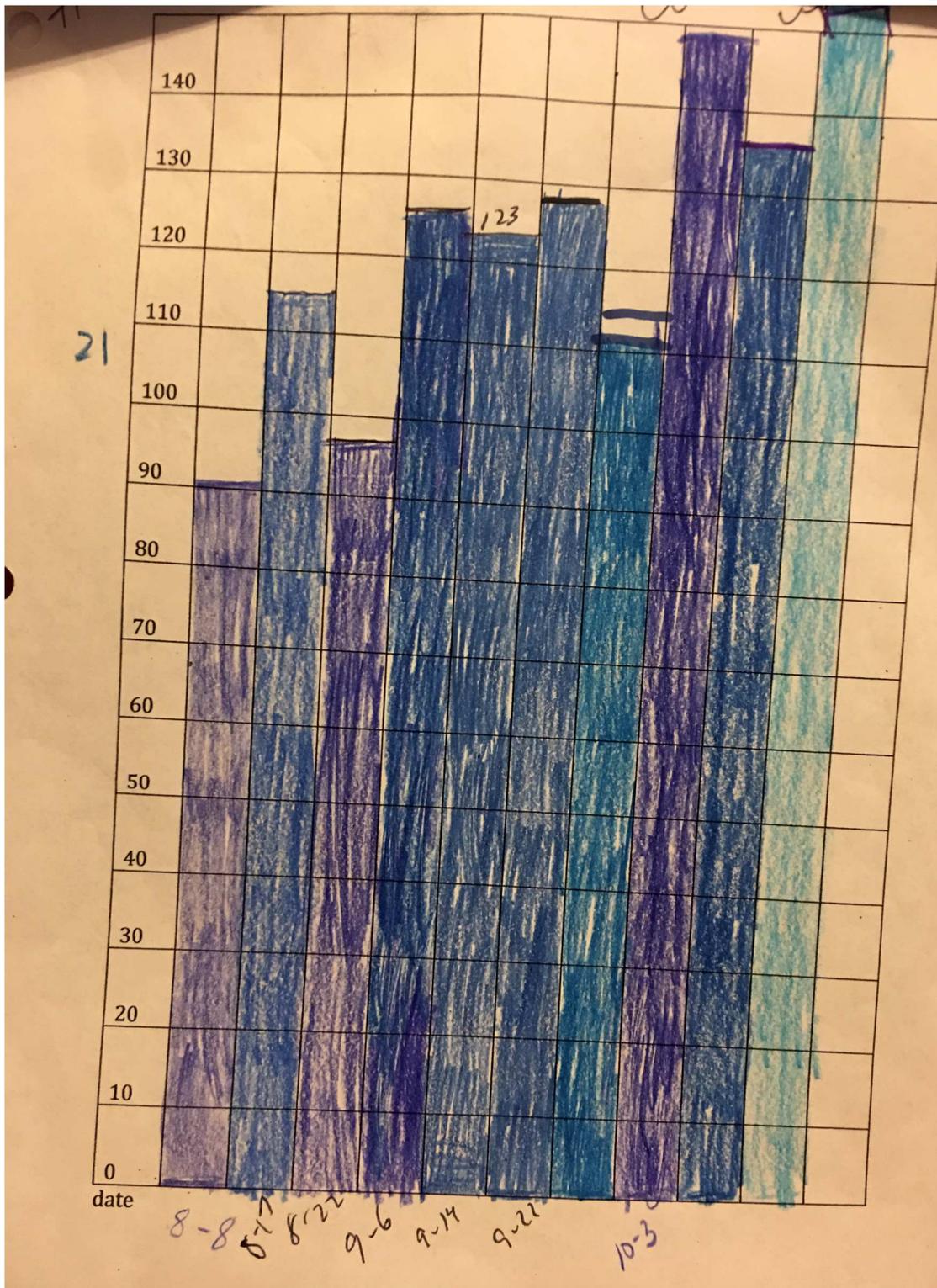




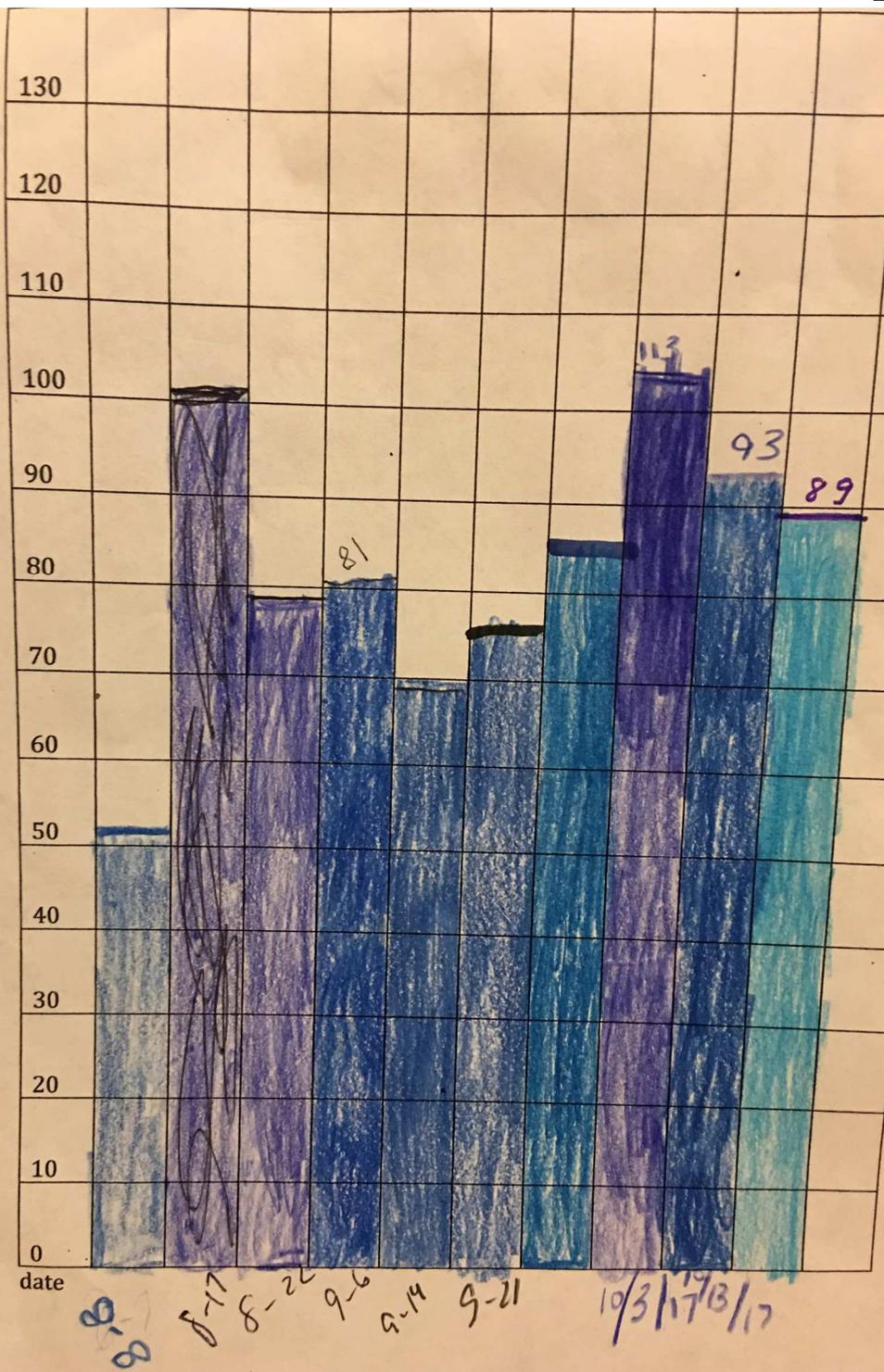


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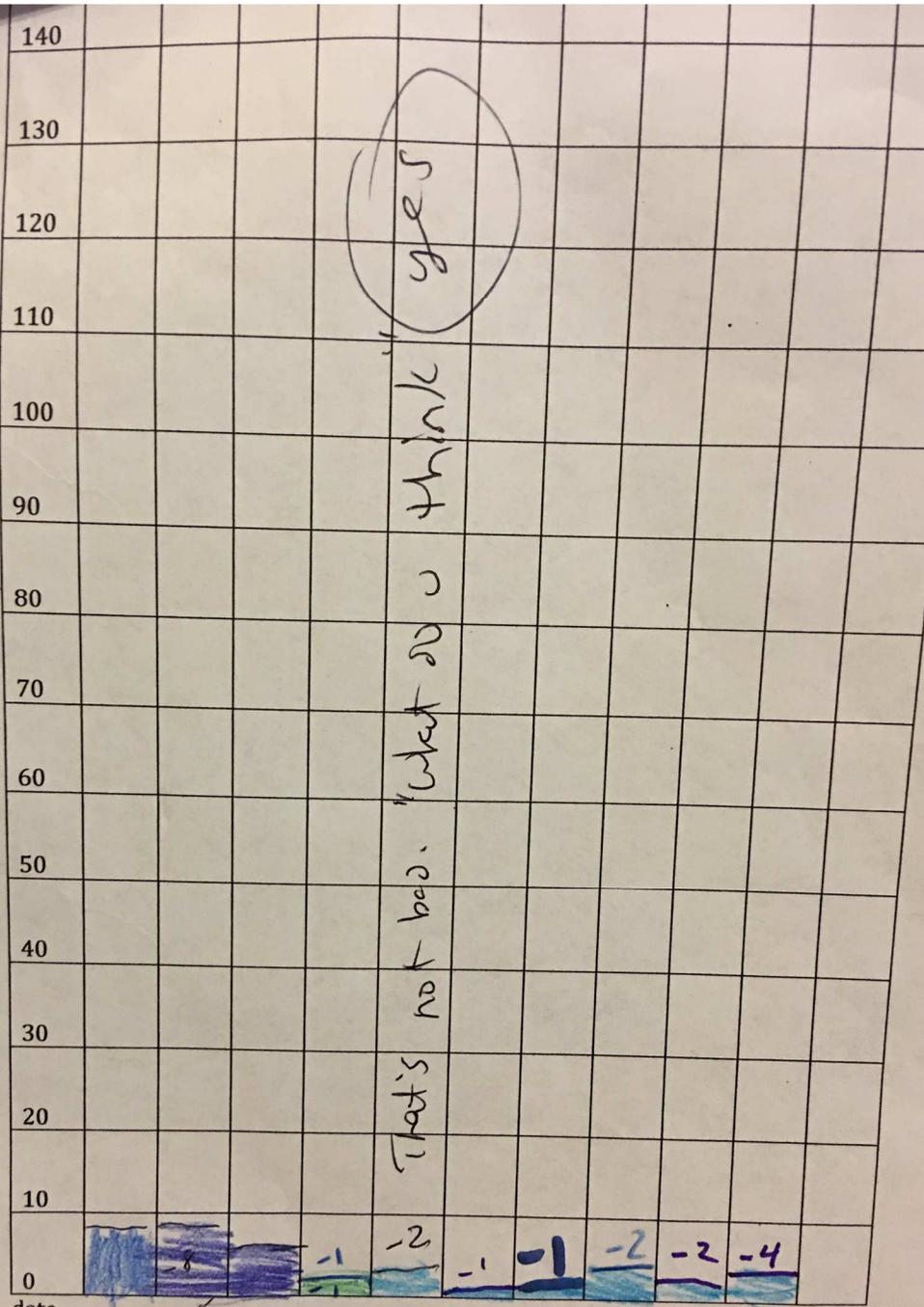




22



23



yes

That's not bad. What do you think?