The Effect of Student Goal Setting Conferences on Oral Reading Fluency Growth

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Abstract

The purpose of this study was to investigate the effects of student goal setting conferences and oral reading fluency growth. This study was conducted in a small rural Title I elementary school in a small suburban school district in western Missouri. The sample for this study included two first and second grade cohorts from the 2013-2014 and the 2014-2015 academic year for a total of 148 students. Goal setting conferences were implemented during the 2014-2015 academic year and were held three times a year.

The independent variables were participation in student goal setting conferences, student gender, and student eligibility status for free or reduced priced lunch. The dependent variables were the oral reading fluency growth on AIMSweb, calculated three times each year following the administration of a curriculum-based measurement probe for reading. Several ANOVAs were conducted to test hypotheses. Results were mixed overall, but showed a statistically significant difference in oral reading fluency from the winter to spring screening periods between students who did and did not participate. Recommendations for future research include replicating the study with a larger sample, including grades three through five, and including MAZE passages to measure reading comprehension.

Dedication

This dissertation is dedicated to my parents, Karen and Jerry Nelson.

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Chapter One

Introduction

To be an educator in the 21st century requires the ability to navigate the ever changing demands of the accountability movement while preparing students for an increasingly unpredictable world. Multiple reforms have been introduced over the past fifteen years to improve educational outcomes for students including The No Child Left Behind Act (NCLB) of 2001, the Race to The Top Grant program in 2009, the Common Core State Standards movement from 2009-2012, and more recently The Every Student Succeeds Act (ESSA) of 2015 (Klein, 2015). As schools work to meet the demands of state and federal authorities, standardized testing has become an accepted part of what it means to be an educator. By prioritizing goal setting in the classroom and involving students in progress monitoring, schools can take steps to meet the changing accountability demands while preparing students for a rapidly changing world.

The most recent legislative change known as the ESSA continues to require annual testing of students in grades 3-8 in English language arts and math (American Federation of Teachers, 2016). While federal intervention in educational assessment, reform, and accountability has been significant since 2001, state legislation has increased accountability for public school districts as well. Enacted in 2001, Missouri's Senate Bill 319 requires individualized reading plans for fourth through sixth grade students who are reading more than one year below grade level in addition to establishing a systematic reading assessment in grades three through six to determine individual reading levels (Missouri Department of Elementary and Secondary Education, n.d.). Senate Bill 319 has also mandated retention for any English proficient fourth grade student who is

reading a year or more below grade level (Missouri Department of Elementary and Secondary Education, 2015).

Reading achievement continues to be a national concern as reflected by results from the 2015 Reading Grades 4 and 8 Assessment Report Card from the National Assessment of Educational Progress (NAEP). The NAEP reports reading proficiency at four levels from low to high: below basic, basic, proficient, and advanced. According to the NAEP assessment, 34% of boys and 28% of girls in the fourth grade were reading at the below basic level in 2015 (U.S. Department of Education, 2015). On the 2015 NAEP assessment, 44% of fourth grade students eligible for free or reduced priced lunch scored at the below basic level compared to 17% of non-eligible students (United States Department of Education, 2015). According to the NAEP assessment, 28 % of boys and 20% of girls in the eighth grade were reading at the below basic level in 2015 (United States Department of Education, 2015). Eighth grade students eligible for free or reduced priced school lunch fared significantly worse than non-eligible students on the NAEP assessment with 36% reading at the below basic level compared to 13% at the below basic level in 2015 (United States Department of Education, 2015). Data from the NAEP assessment suggested a significant impact on reading achievement among specific groups of students: gender, eligibility for free/reduced priced school lunch, students with disabilities, and English language learners (United States Department of Education, 2015).

Rasinski, Rupley, Paige and Nichols (2016) observed that intervention related to developmental reading is lacking, “As students move beyond the primary grades and continue to struggle in reading development, their deficiency in word recognition does

not receive the focus of many current mandated literacy programs adopted by school districts" (p. 165). Dudley and Mather (2005) described the detrimental impact on students when they fail to progress as beginning readers:

> Students who fail to acquire rapid and accurate decoding skills by third or fourth grade, often fall behind their average reading peers in academic performance and achievement, and rarely catch up. As poor readers progress into the intermediate grades (3rd-5th), they have to invest considerably greater amounts of time completing reading assignments, and performing and comprehending grade-level work. In addition, they experience higher levels of frustration and anxiety, and as a result, lack the motivation and desire to participate in reading activities. (p. 22)

While reading intervention at grades 4 through 6 is an important step to support student learning, much can be done in grades 1 through 3 to set goals, measure reading fluency, monitor progress, and adjust instructional practice. Allington (2009) identified the response to intervention (RTI) initiative as a viable option endorsed by the federal government to help close the gaps in literacy achievement. RTI integrates assessment and intervention within a multi-level prevention system to maximize student achievement (National Center on the Response to Intervention, 2007). The RTI components are essential in identifying students who need intense interventions in reading. According to Allington (2009), expert reading instruction, as well as high-quality additional reading interventions, are needed in first grade.

Curriculum-based measurement (CBM) has emerged as one reading intervention strategy to effectively measure oral reading fluency and monitor progress and the elementary grade levels. CBM has been used extensively to monitor achievement in

math and reading. Developed at the University of Minnesota Institute for Research on Learning Disabilities, CBM tracks student progress toward long-term goals, includes frequent monitoring, and the tracking of progress (Stecker, Fuchs & Fuchs, 2005). Stecker et al. (2005) noted, "For CBM in reading, the most commonly used general outcome is proficient oral reading" (p. 797).

According to research, involving students in the development and tracking of goals can help promote literacy (Cabral-Márquez, 2015; Serravallo, 2014). According to Serravallo (2014), "Goals hold students and their teachers accountable. Students will likely be more motivated to read when they have reading goals that are based on accurate assessments, established in consultation with their teachers, and supported over time" (p. 54). Research has suggested a cognitive benefit of goal setting that directs, "…attention and effort toward goal-relevant tasks and away from irrelevant activities" (Cabral-Márquez, 2015, p. 465). If school districts are going to meet the high demands of accountability and help students become proficient readers, understanding the effects of student goal conferences on oral reading fluency is crucial.

Background

This study was conducted in a small rural elementary school in a small suburban school district in western Missouri. The district consists of one high school, one middle school, 3 elementary schools, one vocational school, and one alternative school, for an approximate enrollment of 2,600 students during the 2014-15 academic year. The school selected for this study is a Title I school serving grades kindergarten through fifth grade with two classrooms at each grade level. Table 1 presents a demographic overview of the Title I elementary school and includes ethnicity, eligibility for free or reduced priced

lunch, proportional attendance rate, and total enrollment. During the 2014-15 academic year approximately 226 students were enrolled at the Title I elementary school and 51.4% of these students were eligible for free or reduced lunch. Historically the Title I elementary school has not served a diverse student population with 91.2% of students identified as White during the 2014-15 academic year.

Table 1

Demographic Overview of Title I Elementary School

	2012-13	2013-14	2014-15	2015-16
White	88.6%	89.3%	89.4%	91.2%
Other Race or Ethnicity	11.4%	10.7%	10.6%	8.8%
Eligible for Free or Reduced Lunch	34.7%	48.0%	47.3%	51.4%
Total Enrollment	236	233	218	226

Source: Missouri Department of Elementary and Secondary Education (2016)

At the Title I elementary school, student goal setting conferences are conducted by teachers three times a year. Conferences are one on one and the teacher reviews the student's fluency rate. Together the teacher and student discuss and agree upon a realistic goal for improvement of oral reading fluency. Students set a goal of how many words they will acquire within the period before the next goal setting conference. At the conclusion of the goal setting conference, the teacher and the student create strategies that the student can complete on their own and what the teacher will enact in the classroom. During the 2013-2014 and the 2014-2015 academic year conferences were held in September, December, and May. A typical student goal setting conference lasts anywhere between 10-20 minutes.

Statement of the Problem

Despite years of education reform many students are not acquiring reading proficiency at adequate levels with the current pedagogical approach. Beyond the pressure of federal or state accountability and requirements to improve reading achievement, there is a profound moral purpose to support the literacy development of every student. Reading is a life-long skill that opens the door to opportunity and an improved quality of life. In a study with colleagues from Kent State University, Rasinski (2004) found that reading fluency is an important issue for students beyond the elementary years well into high school. Researchers found "variations in the reading fluency of these students accounted for 30 percent of the variance in their performance on Ohio's High School Graduation Test" (Rasinski, 2004, p. 50). Summary analysis from the 2015 NAEP assessment reported significant reading achievement gaps between the general student population and students most at-risk for academic failure including boys, students with disabilities, English language learners, and students eligible for free or reduced priced lunch (U.S. Department of Education, 2015). Academic interventions such as RTI or CBM have great potential to support effective instruction and promote reading achievement (Allington, 2009; Stecker et al., 2005).

Purpose of the Study

The purpose of this study was to investigate the effects of student goal setting conferences on oral reading fluency growth in first and second grade at a Title I elementary school. This study examined the overall impact of goal setting conferences on oral fluency rates while considering student demographic variables such as gender and eligibility for free or reduced priced lunch.

Significance of the Study

The significance of this study was to provide evidence about the effectiveness of student goal setting conferences to impact oral reading fluency in a Title I elementary school. Involving students in the goal setting process is easily replicated across settings and grade levels. At a time when resources such as personnel or curriculum are scarce, maximizing the instructional period through high leverage practices is critical. The past decade has brought significant demographic change to the Title I elementary school. Since 2005 the percentage of students eligible for free and reduced priced lunch has risen from 25% to 51.4% (Missouri Department of Elementary and Secondary Education, 2016). Involving students in the goal setting process may help mitigate the variables that place students at-risk such as eligibility for free or reduced priced lunch. The growing number of students not reading at grade level makes investigating the growth of oral reading fluency a high priority for educators and school leaders. Results from this study have relevance for school districts, administrators, and teachers who seek practical ways to support and foster higher levels of reading achievement for all students.

Delimitations

The study was restricted to four classrooms in first and second grade at the Title I elementary school over a two year period. The study relied on archived R-CBM data entered into AIMsweb by first and second grade teachers during the 2013-2014 and 2014-2015 academic years.

Assumptions

In order to conduct the study it was assumed all students involved received quality reading instruction daily as well as interventions performed with fidelity. The

researcher assumed the CBM probe was administered and scored as instructed by the AIMsweb Standardized instructions in an environment conducive for testing. The researcher assumed all students completed the Curriculum Based Measurement probe to the best of their ability resulting in valid achievement levels.

Research Questions

This study specifically addressed the following questions to direct a review of the literature and address the problem statement:

RQ1. To what extent is there a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

RQ2. To what extent is the difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

RQ3. To what extent is the difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

RQ4. To what extent is there a difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not

participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

RQ5. To what extent is the difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

RQ6. To what extent is the difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

RQ7. To what extent is there a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

RQ8. To what extent is the difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

RQ9. To what extent is the difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

Definition of Terms

For the purpose of this study and review of literature the following terms are defined for the reader. Key terms were defined to provided clarity and context for the subsequent chapters in this study.

AIMSweb. AIMSweb is a "universal screening, progress monitoring, and data management system that supports RTI and tiered instruction. AIMSweb uses brief, valid, and reliable measures of reading and math performance for grades K-12" (NCS Pearson, n.d.).

Automaticity. Automatic word recognition is related to fluency and reading comprehension. Four properties are considered when measuring whether a skill has become automatic including: speed, effortlessness, autonomy, and lack of conscious awareness (Kuhn, Schwanenflugel, & Meisinger, 2010).

Curriculum-Based Measurement. CBM is a method of progress monitoring that meets three requirements: (1) measurement materials are aligned to the school's adopted curriculum, (2) measurement is frequent and ongoing, and (3) data is used for instructional planning (Fuchs & Fuchs, 2011).

English Language Arts. English language arts (ELA), is a discipline with several distinct domains of knowledge and proficiency incorporating speaking and writing standard English, reading and evaluating fiction, poetry, nonfiction works, writing

formally and informally, visual literacy, communication, and presentations (Missouri Department of Elementary and Secondary Education, n.d.).

Free or Reduced Priced Lunch, is a student classification monitored by state and federal agencies to ensure students who participate in the National School Lunch Program are receiving a high quality education (Missouri Department of Elementary and Secondary Education, n.d.).

MAP Achievement Levels are reported by the Missouri Department of Elementary and Secondary Education and reflect student performance in four achievement levels that "describe a pathway to proficiency and college and career readiness. Achievement-level scores provide a description of what students can do in terms of the content and skills assessed, as described in the Missouri Learning Standards" (Missouri Department of Elementary and Secondary Education, 2016, p. 5).

Missouri Assessment Program. The MAP is an annual test designed to "assesses students' progress toward mastery of the Show-Me Standards which are the educational standards in Missouri. The Grade-Level Assessment is a yearly standards-based test that measures specific skills defined for each grade by the state of Missouri" (Missouri Department of Elementary and Secondary Education, n.d.).

Oral Reading Fluency. According to Council for Learning Disabilities (2013), "The ability to read connected text quickly, accurately, and with expression" (p. 1). This is a critical component for the successful development of reading comprehension.

Prosody, is the ability to read with good expression, intonation, and phrasing (Benjamin, Schwanenflugel, Meisinger, Groff, Kuhn, & Steiner, 2013). The

spectrographic features of prosody include pitch, stress, duration, and pausing (Kuhn et al., 2010; Hirschberg, 2002).

Title I is a provision of the Elementary and Secondary Education Act (ESEA) that "provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards" (United States Department of Education, n.d.).

Organization of the Study

The first chapter provided an overview of the study including background information, the statement of the problem, the purpose of the work, the significance of the study, delimitations, assumptions, research questions, the definition of terms, and the organization of the study. Chapter two examines literature about reading achievement, oral reading fluency, reading interventions, curriculum-based measurement, goal setting, feedback, and motivation. Additionally, chapter two reviews the relationship of poverty and gender on reading achievement. Chapter three provides the methodology of the study. Results from the research questions outlined in chapter one are provided in chapter four. Chapter five concludes the study with a summary, discussion of findings, findings related to literature, implications for action and recommendations for future research.

Chapter Two

Review of Literature

This chapter examines the literature related to the study. Specifically, this chapter examines reading achievement, oral reading fluency, reading interventions, curriculum-based measurement, goal setting, feedback, and motivation. Finally, this chapter examines the relationship of poverty and gender on reading achievement.

Reading Achievement

Since 1969, the National Assessment of Educational Progress (NAEP) has been administered in the United States to measure student understanding and performance in subjects such as mathematics, reading, science, and writing (United States Department of Education, n.d.). The NAEP provides feedback related to achievement across multiple grade levels and content areas. Student achievement on the NAEP is reported on four distinct levels: Below Basic, Basic, Proficient, and Advanced (U.S. Department of Education, n.d.).

Results from the 2015 NAEP assessment were not significantly different from the 2013 assessment, with no difference reported in reading achievement at grade 4 and slightly lower scores at grade 8 (United States Department of Education, 2015). There has been an upward trend in grade 4 reading achievement since 1998, with a steady increase in the percentage of students achieving at or above proficient level moving from 29% up to 36% (United States Department of Education, 2015). Over the same timespan there has been a 6% decrease in the percentage of students achieving at or below the basic level from 70% to 64% (United States Department of Education, 2015). Table 2 presents the overall trend of grade 4 reading achievement on the NAEP.

Table 2

Trend in Fourth-Grade NAEP Reading Achievement

Year	Below Basic	Basic	Proficient	Advanced
2015	31	33	27	9
2011	33	34	26	8
2007	33	34	25	8
2002	36	32	24	7
1998	40	30	22	7

Source: Adapted from "The Nation's Report Card: National Achievement Level Results," by the United States Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (2015).

While growth on the NAEP for grade 4 reading achievement is a positive trend there is still significant room for improvement with 64% of students reading below grade level (United States Department of Education, 2015). Even more alarming is the significance of the achievement gap the NAEP reports by race and ethnicity. The 2015 NAEP assessment reported the following grade 4 reading achievement proficiency levels by race or ethnicity: 46% of white students, 18% of black students, 21% of Hispanic students, 55% of Asian/Pacific Islander students, 57% of Asian students, 28% of native Hawaiian/other Pacific Islander, and 21% of American Indian/Alaska native (United States Department of Education, 2015). School lunch status also emerged as an area for improvement with a 28% achievement gap between students in grade 4 who were eligible for free or reduced lunch and those who were not eligible (United States Department of Education, 2015).

Despite the accountability associated with NCLB, minimal progress has occurred at grade 8 with only a 2% increase in the percentage of students achieving at or above the

proficient level since 1998 (United States Department of Education, 2015). The percentage of students achieving at or below the basic level is largely unchanged, declining to 68% in 2015 from 70% in 1998 (United States Department of Education, 2015). Table 3 presents the overall trend of grade 8 reading achievement on the NAEP.

Table 3

Trend in Eighth-Grade NAEP Reading Achievement

Year	Below Basic	Basic	Proficient	Advanced
2015	24	42	31	4
2011	24	42	30	3
2007	26	43	28	3
2002	25	43	30	3
1998	27	41	30	3

Source: Adapted from "The Nation's Report Card: National Achievement Level Results," by the United States Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (2015).

A sizable achievement gap in grade 8 reading achievement was reported by the NAEP. The 2015 NAEP assessment reported the following grade 8 reading achievement proficiency levels by race or ethnicity: 44% of white students, 16% of black students, 21% of Hispanic students, 52% of Asian/Pacific Islander students, 54% of Asian students, 24% of native Hawaiian/other Pacific Islander, and 22% of American Indian/Alaska native (United States Department of Education, 2015). Students' school lunch status also emerged as an area of concern with a 24% achievement gap between students in grade 8 who were eligible for free or reduced lunch and those who were not eligible (United States Department of Education, 2015).

From a historical perspective, reading achievement scores on the NAEP assessment at grade 4 and 8 underscored the importance of establishing a solid foundation during the developmental reading phase of the instructional process. For many students fluency holds the key to future academic success (National Reading Panel, 2000). The National Reading Panel (2000) noted, "Children who do not develop reading fluency, no matter how bright they are, will continue to read slowly and with great effort" (p. 191).

Oral Reading Fluency

A 1995 NAEP study of oral reading fluency at the elementary level defined fluency as the ease or "naturalness" of reading (White, 1995). Key elements from the NAEP definition included, "(a) grouping or phrasing of words as revealed through the intonation, stress, and pauses exhibited by readers; (b) adherence to author's syntax; and (c) expressiveness of the oral reading interjecting a sense of feeling, anticipation, or characterization" (p. 2). Fountas and Pinnell (2012) defined reading fluency as "the efficient and effective processing of meaningful, connected, communicative language" (p. 274).

Fluency has not always been regarded as a critical reading skill by researchers (Martens et al., 2007; Rasinski, 2004; National Reading Panel, 2000). Despite neglect for many years, research has identified a close relationship between fluency and reading comprehension (Begeny, Krouse, Ross, & Mitchell, 2009; Chard, Vaughn & Tyler, 2002; Marr, Algozzine, Kavel, & Dugan, 2010; National Reading Panel, 2000; Rasinski, 2004). Rasinski et al. (2016) expressed concern about identified fluency deficits noting, "more recent research has shown that slow, disfluent reading cannot be ignored because it is

evidence of lack of word recognition automaticity and inefficient processing of text" (p. 164).

The aforementioned NAEP study from White (1995), found that fluency rates can be useful for diagnostic purposes, detecting poor comprehension. According to Rasinski et al. (2016), word recognition fluency is equally important as accuracy and decoding. The skill of prosody is regularly cited in oral reading fluency research and describes the ability to read a text with appropriate stresses, pauses, and intonation (Dudley & Mather, 2005). An important development related to oral reading fluency occurs when students demonstrate understanding of inflections, self-monitor, and self-correct reading errors (Dudley & Mather, 2005).

Kim, Petscher, Schatschneider and Foorman (2010) conducted a study of oral reading fluency in Florida with 12,536 participants who participated in the Reading First Program from grades K-3. Kim et al. (2010), found the oral reading fluency growth rate during first grade was "the best predictor of students' later reading comprehension skills in first and third grades underscores the fact that ORF growth rate may provide important information about later reading comprehension achievement" (p. 662). Findings from Kim et al. (2010) concluded first grade oral reading fluency growth rates can be useful for instructional decision making. Table 4 is presented below and summarizes the changing focus of fluency instruction from kindergarten through grade 6. Content is adapted from Torgesen, Houston, Rissman, and Kosanovich (2007, p. 5-7).

Table 4

Changing Focus of Reading Fluency Instruction in Grades K-6

Grade	Targets of instruction and methods used for instruction
Kindergarten	Learning to recognize a small set of high frequency words by sight. Teachers provide repeated exposures to words that occur very frequently in kindergarten texts so that students learn to read them at a single glance. This increases reading ease and fluency because these words do not have to be "sounded out."
Grade 1	Students expand the range of words they can recognize "by sight" as they do large amounts of reading, which contributes significantly to the growth of their text-reading fluency. Most words are learned after students have read them correctly multiple times. Teacher modeling of reading in phrases and with proper expression can also help build fluency.
Grade 2	Teachers encourage extensive reading and use specific methods, such as timed readings, partner reading, and reader's theater, to stimulate growth in fluency.
Grades 3-6	Continued growth in students' ability to read grade-level text fluently occurs primarily as a result of large amounts of practice in reading meaningful text.

Source: Adapted from Torgesen et al. (2007).

Despite a renewed focus on reading fluency at the elementary level some researchers have expressed concern about an emphasis of reading speed instead of understanding or meaning. Rasinski (2004) strongly criticized schools where the improvement of the reading rate drove fluency instruction. He expressed concern with a fundamental misunderstanding of fluency instruction noting, "This is a corruption of the concept of reading fluency. If we emphasize speed at the expense of prosodic and

meaningful reading, we end up with fast readers who understand little of what they have read" (Rasinski, 2004, p. 49). Reading fluency is critical for children to decode and comprehend writing. In a study of second grade students, Wang, Algozzine, Ma, and Porfeli (2011) found reading fluency development is a dynamic process.

Witte-Townsend and Whiting (2005) discussed how emotions can impact the development of reading fluency, "It appears that fluency in reading requires that the heart and the head have equal play: Strong skill development is indispensable, but it is not the whole picture" (p. 28). Witte-Townsend and Whiting (2005) recommended the following strategies to foster reading fluency: (1) access and selection of appropriate books, (2) adult understanding of how to nurture a reading attitude, (3) prioritizing necessary time for reading at school and home, (4) respecting children's choices of reading materials, and (5) understanding how children's life experiences impact their relationships with books.

Despite its critical role in the learning process, reading fluency does not develop without effective instruction and priority in the classroom (Allington, 2014; Mraz, Nichols, Caldwell, Beisley, Sargent, & Rupley, 2013). Mraz et al., (2013) called for this type of instructional change, "In order for students to learn to construct meaning from text, it is necessary for teachers to apply instructional strategies that will help readers transition from simple decoding of words to fluent word identification" (Mraz et al., 2013, p. 165). The design and development of reading programs must begin to match what educators know about effective literary instruction (Allington, 2014).

Reading Interventions

The processing and understanding of a text plays a critical role in the learning process. According to Fountas and Pinnell (2012), "When students engage in smooth,

efficient processing of text with deep understanding, they can steadily increase their abilities" (p. 274). To ensure that students develop the competencies required for continued learning, reading interventions may be necessary. Interventions should be carefully selected, sufficiently powerful, and designed to address deficits (Torgesen et al., 2007). Closing an achievement gap requires rapid growth through the reading intervention process. Students identified for reading interventions must demonstrate greater rates of growth than their peers to catch up (Torgesen et al., 2007).

Three reading interventions have traditionally been used to improve levels of reading fluency: repeated readings, listening passage preview, and listening only (Begeny et al., 2009). When the repeated reading intervention is used a student re-reads a brief passage two or more times. Variations of this intervention call for the student to keep reading until a suitable reading fluency level is met (Begeny et al., 2009). Multiple studies support the efficacy of the repeated reading intervention to improve reading fluency and comprehension (Begeny et al., 2009; Daly, Persampieri, McCurdy & Gortmaker, 2005; Martens et al., 2007; Strickland, Boon, & Spencer, 2013; Swain, Leader-Janssen, & Conley, 2013). According to Strickland et al. (2013) "repeated reading is an effective strategy to improve reading fluency for both students with and without LD in the elementary and early secondary grade levels" (p. 15). Passage previewing or modeling is another intervention commonly used to improve reading fluency. Begeny et al. (2009) reported a strong record of success using the passage previewing strategy to improve reading fluency, but noted that the listening passage previewing (LPP) strategy is regarded as the most impactful of the three forms. Another strategy in common use is what many teachers refer to as the "read aloud" strategy, an

instructional strategy that Begeny et al. (2009) called listening only (LO) for the purpose of their study. While there is a close relationship between the LO and LPP strategies Begeny et al. (2009) made a distinction and noted that "LO differs from LPP because LPP involves the student both listening and reading the story silently; with LO, the student simply listens as a story is read aloud by a more skilled reader" (p. 213).

Begeny et al. (2009) examined the effectiveness of repeated readings, listening passage preview, and listening only in their study. Begeny et al. (2009) found that students who received the repeated readings or listening passage preview interventions outperformed students who received the listening only intervention related to words correct per minute. According to Begeny et al. (2009) the repeated reading and listening passage previewing strategies hold great promise for improving reading fluency and should be used "particularly with low- to average-performing readers" (p. 224). Swain et al. (2013) cautioned that the maintenance of reading fluency gains from the repeated reading or the listening passage previewing strategies are difficult to maintain without ongoing instruction. Swain et al. (2013) encouraged teachers to "continue the interventions if students are to make additional improvements in fluency" (p. 16).

Chafouleas, Martens, Dobson, Weinstein, and Gardner (2004) examined the impact of adding performance-based intervention to the repeated reading intervention. According to Chafouleas et al. (2004), "Feedback and reinforcement, two performance-based interventions, have also been shown to increase reading fluency" (p. 68). In their review of prior studies that combined skill-based and performance-based strategies to promote fluency, Chafouleas et al. (2004) found inconsistent results. Results from their study supported the use of the repeated reading intervention without feedback or

contingency-based rewards. However, contingent reward (REW) did not significantly increase the oral reading fluency of participants (Chafouleas et al., 2004).

Other fluency building interventions are commonly used in the classroom setting to promote reading achievement. Literature supports the use of readers theater as an instructional practice to promote reading fluency. As described by Moran (2006), "Readers theater is a staged reading of a play or dramatic piece of work designed to entertain, inform or influence" (p. 317). Readers theater can be used to develop fluency for participants through the combination of text and performance (Moran, 2006). According to Moran (2006), “Fluency is assessed through reading aloud and requires the combination of sight word recognition, comprehension, and verbal expression, all prerequisites for effective readers theater presentations” (p. 318). One explanation for the strength of readers theater as a fluency intervention is the use of repeated reading as a core function of the practice. As a large group practice, readers theater serves to engage students in an authentic reason for repeated reading. The novelty and relevance of this intervention has been demonstrated to motivate reluctant readers (Moran, 2006). Beyond readers theater, Rasinski et al. (2016) reported the efficacy of alternative texts to improve reading fluency, reading comprehension and overall reading achievement.

Coyne, Kame’enui and Simmons (2001) advocated for the following six organizing principles for prevention and intervention at the instructional design level: big ideas, mediated scaffolding, conspicuous strategies, strategic integration, primed background knowledge, and judicious review. Three big ideas should constitute the framework for beginning reading instruction: phonological awareness, alphabetical understanding, and automaticity with the code (Coyne et al., 2001). Ongoing progress

monitoring of students at risk was recommended by Coyne et al. (2001) who noted that screening measures serve as valid and reliable predictors of later reading achievement.

Foorman, Breier, and Fletcher (2003) identified three critical components of reading interventions: (a) the intensity, duration, and supportiveness of intervention; (b) the timing of intervention; (c) student-teacher ratio, requisite knowledge level of intervention teachers, and the content of intervention. According to Foorman et al. (2003) intervention in the primary years is most beneficial, "early intervention—in kindergarten and Grades 1 and 2—is more effective than later intervention because of the intensity and duration of treatment required if later intervention is to be effective and the difficulty of remediating fluency rates" (p. 625). Screening students provides the ability to catch students before they experience academic failure, and provide effective instruction and early intervention if necessary (Foorman et al., 2003).

Curriculum-Based Measurement

CBM has regularly been used as a means to collect student data related to reading, mathematical computation, and writing (Ardoin, Witt, Suldo & Connell, 2004; Christ, Silberglitt, Yeo & Cormier, 2010; Deno, Reschly, Lembke, Magnusson, Callender, Windram, & Stachel, 2009; Graney & Shinn, 2005; Grima-Farrell, 2014; Nese, Biancarosa, Anderson, Lai, Alonzo & Tindal, 2011; Wayman, Wallace, Wiley, Tichá & Espin, 2007). CBM uses the general education curriculum for development of probes that can be used by general or special education teachers to monitor student learning or effectiveness of interventions or core instruction (Ardoin et al., 2004; Hintze & Silberglitt, 2005; Jenkins & Terjeson, 2011; Nese et al., 2011). As noted by Hintze and Silberglitt (2005), "the focus of CBM is on broad long-term goal objectives, rather than

short-term objectives" (p. 372). With its origin in special education, after nearly 40 years of use, "CBM is often used as a primary data source to support problem solving and to evaluate response to intervention" (Christ & Silberglitt, 2007, p. 130).

The reading measure (R-CBM) has been utilized most frequently in the school setting and has been studied extensively by researchers (Christ et al., 2010; Graney & Shinn, 2005; Mercer & Keller-Margulis, 2015; Nese et al., 2011; Van Norman, Christ & Zopluoglu, 2013; Wayman et al., 2007). For nearly 40 years, use of the reading measure (R-CBM) has been the preferred procedure to monitor reading growth at the elementary level (Jenkins, Graff & Miglioretti, 2009; Wayman et al., 2007). Frequent measures used in CBM for reading include reading aloud, maze selection, and word identification (Wayman et al., 2007). According to Graney and Shinn (2005), "R-CBM requires that students read passages of connected, meaningful text aloud for 1 minute. The number of words read correctly is counted and used as the primary datum" (p. 184). As noted by Wayman et al. (2007), "Omissions, insertions, substitutions, hesitations, and mispronunciations are marked as errors" (p. 105). R-CBM has garnered considerable empirical support and has been a widely accepted measure of general reading achievement (Christ, White, Ardoin, & Eckert, 2013; Graney & Shinn, 2005; Greenwood, Tapia, Abbott & Walton, 2003; Jenkins et al., 2009; Nese et al., 2011).

Silberglitt and Hintze (2007) found significantly more growth in grades 2-3 compared to later grade levels such as 4-6. These results are consistent with developmental reading literature supporting the predictive value of curriculum-based measurement at the primary levels (Kim et al., 2010). CBM reading probes consistently relate to a variety of criterion measures across studies conducted over many years for

grades 2-5, regardless of participants, methods, and researchers (Wayman et al., 2007). Meanwhile, Christ et al. (2010) completed a study of R-CBM with a sample of 3,808 students in grades 2-6. A major finding from their study indicated that, "annual growth is greater among students in the general education population than for those in the special education population, especially in the fall season; and, second, more growth occurs in the early grades with less in the upper grades" (Christ et al., 2010, p. 456). This finding was replicated later in the study by Nese et al. (2012). Another significant finding from Christ et al. (2010) addressed the significance of seasonal effects with R-CBM, noting "that more growth occurs in the fall season than in the spring season for general education, but the magnitude of that effect declines with each progressive grade level" (p. 456). Regarding grade level and population effects, Christ et al. (2010) found "a steady decline for both general education and special education in weekly growth as grade level was increased" (p. 457).

There are multiple benefits to the use of CBM in an educational setting including efficient procedures, the relatively low cost, and reported validity (Graney & Shinn, 2005). Studies have suggested that CBM can be predictive of future success on high stakes state achievement tests (Hintze & Silberglitt, 2005; Patton, Reschly & Appleton, 2014; Wayman et al., 2007). CBM has been found to effectively predict performance on high-stakes tests and predict students who are likely to pass reading portions of such tests. This can be reliability measured as early as the first grade level (Hintze & Silberglitt, 2005). This finding was replicated in a study by Patton et al. (2014) who reported that "R-CBM scores can more accurately inform regarding which students are likely to pass the state test rather than which students are likely to fail" (p. 297). Another

study suggested that R-CBM may be a better predictor of reading achievement than some group-administered norm-referenced achievement tests (Ardoin et al., 2004).

Frequency of monitoring using curriculum-based measurement has been widely reviewed in literature. According to Nese et al. (2012), "Most CBM systems offer benchmark ORF measures that assess all students three times per year for universal screening; general education progress monitoring; and adequate yearly progress (AYP) accountability" (p. 888). Ardoin et al. (2004) conducted a study on a third grade sample and found that one R-CBM probe can effectively identify students who might require intervention. Other teachers have shared concern that frequency of R-CBM probes adds to an already heavy assessment burden. Jenkins et al. (2009) found that “teachers may be able to thin the monitoring schedule as long as they assess reading skill with multiple passages at baseline and other monitoring points” (p. 160). However, Jenkins et al. (2009) issued a caution against scaling back the monitoring schedule noting that infrequent monitoring may impede the ability to detect inadequate growth.

Mercer and Keller-Margulis (2015) shared a similar concern about infrequent monitoring recommending, “multiple probes will likely need to be administered per occasion to prevent inflation of growth estimates, and monitoring may need to occur more than once per month to improve decisions based on rate of improvement” (p. 324). Despite research expressing concern about infrequent progress monitoring (Mercer & Keller-Margulis, 2015; Jenkins et al., 2009) a recent study shared an alternative recommendation based on their findings. According to Van Norman et al. (2013), increasing the number of observations to establish baseline data may result in a poor return on time invested.

Beyond concerns over frequency, some researchers have expressed doubt over the adequacy of the reading-aloud measures and proficiency in reading comprehension (Wayman et al., 2007). Other researchers have examined whether the number of words read aloud might reflect processing speed (Wayman et al., 2007). Educators and researchers have also expressed concern that curriculum-based measurement is a measure of speed reading and not a measure of best reading (Christ et al., 2013). Another frequent concern about the use of curriculum-based measurement is the perceived existence of word callers, or students who can read fluently but do not understand (Wayman et al., 2007). Although concerns related to "word callers" may reflect teachers' judgements, Wayman et al. (2007) acknowledged "It is conceivable that a small group of students exists whose performance on the reading aloud measures is, relatively speaking, much higher than their performance on comprehension measures" (p. 110). Christ et al. (2013) examined concerns related to speed reading and word calling in a study of 239 students in 2-5 grades. Findings from their study suggested students are not engaged in speed reading or word calling during CBM-R administration. Their finding supports the claim of moderate to robust criterion-related validity (Christ et al., 2013). Overall, the synthesis of research literature by Wayman et al. (2007) found continued support for the use of the R-CBM procedure to monitor progress, "Reading aloud was found to be a better indicator of reading comprehension than were other "typical" comprehension measures, and results revealed that reading aloud was not just a speed-of-processing measure" (p. 109).

Goal Setting

Researchers have reported that goal setting has a direct positive impact on motivation, informs behavior, and leads to improved performance (Cabral-Márquez, 2015; Schunk, 1990). Goals bring focus to the individual and direct attention and efforts toward goal-relevant tasks and away from distractions (Cabral-Márquez, 2015). Goals impart energy to the individual and increase degrees of perseverance (Cabral-Márquez, 2015).

When goals are specific, individuals are far more likely to marshal the necessary interpersonal resources (i.e., self-regulation, self-reflection) to accomplish the task (Cabral-Márquez, 2015). Beyond clarity of the goal, time has consistently proven important in research on goal setting (Schunk, 1990). According to Cabral-Márquez (2015), goals need to be proximal in nature and should clearly identify the duration of time required for goal attainment. The level of difficulty plays an important role in whether a goal is viewed as worthy of pursuit by an individual. Motivation, self-efficacy, and effort are informed by the difficulty of the goal (Cabral-Márquez, 2015). Setting an appropriate goal requires a moderate approach, neither too easy nor too difficult (Jenkins & Terjeson, 2011; Schunk, 1990; Schunk, 2003).

Choice or autonomy has been demonstrated to support goal setting in the classroom. According to Cabral-Márquez (2015), when students have high degrees of autonomy over their independent reading, goal setting becomes more desirable. A study of 33 students in grades 4 and 5 examined the impact of learning goals on students reading comprehension (Schunk & Rice, 1989). One of the conditions in their study involved specific feedback and shared agreement on learning goals prior to completion of

a reading assessment. Results indicated that proving a specific learning goal during a conference established a condition of choice and enhanced self-efficacy for learning (Schunk & Rice, 1989).

Research has examined the impact of visual goals during the progress monitoring process. Mason, Rivera, Spencer, O'Keeffe, Petersen and Slocum (2016) conducted a study to measure the impact of including a visual goal marker to promote oral reading fluency. Their study included 107 students in grade 3 and found that students read much faster when a within-stimulus prompt was used compared to conditions without visual goal markers (Mason et al., 2016). While study results did not meet the expected rate of weekly growth, Mason et al. (2016) shared several benefits to the use of visual goal markers such as the ease of implementation for relatively large numbers of students.

Conferencing with students to promote reading achievement has been studied in research literature. One of the earliest studies was by John Gaa who examined the effects of individual goal setting conferences on achievement, attitudes, and behavior of 54 students in grades 1-2 (Gaa, 1973). Goal-setting conferences were found to be effective motivational techniques promoting educational outcomes (Gaa, 1973). Another finding from Gaa (1973) suggested that participation in goal setting conferences led to more realistic appraisals of ability and the necessary conditions to meet goals:

> An interesting finding, and one which is inconsistent on the surface, involved the expressed confidence of students in their ability to attain the goals they set. Students in the goal-setting group had lower confidence scores than did the non-goal-setting students. These ‘lower scores’ may, however, simply reflect a more realistic appraisal by students of their chances for success. An examination of

> responses in relation to questions on the scales indicated that a greater percentage of the goal-setting students realize that help might be required in learning and mastering the reading skills and that they might not be able to achieve all of the goals which they had set. In contrast to this, students without goal-setting practice tended to not only set more goals but were more likely to believe they would achieve virtually all the goals with no help. (p. 26)

Gaa (1973) found that goal setting conferences produced superior achievement on criterion-referenced tests. A similar study was conducted by Gaa in 1979 at the high school level. Gaa's results replicated the 1973 study and found "that goal-conference students took greater responsibility for their successes than children without goal setting" (Schunk, 1990, p. 80). More recently, Goettelman (2012) conducted a limited study to examine the impact of conferring on reading proficiency. According to Goettelman (2012), reading conferences may significantly impact students' reading and improve personal accountability for the use of reading improvement strategies. Several steps are suggested for an optimal goal setting conference to promote reading achievement. Serravallo (2014) recommended teachers model reflection and inquiry of their work. Appropriate modeling is thought to support accurate self-assessment of understanding and focus attention. The teacher's role in an effective goal setting conference is important, "Your skill in questioning is crucial because without leadership, students are likely to set goals that are superficial, obvious, or basic" (Sarravallo, 2014, p. 56). Goal setting conferences are recommended to last no longer than 5-10 minutes each time (Sarravallo, 2014). Overall, conferring with students has demonstrated great promise to

improve reading achievement. Through individual meetings with teachers, students can assess goal difficultly and demonstrate current levels of skill (Schunk, 1990).

Poverty and Literacy

Research has studied the predictive nature of elementary reading achievement for quite some time. Hernandez (2011) found that children from poverty are more likely to have low reading test scores and less likely to graduate from high school. A study was conducted by Hernandez (2011) examining how third grade reading skills and poverty influence high school graduation rates. Hernandez (2011) found that children reading below grade level in third grade and living in poverty were three times more likely to dropout or fail to graduate from high school than those who never lived in poverty. According to Hernandez (2011), "They also are more likely to live in neighborhoods with low-performing schools. Consequently, children in poor families tend to develop weaker academic skills and to achieve less academic success" (p. 7). Multiple risk factors quickly amplify challenges for students in most need of academic and social support. Hernandez (2011) found that students with multiple risk factors such as poverty and deficient reading skills increased the risk of dropping out from high school by 17%.

Table 5 presents the trend in fourth-grade NAEP average reading scores and gaps, by eligibility for the National School Lunch Program (NSLP). Data from the NAEP reports an increase of 8 scale score points on the fourth-grade assessment for students who were eligible for the NSLP from 2003 through the 2015 assessment. During this same period there was an increase of 8 scale score points for students who were not eligible for the NSLP. Despite improvement since 2003, the achievement gap between

students eligible for the NSLP and those who are ineligible has not closed (U.S. Department of Education, 2015).

Table 5

Trend in Fourth-Grade NAEP Reading Achievement by NSLP Eligibility

Year	Average Scale Score Eligible for NSLP	Average Scale Score Not Eligible for NSLP
2015	209	237
2013	207	236
2011	207	235
2009	206	232
2007	205	232
2005	203	230
2003	201	229

Source: Trend in fourth-grade NAEP reading average scores and score gaps, by eligibility for the National School Lunch Program (NSLP). Adapted from U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2015 Reading Assessments.

Table 6 presents the trend in eighth-grade NAEP reading average scores and score gaps, by eligibility for the National School Lunch Program (NSLP). Data from the NAEP reports an increase of six scale score points on the eighth -grade assessment for students who were eligible for the NSLP from 2003 through the 2015 assessment. During this same period there was an increase of 6 scale score points for students who were not eligible for the NSLP. Similar to the results from the fourth-grade trends in Table 7, the achievement gap between eighth-grade students eligible for the NSLP and those who are ineligible has not closed since 2003 (United States Department of Education, 2015).

Table 6

Trend in Eighth-Grade NAEP Reading Achievement by NSLP Eligibility

Year	Average Scale Score Eligible for NSLP	Average Scale Score Not Eligible for NSLP
2015	253	277
2013	254	278
2011	252	275
2009	249	273
2007	247	271
2005	247	270
2003	247	271

Source: Trend in eighth-grade NAEP reading average scores and score gaps, by eligibility for the National School Lunch Program (NSLP). Adapted from U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2015 Reading Assessments.

Guo, Sun, Breit-Smith, Morrison, and Connor (2015) completed a study of behavioral engagement and reading achievement at the elementary level. Specifically, Guo et al. (2015) explored whether behavior engagement and reading achievement differed between low-socioeconomic status (SES) and mid- or high-SES students. Guo et al. (2015) found that reading achievement was predictive of behavioral and learner engagement. Guo et al. (2015) concluded their study with the observation that "stronger cross-lagged relations from reading achievement to subsequent behavioral engagement were found for low-SES children" (p. 13). This is potentially problematic and suggests future academic disengagement for children if they leave preschool without proficient reading skills (Guo et al., 2015).

Silvernail, Sloan, Paul, Johnson, and Stump (2014) conducted a study examining the relationship between school poverty and student achievement in Maine. Researchers found that poverty levels have a residual impact on all students in the school setting, not merely students who are eligible for free and reduced lunch (Silvernail et al., 2014). This study was unique in the examination of how poverty impacts an entire learning community. Silvernail et al. (2014) concluded that "levels of school poverty and student achievement are related. The magnitude of the relationship varies, and other factors are related to poverty and achievement, but the single best predictor of performance is school poverty level" (p. 34).

The close of school for summer recess is often cited as a contributing cause of the achievement gap in the United States (Blazer, 2011). The majority of children who live in poverty lack access to enriching summer activities that can help maintain cognitive development and promote continuous learning (Blazer, 2011). Research points to summer skill regression as a direct cause of the achievement gap. Multiple researchers have concluded that differences in achievement between low-income students and advantaged peers are significantly impacted by summer learning loss (Blazer, 2011). Researchers found that the effect of summers without learning is cumulative and disproportionately impact students from low-income communities (Blazer, 2011). Several studies suggest that literacy can be promoted throughout the summer by providing books to low-income children, providing engaging summer reading programs, and having adults help students locate appropriate books (Blazer, 2011). Kim and White (2008) conducted a study of a voluntary summer reading intervention with teacher and parent scaffolding. Their study included over 400 minority students in grades 3-5 who

were eligible for free and reduced priced lunch. Study conditions consisted of a control, books only, books with oral reading scaffolding, and books with oral reading comprehension scaffolding (Kim & White, 2008). Results indicated that children who received the scaffolding interventions (condition 3 and 4) scored significantly higher on the Iowa Test of Basic Skills (ITBS) posttest (Kim & White, 2008).

Gender and Literacy

Researchers have consistently identified an effect of gender on attitudes toward reading and reading achievement in general (Loveless, 2015). Gender differences related to reading have been identified as early on as preschool. A qualitative study of preschool caregiver perceptions of the effect of gender on literacy skills replicated prior research on language development and gender. Moore, Yin, Weaver, Lydell and Logan (2007) reported that female students appeared to surpass male students in language development, word recognition, and reading abilities.

Schwabe, McElvany and Trendtel (2015) found that achievement studies consistently showed higher levels of reading achievement and motivation in female students versus males. Martinez, Aricak, and Jewell (2008) studied the influence of reading attitude on reading achievement with a sample population of 76 students in grade 4. Results from their study replicated previous findings that girls reported more positive attitudes about reading than boys (Martinez et al., 2008). Worrell, Roth and Gabelko (2006) examined the impact of gender on reading attitudes or preferences within a sample of gifted students. Worrell et al. (2006) reported significant gender differences in girls' attitudes towards reading, but failed to determine any specific reason why.

Research has indicated that the gender gap related to reading is not a uniquely American phenomenon (Loveless, 2015). A Malaysian study of 2,666 elementary students examined elementary students' attitudes toward reading and specifically focused on the feelings of boys relative to girls. Mohd-Asraf & Abdullah (2016) found that reading attitudes of girls were more positive than boys. Their study also found variations in attitudes between genders in the early primary years (Mohd-Asraf & Abdullah, 2016). The Brown Center Report on American Education (Loveless, 2015) discussed the global nature of the gender gap noting that it exists around the world regardless of educational systems, cultures, parenting behaviors, or notions of gender roles. The Program for International Student Assessment (PISA) has long served as an international benchmark for educational progress. On the 2012 PISA, the United States reported a 31 point gender gap favoring female students, while Finland led the world with a 62 point gender gap (Loveless, 2015).

A large study of 10 and 15 year old readers in Germany conducted by Schwabe et al. (2015) reported an advantage for girls on CR reading items across all ages. Schwabe et al. (2015) expressed concern that boys are not fully demonstrating reading competence in respect to CR items. Schwabe et al. (2015) hypothesized that boys are disadvantaged due to language processing and that disadvantages may be cumulative. Researchers offered the following reasons for the apparent advantage of girls on constructed response (CR) items including: girls' dominance in verbal domains, girls hold an advantage in language production, and test-taking behavior differs between boys and girls (Schwabe et al., 2015).

Researchers have found that gender can be predictive of oral reading proficiency. Wang et al. (2011) reported that students' gender and special education status can be reliable predictors of oral reading rates. While gender can be predictive of reading achievement, fluency or a student's attitude toward reading, when combined with other factors such as eligibility for free or reduced lunch or an English language learner status the results can prove challenging (Nese et al., 2012).

Feedback

The process of delivering effective feedback begins with the teacher holding a clear understanding of the learning target and should be delivered in a student-friendly manner (Brookhart, 2012). Meaningful feedback is connected to a "performance of understanding—something the student actually does to pursue the target—as well as to accompanying criteria for good work that students use to gauge their progress toward the goal" (Brookhart, 2012, p. 26). Feedback is only effective if students are working toward a learning target. If students are unclear on the target or lack concern then feedback loses importance (Brookhart, 2012). One caution that Brookhart (2012) offered about feedback was a mismatch between the learning target and delivering a clear criteria for performance of understanding. If that happens students may perceive feedback as evaluative rather than informational and improvement oriented (Brookhart, 2012). According to Brookhart (2012), effective feedback is timely, descriptive of the work, positive, clear and specific, and differentiated for each student.

In 1999, John Hattie recommended giving students "dollops of feedback" during an address at the University of Auckland in New Zealand (Hattie, 2012). He later came to regret that phrase given the broad interpretation and inconsistent application within the

educational profession. According to Hattie (2012), feedback is variable in impact and regardless of frequency, may be ineffective or effective. Hattie recommended a series of questions for teachers to consider when preparing to deliver feedback: Where is the student going? How is the student going? and Where to next? (Hattie, 2012; Hattie, Fisher & Frey, 2016). Goal clarity is critically important when providing feedback. The ultimate aim of feedback is to narrow gaps between current understanding or skill and the desired goal (Hattie, 2012). According to Hattie (2012), there are three levels of feedback that teachers must understand: task feedback, process feedback, and self-regulation feedback. Task feedback "describes how well the student performs a given task—such as distinguishing correct from incorrect answers, acquiring specific information, or building surface knowledge" (p. 21). Process feedback "describes the processes underlying or related to tasks, such as strategies students might use to detect or learn from errors, cues for seeking information, or ways to establish relationships among ideas" (p. 21). Self-regulation feedback "describes how learners can monitor, direct, and regulate their own actions as they work toward the learning goal" (p. 21).

Hattie (2012) recommended educators be sensitive to student skill level or readiness for the academic task, "The power of feedback involves invoking the right level of feedback relative to whether the learner is a novice, somewhat proficient, or competent" (p. 21). According to Hattie (2012), "Gathering and assessing feedback are really the only ways teachers can know the impact of their teaching" (p. 23). There are several preconditions to effective feedback in the classroom. Hattie (2012) cautioned teachers that "feedback thrives in conditions of error or not knowing—not in environments where we already know and understand" (p. 23). Feedback alone is not

likely to improve student learning. According to Hattie (2012), "When teachers listen to their students' learning, they know what worked, what didn't, and what they need to change to foster student growth" (p. 23). According to Hattie, Fisher and Frey (2016), teachers should be intentional about promoting students listening skills.

According to Eckert, Dunn, and Ardoin (2006), performance feedback can be delivered verbally, through public posting, self-scoring, or by response card. Research supports the practice of providing performance feedback to students and has demonstrated the ability to improve academic performance in written language, handwriting, spelling, and mathematics (Eckert et al., 2006). Additionally, performance feedback has been found to improve measures of literacy including decoding, word meaning, and reading comprehension (Eckert et al., 2006).

Eckert at al. (2006) conducted a study to examine the effects of performance feedback on elementary-aged students' oral reading fluency. Their study included six second grade students (four males, two females) at an elementary school with an 86% free and reduced lunch rate. R-CBM probes were used in the study by Eckert et al. (2006) over a 10 week period. During the study performance feedback was delivered to students in the following conditions: (a) Performance feedback on words read correctly and (b) Performance feedback on words read incorrectly (Eckert et al., 2006). Results from the study yielded surprising results suggesting that performance feedback about errors produced the greatest gains in oral reading fluency (Eckert et al., 2006). One explanation offered by Eckert et al. (2006) was that students were able to estimate their oral reading fluency more accurately by the number of lines read. According to Eckert et

al. (2006), providing students with feedback about errors or fluency rate can effectively increase rates of oral reading fluency.

Motivation

Given the widespread interest in improving reading achievement, researchers have extensively studied factors that contribute to motivation for reading. Feelings of competence or beliefs of efficacy are tied to a self-assessment of a students' "ability to accomplish a task or activity, such as reading a book or a passage in a book" (Wigfield, Guthrie, Tonks & Perencevich, 2004, p. 301). Researchers have found that prior successful performance is the factor with the greatest impact on self-efficacy for reading (Wigfield et al., 2004). As reported by Wigfield et al. (2004), intrinsic motivation for reading has been demonstrated to positively impact cognitive function and motivation. There is a concern among researchers that extrinsic motivators may interfere with intrinsic drivers of motivation (Pink, 2009; Wigfield et al., 2004). In the context of reading instruction this may run counter to the goal of fostering long-term engagement in reading (Wigfield et al., 2004). Researchers have examined declining motivation for academic work for a while, seeking to better understand the underlying causes of diminished intrinsic motivation as students' progress through their school years. According to Wigfield et al. (2004), the desire for competence is likely responsible for declines, "As children receive more feedback and compare their performance to that of others, their sense of competence may decline" (p. 302).

Wigfield et al. (2004) examined the impact of two instructional reading programs at the third grade level and their influence on intrinsic motivation to read and reading self-efficacy. Specifically they examined Concept-Oriented Reading Instruction (CORI)

and Strategy Instruction (SI). The CORI instructional approach links reading and a content together such as social studies or science in a more hands-on and authentic way (Wigfield et al., 2004; Wigfield, Muenks, & Rosenzweig, 2015). The SI instructional approach consisted of teaching multiple reading strategies while drawing upon six core teaching skills: (a) activating background knowledge, (b) student questioning, (c) searching for information, (d) summarizing, (e) organizing graphically, and (f) learning story structure for literary materials (Wigfield et al., 2004). The same reading strategies were taught with both the CORI and SI approaches, but the SI approach covered one strategy in each week for six weeks in isolation and then taught them together for another six week period. Wigfield et al. (2004) found that "that in CORI classrooms, children's intrinsic motivation to read (defined as reading curiosity and preference for challenge) increased during the course of the program, as did their self-efficacy for reading" (p. 306). In classrooms using the SI approach, intrinsic motivation and self-efficacy did not increase (Wigfield et al., 2004).

The perception of control has been studied frequently by researchers in the field. Much has been theorized about the role of autonomy or perceived control (Guthrie et al., 2007; Pink, 2009). As students progress through the elementary years, motivational drivers change. According to Schwabe et al. (2015), "intrinsic reading motivation depends less on proficiency in elementary compared with secondary school students" (p. 228). Guthrie et al. (2007) reported that "perceived control and choice in the later elementary grades are associated with academic achievement in reading" (p. 284). Researchers often cite the following internal motivational factors related to reading: interest, perceived control, collaboration, involvement, and efficacy (Edmunds &

Bauserman, 2006; Guthrie et al., 2007). Guthrie et al. (2007) found that "interest and positive affect for reading invariably were associated with high cognitive recall and comprehension of text" (p. 305). Regarding perceived control, Guthrie et al. (2007) found that many students valued the option to select their own books while others placed their trust in parents or teachers to select appropriate book choices.

Summary

The review of literature examined the historical perspective of reading achievement in the United States and the importance of monitoring oral reading fluency during the primary and elementary school years. This chapter examined the promise of reading interventions and best practices for implementation. An overview of curriculum-based measurement was included in this chapter along with a review of the impact of gender and poverty on literacy. This chapter concluded with an examination of research on goal setting, feedback, and motivation. Chapter three presents this study's research design, selection of participants, measurement, data collection procedures, data analysis, hypothesis testing, and limitations.

Chapter Three

Methods

This study examined the difference in oral reading fluency growth between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year. To examine the difference, progress was analyzed on curriculum-based measurement probes administered three times annually over a two year period in four first and second grade classrooms. This chapter provides a detailed review of the following study components: description of the research design, description of the population and sampling procedures, instrumentation used for analysis, data collection procedures, data analysis and limitations.

Research Design

A quantitative research design was selected to determine the impact of participating in student goal setting conferences on oral reading fluency of first and second grade students. Archival data from 2013-2014 and 2014-2015 R-CBM results provided objective, numerical measures. The independent variables were participation in student goal setting conferences, student gender, and student eligibility status for free or reduced priced lunch. The dependent variables were the oral reading fluency growth on AIMSweb, calculated three times each year following the administration of a curriculum-based measurement probe for reading.

Selection of Participants

First and second grade students at the Title I elementary school during the 2013-2014 and 2014-2015 academic years were the sample for this study. Data were included

from every first and second grade classroom. During the 2013-2014 and 2014-2015 academic years, 148 students were screened for oral reading fluency with three reading curriculum-based measurement probes. Table 7 illustrates the first grade enrollment size and demographics of the student sample during the study. The two first grade classes consisted of 82 students. Of these students, 50 were not eligible for free or reduced priced lunch while 32 were eligible. Cohort size was 46 students for the 2013-2014 academic year and 44 students for the 2014-2015 academic year. There were 20 girls enrolled in 2013-2014 and 25 girls enrolled in 2014-2015. There were 18 boys enrolled in 2013-2014 and 19 boys enrolled in 2014-2015.

Table 7

First Grade Student Sample

Enrollment	2013-2014	2014-2015
Student Count	38	44
Female Students	20	25
Male Students	18	19
Eligible for FRPL	12	20
Not Eligible for FRPL	26	24

Source: Retrieved from "Progress Monitor Status Report" AIMSweb, 2016.
Note: FRLP = Free or reduced lunch price.

Table 8 illustrates the second grade student sample during the study. The two second grade classes consisted of 66 students. Of these students, 41 were not eligible for free or reduced priced lunch while 25 were eligible. Cohort size was 30 students for the 2013-2014 academic year and 36 students for the 2014-2015 academic year. There were

14 girls enrolled in 2013-2014 and 20 girls enrolled in 2014-2015. There were 16 boys enrolled in 2013-2014 and 16 boys enrolled in 2014-2015.

Table 8

Second Grade Student Sample

Enrollment	2013-2014	2014-2015
Student Count	30	36
Female Students	14	20
Male Students	16	16
Eligible for FRPL	12	13
Not Eligible for FRPL	18	23

Source: Retrieved from "Progress Monitor Status Report" AIMSweb, 2016.
Note: FRLP = Free or reduced lunch price.

Measurement

The research instrument selected to collect oral reading fluency data was the R-CBM, or reading curriculum-based measurement probe. According to the National Center on Progress Monitoring (2006), AIMSweb R-CBM meets the basic foundational psychometric standards of reliability and validity. The AIMSweb R-CBM has demonstrated sensitivity to student improvement and rates of improvement are specified (National Center on Progress Monitoring, 2006). According to Daniel (2010), multiple studies have demonstrated the reliability of AIMSweb R-CBM benchmark scores. An estimated level in the low .90s was identified "for the mean score on three probes administered at the same time, and the median is similar to the mean in representing the central tendency of the three values" (Daniel, 2010, p. 3). Additional studies have replicated earlier research finding "single-probe alternate-form reliabilities consistent across grade levels with an average value of .94 at each period" (NCS Pearson, 2012b, p.

8). Each CBM probe tracks student progress toward long-term reading goals and includes frequent progress monitoring (Stecker, Fuchs & Fuchs, 2005). Student progress on R-CBM probes was measured three times annually at the Title I elementary school and data were used for instructional purposes by the classroom teacher. CBM is used district-wide where the study was conducted to screen students for reading intervention (Lacy, Arnold, Wood, Rice & Hubbuch, 2012).

Administration of the curriculum-based measurement probe was individualized for each student in the sample. The teacher met privately with each student as CBM probes were completed (Travis, personal conversation, May 10, 2016). A teacher and student were each provided the same passage written at the first or second grade reading level. Students were provided one minute to read as much of the passage as possible. Any errors (words read incorrectly, skipped, or out of order) were noted on the teacher's copy of the passage as the students read their passage (Travis, personal conversation, May 10, 2016). Teachers were trained to complete the following tasks while students read: (a) draw a slash through the incorrect word, (b) record any insertions by writing them above the line of text where the insertion was made, and (c) if the student self-corrects within 3 seconds, mark the self-correction with the notation of "SC" (NCS Pearson, 2012b).

Data Collection Procedures

A proposal for research was submitted to the Baker University Institutional Review Board in August 2016 (see Appendix A). Approval was granted from the Baker University Institutional Review Board on August 16, 2016 under exempt status review (see Appendix A). Permission to use archived data from AIMSweb in this study was

granted from the Superintendent of Schools where the study was conducted (see Appendix B). The archived curriculum-based measurement reading data was obtained by the researcher from AIMSweb. The following data were retrieved from AIMSweb for inclusion in this study:

1. Words read correctly from the fall, winter, and spring R-CBM screening.
2. Gender status from each student.
3. Free or reduced lunch price status.

Data was collected and organized on an Excel spreadsheet by academic year and entered into IBM SPSS Statistics Faculty Pack 24 for Windows for analysis.

Data Analysis and Hypothesis Testing

This section outlines the steps taken by the researcher to analyze data and test hypotheses. Background data about student achievement and demographic factors at the Title I elementary school were provided in chapter one to provide context for the first and second grade oral fluency rate data. Nine research questions provided a framework to guide this study and explore the impact of involving students in goal setting conferences on oral reading fluency.

RQ1. To what extent is there a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

H1. There is a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting

conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year.

A two-factor analysis of variance (ANOVA) was conducted to test H1 and H2. The two categorical variables used to group the dependent variable, oral reading fluency from fall to winter growth, were participation in goal-setting conferences status and free or reduced lunch eligibility status. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for free and reduced lunch eligibility status, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status). The main effect for participation in goal-setting conferences status was used to test H1. The level of significance was set at .05.

RQ2. To what extent is the difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

H2. The difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by free and reduced lunch eligibility status.

The two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status) from the first ANOVA was used to test H2. The level of significance was set at .05.

RQ3. To what extent is the difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

H3. There difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by gender.

A second two-factor analysis of variance (ANOVA) was conducted to test H3. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and gender. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for gender, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Gender). The two-way interaction effect (Participation in Goal-setting Conferences Status x Gender) was used to test H3. The level of significance was set at .05.

RQ4. To what extent is there a difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

H4. There is a difference in the oral reading fluency as measured by curriculum-based measurement reading probes, between students who did not participate in student

goal setting conferences during the 2013-2014 academic year and who participated in goal setting conferences during the 2014-2015 academic year.

A third two-factor analysis of variance (ANOVA) was conducted to test H4 and H5. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and free or reduced lunch eligibility status. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for free or reduced lunch eligibility status, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status). The main effect for participation in goal-setting conferences status was used to test H4. The level of significance was set at .05.

RQ5. To what extent is the difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

H5. The difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by free and reduced lunch eligibility status.

The two-way interaction effect (Participation in Goal-setting Conferences Status x Free and Reduced Lunch Eligibility Status) from the third ANOVA was used to test H5. The level of significance was set at .05.

RQ6. To what extent is the difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

H6. The difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by gender.

A fourth two-factor analysis of variance (ANOVA) was conducted to test H6. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and gender. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for gender, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Gender). The two-way interaction effect (Participation in Goal-setting Conferences Status x Gender) was used to test H6. The level of significance was set at .05.

RQ7. To what extent is there a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

H7. There is a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting

conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year.

A fifth two-factor analysis of variance (ANOVA) was conducted to test H7 and H8. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and free and reduced lunch eligibility status. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for free and reduced lunch eligibility status, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Free and Reduced Lunch Eligibility Status). The main effect for participation in goal-setting conferences status was used to test H7. The level of significance was set at .05.

RQ8. To what extent is the difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

H8. The difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by free and reduced lunch eligibility status.

The two-way interaction effect (Participation in Goal-setting Conferences Status x Free and Reduced Lunch Eligibility Status) from the fifth ANOVA was used to test H8. The level of significance was set at .05.

RQ9. To what extent is the difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

H9. The difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by gender.

A sixth two-factor analysis of variance (ANOVA) was conducted to test H9. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and gender. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for gender, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Gender). The two-way interaction effect (Participation in Goal-setting Conferences Status x Gender) was used to test H9. The level of significance was set at .05.

Limitations

Two limitations should be noted as they may impact the findings from this study. While the study examined the impact of goal setting conferences on oral reading fluency growth, it is possible that learning needs and the differences between student grade level cohorts from each year may have also impacted the findings of the study and confounded the results of the statistical analysis. Should the student population from the 2014-2015 academic year have had greater need for academic support, findings from the study

would be affected. Second, external influences on students' performance on the curriculum-based measurement reading probes may have had some degree of impact on the findings. Setting events that occur before school (at home or on the bus), or during the school day may have impacted the motivation or accuracy of the findings.

Summary

This chapter included a discussion of the methodology and design for this study. A quantitative, non-experimental research design was selected to examine the impact of student goal setting conferences on oral reading fluency. The study sample was four classrooms in first and second grade at the Title I elementary school. Data were collected and analyzed from AIMSweb from three curriculum-based measurement probes. This study examined the overall academic impact of goal setting conferences for students and analyzed specific performance for students eligible for free and reduced priced lunch and by their gender status. Chapter four focuses on the results of the hypothesis testing.

Chapter Four

Results

This study examined the impact of student goal setting conferences on the oral fluency rates of first and second grade students. This chapter reports statistical analysis from this research study and examines results as they relate to the research questions. This chapter includes an analysis of descriptive statistics and results from hypothesis testing.

Descriptive Statistics

First and second grade students at the Title I elementary school served as the sample for this study. There were 148 students included in the study sample over two academic years (see Table 9).

Table 9

Academic Year Frequencies

Year	Frequency	Percent	Cumulative Percentage
2013-2014	68	45.9	45.9
2014-2015	80	54.0	100.0
Total	148	100.0	

Approximately 55.4% of the students in the study were in the first grade (see Table 10).

Table 10

Grade Level Frequencies

Grade Level	Frequency	Percent	Cumulative Percentage
1	82	55.4	55.4
2	66	44.6	100.0
Total	148	100.0	

79 female students and 69 male students were included in the study (see Table 11).

Table 11

Gender Status Frequencies

Gender	Frequency	Percent	Cumulative Percentage
Female	79	53.3	53.3
Male	69	46.7	100.0
Total	148	100.0	

Approximately 38.5% of students were eligible for free or reduced priced lunch (see Table 12).

Table 12

Free or Reduced Priced Lunch Eligibility Status Frequencies

FRLP Eligible	Frequency	Percent	Cumulative Percentage
No	91	61.5	61.5
Yes	57	38.5	100.0
Total	148	100.0	

Note: FRLP = Free or reduced lunch price.

The R-CBM process monitored the number of words read correctly by first and second grade students at the Title I elementary school. See Table 13 for the mean words read correctly from first grade students, first grade students eligible for free or reduced price lunch, first grade students not eligible for free or reduced price lunch, first grade female students, and first grade male students. As reflected on Table 13, there was noticeable improvement at the first grade level with the implementation of goal setting conferences. The rate of improvement and the total number of words read correctly appeared to be higher during the 2014-2015 academic year.

Table 13

Average Words Read Correctly by First Grade Sample

	2013-2014			2014-2015		
	Fall	Winter	Spring	Fall	Winter	Spring
Total First Grade Sample	21.03	48.49	68.79	24.20	48.07	76.56
Eligible for FRLP	15.64	43.09	60.27	20.90	43.19	70.05
Not Eligible for FRLP	23.67	50.78	71.07	28.09	56.17	85.43
Female	28.25	56.10	74.85	30.68	59.16	88.12
Male	13.66	40.16	60.27	16.56	36.17	62.17

Note: FRLP = Free or reduced lunch price.

See Table 14 for the mean words read correctly from second grade students, second grade students eligible for free or reduced price lunch, second grade students not eligible for free or reduced price lunch, second grade female students, and second grade male students. Despite lower overall performance during the 2014-2015 academic year, students demonstrated greater growth following the implementation of goal setting conferences. This may reflect a stronger cohort during the 2013-2014 academic year.

Table 14

Average Words Read Correctly by Second Grade Sample

	2013-2014			2014-2015		
	Fall	Winter	Spring	Fall	Winter	Spring
Total First Grade Sample	67.47	87.18	104.55	58.14	82.53	100.42
Eligible for FRLP	60.50	85.17	103.75	55.62	78.77	96.15
Not Eligible for FRLP	72.11	94.78	113.89	59.57	84.65	102.83
Female	70.43	92.07	109.00	62.40	85.65	103.70
Male	64.88	89.94	110.56	52.81	78.63	96.31

Note: FRLP = Free or reduced lunch price.

Hypothesis Testing

The following section provides the results of the hypothesis testing.

RQ1. To what extent is there a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

H1. There is a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year.

A two-factor analysis of variance (ANOVA) was conducted to test H1 and H2. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and free or reduced lunch eligibility status. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for free and reduced lunch eligibility status, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status). The main effect for participation in goal-setting conferences status was used to test H1. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between the two means, $F = .359$, $df = 1, 147$, $p = .550$. See Table 15 for the means and standard deviations for this analysis. The mean oral reading fluency fall to winter growth ($M = 25.62$) for students who did not participate in student goal

setting conferences was not different from the mean oral reading fluency fall to winter growth (M = 24.65) for students who participated in student goal setting conferences. No post hoc was warranted.

Table 15

Descriptive Statistics for the Results of the Test for H1

Goal Setting	*M*	*SD*	*N*
Did not Participate	25.62	14.68	69
Participated	24.65	12.66	82

RQ2. To what extent is the difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

H2. The difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by free and reduced lunch eligibility status.

The two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status) from the first ANOVA was used to test H2. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between at least two of the means, F = 1.314, df = 1, 147, p = .254. See Table 16 for the means and standard deviations for this analysis. The mean oral reading fluency fall to winter growth for students eligible for free or reduced lunch (M = 26.17) or students not eligible for free or reduced lunch (M =

25.33) who did not participate in student goal setting conferences was not different from the mean oral reading fluency fall to winter growth for students eligible for free or reduced lunch (M = 22.17) or students not eligible for free or reduced lunch (M = 26.59) who participated in student goal setting conferences. No post hoc was warranted.

Table 16

Descriptive Statistics for the Results of the Test for H2

Goal Setting	F&RL Status	*M*	*SD*	*N*
Did not Participate	Not Eligible	25.33	16.51	45
	Eligible	26.17	10.74	24
Participated	Not Eligible	26.59	11.64	46
	Eligible	22.17	13.61	36

Note: FRPL = Free or reduced lunch price.

RQ3. To what extent is the difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

H3. There is a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by gender.

A second two-factor analysis of variance (ANOVA) was conducted to test H3. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and gender. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in

goal-setting conferences status, a main effect for gender, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Gender). The two-way interaction effect (Participation in Goal-setting Conferences Status x Gender) was used to test H3. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between at least two of the means, $F = .699$, $df = 1, 147$, $p = .404$. See Table 17 for the means and standard deviations for this analysis. The mean oral reading fluency fall to winter growth for female students ($M = 25.43$) or male students ($M = 25.82$) who did not participate in student goal setting conferences was not different from the mean oral reading fluency fall to winter growth for female students ($M = 26.16$) or male students ($M = 22.81$) who participated in student goal setting conferences. No post hoc was warranted.

Table 17

Descriptive Statistics for the Results of the Test for H3

Goal Setting	Gender Status	*M*	*SD*	*N*
Did not Participate	Female	25.43	14.72	35
	Male	25.82	14.87	34
Participated	Female	26.16	12.65	45
	Male	22.81	12.60	37

RQ4. To what extent is there a difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

H4. There is a difference in the oral reading fluency growth from winter to spring as measured by curriculum-based measurement reading probes, between students who

did not participate in student goal setting conferences during the 2013-2014 academic year and who participated in goal setting conferences during the 2014-2015 academic year.

A third two-factor analysis of variance (ANOVA) was conducted to test H4 and H5. The two categorical variables used to group the dependent variable, oral reading fluency growth from winter to spring, were participation in goal-setting conferences status and free or reduced lunch eligibility status. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for free or reduced lunch eligibility status, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status). The main effect for participation in goal-setting conferences status was used to test H4. The level of significance was set at .05. The results of the analysis indicated the difference was statistically significant between the two of the means, F = 4.421, df = 1, 154, p = .037. See Table 18 for the means and standard deviations for this analysis. The mean oral reading fluency winter to spring growth (M = 19.19) for students who did not participate in student goal setting conferences was lower than the mean oral reading fluency winter to spring growth (M = 23.40) for students who participated in student goal setting conferences.

Table 18

Descriptive Statistics for the Results of the Test for H4

Goal Setting	*M*	*SD*	*N*
Did not Participate	19.19	13.22	75
Participated	23.40	13.66	83

RQ5. To what extent is the difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

H5. The difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by free and reduced lunch eligibility status.

The two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status) from the third ANOVA was used to test H5. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between at least two of the means, $F = .259$, $df = 1, 154$, $p = .612$. See Table 19 for the means and standard deviations for this analysis. The mean oral reading fluency winter to spring growth for students eligible for free or reduced lunch ($M = 16.92$) or students not eligible for free or reduced lunch ($M = 20.32$) who did not participate in student goal setting conferences was not different from the mean oral reading fluency winter to spring growth for students eligible for free or reduced lunch ($M = 22.74$) or students not eligible for free or reduced lunch ($M = 23.74$) who participated in student goal setting conferences. No post hoc was warranted.

Table 19

Descriptive Statistics for the Results of the Test for H5

Goal Setting	FRPL Status	*M*	*SD*	*N*
Did not Participate	Not Eligible	20.32	14.17	50
	Eligible	16.92	10.98	25
Participated	Not Eligible	23.88	14.89	48
	Eligible	22.74	11.94	35

Note: FRPL = Free or reduced lunch price.

RQ6. To what extent is the difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

H6. The difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by gender.

A fourth two-factor analysis of variance (ANOVA) was conducted to test H6. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and gender. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for gender, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Gender). The two-way interaction effect (Participation in Goal-setting Conferences Status x Gender) was used to test H6. The level of significance was set at .05. The results of the analysis indicated the

difference was not statistically significant between at least two of the means, $F = .749$, $df = 1, 154$, $p = .388$. See Table 20 for the means and standard deviations for this analysis. The mean oral reading fluency winter to spring growth for students female students ($M = 18.13$) or male students ($M = 20.27$) who did not participate in student goal setting conferences was not different from the mean oral reading fluency winter to spring growth for female ($M = 24.11$) or male students ($M = 22.51$) who participated in student goal setting conferences. No post hoc was warranted.

Table 20

Descriptive Statistics for the Results of the Test for H6

Goal Setting	Gender Status	*M*	*SD*	*N*
Did not Participate	Female	18.13	12.42	38
	Male	20.27	14.07	37
Participated	Female	24.11	13.62	46
	Male	22.51	13.84	37

RQ7. To what extent is there a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year?

H7. There is a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year.

A fifth two-factor analysis of variance (ANOVA) was conducted to test H7. The two categorical variables used to group the dependent variable, oral reading fluency

growth, were participation in goal-setting conferences status and free or reduced lunch eligibility status. The two-factor ANOVA can be used to test three hypotheses including a main effect for participation in goal-setting conferences status, a main effect for free and reduced lunch eligibility status, and a two-way interaction effect (Participation in Goal-setting Conferences Status x Free or Reduced Lunch Eligibility Status). The main effect for participation in goal-setting conferences status was used to test H7. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between the two means, $F = 1.198$, $df = 1, 144$, $p = .276$. See Table 21 for the means and standard deviations for this analysis. The mean oral reading fluency fall to spring growth ($M = 44.74$) for students who did not participate in student goal setting conferences was not different from the mean oral reading fluency fall to spring growth ($M = 48.41$) for students who participated in student goal setting conferences. No post hoc was warranted.

Table 21

Descriptive Statistics for the Results of the Test for H7

Goal Setting	*M*	*SD*	*N*
Did not Participate	44.74	19.11	68
Participated	48.41	18.70	80

RQ8. To what extent is the difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status?

H8. The difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by free and reduced lunch eligibility status.

The two-way interaction effect (Participation in Goal-setting Conferences Status x Free and Reduced Lunch Eligibility Status) from the fifth ANOVA was used to test H8. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between at least two of the means, $F = .246$, $df = 1, 144$, $p = .621$. See Table 22 for the means and standard deviations for this analysis. The mean oral reading fluency fall to spring growth for students eligible for free or reduced lunch ($M = 43.91$) or students not eligible for free or reduced lunch ($M = 45.16$) who did not participate in student goal setting conferences was not different from the mean oral reading fluency fall to spring growth for students eligible for free or reduced lunch ($M = 45.85$) or students not eligible for free or reduced lunch ($M = 50.30$) who participated in student goal setting conferences. No post hoc was warranted.

Table 22

Descriptive Statistics for the Results of the Test for H8

Goal Setting	FRLP Status	*M*	*SD*	*N*
Did not Participate	Not Eligible	45.16	21.35	45
	Eligible	43.91	14.14	23
Participated	Not Eligible	50.30	19.35	46
	Eligible	45.85	17.73	34

Note: FRLP = free and reduced priced lunch

RQ9. To what extent is the difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender?

H9. The difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year is affected by gender.

A sixth two-factor analysis of variance (ANOVA) was conducted to test H9. The two categorical variables used to group the dependent variable, oral reading fluency growth, were participation in goal-setting conferences status and gender. The level of significance was set at .05. The results of the analysis indicated the difference was not statistically significant between at least two of the means, $F = 1.291$, $df = 1, 144$, $p = .258$. See Table 23 for the means and standard deviations for this analysis. The mean oral reading fluency fall to spring growth for female students ($M = 43.29$) or male students ($M = 46.18$) who did not participate in student goal setting conferences was not different from the mean oral reading fluency fall to spring growth for female students ($M = 50.27$) or male students ($M = 46.03$) who participated in student goal setting conferences. No post hoc was warranted.

Table 23

Descriptive Statistics for the Results of the Test for H9

Goal Setting	Gender Status	*M*	*SD*	*N*
Did not Participate	Female	43.29	20.56	34
	Male	46.18	17.75	34
Participated	Female	50.27	18.57	45
	Male	46.03	18.85	35

Summary

This chapter presented the findings from this study about the impact of student goal setting conferences on oral reading fluency. Descriptive statistics and hypothesis testing were reported for the guiding research questions. Two years of R-CBM data was analyzed through this study to explore the potential impact of student conferences. Chapter five will provide a summary of the study and present major findings. Recommendations, implications for action, and suggestions for future research are provided in the final chapter.

Chapter Five

Interpretation and Recommendations

This chapter contains a summary of the study including an overview of the problem, the purpose statement and research questions, a review of the methodology, and the major findings of this research. Findings related to the review of literature are also discussed in this chapter. Chapter five concludes with the implications for action, the recommendations for future research and concluding remarks.

Study Summary

This section includes an overview of the problem concerning student goal setting conferences and the increase of oral reading fluency at the first and second grade level. The purpose statement, research questions, methodology, and major findings of the study are also included. This section concludes with the major findings from the study.

Overview of the problem. Despite ever changing reforms, students are not acquiring reading proficiency at adequate levels with the current pedagogical approach. While pressures from state and federal authorities maintain a focus on literacy development, there is an underlying moral purpose informing instructional practice. As noted by Rasinski (2004), reading fluency is an important issue for students beyond the elementary years well into high school. Significant achievement gaps were reported on the 2015 NAEP report between the general student population and students most at-risk for academic failure. Interventions such as RTI or CBM have great potential to support student learning (Allington, 2009; Stecker et al., 2005).

Purpose statement and research questions. The purpose of this study was to investigate the effects of student goal setting conferences on oral reading fluency growth

at the Title I elementary school. Student goal setting conferences were established school-wide at the Title I elementary school during the 2014-2015 academic year. Data for this study was obtained from four classrooms in first and second grade over the course of two academic years from 2013-2014 through 2014-2015. This study sought to examine the overall impact of student goal setting conferences on oral fluency rates while considering the impact of gender and eligibility for free or reduced priced lunch.

Nine research questions guided the review of the literature and addressed the problem statement. The first three questions focused on oral reading fluency growth from fall to winter. The first question examined whether there was a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year. The second question examined whether there was a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status. The third question examined whether there was a difference in oral reading fluency growth from fall to winter, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender.

The next three questions focused on oral reading fluency growth from winter to spring. The fourth question examined whether there was a difference in oral reading

fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year. The fifth question examined whether there was a difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status. The sixth question examined whether there was a difference in oral reading fluency growth from winter to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender.

The final three questions focused on oral reading fluency growth from fall to spring. The seventh question examined whether there was a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in student goal setting conferences during the 2014-2015 academic year. The eighth question examined whether there was a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by free and reduced lunch eligibility status. The ninth question examined whether there was a difference in oral reading fluency growth from fall to spring, as measured by AIMsweb,

between students who did not participate in student goal setting conferences during the 2013-2014 academic year and who participated during the 2014-2015 academic year affected by gender.

Review of the methodology. A quantitative research approach was used to determine the impact of student goal setting conferences on oral reading fluency of first and second grade students. The sample for this study included first and second grade students from a Title I elementary school over a two year period from 2013 through 2015. Comparison was made between the oral reading fluency of first grade students who participated in student goal setting conferences during 2014-2015 and first grade students who did not participate in student conferences during the prior academic year. R-CBM data from AIMSweb was entered into IBM's Statistical Package for the Social Sciences (SPSS) along with students' gender and eligibility status for free or reduced price lunch. Multiple ANOVAs were used to analyze for the effect of participation and the interaction effects of participation by lunch eligibility status and participation by gender on three measures of growth in reading fluency.

Major findings. Results from the research questions were not statistically significant with the exception of the fourth research question. Question four examined the difference in the oral reading fluency growth from winter to spring as measured by curriculum-based measurement reading probes, between students who did not participate in student goal setting conferences during the 2013-2014 academic year and students who participated in goal setting conferences during the 2014-2015 academic year. Results from the two-factor ANOVA indicated a statistically significant difference between the mean words read correctly. It was surprising to find that fluency growth from winter to

spring was statistically significant, but that growth from the fall baseline to the spring was not significant.

Results related to school lunch status were not found to be statistically significant. However, research question five suggests a positive impact of goal setting conference participation for students who are eligible for free or reduced priced lunch. There was a slight narrowing of the achievement gap between non eligible and eligible students when students participated in goal setting conferences.

Results related to gender status were not found to be statistically significant. First grade students demonstrated higher levels of growth when participating in goal setting conferences and the achievement gap by gender widened from fall to spring. Second grade students demonstrated higher levels of growth when participating in goal setting conferences and the achievement gap by gender narrowed slightly from fall to spring.

Findings Related to the Literature

This section examines this study's findings as they relate to the literature regarding reading interventions and oral reading fluency at the first and second grade levels. The research conducted for this study specifically focused on the difference in oral reading fluency growth between students who did not participate in student goal setting conferences and students who participated in student goal setting conferences. There has been extensive research conducted about the efficacy of using R-CBM as part of a comprehensive reading intervention program designed to monitor reading fluency.

Silberglitt and Hintze (2007) found that oral reading fluency growth rates were much larger in grades 2-3 than later grades such as 4-6. Kim et al. (2010) replicated those findings, adding that the first grade oral reading fluency growth rate was highly

predictive of later levels of reading comprehension. The current study was designed to collect data at the primary grade levels based upon the importance and accuracy in predicting future levels of reading comprehension and overall reading achievement.

Past studies have consistently demonstrated a significant difference in reading achievement based upon gender with female students far outperforming their male counterparts (Loveless, 2015; Moore et al., 2007; Schwabe et al., 2015). Wang et al. (2011) found that the gender and special education status of students' was a reliable predictor of oral reading fluency. Results from the current study failed to demonstrate the efficacy of goal setting conferences to narrow the reading achievement gap by gender status. These findings are consistent with the research of Nese et al. (2012) who found that although female and male students demonstrated growth and the achievement gap did not widen, it failed to narrow.

Past studies have examined the impact of poverty on reading achievement and the importance of early intervention. Hernandez (2011) found that children, who lived in poverty and were not reading proficiently by third grade, were three times more likely to dropout or fail to graduate from high school than those who had never been poor. While results from this study about oral reading fluency were inconclusive with respect to the effect of SES on differences in reading fluency growth between participating and non-participating first and second graders, descriptive statistics from research question five suggest a positive impact on reaching achievement. Students who participated in goal setting conferences read more words correctly regardless of their eligibility status for free or reduced priced lunch. Results also indicate a narrowing of the achievement gap between students who are not eligible and eligible for free or reduced priced lunch.

Conclusions

This section provides conclusions derived from the current study which investigated the effects of student goal setting conferences on the rate of oral reading fluency at the first and second grade levels. Implications for action and recommendations for further research are included in this section. Concluding remarks will complete this section and chapter.

Implications for action. Despite a relatively small study sample, a positive relationship is suggested between student goal setting conferences and the potential to increase oral reading fluency at the first and second grade level. There was a statistically significant difference between winter and spring R-CBM screenings when students participated in goal setting conferences. Although not statistically significant, there was a slight narrowing of the achievement gap between non eligible and eligible students when students participated in goal setting conferences.

Findings from this study offer district and school leaders a path toward reading intervention and improvement that is site-based, low-cost, and relatively easy to implement (Deno et al., 2009; Kim et. al, 2010). Research supports the practice of goal setting conferences as a means to deliver feedback and engage students in the improvement process (Gaa, 1973). By partnering with students in the goal setting process and giving them autonomy over independent reading selections, self-efficacy and motivation for reading can flourish (Cabral-Márquez, 2015).

Findings from this study were consistent with prior research on gender and reading achievement (Loveless, 2015; Schwabe et al., 2015) and highlight an area of concern for practitioners. Given the predictive nature of reading achievement at the

primary levels (Kim et al., 2010) and the well-established international gender gap, schools must work diligently to narrow the achievement gap (Loveless, 2015; Mohd-Asraf & Abdullah, 2016; Schwabe et al., 2015). While findings from this study did not show that student goal setting conferences narrowed the reading achievement gender gap, the overall impact of the practice was positive as reflected by descriptive statistics and merits further study with a larger student sample.

Finally, although findings from the current study are mixed, literature on regular goal setting conferences suggests that teachers can improve the relevance and specificity of feedback, thus improving oral reading fluency and reading comprehension overall (Gaa, 1973). Research from Eckert et al. (2006) suggests that providing corrective performance feedback related to the number of words read incorrectly may lead to greater gains in oral reading fluency. Research suggests that conferring and setting goals with students tends to impart a more accurate appraisal of competence for students leading to enhanced levels of self-assessment and self-efficacy (Eckert et al., 2006; Gaa, 1979; Goettelman, 2012; Serravallo, 2014).

Recommendations for future research. The purpose of this study was to investigate the effects of student goal setting conferences on oral reading fluency growth at the first and second grade level. While considerable research exists supporting the predictive nature of R-CBM at the primary grade levels, additional measures could be considered to further explore the development of oral reading fluency and reading comprehension. This study could be replicated with the inclusion of data from CBM Maze passages, which are designed to monitor overall reading progress (Shin, Deno & Espin, 2000).

While this study focused exclusively on growth in oral reading fluency at the first and second grade levels, this study could be expanded to further examine the effect of student goal setting conferences. This study could be expanded to include all elementary grades using R-CBM for progress monitoring, grades 1-5 in the case of this study. Additional data would be beneficial to make a further generalization regarding the effect on oral reading fluency. By expanding the grade levels of the study researchers could examine the relationship between words read correctly on the R-CBM and high stakes criterion referenced assessments. Understanding the relationship between these two measures could inform core instructional practices and better direct reading interventions at the primary level. Additionally, a longitudinal study of student goal setting conferences might better explain the effects of participation on growth at each grade level. While this study examined the impact of goal setting conferences with pre and post implementation data, a multi-year study might better explain the effect of conferring at specific grade levels.

A final recommendation for future research would be the replication of the study with another foundational content area such as math. Given the importance of numeracy to the overall academic achievement of students it seems logical to propose student goal setting conferences in the area of math. The precise nature of what these conferences would depend on existing educational research from experts in the field of math education.

Concluding remarks. As previously noted, this study had a limited sample size at the primary grade levels. The results of the current study are mixed and affirm the potential of goal setting and feedback to improve student engagement, motivation, and

most importantly reading achievement. This study showed that implementing student goal setting conferences led to statistically significant differences from the winter to spring R-CBM screenings, increasing the oral reading fluency of first and second grade students.

This study supported previous research suggesting student goal setting conferences may produce positive outcomes. District and building leaders should carefully examine their intervention practices and specifically their strategies related to goal setting, feedback, and progress monitoring. The notion of working smarter and not harder applies here. Implementing goal setting conferences might just be what schools need to improve their existing intervention or core instructional practices.

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Appendices

Appendix A: IRB Approval

Baker University Institutional Review Board

Tuesday, August 16, 2016

Dear Larry Nelson and Dr. Robins,

The Baker University IRB has reviewed your research project application and approved this project under Exempt Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.

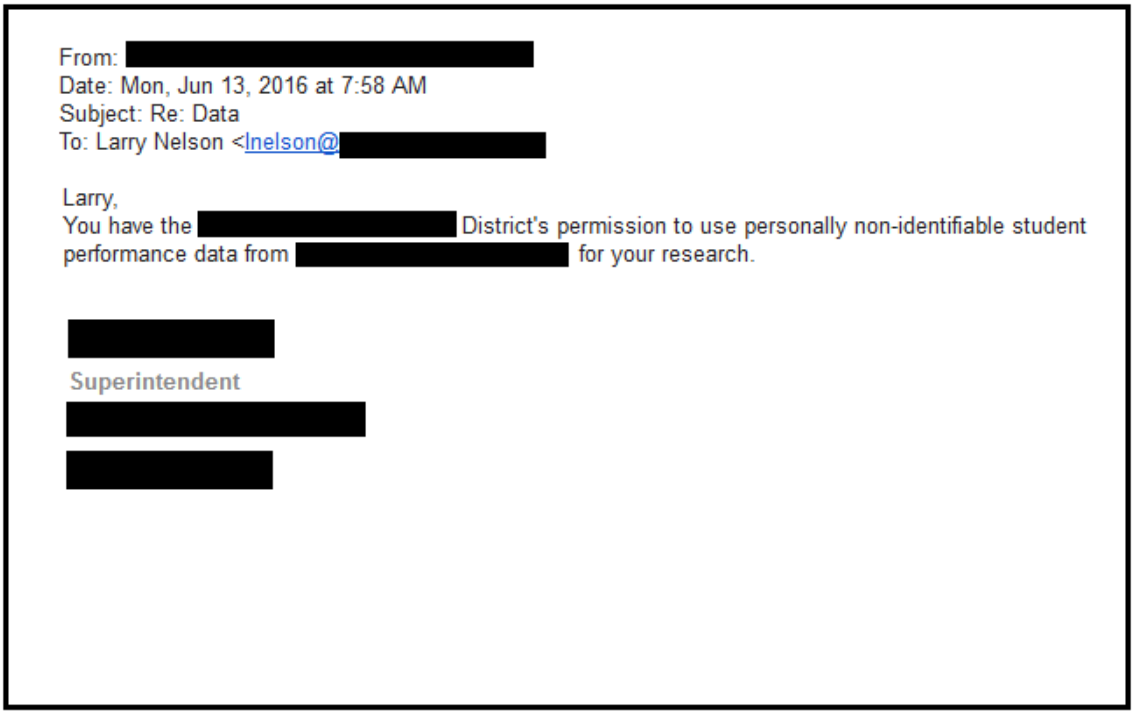
Please inform this Committee or myself when this project is terminated or completed. As noted above, you must also provide IRB with an annual status report and receive approval for maintaining your status. If you have any questions, please contact me at CTodden@BakerU.edu or 785.594.8440.

Sincerely,

Chris Todden EdD
Chair, Baker University IRB

Baker University IRB Committee
Verneda Edwards EdD
Sara Crump PhD
Erin Morris PhD
Scott Crenshaw

Appendix B: District Approval



From: [redacted]
Date: Mon, Jun 13, 2016 at 7:58 AM
Subject: Re: Data
To: Larry Nelson <lnelson@[redacted]

Larry,
You have the [redacted] District's permission to use personally non-identifiable student performance data from [redacted] for your research.

[redacted]
Superintendent
[redacted]
[redacted]