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Student growth through goal setting

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Abstract

This mixed methods research study explored how goal setting influences student growth in reading fluency, motivation and self-efficacy of second through fifth graders at school in central Illinois. Literature suggests that student goal setting can have a positive impact on the academic development of a student. In addition to academic achievement, research found goal setting to affect self-efficacy and motivation. A combination of qualitative and quantitative data collection methods was used to gather and evaluate students' reading fluency scores. This data provided a starting point from which surveys were utilised to gain a more in-depth understanding between goal setting, self-efficacy and motivation. The results of the study indicate that interventions along with goal setting could increase reading achievement. The analysis supports the claim that goal setting can affect words read correctly, but not accuracy. The analysis also found that goal setting can influence student self-efficacy growth. These findings could provide classroom teachers with valuable information that would have an impact on student growth.

Keywords: Elementary education, goal setting, reading fluency, self-efficacy, student growth

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1. Introduction

Goal setting defines a path for future success. According to Bishop (2016), goals help people set priorities and stay motivated. Setting and achieving goals provide a sense of ownership and pride as well as helping to recognise strengths and areas that need further development. If this is the case, then how might this evolve in a school setting with below-level readers?

Educators need to find and implement strategies to close any gaps that occur between a student's current reading level and his proficiency level. Goal setting as a supplement to fluency intervention could be a possibility to improve reading growth. Our professional experiences have shown that many students lack growth in oral reading fluency (ORF) from year to year. With the lack of ORF, students also fall short in other reading areas such as fluency, accuracy, comprehension and retell. To combat this occurrence, research suggests setting specific and attainable goals. According to Serravallo (2014), there is power in goal setting and the feedback it provides students. Student-generated goals bring reading engagement, motivation and progress to a whole new level.

Several researchers have studied the effect of goal setting and the benefits of students setting their own attainable goals that lead to increased reading achievement. Förster and Souvignier (2014) concluded that students who specified goals before assessments and reflected their goal achievement afterward showed more reading growth compared to students who did not set goals. In addition, goal setting has benefitted more than just reading ability. Studies on goal-setting theory found goals to have a positive effect on motivational, cognitive and performance outcomes. The validity of goal-setting findings has been documented through hundreds of studies, narrative reviews and meta-analyses (Locke & Latham, 2006).

Students whose reading fluency scores fall below average tend to stay below average throughout their elementary careers. This lack of growth in ORF is a concern. Students need to increase their fluency rate to develop vocabulary and comprehension skills. The success of interventions has resulted in varied outcomes, so more information is needed to address this problem. Past research suggests instilling reading goals to enhance reading motivation and fluency but the effects of goal setting on reading achievement have not been systematically investigated (Guthrie, McRae, & Klauda, 2007). This study examined goal setting as a strategy to aid readers, especially below level readers to determine if interventions along with goal setting will increase reading achievement and more specifically, reading fluency.

The purpose of this mixed methods study was to discover if student-generated goal setting will produce fluency growth in second through fifth graders. Reading fluency is defined as the amount of words a student reads in 1 min and the accuracy of those words read. Growth can also lend itself to other areas of student development so further exploration of student self-concept is warranted.

To properly measure how fluency goal setting affects ORF, the study took place over the course of 8 weeks. During this time, ORF performance was measured through Dynamic Indicators of Basic Early Literacy Skills' (DIBELS) benchmarking and progress monitoring. In addition to DIBELS' benchmarking and progress monitoring, researchers evaluated students' self-concept through a survey process as well as classroom observation and anecdotal record keeping.

This study attempted to answer the following research questions: What is the effect of goal setting on a student's oral reading fluency growth? Will goal setting increase a student's motivation and feeling of self-worth?

This study is important to the growth of students, the teachers and the school. When a student's ORF scores increase, the school's reading percentage increases as well. When students' fluency and foundational reading skills improve, other areas of growth can strengthen, too. With this improvement, less time can be spent practicing reading strategies and more time applying

comprehension skills. The teachers will benefit because they can implement these strategies with their students not only in reading but also in other subject and personal areas. Overall, when students achieve all those involved will benefit.

2. Literature Review

The purpose of the following literature review was to summarise the research behind goal setting, specifically why goal setting needs to be addressed and how it affects students. In addition, student goal setting to increase reading fluency will be discussed along with its effects on self-efficacy and motivation.

2.1. Goal Setting

Goal-setting theory was developed over a 25-year period through hundreds of laboratory and field studies. The purpose of these studies was to explain, predict or influence work-related performance in industrial-organisational settings (Locke & Latham, 2006). Goal-setting theory stresses the essential link between goals and behaviour. Goals reflect an individual's purposes and refer to the 'quantity, quality or rate of performance' (Schunk, 2001, p. 2). Goals affect performance through specific instruments, but motivation and self-regulation are directly affected through a goals' clear attributes-specificity, proximity and difficulty (Schunk, 2003).

Specific goals increase performance because they provide exact details about the amount of effort necessary for success to occur. Specific goals also increase self-efficacy because goal specifications make it easy for the individual to assess progress as opposed to goals that are either too easy or too difficult (Schunk, 2003). Proximity is a goal characteristic that refers to how far the goal projects into the future. For elementary students, proximal goals are influential because a young child's temperate frame of reference makes it difficult for them to comprehend distant outcomes. Finally, goal difficulty plays a crucial role in the success of goal achievement success. Overly easy goals are not motivating and neither are those that are believed impossible to achieve. Moderately difficult goals have the most positive effect on motivation (Schunk, 2003).

Goal setting can positively affect students and help them develop clear and concise targets. Creating clear targets through goal setting can help motivate students to achieve and be more successful in all aspects of learning. 'While almost all students recognise that learning is important, some are simply not motivated by academics or love of learning alone. Maybe if that learning was reframed to achieve a certain goal, these students would be better able to see its value' (Usher & Kober, 2012, p. 1). It is known that not all students are at the same learning level, so when students are setting their own goals they have a better opportunity of achieving and reaching their learning targets.

Teacher provided goals rather than student-generated ones has been in the forefront of research. Student-generated goals can be a helpful tool in supporting self-regulated learning. Asking students to develop and reflect on goals fosters involvement. This promotes self-efficacy and self-regulated learning. Engaging students in goal setting with proper support from teachers may be fruitful in fostering motivation. Student goal setting will need to be monitored by teachers and will be an ongoing process (Förster & Souvignier, 2014). Swain's research encourages teacher feedback and support during the goal-setting process. In her study, teachers helped monitor student progress to make assessments understandable and more meaningful to the students (2005). Once a goal is established, the teacher will provide feedback to the students over time about the progress toward the goal. This feedback is shown to have a major influence on performance (Serravallo, 2014).

Goal setting will reflect the amount of weekly growth that teachers establish as a minimum for adequate progress. For example, a student may set a goal increasing reading fluency growth by an average of one word per week. If measured growth matches or exceeds this goal, instruction and

interventions should be continued as before. However, if the rate of growth falls below this level, the teacher will be prompted to modify the student's intervention or possibly modify the student's goal. Due to this analysis, the students' interventions and goals will change frequently throughout the semester (Jenkins & Terjeson, 2011).

Setting short-term reading goals to improve reading motivation have been recommended in literature (Guthrie et al., 2007). However, the effects of goal setting on reading achievement, reading motivation and reading activity have not been thoroughly examined. While learning goals have often been considered a variable in reading motivation research, the motivational effects of goal setting have rarely been considered.

2.2. Reading Fluency

Fluent reading is the ability to read accurately and quickly. Fluent readers can recognise words automatically, read aloud effortlessly, read with expression and make connections between texts and background knowledge (White, 2013).

Reading fluency is important at the elementary level because it provides a bridge between word recognition and comprehension. When students lack the ability to read fluently, other reading skills can be a challenge. Recent research findings by Haas, Stickney and Ysseldyke show that student performance can progress through individualised interventions and goal setting. 'The practice of individualised instructional intervention includes setting targets or goals one wants students to achieve, monitoring progress toward those goals, and adapting instruction or changing goals dependent on student performance and progress' (Haas, Stickney, & Ysseldyke, 2016, p. 82).

Three major instructional approaches to teaching fluency have been investigated. The first approach involves repeated reading students read passages aloud several times and accepts guidance and feedback from the teacher. Students who read and reread passages orally as they receive guidance and/or feedback become better readers. Repeated oral reading substantially improves word recognition, speed and accuracy as well as fluency improves the reading ability of all students throughout the elementary school years (Cohen, 2011). It also helps struggling readers at higher grade levels.

The second approach, independent silent reading, encourages students to read extensively on their own. Many studies have found a strong relationship between reading ability and how much a student reads. Based on this evidence, teachers have long been encouraged to promote voluntary reading in the classroom in the form of daily independent reading or sustained reading time (Gray, 2012). Although not universally endorsed as an instructional activity (e.g., National Reading Panel, 2000), a growing body of scholarly writing suggests that increasing the volume of students' independent reading will yield improvements in students' reading fluency and other measures of reading proficiency. Reutzel, Jones, Fawson and Smith (2008) argue that students often do not have much guidance or accountability in many independent reading protocols and suggest that providing greater structure and accountability during independent reading will yield even more positive results in students' reading outcomes.

The third approach is to have students read aloud along with a model. This model of well-paced, expressive reading and specific feedback through systematic progress monitoring helps improve students' fluency skills. Students reading a text while listening to a fluent recorded version of the same text are engaged in assisted reading. Using readily available voice recording applications, teachers (or others) can record their reading of a text, save the recording as a digital file, provide access to the recording through the internet and have students read while listening to the digital recording on a mobile device. Although studies using technology-assisted reading are limited, the results of the

existing studies demonstrate great potential for improving students' fluency and overall reading achievement (Rasinski, Reutzel, Chard, & Linan, 2011).

When students set fluency goals they work toward a realistic target that will allow them to improve their reading fluency. It is important to note that fluency instruction should be with a text that a student can read at their independent level. It is at this level where students can practice speed and expression rather than decoding. With assistance, students can set obtainable goals and graph their progress throughout the semester. This process could lead to improvement in the students' reading fluency. Additional research provides evidence that when students track their own progress on assessments using graphic displays, the gains are even higher (Marzano, 2010).

2.3. Student Self-Efficacy and Motivation

Self-efficacy plays a key role in how one thinks, feels and behaves. Self-efficacy can determine how one sets goals and attempts tasks and challenges. Reading efficacy is defined as the belief or expectation that one can be successful at reading (Cabral-Márquez, 2015). Self-efficacy is significant in goal setting because it is the most central of self-regulatory functions. Cabral-Márquez referenced Bandura's perceptions of efficacy as being crucial because they 'partly determine the tasks in which individuals engage, the effort they invest, their degree of perseverance and the level of anxiety or confidence with which they approach the task' (2015, p.467). Goal setting affects self-efficacy, but self-efficacy also exerts a significant influence on goal setting as well as student achievement. Research shows a strong correlation between student self-efficacy and achievement level. For example, 'Highly efficacious students set higher goals, try harder to reach their goals, improve on existing efficacy as they make progress, use critical thinking skills and strategies and do not give up as easily' (Schulze & Schulze, 2003, p. 107).

The behavioural and cognitive benefits associated with goal setting are numerous. There is strong research evidence that setting goals increase motivation and that goals affect behaviour (Schunk, 2001). When students set goals, they are stimulated to put forth more effort. Students persist and develop a desire to achieve and attain the goal or complete the task. Seravallo (2014) notes that motivation does not always come from the enjoyment of the task alone but rather from recognizing that hours of practice will yield increased performance.

Goals that can be attained in a short period result in greater motivation. These are referred to as proximal goals. In our study, the student participants will set proximal goals to be attained every 10–15 academic days. Schunk stated that proximal goals not only boost motivation but they also increase self-efficacy because, in contrast to distant goals, they facilitate self-evaluations of progress (2001). When a child attributes a success to internal, stable and global factors, he or she will experience a sense of mastery and this will reinforce his self-efficacy (Cotter, 2012). Teaching children how to set realistic goals, develop strategies for persisting in achieving their goals, identify successes and accurately assess their contributions are all means to improve student self-efficacy.

Student self-efficacy may increase when students continue to grow and improve their oral reading fluency. Students should possess a growth mindset where they believe that one's intelligence can be grown or developed with persistence, effort and a focus on learning (Ricci, 2013). A growth mindset can also help develop students' conceptual understanding of learning thus motivating students to learn and improve. Through goal setting and building resilience a central message can be communicated that all students can learn to adjust to situations when they are faced with adversity or lack of success (Ricci, 2013). Student goal setting can help build student confidence and aid students in achieving their targets. Schunk (2010) found that when students perceive satisfactory goal progress, they feel capable of improving their skills; goal attainment, coupled with high self-efficacy, leads students to set new challenging goals. Students are likely to avoid challenging reading activities if they

lack a sense of efficacy (Bandura, 1997). Student self-efficacy is important while students learn new challenging skills. Students with low self-efficacy may struggle with new learning targets due to their lack of confidence. Students who continue to struggle academically develop a significantly lower self-concept than their average achieving peers (Swain, 2005). This increases the need to find an intervention that might improve a student's feeling of self-worth.

3. Methodology

Considering the gaps in reading levels for second through fifth graders, an intervention needs to be found that will close this gap and prepare students to reach reading proficiency. Research studies have been conducted in reading fluency. These studies have included a combination of interventions. Components of modelling, direct instruction and feedback, charting of progress and additional practice beyond reading instruction have been explored to increase the reading rates of students (White, 2012). The researchers for this study assessed how goal setting influences student growth in reading fluency, motivation and self-efficacy using a mixed methods approach. This study examined the relationship between goal setting and reading fluency. Specifically, this study sought to answer the following research questions: (1) What is the effect of goal setting on a student's oral reading fluency growth? (2) Will goal setting increase a student's motivation and feeling of self-worth?

The participants of this study are second through fifth graders in a self-contained elementary school classroom at a Title 1 school at a school in central Illinois. Students identified for the study were admitted into the response to intervention program (RtI), a system of interventions and assessments that have the potential to advance educational decision-making and student outcomes (Griffiths, Skokut & VanDerheyden, 2009). It is a multi-tiered approach to helping struggling learners and monitoring student progress to determine the need for further research-based instruction in the general education and special education setting.

The students chosen for this case study were classified as strategic or intensive (well below the benchmark) in their last two ORF benchmarks. The use of two consecutive ORF benchmark scores shows more validity than a one-time score. The researchers used purposeful sampling because these students it provided more valuable information for the implementation of goal setting and student growth.

3.1. Data Collection Procedures

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade (University of Oregon, 2015). Students in this school district are regularly tested within the first month of school, again in December and finally in May. Students placed in interventions are progress monitored every eight weeks to measure their growth and the effectiveness of the intervention. The DIBELS test is administered in a one to one setting. Students are pulled out one at a time to read to a teacher. DIBELS tests students' kindergarten through second grade on their phonemic awareness and phonics skills. Students in first through fifth grades are tested on their reading fluency. Oral reading fluency measures how accurately and quickly the student can read in one minute. DIBELS benchmark assessments were administered in August. Students were selected based on those scores. Students identified as strategic and intensive were placed in RtI. From these groups, students were selected to develop fluency goals. Every 10–15 days, students were progressed monitored using the same assessment tool as the benchmark.

Throughout the study, students will track their progress with graphs. They will then set new goals based on their data. At the end of 8 weeks, students will be benchmarked again. Their scores will be compared to determine the effectiveness of goal setting.

Researchers administered a pre-test using the academic self-efficacy questionnaire to establish a baseline of knowledge, attitudes, beliefs or behaviours before the start of the intervention. After the intervention period, the same questionnaire was administered to participants. The pre-test scores were compared to the post-test scores to determine if there is a change in student's self-efficacy.

The following were the survey questions that were used on the self-efficacy questionnaire. These questions were adapted from the Academic Self-Efficacy Subscale from Self-Efficacy Questionnaire for Children (Muris, 2001). The responses will range from 1 being 'not at all' to 4 being 'very well'.

1. How well can you get teachers to help you when you get stuck on schoolwork?
2. How well can you study when there are other interesting things to do?
3. How well do you succeed in reading outside of school every day?
4. How well can you pay attention during every class?
5. How well do you succeed in understanding all subjects in school?
6. How well do you succeed in satisfying your guardians with your schoolwork?
7. How well do you succeed in passing a test?
8. How well do you succeed in reading aloud?

3.2. Definition of Terms

DIBELS: The Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade (University of Oregon, 2015).

Goal: Goals are 'the personally meaningful objectives that people pursue in their daily lives. They reflect the personal purpose and refer to the quality or rate of performance' (Boekaerts, 2009, p. 105)

Oral Reading Fluency (ORF): The ability to read connected text quickly, accurately and with expression. In doing so, there is no noticeable cognitive effort that is associated with decoding the words on the page (Price, Meisinger, Louwerse, & D'Mello 2016).

Progress Monitoring: Used to assess students' academic performance, to quantify a student rate of improvement or responsiveness to instruction and to evaluate the effectiveness of instruction. Progress monitoring can be implemented with individual students or an entire class (Castro-Villarreal, Rodriguez, & Moore, 2014).

Repeated Readings: An intervention that uses repeated guided oral reading practice and immediate error correction to improve reading rate, accuracy and comprehension (Van Gorp, Segers & Verhoeven, 2014).

Response to Intervention (RTI): A multi-tier approach to the early identification and support of students with learning and behaviour needs. The RTI process begins with high-quality instruction and universal screening of all children in the general education classroom (Castro-Villarreal et al., 2014).

Reading motivation: Reading motivation is described as 'the individual's personal goals, values and beliefs with regard to the topics, processes and outcomes of reading' (Guthrie & Wigfield, 2000, p. 405).

Self-Efficacy: The belief about one's ability to perform a task successfully.

Six-Minute Solutions: A research-validated procedure to increase reading fluency by pairing students with same-level peers for reading, monitoring and feedback (Adams & Brown, 2003).

4. Results

The purpose of this mixed methods study was to discover if student-generated goal setting would produce fluency growth in second through fifth graders. The participants included 21 students taking part in a Six-Minute Solutions reading intervention. The study took place over the course of 8 weeks.

The following research questions were addressed: What is the effect of goal setting on a student’s oral reading fluency growth? Will goal setting increase a student’s motivation and feeling of self-worth?

Two pieces of data were collected as pre-tests, a benchmark score and a self-efficacy survey. Researchers used the students’ ORF DIBELS Benchmark score as a pre-test for the study. Researchers also administered the self-efficacy survey to the student participants the 1st day of the study.

Students took the survey independently during their intervention time. Then, the students participated in a reading intervention to build fluency. The intervention consisted of multiple timed readings of the same text. Weekly, the students’ fluency rates were measured through progress monitoring using the DIBELS ORF assessment. Throughout the intervention, participants developed reading goals with their interventionist and graphed their fluency progress from DIBELS ORF results.

At the end of 8 weeks, researchers administered the self-efficacy survey. The pre- and post-survey results were compared as well as DIBELS ORF scores. The researchers analysed student ORF growth through descriptive statistics. Descriptive statistics provided values that described the characteristics of the sample student population. A t-test was administered to examine the relationship between variables. SurveyMonkey, a self-serve survey platform, was utilised to collect and analyse data results from the self-efficacy survey through an online interface.

Table 1. Words correct reading fluency scores

Reading test	Mean score	Mean difference	Standard deviation	Standard difference	t value	p value
Pre-test	72.24	+13.81	26.51	-2.67	-1.77	*0.04
Post-test	86.05		23.85			

*p<0.05 denotes a significant relationship.

Data in Table 1 addresses the question, what is the effect of goal setting on a student’s oral reading fluency growth? More specifically, will goal setting increase a student’s words read correctly in 1 min? The t-test was used to compare the students’ pre-test scores with their post-test scores to determine if there was growth. The t value (1.77) was greater than the critical value (1.68) and the p = 0.04 was less than the established 0.05 level. Therefore, we rejected the null hypothesis. These comparisons showed a significant enough difference in the pre-test and the post-test scores. This difference, along with a 19% (13.81 words) increase in mean scores, was due to something other than chance. The analysis supports the claim that goal setting can affect words read correctly.

Table 2. Accuracy reading fluency scores

Reading test	Mean score	Mean difference	Standard deviation	Standard difference	t value	p value
Pre-test	95.24	-1.86	4.07	+2.67	-1.10	0.14
Post-test	93.38		6.61			

Table 2 also address the first research question, what is the effect of goal setting on a student’s oral reading fluency growth? The data represent increases as well as decreases in pre-test and post-test scores. As shown in Table 2, the pre-test mean was 95.24, whereas the post-test mean decreased by 2% (1.86 words) to 93.38. There was not a significant difference in mean scores for accuracy. Students’ fluency accuracy data were analysed using t-test. The critical value of 1.68 was greater than the $t = 1.10$. $p = 0.14$ was greater than the set 0.05 level. Therefore, the study fails to reject the null hypothesis. There is not a significant enough difference between pre-test and post-test accuracy scores. The researchers rejected the research hypothesis and assume student goal setting does not influence accuracy growth. Any growth that was seen was due to chance.

The second research question, will goal setting increases a student’s motivation and feeling of self-worth, is represented in the following Table 3. This inquiry utilised a rating scale survey with eight questions all hoping to obtain some insight to students’ self-efficacy. The results on this scale reflected the strength of an individual’s generalised self-efficacy belief. As part of the data screening process, means and standard deviations of all eight items were examined. The rating scale questions ranged from a score of 1 to 4 (1 = not at all and 4 = very well). Thus, the higher the mean score, the greater the individual’s generalised sense of self-efficacy. Figures 3-10 display the differences in mean scores of students’ pre-survey and post-survey answers. Means and standard deviations are presented in data Table 3.

Table 3. Self-efficacy

Survey questions	Pretest		Posttest	
	Mean	SD	Mean	SD
1. How well can you get teachers to help you when you get stuck on schoolwork?	2.74	0.96	2.95	0.89
2. How well can you study when there are other interesting things to do?	2.37	1.18	2.37	0.87
3. How well do you succeed in reading outside of school every day?	2.53	1.14	2.89	1.12
4. How well can you pay attention during every class?	3.0	1.03	2.95	0.69
5. How well do you succeed in understanding all subjects in school?	2.89	0.91	3.05	0.94
6. How well do you succeed in satisfying your guardians with your schoolwork?	3.37	0.98	3.47	0.75
7. How well do you succeed in passing a test?	3.26	0.78	3.16	0.99
8. How well do you succeed in reading aloud?	2.63	1.04	3.53	0.68

The students' mean response for question one, 'How well can you get teachers to help you when you get stuck on schoolwork?' increased slightly from 2.74 to 2.95. For question two, 'How well can you study when there are other interesting things to do?' the mean remained at 2.37. The students' mean response for question three 'How well do you succeed in reading outside of school every day?' increased from 2.53 to 2.89. The mean scores for question four, 'How well can you pay attention during every class?' decreased from 3.0 to 2.95. The students' mean response for question five, 'How well do you succeed in understanding all subject areas?' increased a good amount from 2.89 to 3.05. Question six, 'How well do you succeed in satisfying your guardians with your schoolwork?' increased from the pre-test mean of 3.37 to the post-test mean of 3.47. Question 7, 'How well do you succeed in passing a test?' saw a decrease in mean scores from 3.26 to 3.16. Finally question eight, 'How well do you succeed in reading aloud?' had the largest increase from pre-test to post-test with 0.9. This mean survey response scores increased 34% from 2.63 to 3.53. This growth showed a significant enough difference to warrant an effect. The overall average scores increased 7% from 2.85 to 3.04.

Overall, students' efficacy beliefs grew in regard to how well they succeed in reading aloud followed by how well they succeed in reading outside of school. Students reported the least amount of confidence in their capabilities to study when there are other interesting things to do. There was a slight decline in mean scores on two items; how well can you pay attention during every class and how well do you succeed in passing a test. Due to the increase of 7% in mean scores, goal setting is found to influence student self-efficacy growth.

5. Discussion

The purpose of this study was to examine the effects of student goal setting on oral reading fluency and self-efficacy. Specifically, this study sought to determine if goal setting would increase a student's oral reading fluency growth and improves their feeling of self-worth. Students whose reading fluency scores fall below average tend to stay below average throughout their elementary careers.

The study's findings did indeed determine that interventions along with goal setting could increase reading achievement. The research question, what is the effect of goal setting on a student's oral reading fluency growth, was answered through an analysis of pre- and post-test scores. When analysing the data collected, students did make statistically significant gains in their fluency when setting reading goals. Students showed more growth in their words read correctly than words read accurately. The average score of words read correctly in 1 min increased 19%. This growth shows that students who generate reading goals before they read are likely to read more words correctly. Students read more words per minute each time they read a passage. This increase in total words read also improves their words read correctly. A few factors most likely contribute to the success of goal setting. The reading intervention students participated in involved reading a passage 3–4 times. Each time a student read a passage they set a goal for their next reading. This repetition of reading and goal setting created a target to reach. The students had a purpose and a clearer objective when they developed a goal to pursue.

While goal setting did show improvement in words read correctly, it did not, however, show a positive effect on accuracy. The accuracy fluency results indicated that many students who generated goals did not improve on their words read accurately. The average scores from the pre- and post-test decreased by 2%. This was only a slight difference, but the problem of the study was seeking an improvement to the outcome. With this lack of growth, we cannot assume that goal setting will increase a student's fluency growth.

According to the results, the total amount of words read correctly increased. This could have been due to an increase in total words read. The amount of words read accurately likely decreased because the total words increased at a greater rate than the words read correctly. The students set goals and achieved those goals with their words read. However, they were not reading the words clearly enough to improve on their accuracy.

The results of the data show some gain in student achievement. These results come as no surprise, based on previous research. Förster and Souvignier (2014) concluded that students who specified goals before assessments and reflected their goal achievement afterward showed more reading growth compared to students who did not set goals. According to Schunk (2003), setting specific goals make it easy for individuals to assess their progress. Throughout the study, students were directed in setting appropriate goals to reach. This approach did improve student's reading fluency. While students were setting goals, they believed they were succeeding in reading aloud. Research stated that specific goals increase student performance because they provide exact details about the amount of effort necessary for success to occur (Schunk, 2003). While students were setting individualised goals, their average words read correctly increased by 13.81 words from the pre-test to the post-test. This study's findings support previous literature because research shows through individualised interventions and goal setting student performance can progress.

The significance of fluency growth is vital to a student's reading achievement. If students generate goals with their teachers, they might show improvement in their reading fluency. Furthermore, the more a student reads a passage the more likely they will improve on their words read correctly. This increase could carry over to accuracy growth if the study lasted longer. Hence, additional research would need to be conducted to verify the results of this study. More time can be given to the weeks the students supplement goal setting with a reading intervention. This might allow for the words read accurately to catch up to the words read correctly.

The second question of this study focused on students' motivation and self-efficacy after the 8 week intervention was implemented and students created individualised goals. Results varied with some items increasing and decreasing between the time frames. It is challenging to discern exactly why the decreasing trend occurred. 'How well do you pay attention during class?' was one question where the mean score decreased from 3.0 to 2.95. It is safe to infer that students did not believe goal setting helped them in this area. A factor that plays a role in this could be the time of the school year. When students took the pre-test they just came back from a long winter break, and the post-test was given at the end of third quarter when there had been limited non-attendance days. The other question, 'How well do you succeed in passing a test?' showed a marginal decrease in mean score from pre-test to post-test. The sample used for this study consisted of a small group of students below grade level in oral reading fluency. These students received an 8-week intervention focusing on oral reading fluency while using student goal setting. At the end of the intervention students were again given the survey. Students' mean scores increased 7% from 2.85 to 3.05. This growth along with the increase of words read correctly shows overall success in student achievement throughout the 8 weeks.

Literature was reviewed and supports the influence goal setting has on student motivation. Motivation and self-regulation are directly affected through goals' clear attributes, specifically proximity and difficulty (Schunk, 2003). Students in the study set specific oral reading fluency goals. When they were asked, 'How well do you succeed in reading aloud?' Their average scores went up 34% from the pre-test to post-test. While students were setting goals, they believed they were succeeding in reading aloud. Several studies have also shown that performance feedback and goal setting can affect students' self-efficacy (Feldman, Kim, & Elliot, 2011). The present study's findings suggest that goal setting not only is effective but may also be a necessary component when considering school-based intervention practices regarding literacy. Students' beliefs about themselves and reading should be considered in the learning process.

When students experience failure on reading aloud, passing a test, or have trouble staying on task, their motivation may diminish even more. Interventions that raise actual performance on fluency and academic behaviour should result in realistic self-perception and increased motivation to engage in ongoing literacy demands. Since changes were found between the pre- and post-test on several components of the survey, teachers need to assess changes in self-efficacy that may attribute to goal setting. At the same time, if literacy efficacy of students remains unchanged or reduces within the

intervention process, then goal-setting interventions are not influencing students' confidence or motivation to persevere in fluency tasks. Once again, our position is that goal setting can increase self-efficacy within students.

In summary, goal setting as a technique has been well established in literature over a period that exceeds 50 years (Locke & Latham, 2013). Promoting goal setting within the context of a students' academic life can lead to facilitation of personal growth not only with respect to fluency but also self-efficacy and motivation. This mixed methods study offered unique insight into the connections between goal setting, fluency growth and self-efficacy.

6. Conclusion

As noted in literature review, goal setting as a technique to increase motivation has been well established. In addition, multiple research studies provide evidence that student goal setting influences student growth in motivational, cognitive and performance outcomes. Several studies have been conducted on goal setting for reading improvement but little research has focused on how students come to develop their self-efficacy in reading. This action research study contributes to the literature by providing data for two specific outcomes of student goal setting: (1) Oral reading fluency growth and (2) student efficacy and motivation.

With repetition of reading and goal setting students showed improvement in overall words read correctly. It was determined that while working on reading fluency through goal setting, students were also building self-efficacy. Results show that students were successful in improving their oral reading fluency, though it is difficult to conclude that the actions and methodologies of this study were the main or only reasons for their overall growth. These improvements could have been due to a large variety of factors, not just their involvement with goal setting. Factors influencing limitations to this study in relationship to reading fluency and self-efficacy include the following:

1. Multiple classrooms and grade levels within the same school were used which involved teachers' diverse instructional styles and interventions.
2. Students came from different grade levels and backgrounds, had varied learning styles, and different homeroom teachers.
3. Student in RtI received different grade level appropriate interventions; therefore, not all students received the same interventions.
4. Differences in home to school parent involvement differed among the participants which could also be an internal threat.
5. Students tend to show growth in their overall fluency rates as the year progresses and their reading abilities progress.
6. Students react differently to various testing situations, interventions as well as interventionists.
7. Students vary in ability within any group of students, regardless of the presence of a study or specific school intervention or program. In addition, student interests and background knowledge vary which may affect individual success within any given reading prompt.
8. Students tend to read at faster paces when reading silently versus reading orally and their comfort level with reading aloud varies from individual to individual.
9. Students may test differently each testing day, depending on various factors such as mood, health, attitude and distractions from the test and their determination to read their best that day. The data taken from individual days of testing may not always be reflective of the student's abilities outside of that testing situation when they are reading to themselves or in the normal classroom setting.
10. Students may or may not have had experiences with the oral reading fluency intervention in the past, which may affect their familiarity with this type of learning.
11. There may have been a pre-existing high or low self-efficacy with individual students.

12. The self-efficacy survey could have posed a threat to the validity of the study because it was based on student self-reporting and students may have responded in socially desirable ways for fear that teachers would judge their responses. There was an attempt to reduce this source of bias by reminding students that there were no right answers to the survey items and that responses would be kept confidential.

The self-efficacy rating developed for the study may not have measured the concept it intended. Students may have responded to each item about their performance on the repeated reading interventions texts on how good or bad they were feeling about reading that day, rather than specifically reporting on their confidence regarding their reading fluency.

Future research should investigate other related variables to determine which combination of factors best predicts reading fluency. Environmental and behavioural factors such as early reading skills, socioeconomic status, classroom and teacher characteristics, amount of time spent reading and English proficiency have been shown to influence a student's trajectory toward fluency growth and positive self-efficacy. These types of variables were not included in this study and may account for predictive influence of the fluency outcomes.

Since there has been limited research focused on how students come to develop their self-efficacy in reading, one future direction for research is the validation of the sources of self-efficacy in reading scales. With a valid scale, researchers could ask different questions about reading self-efficacy. Furthermore, further research in this area could help to determine if sources of self-efficacy function in similar or different ways for students from different groups (e.g., gender, ethnicity and school type). Little is known about how or if the relationship between reading self-efficacy and goal setting varies for students of different groups. This was not a focus of the present study. More research could be done to see if reading self-efficacy has the same predictive power for different groups of students.

There are several recommendations that have implications for teachers and can be considered for future research. First, it is suggested that more time be allocated for the study. If possible, using this type of setup over the entire school year or even 2 school years would be more beneficial to look for patterns and use data to drive instructional goals and student needs. Furthermore, it would be beneficial to study and compare one group of students within a similar instructional setting, such as two or more classrooms but within the same school and grade level. It would also be valuable for teachers to see what other classrooms do and how their students are improving as well. Again, this would benefit all teachers in the school to be able to look for patterns in student growth. When comparing students across different grade levels the findings showed a wide variety of results that were more difficult to interpret.

The use of more than one method to collect data would also be beneficial to teachers. For example, comparing the results from the 1 min DIBELS fluency tests with running record results would help teachers use two sets of data to monitor student growth. The time of year that the intervention practices are implemented can also make a difference. The interventions need to be consistent between groups of students to get accurate results. The collection and analysis of this data resulted in a strong belief that an implementation of repeated reading and student goal setting can improve oral reading fluency and self-efficacy.

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