GOAL SETTING AND READING ACHIEVEMENT

BY

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ABSTRACT

This study was completed to find if there was a significant different in reading comprehension scores from the Iowa Test of Basic Skills (ITBS) between students who set reading goals and students who did not set reading goals. Involving students in their learning, through goal setting, should be considered when developing classroom instruction for reading, which could affect how students perform on standardized tests. Research shows that goal setting, in the area of reading, supports student achievement. Findings of this study did not conclusively support this research. The reasoning behind this is not pinpointed in this study; however types of goals and teacher involvement in the goal setting process could affect the goal setting data. After compiling and reviewing the findings of this study, current research and literature, and the statistical data from the ITBS, it is found that goal setting in the area of reading could have an effect on student reading achievement.
INTRODUCTION

Background, Issues and Concerns

Reading is considered the foundation of learning. Achievement in this area, and academic progress, depends on applying the information gathered through reading. Educators are constantly seeking ways to boost this critical skill. At the private school where this study takes place, the goal is for students to be reading at, or above, grade level by the end of the school year. It is important that students are able to read at, or above, grade level so they can be successful at school. Another goal, at this school, is for students to show growth on the reading comprehension portion of the Iowa Test of Basic Skills (ITBS) standardized test that is given each year. Some educators have theorized that there is a difference, or relationship, between goal setting in the area of reading and reading achievement. Researchers are concerned about reading achievement and want to see what, if any, effect goal setting has on reading achievement.

Practice under Investigation

The practice under investigation is goal setting in regards to student reading achievement. There will be an investigation to see if there is a significant difference in reading achievement between students who set reading goals and students who do not set reading goals. During this investigation data will be looked at from the reading comprehension portion of ITBS to determine reading achievement. The data from ITBS will be used to determine if goal setting had an effect on reading achievement.
School Policy to be Informed by Study

The school practice to be informed by the study is the use of goal setting within the reading program and its effect on reading achievement. The reading program, and goal setting within that program, will be informed by the study.

Conceptual Underpinning

The theory is that students who actively participate in their learning, through goal setting, will have higher achievement than students who do not set goals for their learning. Researchers theorize that when staff and students work towards a common reading goal, students have a greater chance of reading at, or above grade level (Oregon K-12 Literacy Framework, 2009). However, the goals should be measurable, and guide reading instruction so students continue to progress in their reading.

The reading program in use at the school under study has an online goal-setting option for students. This goal setting option of AR is utilized by only a few teachers. These goals are measurable and can be used to guide reading instruction if utilized by the reading teacher. Each student has a different point goal. Points are based on text complexity and earned by passing reading comprehension tests. These tests are taken after students have read a text of their choice. Students and teachers who use these reading goals track point accumulation in conjunction with individual reading progress. This keeps the students actively informed of their reading progression and involved in their learning. Many educators theorize that this active participation by students will boost reading achievement. The data analyzed from the results of this study will help to determine if goal setting should become part of the reading program, with the ultimate goal of boosting student reading achievement.
Statement of the Problem

If there is a difference in reading achievement between students who set reading goals, and students who do not set reading goals, teachers need to be trained in best practices for goal setting with students, and implement goal setting into their reading program.

Purpose of the Study

The purpose of this study is to determine if goal setting has an effect on student achievement, specifically in the area of reading. If students set a specific goal for reading, will this raise reading achievement? Data from the reading comprehension component of ITBS, will be used to analyze the reading achievement for the students who set reading goals, as well as those students who did not set reading goals.

Research Question

Is there a significant difference in student achievement between students who set reading goals for sustained reading with a text of their choice, compared to students who do not set goals practicing sustained reading with a text of their choice?

Null Hypothesis

There is not a significant difference in reading achievement between students who set reading goals for sustained reading with a text of their choice, compared to students who do not set goals practicing sustained reading with a text of their choice.
Anticipated Benefits of the Study

The anticipated benefits of this study are that goal setting will raise reading achievement. This will be beneficial for teachers because they can incorporate lessons for students on setting individual goals in anticipation of raising reading achievement. This will also be beneficial for students, because they can be taught the value of goal setting in order to raise achievement in the area of reading.

Definition of Terms

Goals that are specific, measurable, attainable, results based, time-bound (SMART) goals.

Iowa Test of Basic Skills (ITBS). A standardized test administered to students kindergarten through eighth grade.

Accelerated Reader (AR). An online reading program designed for kindergarten through twelfth grade students.

Common Core State Standards (CCSS). A U.S. education initiative that seeks to bring diverse state curricula into alignment with each other by following the principles of standards-based education reform.

Summary

A study was conducted to see if there was a significant difference in reading achievement between students who set reading goals and students who do not set reading goals. If the t-test concludes that there is a significant difference in reading achievement between students who set reading goals and students who do not set reading goals, teachers should work with students to set reading goals. Since goal setting is a strategy that can be taught, teachers should incorporate
reading goals, and how to set them, into their instruction. After this study is conducted, schools could benefit by looking at data in relation to goal setting. Schools could also provide professional development for teachers in regards to goal setting with students.
REVIEW OF LITERATURE

There have been many changes in education in recent years. Undoubtedly the most sweeping change being the adoption of the Common Core State Standards (CCSS) by the majority of the states. The CCSS initiative was launched by governors and state commissioners in 2009. They “recognized the value of consistent, real-world learning goals” and the importance for students to “acquire the habits of reading independently and closely, which are essential to their future success” (Common Core State Standards, 2014, Development Process para.1). Clearly literacy is a national priority. Teachers are faced with a wide array of challenges, and increasing student reading achievement continues to be one of these challenges. Theories and practices abound as to how to increase student reading achievement. One theory is that having students set reading goals will help to increase reading achievement. Bedden (2009) is a proponent of using SMART (specific, measurable, attainable, results, time-bound) goals to raise student achievement.

There is a plethora of literature and research regarding goal setting. An enormous amount of research also exists for reading achievement. The review of literature for this study will focus on goal setting and its effect on primarily reading achievement. There is universal agreement among educators on the importance of reading and student achievement. According to Renaissance Learning (2013), a study of 174,000 students in 74 countries showed that time spent reading books is the single biggest indicator of academic achievement, even more highly correlated that socioeconomic status and ethnicity. It is universally accepted among educators that there is a high correlation between reading achievement and student success. The challenge for educators is how to best utilize this reading time so students are successful readers. Schmoker (2009), an expert in the field of education goes so far as to say that the setting of goals that are
specific and measurable, is one of the most promising but underutilized strategies to improve student success. The state of Oregon agrees with Schmoker, and took the step of developing their literacy guidelines around student goals. Oregon’s K-12 Literacy Framework guidelines align with Schmoker’s assertion regarding goal setting. “In order for goals to have a positive effect on student reading achievement they should be measurable” (Oregon’s Literacy Framework, 2009, p. G-5).

There are many positive effects to goal setting if done correctly. Educator and researcher Schunk (2009) states that “goal setting is an important component of students' motivation, self-regulation, and achievement in academic settings” (para.1). The first component of effective goal setting is for the goal to be specific. According to researcher Gillespie, (n.d.) learners who establish concrete goals, and are given the opportunity to see they are making measurable progress towards their goal are more able to persist in their efforts long enough to reach them. Taking the time to set concrete reading goals is an important first step for students. A teacher working collaboratively with students during the goal setting process helps with the specificity aspect of goal setting.

After the student sets a specific reading goal, the teacher will ensure that the goal is measurable. An example of a goal that is not measurable is, student x will become a better reader. An example of a goal that is measurable is that student x will be reading at grade level by the end of the school year. In the first example there is no clear criteria for what constitutes becoming a better reader. The second example of a goal can be measured by a standardized reading assessment. “Writing a goal that is measurable both guides instruction and provides an objective format for monitoring and assessing a student’s educational progress. (Yell, n.d. p. 5)
The next two components of effective goal setting in regards to reading achievement are attainability and results-based. This means a setting goal that is neither too easy nor too difficult, and one that has concrete results. A powerful way to ensure that students are setting appropriate goals is through formative assessments. Students and teachers can jointly set reading goals using the data from formative assessments. “The formative assessment process can strengthen students' abilities to assess their own progress, to set and evaluate their own learning goals, and to make adjustments accordingly” (Ferlazzo, 2012, para.4). Setting goals based off formative assessments is another way for students to become invested in their learning which is considered a best practice in teaching. Next educators should ensure that students are setting goals that are time bound. Students must have a clear time frame to reach their goals as well as adequate time to work towards their goals.

According to educator Deforge (2012), setting goals with students allows them to feel ownership of their success by being able to clearly see how their actions affect their achievement. Pro-Literacy Worldwide (2007) has done research indicating that learning how to effectively set goals with students is the foundation of instruction. This has huge implications for the educators who are teaching reading. However, “simply having a goal does not mean it will improve student achievement” (Schunk, 2009, para.2). Setting the right goal and providing feedback is critical. “Goal progress feedback provides information about progress toward goals and can promote self-efficacy and motivation when students cannot derive progress information on their own” (Schunk, 2009 para.20).

Schunk’s (2009) research indicates that another important aspect of goal setting with students is commitment. Of course commitment is not easily measured. Although commitment
is not easily measured it still has value. Schunk (2009) argues that student’s commitment will remain high when they are receiving feedback on their goals.

Once goals are effectively set, is another critical time for students. Teachers must monitor student progress toward goals. Pro-Literacy Worldwide (2007) argues that monitoring allows teachers to make important instructional decision based on student progression towards goals. Monitoring progress towards goal allows the teacher to trouble shoot. In other words, “it allows students to see progression and avoid frustration.” (Pro-Literacy Worldwide, 2007, para.6). Consequently, educators must monitor this learning and goal-setting in order to effectively instruct the students. Meeting with students on a regular basis to set small goals is considered a best practice in teaching. Teaching students to set smaller goals will help lead them to the ultimate goal of being college or career ready, which is the main purpose of the development of the Common Core State Standards.

Another best practice in regards to goal setting is the ability to adjust goals based on the needs of the learner. This is also another benefit of monitoring student progress towards established goals. “Learning itself is a purposeful goal-directed activity” (Gillespie, n.d. p.1). Teachers can help direct the learning of the students based off their individual goals. If a goal is found to be too easy or too difficult than the goal should be adjusted to best fit the needs of the learner. If the instructor deems the goal appropriate for the learner, the teacher can instruct the student on how to best meet the goal. A teacher can also offer a student constructive criticism in relation to effort and goal attainment. “Withholding constructive criticism does not help children’s confidence; it harms their future. (Dweck, 2009, p.182). This constructive feedback is important for students if they are to make gains in reading. Therefore, teaching students how to
set and reach goals becomes a teaching opportunity similar to teaching a new reading strategy to a student. This goal setting strategy can be used across the curricular areas, as well as outside of the classroom.

Another best practice in goal setting is to express goals positively: “To spell my words correctly” is a much better goal than “Don’t spell with so many mistakes” (Sasson, D. 2010, para.5). There is not a lot of research for expressing goals positively. However, experienced educators are known to express directions in a positive manner. For example, “work quietly” as opposed to “no talking” is considered a best practice for giving directions. Therefore, it is a best teaching practice for a goal to be a positive affirmation that students are working towards, rather than a negative that they are trying to avoid.

Educating teachers on the importance of goal setting, specific to reading, will have a positive effect on reading achievement. “The most appropriate progress monitoring systems are those in which objective numerical data are collected…and analyzed to make instructional decisions. “ (Yell, n.d. p.4). Therefore it would be safe to assume that setting reading goals with students is a critical part of the teacher’s job. Based on the numerical data from student reading scores teachers should adjust instruction to improve reading achievement.

According to Schunk (2009):

Goal-setting research in school settings shows that students' learning, motivation, and self-regulation can be improved when students pursue goals that are specific, proximal, and moderately difficult, receive feedback on their goal progress, focus their attention on learning processes, and shift their focus to outcome goals
as their skills develop. These points have implications for educators who desire to use goal setting systematically. (para.23).

Therefore, based on the literature review it would be safe to assume that implementing best practices for goal setting will be an important component of raising student reading achievement.
RESEARCH METHODS

Research Design

A quantitative study was conducted to see if there was a gap in achievement on the ITBS reading comprehension scores between students who set reading goals, and students who did not set reading goals. The independent variable being tested was students’ reading scores on the ITBS who set reading goals, while the dependent variable tested was students’ reading scores on the ITBS who did not set reading goals. If there is a significant difference found in scores based on goal setting, teachers should be informed and implement instruction on goal setting to increase learning and performance in the area of reading.

Study Group Description

Students selected for this study were fifth graders from a private, suburban school. One group of students set reading goals, the other group of students did not set reading goals.

Data Collection and Instrumentation

Data from the 2014 ITBS fifth grade reading comprehension scores was collected to analyze scores.

Statistical Analysis Method

A t test was used to analyze data from the 2014 ITBS reading comprehension test to see if there was a difference in reading achievement between students who set reading goals and students who did not set reading goals.
FINDINGS

A t-test was conducted to decipher whether there was a difference in performance on the 2014 on the ITBS reading comprehension test based on student goal setting in the area of reading. The following table, graph, and chart will depict the organized findings based on the statistical raw data from the spring 2014 ITBS test scores.

Figure 1

t-Test Analysis Results for Students who set reading goals and students who did not set reading goals

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Mean D</th>
<th>t-test</th>
<th>df</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student goals (n=19)</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student no goals (n=19)</td>
<td>83</td>
<td>3</td>
<td>0.33</td>
<td>2</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Note: Significant when p<=0.25

The independent variable was the percentile scores from the ITBS Spring 2014 Reading Comprehension test for students who set reading goals. The dependent variable was the percentile scores from the ITBS Spring 2014 Reading Comprehension test for students who did not set reading goals. 38 students were selected from two fifth grade classrooms. One class of 19 students set reading goals and the other class of 19 students did not set reading goals. The mean ITBS reading comprehension score for students who set reading goals was 86, while the mean
ITBS reading score for students who did not set reading goals was 83. The difference between the mean scores (Mean D) was 3. The t-test value was 0.33. The degree of freedom was 2.

The null hypothesis is there is not a significant difference in reading achievement between students who set reading goals for sustained reading with a text of their choice, compared to students who do not set goals practicing sustained reading with a text of their choice. The null is not rejected because the p-value is 0.77, which is more than the alpha level of .25. This means that there is not a significant difference between students who set reading goals for sustained reading with a text of their choice and students who do not set reading goals with a text of their choice.
Figure 2

2014 ITBS 5th Grade Reading Comprehension Scores

Students Who Set Reading Goals

Students Who Did Not Set Reading Goals

Figure 3

<table>
<thead>
<tr>
<th>Students Who Set Reading Goals</th>
<th>Students Who Did Not Set Reading Goals</th>
<th>Column1</th>
</tr>
</thead>
<tbody>
<tr>
<td>73%</td>
<td>62%</td>
<td>Mean</td>
</tr>
<tr>
<td>74%</td>
<td>64%</td>
<td>Median</td>
</tr>
<tr>
<td>99%</td>
<td>89%</td>
<td>Maximum</td>
</tr>
<tr>
<td>49%</td>
<td>18%</td>
<td>Minimum</td>
</tr>
<tr>
<td>17%</td>
<td>23%</td>
<td>St Dev</td>
</tr>
</tbody>
</table>
While analyzing data from the 2014 reading comprehension portion of the ITBS for students who set reading goals and students who did not set reading goals no clear trends were evident. 19 student from one class set reading goals, and 19 students from another class did not set reading goals. Scoring above the 40% on the ITBS is considered proficient, using this indicator, 100% of the students who set reading goals are considered proficient in reading. Using the same proficiency indicator of 40%, 16/19, or 84%, of the students who did not set reading goals are proficient in reading according to the ITBS data.

However, the class that set reading goals had higher percentile scores on several indicators. The average (mean) score of students who set reading goals was 73%. The average (mean) core of the student who set reading goals was 62%. The median score of students who set reading goals was 74%, while the median score of students who did not set reading goals was 64%. The maximum reading percentile score for a student who set a reading goal was 99%. The maximum reading percentile score for a student who did not set a reading goal was 89%. The minimum reading percentile score for a student who set a reading goal was 49%. The minimum reading percentile score for a student who did not set a reading goal was 18%.
CONCLUSIONS AND RECOMMENDATIONS

The outcomes of this particular study provided no clear outcomes in the area of goal setting and reading achievement. The expectation was that there would be a clear outcome for this study, and that students who set goals in the area of reading would have higher scores on the ITBS than students who did not set goals in the area of reading. Prior to conducting this study, it was expected that setting goals would raise reading achievement. The theory was that as students work towards a reading goal that student achievement would rise. Because there was no clear outcome in this particular sample of students, in regards to goal setting and reading achievement, it cannot be stated that goal setting will raise reading achievement.

However, there are several factors involved in goal setting that must be considered. It is clear from research that just setting a goal is not enough. Goals must be specific, measurable, attainable, results based and time bound, and all these attributes must be carefully monitored by a teacher. If the study were to be revamped a larger sample of students would be studied, and teachers would be educated on effective goal setting with students.

The recommendation from this study is that goal setting and its effect on reading achievement should be studied further. Because of the amount of research on the goal setting process within the educational field, educators should look closely at the goal setting process within their reading program. Professional development centered on the implementation of goal setting within the reading program should be considered as one way to raising reading achievement.
REFERENCES


Schmoker, M. *Results: the Key to Continuous School Improvement*

