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Does Goal Setting Make a Better Reader?

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An Action Research Project Presented

in Partial Fulfillment of the Requirements

For the Degree of Master of Education

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Table of Contents

Abstract

This action research project looked at the relationship between goal setting and an increase in reading levels in six public school students in 4th and 5th grade with learning disabilities in reading. Data was collected through Individualized Education Plan progress reports and individual goals written by the students in connection with the Developmental Reading Assessment test over the fall 2018 semester. The data was compared to the 2018 spring semester IEP goal data from the previous school year when the students had not written goals.

Does Goal Setting Make a Better Reader?

Pablo Picasso said, "Our goals can only be reached through a vehicle of a plan, in which we must fervently believe, and upon which we must vigorously act. There is no other route to success" (The Art Story Contributors, 2019, para 1). A goal without a plan makes as little sense as making a plan without a goal in mind. Setting goals and making plans are things that are taught and must be learned. While goal setting and self-determination are adult life skills, their development occurs throughout one's lifetime. Self-determination and goal setting begin at a young age and the skills continue to be learned across multiple environments and in a variety of contexts (Wehmeyer & Palmer, 2000). For individuals with learning disabilities, self-esteem, perceptions of abilities, and beliefs regarding future success are lower than individuals without disabilities (Hojati & Abbasi, 2013).

Self-awareness, proactivity, perseverance, emotional stability, goal setting, and support systems are all attributes that can be a predictor of future success (Hojati & Abassi, 2013). If a child has a reading disability, perhaps it is possible that they could improve their reading levels by becoming aware of their strengths and weaknesses in reading, learn perseverance through difficult reading tasks, and use goal setting to guide their progress. While research has been conducted on goal setting and how it affects students with and without disabilities, there is little research on how goal setting affects elementary aged students with learning disabilities in the area of reading, specifically in informal reading inventories such as the Developmental Reading Assessment (DRA). This teacher researcher sought to answer the question, does goal setting for elementary special education students with reading disabilities contribute to progress on the DRA test versus previous school years without setting a goal? The goal of this study was that students who have been stagnant in their reading levels for a long time would start to experience

some progress and success by setting goals for themselves on the DRA. First, it is important to understand goal setting, the DRA, and goal setting research that has been done in the area of reading for students with disabilities.

Review of the Literature

Goal Setting Defined

Self-Determination can be described as being the sole responsible agent in one's life and making choices and decisions about the quality of one's life (Lee, Palmer, Turnbull, & Wehmeyer, 2006). Goal setting is one component of self-determination and in special education it has been defined as teaching children how to become aware of their needs and make those needs known (Wehmeyer & Palmer, 2000). Once children are aware of their needs and can make those needs known they are able to make decisions in their life related to those needs. Goal setting theory is built on two things. First, there is a relationship between the difficulty of goals and student performance. Secondly, difficult goals result in better performance than no goals or goals that are difficult to measure such as, "I will do my best" (Garrels, 2017). When given choice making opportunities, schoolchildren will learn what options are available to them and they will have opportunities to gain control over their life (Wehmeyer & Palmer, 2000). When children take part in goal setting they may seek work that is more challenging as well as develop persistence (Garrells, 2017). Other benefits of self-monitoring include becoming organized, having less stress over assignments, becoming more confident, participating more in class, keeping track of their work, understanding assignments, and utilizing better study habits (Lee, Palmer & Wehmeyer, 2009).

Some studies have suggested that self-monitoring in relation to goal setting has improved motivation and performance of students and has helped contribute to increases in the amount of

assignments completed (Wehmeyer, Agran, & Hughes, 2000). Encouraging students with disabilities to develop skills in self-determination can promote access to the general education curriculum. When students learn the importance of setting goals they can learn to set academic related goals connected to the general education curriculum (Lee et al., 2009). When goals are made in connection to the general education curriculum students can make progress academically. These academic skills can be taught by teaching students to set educational goals, develop an action plan to carry out those goals, and monitor progress (Palmer, Wehmeyer, Gipson, & Agran, 2004). Students must identify their interests, passions, and strengths. Once these are identified, children can participate in partnerships with educators to set goals that help guide them in the learning process (DeMink-Carthew, Olofson, LeGeros, Netcoh, & Hennessey, 2017).

In a study of Norwegian elementary and lower secondary students with and without disabilities one question Garrels (2017) sought to answer was, "Do students feel that they learn how to set goals and make plans for goal attainment at school?" (p. 500). Students were asked whether they feel encouraged to set goals. Thirty-eight percent of students responded that they never or rarely felt encouraged to set goals while sixty-two percent of those students felt encouraged. Fifty-seven percent of the students surveyed responded that they never or rarely learned how to make plans to achieve goals and the other forty-three percent responded that they often or always have been taught how to do so (Garrels, 2017). This study found that students with intellectual disabilities feel encouraged to set goals more often than their peers without disabilities. It has been suggested students with disabilities set academic and career goals more often than their non-disabled peers who set goals more often for extracurricular activities (Garrels, 2017).

Different studies have suggested that goal setting has had a positive impact on students with disabilities in the areas of reading, writing, and math (Lee et al., 2009). One study looked at forty students with mild intellectual disabilities or learning disabilities. Teachers rated their student progress toward goals with rating scales. Of those forty students, 55% of students made their goal or exceeded it, 25% made progress, and 20% made no progress (Palmer et al., 2004). Another study later looked at students with significant intellectual disabilities. Students collaborated alongside their teachers to identify one goal to work on. As a result, seventeen out of the nineteen students met or exceeded their outcome goals and only two made no progress (Palmer et al., 2004). Research suggests that students with disabilities who have learned self-determination skills achieve more positive outcomes as adults than their peers who did not learn these skills (Lee et al., 2006).

Another study by DeMink-Carthew et al. (2017) looked at different perspectives and approaches to teaching goal setting with middle-grade students. The study included a sample of eleven teachers from eight different schools who participated in a week long professional development workshop. All teachers taught in middle level grades 4-8 and the eleven teachers were interviewed with a task sheet and were asked to provide samples of their goal setting instruction (DeMink-Carthew et al., 2017). The eleven teachers used five different approaches to goal setting: In approach A, teachers did not tie learning to their student's goals. Students completed a passion project and they were taught how to make goals specific, measurable, attainable, relevant, and time-bound (SMART) in approach B. In approach C students' interests were taken and combined skills they already had to plan their goals. In approach D, teachers co-designed goals with students based on their proposed goals. Finally, in approach E students chose from a list of goals that were preselected by their teacher. Approach A was student-driven,

while B, C, and D were codesigned with teacher and student. Approach E was noted to be solely

teacher designed (DeMink-Carthew et al., 2017). The final findings of this study found that

approach C was the most relevant to promote 21st-century skills (DeMink-Carthew et al., 2017).

Approach B and D were also perceived as the best practice in aligning with students interests

(DeMink-Carthew et al., 2017).

Wehmeyer and Palmer (2000) stated that "unless there is a solid foundation established

during the early elementary years, children will not be prepared to assume greater control over

their lives when the time comes to do so" (p. 465). One barrier for elementary aged student

participation in setting goals is the adults may not realize that young students possess the ability

to have self-determination skills (Danneker & Bottge, 2009). Elementary teachers can begin

teaching goal setting in a large or small group. At first, students may need support in decision-

making but with practice, they will become better at setting goals (Lee et al., 2009). For students

that do not have experience with goal setting, guided goal setting might be an option in the first

stages of goal setting instruction. Students choose from a preset list of goals, which allows for

more choice and participation in their learning (Garrels, 2017). In an elementary setting, teachers

can help students set simple goals that are related to their preferences yet are still within the

context of what they are learning (Wehmeyer & Palmer, 2000). Teaching students to set goals

could provide students with a means to set academic goals that are connected to general

education curriculum (Lee et al., 2009).

When looking at goal setting effects between elementary and secondary students, there

have been no grade level differences in goal setting but some gender differences have been found

(White, Hohn, & Tollefson, 1997). In second to fourth grade, girls were classified as more

realistic goal setters, however, shifts were found in fifth grade that more boys set realistic goals

(White et al., 1997). Regardless of gender or age, if a goal is not accompanied by strategy the

goal will likely fail (White et al., 1997). When teaching students goal setting it is important to

adjust goals as needed. This promotes self-monitoring and helps students become more aware of

what they need to improve on (Lee et al., 2009). It is recommended that students at all grades set

goals that are; specific enough to know if they have been met, are a little more challenging than

expected, and are manageable enough to be achieveable within a given amount of time such as a

day, week, or semester (Wehmeyer & Palmer, 2000).

The benefits of goal setting, the differences between gender and age with goal setting,

and teaching goal setting can be applied to the subject of reading specifically. For many children

with disabilities in academic areas such as reading, repeated failure can cause them to lose

motivation and have difficulty believing that learning to read can be an attainable goal

(Williams, Hedrick, & Tuschiniski, 2008). In recent years, emphasis on high stakes testing has

resulted in classrooms focusing on matching reading levels with material, placing an emphasis

on fluency, and promoting guided reading groups (Williams et al., 2008). One test that is used to

help children match their reading level to the appropriate reading materials is the DRA.

The Developmental Reading Assessment.

Joetta Beaver and the Upper Arlington City School District in Ohio (Pearson, 2011)

originally developed the DRA in 1988. Beaver had a desire to develop an assessment that would

help drive instruction during a time when many schools in Ohio were relying on norm-referenced

tests (Pearson, 2011). The DRA would be designed similar to reading recovery; however, instead

of utilizing trained reading specialists, classroom teachers are able to administer the assessment.

It was first designed as an assessment for grades K-3 and 4-6 but with No Child Left Behind in

2001, the test was expanded to grades 4-8 (Pearson, 2011). This test is designed to evaluate how

well students read fiction and non-fiction, to monitor student's reading growth, to help teachers

diagnose and plan for students' needs, and to support teachers and districts in keeping parents

and other stakeholders in school districts informed on reading acheievement (Pearson, 2011).

The DRA is driven on several premises that have been collected from teachers, research,

and observations. These premises are that good readers choose reading materials to reflect their

interests, are able to sustain reading for extended periods, are able to preview books before they

read them, read fluently, use strategies to decode words, read for meaning and understanding,

communicate about what they have read, monitor their reading, interpret the text literally and

inferentially, back interpretations up with information from the text, and demonstrate

understanding of the author's intentions (Pearson, 2011). The DRA is considered to be an

Informal Reading Inventory (IRI). The DRA assessment scores four areas: reading engagement,

reading rate, accuracy, and reading comprehension (Beaver, 2006). In order to determine oral

reading rate there are benchmarks for different texts. For example, a level 14's independent

range for fluency is 40-70 words per minute while a level 30 independent range is 80-110 words

per minute (Pearson, 2011). At levels 16, 28, 38, 40, 50, 60, 70 and 80 students must pass non-

fiction and fiction texts (Pearson, 2011). Miscues such as substitutions, omissions, reversals,

insertions and repetitions are tallied and accounted for. In the comprehension section, teachers

must score the student based on the best description of their performance with indicators 1

intervention, 2 instructional, 3 independent, and 4 advanced (McCarty & Christ, 2010).

The level ranges of the DRA are as follows: level A-3 are kindergarden benchmarks,

levels 3-16 are first grade benchmarks, levels 16-28 are second grade benchmarks, levels 28-38

are third grade benchmarks, levels 38-40 are 4th grade benchmarsk, levels 40-50 are fifth grade

benchmarks, and levels 60, 70, and 80 are benchmarks for sixth, seventh, and eighth grades

respectively (Beaver, 2006). At different levels of the DRA, there are more testing variables

introduced such as being timed when a student reaches a level 14 and writing a summary at a

level 28 instead of an oral summary (Beaver, 2006). The rationale that Beaver (2006) gives for

written summaries is that most state assessments will ask students to respond to questions and

prompts through writing. In order for a student to pass a DRA test, they must have overall scores

in the independent or advanced range on each continuum of fluency, accuracy, and

comprehension. For a comprehension score in the advanced range, a student must have retold the

story in sequential order, included character's names and details, used appropriate vocabulary,

and no prompts were given in retelling. For the independent performance on a rubric the child

must tell most of the story information, include most details, use language that reflects a basic

understanding, and only need prompting one to two times on the retell (Beaver, 2006).

As with any assessment, there are limitations to the DRA. The DRA is one source of

information about a learner's abilities in reading. Informal Reading Inventories can be viewed as

unreliable due to the differences between the passages at each level. The prior knowledge of

vocabulary and words may also vary in difficulty from text-to-text with an IRI (Paris, 2002).

This piece of data taken is one measure recorded in one day of a child's life. It should not solely

drive decision making when it comes to retention or summer school for a learner (Pearson

Education, 2011). Paris (2002) suggests that in order to gather more accurate data, test

administrators could use the same text for each test session. They should also measure a

student's increases in rate, accuracy, fluency, comprehension, and retelling. Documenting this

data may help with inconsistencies. Teachers must also be cautious of avoiding prompting

students while they read which might affect the inter-rater reliability of the DRA (Burgin &

Hughes, 2009).

Another consideration in the reliability of the DRA test involves open-ended comprehension questions. Questions such as "What was the author trying to tell you in this story?" are graded with subjectivity between raters. Grading for the DRA looks at strengths and weaknesses in comprehension utilizing a rubric of 1-4 point rubric scale. McCarthy and Christ (2010) noted that, "Teachers determine strengths and weaknesses based on their own interpretation of the scores obtained and are supposed to decide on three to five focuses for future instruction without specific instructions for teachers to make this decision" (p. 184). Beaver (2006) noted that there is more than one correct answer for oral and written responses however; it is the clarity, content, and insight that should determine the child's level of understanding and performance.

The DRA technical manual gives details involving the validity of the assessment (Pearson, 2011). Individuals that filled out rating scales on the assessment have reported that the DRA test has high usefulness (McCarthy & Christ, 2010). Validity scores for fluency and comprehension were rated high at .78 and .81, however, while they were considered high McCarthy and Christ (2010) recommend that it should not be used to make high stakes decisions because reliability co-efficient are recommended to be .90 or higher to inform decisions. Regardless of how high validity was in the assessment, there have been strong correlations and consistencies in the scores that the DRA test measures (Pearson, 2011). A study by Burgin and Hughes (2009) looked at the reliability of the DRA with a group of summer school students. Teachers of the summer school program looked at the children's DRA test scores and compared them to running record scores taken in the summer. The evaluators discovered that there were high reliabilities between the tests and that there was powerful evidence of validity when using

running records assessments. The study showed evidence that an IRI such as the DRA is a

credible measure of students' reading abilities (Burgin & Hughes, 2009).

One advantage of the DRA is that it is not conducted as a multiple-choice test. Multiple-

choice tests cannot show the depth of information that teachers can use to improve instruction; it

only indicates test-taking behaviors without measuring a child's literacy (Burgin & Hughes,

2009). The informal reading inventory taken by the DRA helps in designing instruction based on

student's literacy behavior (Burgin & Hughes, 2009). Beaver (2006) recommends that for special

education students, the DRA continuum can be turned into measurable goals and objectives as

well as can be used as a progress-monitoring tool. If written IEP goals and objectives can be

driven from the assessment, it is important to consider what individualized goal setting could

look like with not only an informal reading inventory like the DRA, but also reading goal setting

as a whole.

Goal setting and reading.

One of the first steps in teaching a student to set reading goals is to allow choice in their

reading (Cabral-Márquez, 2015). Márquez (2015) noted that classrooms could not implement

goal setting if the reading curriculum is controlled because students should be able to make some

choices about what and how they read. Students must be aware of the amount of effort it will

require to complete a task (Cabral- Márquez, 2015). Telling a student that their goal is to read the

next DRA level without the student understanding the effort and actions necessary to move to the

next level will be a meaningless goal. As long as the goal is able to be attained in a short period

of time and the student is able to understand the differences in attaining the goal and not

attaining it, goal setting will be more effective (Cabral- Márquez, 2015).

One study looked at reading motivation, achievement, activity, and the impact that meeting reading goals had on fourth and fifth grade students in general education (Cabral-Márquez, 2011). The study also looked at relationships between motivation, achievement, and goals in 48 fourth and fifth grade students. The researcher used a Motivation for Reading Questionnaire, Reading Activity Inventory and the Measures of Academic Progress (MAP) test. The tests were administered in the fall and the spring (Cabral- Márquez, 2011). The researcher found that the student's reading goal-setting intervention (RGI) did not have an impact on their achievement, motivation or activity. The goals that were met, however, predicted growth in seeking more challenging reading, curiosity toward reading, achievement in reading, and their overall reading activity (Cabral- Márquez, 2011).

Another study took data from 328 fifth grade students in Kentucky. The school district spent two years utilizing goal setting with their students and saw growth not only on their state assessments but on local assessments as well (Dotson, 2016). Information from the 2014 reading assessment data was taken when students were not setting goals in fourth grade. The data was compared to the following year when the students were in fifth grade. In fourth grade, the students did not set a reading goal and in fifth grade they set a goal for the assessments (Dotson, 2016). The study found that 69% of students in fifth grade made adequate progress on the test when the year prior 60% of the students made progress (Dotson, 2016). This increase of 9% occurring over one year in a larger district suggests that goal setting may be a contributing factor in reading growth.

A group of middle school students involved in a pilot study by Swain (2005) investigated whether goal setting and student awareness of goals would increase their curriculum based measurement (CBM) assessment scores in reading. A group of four special education teachers

participated in a study with nineteen sixth and seventh grade students. Two conditions were set. In the first condition the students did not know they were setting goals and within the second condition students were taught how to set goals and were aware of their goals (Swain, 2005). One group of students were taught how to set a goal, how to reach a goal and how to identify if they made their goal while the other group did not see any goal or graph of their progress (Swain, 2005). The progress of the students' reading scores were tracked for seven weeks. The students that set their goals made their daily goal 38% of the time. Students met their realistically set goals 48% of the time. Eighty-nine percent of students met their end-of-intervention goal set by their teacher (Swain, 2005). While students struggled to set realistic goals, they were able to identify a specific reading goal. Over the seven weeks, students made progress by not setting as vague of goals as they had at the start of the study (Swain 2005).

Students with learning disabilities in the area of reading often have feelings of helplessness often believing that they are unable to overcome their reading difficulties (Swain, 2005). Students with learning disabilities often experience failure which in turn can cause them to believe that they do not have ability and lower their expectations for themselves when they are setting goals. Brown (2008) recommends when working with children with learning disabilities in the area of reading, there are several things that educators and parents can do to encourage them. The first is to notice the goals that they set, connect their goals to schoolwork, praise them throughout the process towards achieving the goal as well as their product, and have discussions about how they accomplished the goal. When students with learning disabilities are aware of how they accomplished a goal, they will be able to understand what works for them (Brown, 2008).

Swain (2005) noted that in order for students to understand their progress academically they must understand what their reading goals are and be able to work with their teachers to determine their progress. One cycle of setting reading goals recommended by Cabral - Márquez (2015) is to first teach students to set reading goals just like any other reading skill. Secondly, the student should set goals that are short term, long term, and specific. Then teachers should conduct goal conferences with students and prioritize which goals should be targeted first, assist students in acquiring necessary materials to meet their goal, continue to have conferences about progress, and allow students to sign up for goal conferences if needed. Lastly, teachers should evaluate progress at the end of each goal setting cycle and repeat the reading goal setting cycle.

Pierce (2016) sought to answer the question, "How much change in student reading ability is produced as a result of goal setting with students?" (p. 73). Nineteen Florida elementary students participated in the study in grades second through fifth. The testing administration was the Reading A-Z running record. Six students read at a first grade level, three read at a second grade level, and ten read at a third grade level or above. Students were taught to set SMART goals. They completed timed reading fluency passages each week and would set weekly fluency goals for nine weeks (Pierce, 2016). Each grade level made progress in the study with goal setting; however, fifth grade students had the largest amount of progress. This study supports the hypothesis that goal setting has benefits in student progress (Pierce, 2016). Because of the study, parents also reported that their children were making other goals at home as well as in other areas such as math (Pierce, 2016).

Another study by Johnson, Graham, and Harris (1997) explored goal setting on comprehension strategies for a group of fourth, fifth, and sixth grade students. All the students in the study read 2-4 levels below their peers either at a second or third grade reading level. The

study used five stories and five comprehension probes, taught student's pre-skills, held

conferences, discussion, modeling, mastery, and collaborative practice of the strategies (Johnson

et al., 1997). Students set goals during this process and the study found that although the students

experienced growth in their comprehension skills, goal setting did not make a contribution to the

student's progress. The study noted that the possible limitations that contributed to this result

occurred when data was not taken with the absence of goal setting and that goal setting was not

needed as the students achieved mastery (Johnson et al., 1997).

The limitations from the Johnson, Graham, and Harris (1997) study will be addressed in

this action research study. This action research project will explore how students with learning

disabilities in the area of reading respond to goal setting on their DRA. The results will be

compared to the previous semester when there was an absence of goal setting. This group of

students has experienced many difficulties and frustrations in reading throughout their

elementary years and the hope of this study is that by goal setting for reading, they in turn, will

experience success and growth on their reading levels.

Methods

Participants

Participants in this study involved six elementary students in grades four and five in a

school in Harrisburg, South Dakota. The group of students is comprised of five girls and one

boy. During the study, these students' ages ranged from nine to eleven. In the spring of 2018, the

students were in third and fourth grade. All students receive special education services during the

data collection period. Four students least restrictive environment (LRE) are resource room,

while two students LRE are general class with modifications. All six students qualify for special

education services under the category of specific learning disability in one or more of the

following areas: reading fluency, reading comprehension, or basic reading. Students A, B, C, and D receive full instruction in reading and students E and F receive supplemental reading instruction. Students that receive full instruction in reading have between 45 and 60 service minutes daily on their IEP, work on an alternate curriculum at their ability level, and receive their grades from the special education teacher. Students who receive supplemental instruction have 30 or less service minutes per day, receive their grades from the general education teacher, and access general education content. Students receiving supplemental instruction receive between 5-30 minutes daily of services in reading. Students A, B, C, D, and F are reading three to four grade levels below their same aged peers and student E began the study one grade level below their peers.

The elementary school these children attend in Harrisburg is made up of 453 students. The school is one of six elementary schools in the district with the district having a total enrollment of 4,086 students (Amolins, 2018). The district's diversity is predominately white with 89.8% of the students in district identifying as white (Amolins, 2018). Five students in this study are white and one is Hispanic. The district has 204 total students identified with a specific learning disability according to child count numbers (Amolins, 2018). All six students were involved in a personalized learning program in the fall of 2018. In the spring of 2018, only one of the six students was in the personalized learning program. The program in the Harrisburg School District is described as giving students voice and choice to aid in making decisions about their learning (Amolins, 2018). Students are taught to become aware of what is best for their learning and participate in learning studios rather than classrooms to split students into groups that will suit their individual academic needs. Students work on skills that they are ready for and are able to accelerate their learning or to slow down and relearn concepts. At the elementary

level, students move between studios to work on concepts and standards that they are missing to

fill in gaps. In this elementary school and one other in the district there are 300 students

participating in the program (Amolins, 2018). All grades second through fifth participate in the

program at this particular elementary school.

Data Collection

Quantitative data was collected from student scores on a DRA test. Students must receive

a passing score to move to the next DRA level. The independent variable includes the goals set

by the students. Data was collected from quarterly progress reports from each student's

individualized education plan. Third and fourth quarter from 2017-2018 school year and the first

and second quarter of the 2018-2019 school year were used for data collection. All six students

have IEP goals written related to the DRA. An example of a student's IEP goal is written as

follows: Given a DRA level 20; (student) will be able to decode the text at the independent level

with 95% accuracy on 4 out of 5 tries. Some goals may include fluency such as: Given a DRA

level 24; (student) will be able to read the text at a rate of 75 words per minute with 95%

accuracy on four out of five tries. All six students have IEP goals connected to the DRA test

regardless of whether they are receiving full instruction or supplemental instruction by the

special education teacher. IEP goals are written to target reading acceleration by moving up four

DRA levels per year, or one DRA reading level per quarter. If students move more than four

DRA levels per year, the IEP goals are rewritten by the IEP team to continue to give the student

rigorous goals.

In the spring of the 2017-2018 school year, students did not set personal goals related to

the DRA test. The intervention in the fall of 2018-2019 school year involved students writing

goals related to the DRA test. Students were taught how to set SMART goals. Students set their

SMART goals prior to taking their DRA by writing the goal on a sticky note and placing it in a visible area within the classroom. Before taking the test, students took the sticky note off the wall and brought it over to the table to remind themselves before the test of the goal they wrote. If students passed, they were able to write a new goal and the old goal would be taped to a certificate to take home to parents. Examples of student goals written related to DRA tests are: I will move up a reading level, I will read a level 16, I will level up in DRA, and I will read a book level 18. Students were aware of the DRA level progression and what level they were striving to meet at an independent range next.

Students had informal conferences with the teacher researcher in order to make connections to books that they would be able to read as they moved up DRA levels. For example, if a student wanted to read a book out of the level M bin in the classroom but were reading a level F they were shown the correlation between DRA level and the age appropriate bins in the classroom. Formal goal conferences were not held, however, students spent time reviewing their goal before they took their DRA test by reading their goal and looking at the book's level. During this data collection period from January of 2018 until December of 2018 none of the six students had to rewrite their goals, however, this would have been part of the research methods if the goal the students had written was taking longer than several months or was found to be too difficult for them.

Findings

Data Analysis

Upon initial analysis, it appears as though all students made more progress in the fall of 2018 than the spring of 2018 with a goal setting intervention in place. Table 1 indicates the six student's data without goal setting intervention in the spring of 2018. January 2018 data was

taken as a baseline for the spring scores. It is important to note that DRA levels sequence as follows: A, 2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 28, 30, 34, 38, 40, 50, 60, 70, 80 (Pearson, 2011). It is also important when reviewing this data to consider that meeting a time requirement for fluency begins at a level 14 which is a level that students A, B, C, and D attempted or became close to attempting in this study (Pearson, 2011). The average scores at the bottom of both tables were found by adding the levels together, finding the mean and rounding the mean to the nearest level. For example, if the average of the scores came out to 15 the level was rounded to 16 because there is no level 15 in the DRA scoring system.

Table 1

DRA Progress Spring 2018

Student	January 2018	March 2018	May 2018	Progress
Student A	8	10	10	1 level
Student B	10	10	10	No progress
Student C	10	12	14	2 levels
Student D	10	10	10	No progress
Student E	24	28	30	2 levels
Student F	18	20	20	1 level
Average level	14	16	16	1 level

Table 2 indicates a baseline score in August 2018 after the summer break. All six students maintained their previous level from May 2018. Students A, B, and C attended summer school for reading services due to regression and/or emerging skills in the 2017-2018 school year. Students A, B, and C maintained their levels over the summer months. Table 2 indicates student's tracked DRA levels in October and December of 2018 when DRA tests were taken for

quarters one and two. In Table 2, averages were found on student's levels and progress

throughout the pre-intervention and post-intervention phases of the study. Table 2 suggests a

growth of two levels on average in DRA scores versus one level during both data collection

periods.

Table 2

DRA Progress Fall 2018

Student	August 2018	October 2018	December 2018	Progress
Student A	10	12	14	2 levels
Student B	10	10	12	1 level
Student C	14	16	18	2 levels
Student D	10	12	14	2 levels
Student E	30	34	38	2 levels
Student F	20	24	28	2 levels
Average level	16	18	20	2 levels

Five out of six students grew two levels from August to December while one student

grew one level. This is a larger DRA level jump when comparing the first data collection period

from January until May. During that period of time, two students made no progress, two-made

progress by moving one level, and two students moved two DRA levels. In the spring semester

of 2018, 33% of the students made quarterly progress and in the fall semester of 2018, 83% of

students made quarterly progress. In the spring of 2018, 67% of students made some progress

whether it was one or two DRA levels. In the fall of 2018, it increased to 83%. This is a 16%

overall growth between the six students.

When considering the results of this study it is important to consider a few factors. First, student B made a growth of one level from August to December 2018. This student was one of the two students in the study who made no progress from January to May 2018. This student's scores have been inconsistent in previous school year's progress reports in reading, however, their comprehension has always been in the independent range whether or not their fluency scores are in the independent, instructional or intervention range. It is also important to note that students C and E made the same amount of progress from August to December as they did in January to May moving one level per quarter or two levels per semester. Both of these students received the same amount of service time in both data collection periods.

Other factors important to consider when reviewing this data are tutoring and being a new student to the district. Student A began receiving tutoring over the summer of 2018 and continued having weekly outside tutoring in addition to recieiving full instruction in reading. This child only moved one level in the spring of 2018 and not only maintained their level over the summer when previous years had regressed but also moved two levels in the fall of 2018. Students D and F both transferred into Harrisburg from another school district in the fall of 2018. Student D made no progress from January to May 2018 and also received only 30 minutes of supplemental instruction in the previous school district they attended. In August of 2018, student D began receiving full instruction in reading. Student D and F moved one level per quarter from August to December 2018. Student F continued to receive the same amount of instruction as her previous school district but moved one DRA level from January to March at her previous district and moved two levels from August to December. These factors will also be discussed in the limitations section of this study.

Discussion

Summary of Major Findings

This study's findings can be compared to Swain's (2005) study that looked at curriculum-based measurements with goal setting. Seventy-eight percent of students in Swain's study met their end of intervention goal. Though there was 78% growth, it was noted that 72% of students had trouble setting realistic goals (Swain, 2005). In this study, 83% of the six students made progress on their DRA each quarter and 17% made progress at least once over the semester compared to the previous semester where only 33% of students made progress quarterly, 33% made no progress, and 33% made progress at least once throughout the semester. One difference between this study and the Swain (2005) study was the amount of students. Swain had 19 sixth and seventh grade students and this study contained six fourth and fifth grade students (Swain 2005). In the Dotson (2016) study, 328 students in Kentucky went from not setting goals on their MAP testing in fourth to setting goals in fifth grade. While that study had a 9% growth, their test sample involved a whole grade level. It is important to consider the potential differences in results between a larger group of students.

This study was consistent with Cabral-Márquez (2011) which also focused on fourth and fifth grade students, however, this study looked at students with learning disabilities. In the Cabral-Márquez (2011) study students' goal setting did not have impact on their overall achievement or motivation. Although students in that study made progress, it did not correlate to their overall achievement on the MAP testing. This study would not be able to correlate student motivation like Cabral-Márquez in 2011 because students did not fill out questionnaires about their motivation. Because of the study, the teacher researcher informally noticed student enthusiasm when it was time to take the DRA test. Also informally noticed was student requests

to try the next level during instruction time. These observations, however, do not contribute to

overall results, as they were not recorded formally.

Limitations of the Study

This study has several limitations to consider such as behavior, instructional limitations,

teacher scoring interpretations, the scope of ages, and diversity of the school. Behavior is a

limitation because at times students may decide they do not want to try their best on a DRA test

or become flustered. As a result, it will not show a true picture of what they are capable of.

Behavior limitations are common in this elementary school in Harrisburg. For example, student

B's DRA test scores have been inconsistent in past years due to effort or behavior. Student B

shut down or became flustered when tested and in turn, effort would be inconsistent such as

making 18 word errors on a test and the next week reading the same story and making 4 word

errors. In those instances, the student was retested at a later date and time of the day to account

for their inconsistencies.

Other behavior limitations involve the testing environment and whether or not the student

is taking medication for conditions such as attention deficit hyperactivity disorder. Testing

environment could be considered a limitation to this study. The students in this study were tested

in the resource room with several other students present but not working at the same table. If

students were tested in a room with no distractions or other people to become distracted by, the

outcome could be different for the student. Only one student of the six students in this study

takes medication for their behavior. The student has taken medication throughout the spring of

2018 and the fall of 2018 so medication did not play a role in their progress. A limitation,

however, could occur if a student was not on medication in the spring semester of 2018 and

started taking it in the fall or vice versa. Medication could positively or negatively impact progress on their reading.

Some instructional limitations are present such as service times and outside tutoring. These limitations are important to consider for students A, D, and F. One limitation is the amount of service time that students are receiving as well as tutoring. Student D received supplemental instruction in the spring of 2018 from the previous district they attended. When they moved to Harrisburg, they began full instruction services in August of 2018. The sudden increase in levels could be contributed to receiving more intense instruction. Student D and F's progress could be a result of moving districts. Both student D and F could also have made progress due to the style of learning the district offers with their personalized learning program. Student A began receiving outside tutoring in the summer of 2018 before the school year. Student A's movement in levels could be a result of receiving extra support outside of school.

Another instructional limitation is found within scoring. Students the teacher researcher works with sometimes earn a passing score with comprehension and accuracy but on the fluency piece, they do not pass. This part of the test could affect the passing rate of a few students. At the end of a DRA test, teachers score the test and decide what the student earns in the rubric. One teacher's interpretations on the rubric of the test may vary from another's limiting the results. Some students may be held back in passing a DRA for several quarters because their fluency rate does not fall in the independent range. The student could comprehend all that they're reading however make too many accuracy errors. Another possible scoring scenario is that the student can read in the advanced range, however, struggles to retell or write a summary about what they have read.

The scope of this research only looked at fourth and fifth grade students, therefore the results of the study may not translate to younger grade levels due to the word analysis required in DRA tests. It is important to remember that for a child in first or second grade on an IEP, goal setting may not be appropriate for DRA tests as they may not be instructionally ready to take the tests depending on their strengths and needs. Because this study looked at students who are reading significantly below grade level, it is important to note that it may produce different results with students in general education and who are reading at grade level. This study also was conducted in a school with little diversity. Although conducted in a low-income school, the majority of the school population is white and English speaking. There is a limitation in scope of socioeconomic statuses. The students are primarily low income. This does not reach a majority of students from middle-upper income families. Environmental limitations such as home life could play a factor in this study as well. If students are part of a a two parent home, a single-parent home, or are being raised by another guardian, this could play a role in the amount of exposure a child gets in reading at home and translated into their effort in reading at school.

Further Study

Because this study involved students in a personalized learning setting, it is important to consider intersecting some philosophies of personalized learning and goal setting in future research. DeMink-Carthew et al. (2017) noted that elements of personalized learning involve connecting learning with student's interests, allowing students to actively participate in their learning, and become responsible for their learning by having voice and choice in how they learn. Approach E in the selection approach study by DeMink-Carthew et al. (2017) can be compared to this study's approach. Approach E in the study had students identify their goal from a list of suggested goals that were already written. In this study, students wrote goals related to

their DRA level which were suggested goals. DeMink-Carthew et al. (2017) found in their study

that approach E was less student driven and largely teacher-driven however allows students to

have some voice and choice in their learning. For further research, allowing students with

learning disabilities to self-select their goals, align the goals to their interests, and help design

their goals could have another outcome to their progress.

  The DRA is just one tool that teachers use to determine progress. Many other data

collection methods could be considered as future research to find patterns in progress with goal

setting for students with learning disabilities. Future research could look at district progress

monitoring such as MAP testing (Cabral-Márquez, 2011) looking at reading and math progress.

Another reading measurement tool to consider could be Curriculum Based Measurements

(Swain, 2005). While this study looked at DRA in one elementary school, the Harrisburg School

District currently has six elementary schools as of 2018. This study could have expanded to look

at children with learning disabilities across the district. Any other tool like MAP or CBM that is

used throughout an entire district could cast a wider net of data to analyze and compare when

considering goal setting.

  This study focused on students with learning disabilities several grade levels below their

peers in reading. The DRA scores three areas: fluency, accuracy and comprehension (Pearson,

2011). Students in this study set goals to move up a level however some students in the study

struggle more with one area than others. If goal setting were focused on a student's weakest area

such as comprehension or fluency, a further study could look at whether or not their overall

progress differs from just setting a basic goal to pass a leveled text. If a student's passing score

on a DRA test is always affected by their words correct per minute in fluency, that student could

set goals in increasing their words per minute. If their words per minute increases, it could

translate into their DRA test. Long-term and short-term goal setting could be used for further

study into student reading progress. A long-term goal could be moving a certain number of DRA

levels within the entire school year, while a short term would be to increase the student's

weakest area such as increasing fluency rates 10 words per month.

Other ideas for future research could involve parents or external reinforcers. As Lee et al.

(2006) noted, "Home offers children the earliest opportunity to make choices, exercise control,

and exhibit competence… the home has been the primary setting in which children learn to solve

problems and make decisions" (p. 37). Further research could focus on when parents and schools

work together and if there are corresponding changes in the child's reading ability when goal

setting involves parents. In this study, it was known that one student had parents who set up an

outside tutor. If parents had been contacted about their child's personal goals, would the outcome

have resulted in more progress? Further research could look at if parents had homework for the

child that would support their goals, would it make a difference in student achievement when

setting SMART goals? Finally, external prizes and reinforcers were not used in this study,

however, if a child had worked for a prize or external reinforcer of choice, the results of this

study may have had a different outcome. The children in this study went home with a certificate

stating they met their goal to notify parents. Further research could study the effects of a prize or

reward to work for at home and how it affects students' intrinsic and extrinsic motivation.

Conclusion

Does goal setting make a better reader? The answer to this question is possibly. Many

schools today are using goal setting as common practice and it can play a crucial role in reading

development for children (Cabral-Márquez, 2015). This study supports the belief that goal

setting helps students with disabilities realize they are making progress and that goal setting

makes a positive impact on students' academic performances in reading, writing, and math

(Swain, 2005). Even though more research needs to be conducted to conclude if goal setting

plays a significant role in the progress of students with learning disabilities, setting goals and

participating in goal setting could inspire students to be active in their learning (Williams et al.,

2008). While goal setting is not required for students to make progress, it can be used as a tool in

an educator's toolkit to help students become motivated and learn the skills related to goal

setting.

Helping elementary students with disabilities learn self-efficacy by setting goals will help

them begin a path to gain control over their lives and be prepared to do so when they enter

adulthood (Danneker & Bottge, 2009). As Pablo Picasso said, "Our goals can only be reached

through a vehicle of a plan, in which we must fervently believe, and upon which we must

vigorously act. There is no other route to success" (The Art Story Contributors, 2019, para 1).

The vehicle of a plan can begin to be taught in a child's young age in skills like reading. Students

with learning disabilities can be taught to believe in themselves. They can learn to make plans

and dream dreams fervently. As the child grows and matures, and as their goal becomes a fervent

belief, students will learn to vigorously act on their goals. The route to success begins when

students take steps to participate in their learning and goal setting is just one of many routes to

success.

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