Learning Goals:

The Effects of Using Assessment Data to Set Student Created Goals for Growth on Reading Achievement

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Achievement

Abstract: Struggling learners are often more successful at achieving learning growth when a specific goal is set in place with measureable outcomes. The goal of this study was to evaluate the effectiveness of using assessment data to set student determined learning goals with the end result being reading achievement. For the study, a group of first grade students were selected and assessed to determine what areas of weakness they had in their reading knowledge. Then learning goals were set with the student based on the assessment data collected. Student selected learning goals were found to impact the student's reading achievement during the study.

Keywords: assessment, data, student created, learning goals, achievement

Introduction

Mraz and Hertz (2015) stated that "Setting goals with each individual child will take time, but trust that it is time well spent" (p.116). Assessments are common in most classroom settings to determine student achievement and areas of weakness. Teachers often use this data to set learning goals for students and to plan lessons to help students accomplish these goals. When students are involved in the assessment process and setting learning goals, it allows them to take ownership in their own learning. With students in mind, learning goals should be set in language the students understand, be measurable, and be obtainable in a targeted amount of time. Mraz and Hertz (2015) also stated that "Once the goal is identified for the child, you have only selected your destination. Together, you and the child must map out and record the journey so she has a reasonable, reliable way to achieve the goal again and again" (p.118). When teachers and students set out on the journey to achieve a goal, academic achievement will increase.

Background

Teachers often use student assessment data to set learning goals for whole group lessons, small group interventions, and individual student goals in a subject area where the students can show growth. Students often possess a drive to want to do better in their learning and are often curious about how they do on a particular assessment. They are proud when they show growth and often get frustrated when they are not sure what to do. When students are involved in the goal setting process, they can select an area they would like to improve in and work to reach that set goal. This provides the student with ownership and accountability in their own learning. The trend in the reading research is that students need to be actively involved in their learning and goal setting to help them improve academically and gain confidence in their abilities. Stated goals hold the teacher and student accountable and achievement is enhanced to the degree that

students and teachers set and communicate appropriate, specific, and challenging goals.

Students will be actively involved in the goal setting process to set appropriate, specific, and

challenging goals for themselves which will begin to help the student toward increased

achievement (Serravallo, 2015).

According to Lucy Calkins (2015), teachers must first set the tone for literacy learning by

serving as a mentor who demonstrates what it means to live joyfully literate lives. Students often

rely on schools to provide them with this image of possibility. When teachers are transparent

about their own reading and their goals to develop themselves as a reader, they can model that

learning to read well is a lifelong process (Calkins, 2015, p.17). Calkins (2015) also states that

learners need assessment-based instruction, including feedback that is tailored specifically to

them. By taking the time to research students' work and to think about their path of development

in reading skills, teachers can gain knowledge to provide guidance so each learner can progress

toward clear goals (Calkins, 2015, p.25). This is also important to build skills and confidence in

an area that is important to them for a successful experience before conquering more difficult

areas (Elias, 2013). Students must own the assessment process as well, by being able to

communicate what and how they are being assessed, and why it is valuable to them (Miller,

2015). Once classroom teachers start empowering students to become metacognitive with the

focus of improving learning, it can result in a change in student motivation, resilience, and

learning gains (Wilson, 2015).

By setting a daily attainable goal, students can strive to outgrow themselves each day

(Calkins, 2015). By noticing reading and writing connections in assessments and instruction,

teachers can begin to notice similar strengths and weaknesses to make the most out of a goal, and

provide opportunities to repeat the work across the student's day (Serravallo, 2015). In using

assessment to set learning goals with students, there are four specific steps identified by Jennifer

Serravallo. They include: collecting, analyzing, interpreting data, and establishing a goal with

the student. Then, through an individual conference, set an action plan to help obtain this goal

(Serravallo, 2015). When setting learning goals with students it is important to consider the five

lenses for reading. These include: engagement, fluency, print work, comprehension, and

conversation. Learning goals can also be set in order to achieve good writing, writing process,

and writing engagement (Serravallo, 2015). The more content knowledge teachers can gain from

a variety of assessments and tools students use on a regular basis, such as reading logs, the more

they can learn about the reader. The more they help them develop goals and make gains in

reading achievement. The first step in the goal setting process is to match the right goal to the

right reader (Serravallo, 2015). It is important to consider its appropriateness and how

assessment will take place to see if the child met their learning goal. Once the goals are

developed, the teacher can select strategies to match the student's needs in meeting that learning

goal (Serravallo, 2015). When developing goals teachers must consider: what the student knows,

what they need to know, and what they need to be able to do for a particular reading level

(Calkins, 2015). When developing learning goals with students the language we use to

communicate with students is valuable. This includes our oral language, written language, and

language we use to convey learning goals to the students in our classrooms. "Students can refer

to charts to find strategies to tackle areas of trouble. Charts also remind students of new

processes until they become automatic" (Mraz & Martinelli, 2014). One way to make a learning

goal chart fit the student's needs for just-right words and phrases is to listen to the words

children use to define and label what they are learning (Mraz &Martinelli, 2012).

Research shows that setting learning goals with students holds many values with young readers. They help readers feel a sense of ownership in their learning, make learning meaningful, and help readers develop their skills and independence in developing into stronger readers. Learning goals can help students grow as readers as long as the goal is obtainable and meets the reader where they need to be in order to grow.

Research Question

Research on this topic contains a limited number of classroom setting studies to measure the impact on student determined learning goals using assessment data. The purpose of this study is to investigate the following question:

How can assessment data be used to set student selected learning goals to better reading instruction and monitor student growth to improve student reading achievement?

The expected outcome of this study was that when assessment data was used to determine and set student learning goals with the individual student that reading achievement would increase through sight words which also impacted student's sight word recognition. The goal of the study was to determine if student selected learning goals had an impact on motivation and student growth through a selected targeted time of study.

Method

Participants and Setting

Research was conducted in a first grade classroom. The classroom contains twenty one students ranging in age from six to seven years old. The students are familiar with the goal setting process in the literacy workshops from previous literacy instruction based on the Lucy Calkins curriculum. Students had not had previous experience of using assessment data to set learning goals with assistance from the classroom teacher. The research timeline is from October

1 to October 30, 2015. The students were selected for the test group based on their beginning of

the year assessment scores for the reading benchmark and sight word assessments. The test

group was also balanced with English language learners in the classroom. Students were

selected based on not receiving outside services as a reading intervention. These services

included reading recovery, speech, special education resource, and language tutoring. The rest of

the students were picked based on being below expected grade level standards for sight words

and reading level. This test group was selected from an elementary school with eighty four

percent free and reduced lunch and limited parental support at home. The test group contains

three identified English Language Learners. The test group is comprised of 3 male students and

4 female students. All the participants of both groups are in the same first grade classroom and

receive the same literacy instruction throughout the school day. The control group participated in

the same reading tasks of setting learning goals but did not use their assessment data to select a

goal. The teacher studied that data and helped guide the learning goal. Both groups had the same

literacy teacher to limit variables that might occur based on teaching style and approaches to goal

setting.

Materials and Procedures

        A district mandated assessment was used as a pre- and post-assessment for both test and

control groups. The assessment was given to the experimental group prior to modifications

being made to how learning goals were set. The assessment given was the Lucy Calkins Sight

Word Assessment. This assessment is comprised of 200 sight words on lists A-H which students

are expected to know by the end of the first grade school year. Each quarter students are

required to know a certain amount of words to meet the benchmark set by the school district.

This assesses known words found in the student's independent reading books.

When the assessments were first given before setting learning goals the range was large on known sight words and reading assessments. The students in the control group ranged from 27 to 122 known sight words. The students in the experimental group ranged from 12 to 52 known sight words. The students in the control group received sight word cards from the teacher with a goal set for the number of sight words to learn. The students in the experimental group set the number of sight words they wanted to learn by a targeted date of October 30, 2015. Students attended a one-on-one goal setting conference with the teacher to determine the projected outcome for their learning goal by the end of the given time period. The conference part of the goal setting provided insight on what the students felt they were able to accomplish in a month's time frame based on what they felt their sight word knowledge was at the time. The literacy teacher explained to students based on their assessments what the expected number of sight words for the quarter was and how it related to what they knew. Together they determined what they needed to do to meet standards.

The other variable was the amount of time students spend practicing their sight words at home and school. The students were then given a sight word ring to study at home and school based on the words they wanted to accomplish by October 30, 2015. A sight word ring is a group of flashcards with sight words the student is working on mastering. Each child's sight word ring is individual to their needs based on their sight word assessment. It was their responsibility to work on the sight words during this time period and they did not receive additional instruction other than the in class sight word instruction that was given to all students. Students could practice their sight words with the teacher but the only feedback provided was to reinforce the words they did not know. Students were progress monitored after two weeks in the

study to check how much growth had been made and to determine what words were left to meet their end goal.

<div align="center">**Findings**</div>

Conversational Interviews and Observations

The individual conferences produced insights to the student's mindset on their own learning and they helped the researcher match student assessment data and mindset to their individual learning goals. During the goal setting conferences, students shared what they wished to accomplish and their fears on accomplishing the goal set. One student responded to the initial conference, "I am just not good at sight words. I can't remember what they are!" Another student replied, "I try my best but there are just so many." This showed that the sight word list when given in its entirety can be completely overwhelming to a first grader. All the students in the experimental group wanted to know more sight words. However, they were not quite sure how to accomplish that task. When students met with the researcher to check up on growth and revise their learning goal if needed, students used the academic language related to the sight word assessment. They used the words such as I need 5 more words to complete list C and then how many more do I need to accomplish list D as well? During the student's individual goal setting conferences, students shared what they wished to accomplish and their fears on accomplishing the goal set. Other educators from the building noticed that this group of students had their sight word cards out in the after school pick up line, and had them attached to their backpacks. The students took ownership in their learning and as a result benefited from academic growth.

Student 1 shared that he practiced his sight words but sometimes they got mixed up in his brain. He stated that he was proud of how many he knew, but he wanted to learn more because

that is what he gets stuck on when reading books. After looking at the data, he decided that by

October 30, 2015 he would know all of lists A, B, C, and D. He would practice his sight words

at home and would practice his sight words at least once a day with his literacy teacher. When

he met for his progress monitoring, he stated that he knew all the words on lists A-C but was

stuck on list D. He decided he would then practice his words with his reading partner as well to

help him learn the tricky words.

Student 2 said she did not practice her sight words at home because her sister always said

the words before her when they did them together. She set her learning goal of knowing 75 sight

words by October 30, 2015. In her progress monitoring conference, she said it was easier to

practice at home with her own words. She would practice them with her older sister by just

reading the words to her which was less frustrating. She said she enjoyed working toward a goal

because she knew what she needed to do to be a better reader.

Student 3 was very eager to learn more sight words to help him become a better reader.

He saw his goal as a competition, and he was going to win no matter what. He even encouraged

the other members of the goal setting group to put their sight words on the zipper pull of their

backpacks so they would always have them with them to practice. He set a goal of knowing lists

A, B, and C by the target date. Each time he met with the researcher, he stated that he was

getting close and always asked how many were left to reach his target goal.

Student 4 was not sure that he could learn many sight words but he would try. He said

that the sight words were hard for him to remember because there were so many and some

looked the same. He decided that he could accomplish lists A and B by the deadline as that was

not too many words. At his progress monitoring conference, he knew 44 of his 50 set words. He

was very proud of his accomplishment and said he was sure he could meet his learning goal. He

also said he liked setting goals because it was easier to manage since his mom couldn't help him at home because she does not speak English very well.

Student 5 was not sure what she wanted to work on for her learning goal. When the researcher showed her the sight word assessment she said, "I need to work on sight words." She decided she could work on lists A and B for the month of October. At her progress monitoring conference, she knew 30 of the 50 sight words. She was very proud of her progress and said she would work hard to learn the rest. The researcher observed her working on her sight words during reading time which had not occurred before the goal setting.

Student 6 said she couldn't work on sight words at home with an adult because she was a foster child and there were six children in the house. She decided she would work on her words with her reading partner and with the teacher during the school day. She said that she wanted to know more but just did not have a chance to work on them. She set her learning goal at lists A and B by the target date.

In her conference, student 7 said, "Sight words have always been hard for me to remember. My mom and I practice them at home but there are so many and I get frustrated." She decided that she wanted to know 125 sight words which are lists A-E by October 30, 2015 because it would help her with her reading and writing.

Data

The following tables and graph show the results of the Lucy Calkins Sight Word Assessment given as a pre-test and post-test for students in each group. The data also shows the student group averages and the amount of change over the period of the study.

Table 1: Control Group Scores on Lucy Calkins Sight Word Assessment

	Pre-Test	Progress Monitored	Post-Test	Change
Student A	107	135	137	+30
Student B	27	35	45	+18
Student C	26	41	50	+24
Student D	35	59	71	+36
Student E	27	39	44	+17
Student F	39	65	72	+33
Student G	12	15	16	+4
Average	41	59.28	62.14	+23.14

Table 2: Experimental Group Scores on Lucy Calkins Sight Word Assessment

	Pre-Test	Progress Monitored	Post-Test	Change
Student 1	50	87	94	+44
Student 2	49	71	80	+31
Student 3	42	52	56	+14
Student 4	39	44	55	+16
Student 5	12	24	41	+29
Student 6	22	38	47	+25
Student 7	52	101	106	+54
Average	38	59.57	68.42	30.42

Bar Graph: Group Averages on Lucy Calkins Sight Word Assessment
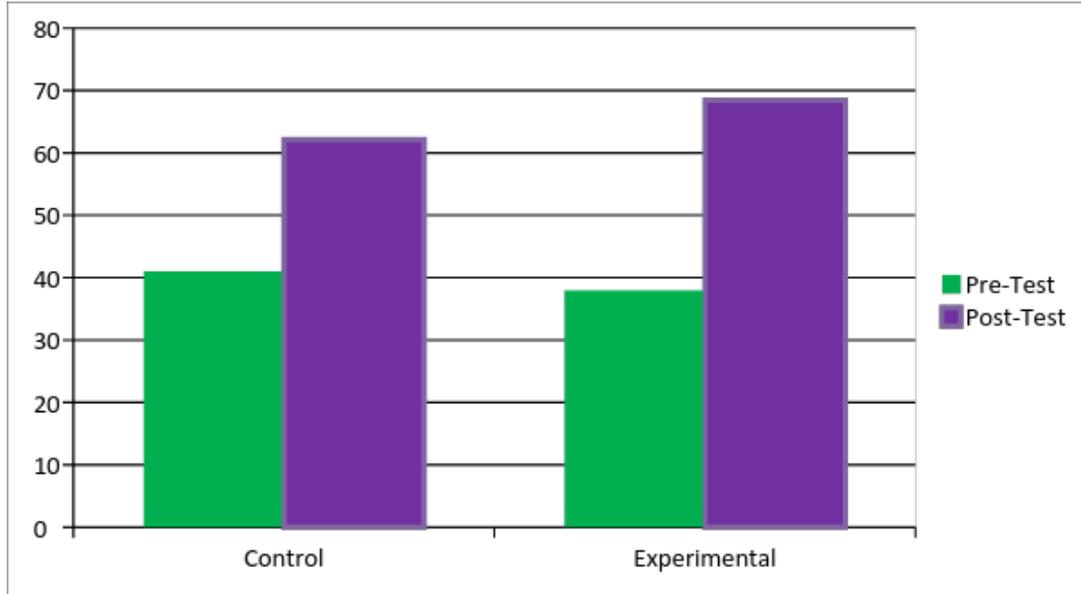
Discussion

The average increase in student sight word knowledge in the experimental group, as measured by the Lucy Calkins Sight Word Assessment, was an increase of fifty five percent from the pre-test to the post-test. Three students showed moderate improvement between twenty nine and forty nine percent, while the other four students showed a substantial increase of between fifty three and seventy five percent sight word knowledge growth.

The students in the control group showed an average change in sight word knowledge which is to be expected with sight word instruction in the first grade classroom. Three students increased sight word knowledge between forty nine and fifty four percent while others showed a slightly increased knowledge of between sixty and seventy eight percent.

Overall, two out of seven students who scored in the lowest bracket of achievement on the sight word assessment showed growth over the four week period, but the experimental group showed more significant increases over the same time period with their selected learning goals. The difference in the two groups of amount of change between the pre-test and post-test is

significant enough to encourage further research into the topic of using assessment data to set learning goals.

Limitations of the Study

Some influences outside of the researcher's control played a role in the results of the study. In addition to working on the learning goal at school, students were instructed to practice at home in order to be more successful. Some students in the study did not have the home support to practice their words at home. Students who only practiced at school were not as likely to have made the same gains as a student who practices at both school and home. This often came up in conferences with the teacher when she asked how they were working to achieve their learning goal. These conversations helped the teacher motivate and provide opportunities and support for these students to practice more at school.

A question about the study is where the results would be if replicated in another lower socioeconomic classroom or in a community with higher socioeconomic status and parental support. This would provide more data on the effectiveness of learning goals with students in this socioeconomic status and how it helps their learning if they do not benefit from support at home. The factor of setting learning goals based on assessment data and individual conferences with the teacher about their learning and what the student wanted to achieve helped them focus their attention on the task at hand and provided students with opportunities to work toward their learning goal.

Another limitation in this study was the size of the experimental group. The group was comprised of seven students from a class of twenty one students. If this study was completed again in the future, a larger sampling would be more conclusive to the outcome of the study. The study could also be completed with other key literacy areas such as: reading volume, stamina,

comprehension, and decoding strategies to determine the effectiveness of using assessment data to set student determined learning goals in the classroom setting.

Implications and Future Research

A possible implication from these results is that learning goals have a greater effect on some students than others. Future research could be used to investigate if the changes in motivation introduced to the experimental group led to greater reading achievement gains for students like some of the students in the group who did not feel they could accomplish their learning goal because the task was overwhelming. Future research should consider the overall merits of using learning goals to increase student achievement but also the effects on the student mindset on their own learning capabilities.

Student learning goals can be found in many classrooms and are highly encouraged in the Lucy Calkins Reading curriculum. They can be a helpful tool for teachers to gain insight into student learning and can be used to determine their mindset in relation to their thoughts about their own learning. Students can benefit from studying assessment data alongside the teacher to gain ownership of their own learning and gain motivation to increase their academic achievements in literacy. When teachers have a better understanding of how students feel about their own learning abilities and achievements, they are more able to meet the student where they are on their path of learning and help them change their mindset and see the good in what they do on a daily basis. Students with a fixed mindset that do not believe they can achieve, will not be as successful as students with a growth mindset who think that anything is possible with time and a little hard work. Learning goals are an excellent way of moving the students toward growth mindset and helping them select what they want to work on to become a better reader and learner.

The focus on students taking on ownership and having agency about their own learning might make teachers want to control what students set for a learning goal. By knowing your students and what they must accomplish to be successful in grade level benchmarks, setting learning goals with students can provide valuable insights into the student learning process. An educator wanting to set learning goals with students should take into consideration the time for setting a goal and finding appropriate student friendly interventions to help them meet their goal successfully while gaining confidence in their own learning. When students take ownership in their own learning, motivation and achievement will increase.

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