Undergraduate Action Research Paper No. 22

*The Effects of Personal Goal Setting in Fourth Grade*

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**Introduction**

 Personal goal setting is a practice that involves students setting a specific goal and a clear performance standard (Smithson, 2012). Multiple studies have shown personal goal setting is associated with achievement growth in students’ academic lives as well as students’ feelings of efficacy, perceived control, and adaptability (Martin & Elliot, 2016). It is my intent to research how personal goal setting can impact my ability to motivate my fourth graders to remain on task and therefore preserve instructional time.

This study took place in a large county public school in the southeastern United States in a fourth grade classroom (n=27). There were 13 boys and 14 girls with 84 percent of students identifying as White (n=22), eight percent as Black (n=3), and eight percent as Hispanic (n=2). Eighteen percent of students qualify for free and reduced lunch.

The students were seated at four long arrangements of desks with seven desks at each table. Three students with learning differences had individual education plans, and one student who was in the process of obtaining an IEP. There were four gifted students in the class who were pulled for enrichment activities once a week. There were also two students who were in the referral process for the gifted education program.

When planning instruction, a multitude of accommodations and extensions were implemented to fit the diverse learning needs of the students. Two students who were pulled regularly for special education intervention and help with tests; another was pulled from the classroom to receive special education services regarding behavior and had an aide with him for parts of the day.

The classroom featured bright blue walls and a variety of decorations. Technology included two laptop computers that the students used to complete accelerated reader tests, and an apple TV that the teacher used to project on to the white board. The students did not have any observable extrinsic motivators present in the classroom. As such, students were not always motivated to complete their work and were often off-task. Furthermore, the students were often talked to about being kind to each other, which helped promote a classroom environment of acceptance.

**Statement of the Problem**

I noticed the students in my fourth grade class had a difficult time engaging in whole group instruction, particularly during reading, and often engaged in off-topic conversations with each other rather than participating in the lesson. This study was designed to investigate the best practices to eliminate off-topic conversations during whole group instruction. I was the student teacher in the classroom where I conducted the study. Fellow peers and teachers as well as administrators may also benefit from the knowledge gained during this investigation.

**Research Question**

How can the use of personal goal setting impact my ability to motivate students to remain on task, thus preserving instructional time?

**Review of Literature**

 *Personal goal setting* is a practice that involves students setting specific, challenging, and self-referenced targets to which they strive to achieve or exceed their personal best. It is growth oriented and self-regulated (Burns, Martin, & Collie, 2018; Martin & Elliot, 2016; Smithson, 2012). Personal goal setting encourages students to focus on personal improvement and striving to outperform their best past personal efforts, rather than the efforts of others or achieving against the absolute criteria of the task (Martin & Elliot). Goals play an important role in student academic and motivational gains, and goal setting methodology “attains an average effect size of .50, indicating that they are an effective method of improving students’ academic performance” (Martin, Durksen, Williamson, Kiss, & Ginns, 2014, p. #).

**Setting Appropriate Goals**

 Simply telling a student to “try your best” on an activity or assessment is insufficient. Setting specific goals eliminates any question of where students need to aim when completing tasks. However, large goals may be overwhelming to students. Teachers should ensure goals are specific, measurable, and attainable while remaining challenging (Martin & Elliot, 2016). By following these criteria when setting goals, students will be able to achieve smaller, feasible goals and build confidence in themselves before being tasked with a larger achievement. Furthermore, when students’ sense of achievement is heightened they are more motivated to perform better and complete their next goal (Smithson, 2012). It should be noted that it is imperative that teachers guide students in setting attainable goals, as students who are not given assistance during the goal setting process have be shown to have more difficulty setting realistic goals and therefore need additional support later (Förster & Souvignier, 2014).

**Goals Are Strongly Correlated with Student Motivation and Performance**

 *Intrinsic motivation* is motivation that is characterized by personal enjoyment, interest, or pleasure as opposed to tangible rewards that are extrinsic in nature. Based on their research, Boggiano and Barrett (1985) suggest that intrinsic motivation leads to outcomes that are beneficial to individuals and society. Personal goal setting is one form of intrinsic motivation. It can facilitate higher levels of academic participation in students (Smithson, 2012). Furthermore, when students achieve their goals it boosts their self-concept; ultimately motivating them to continue the behaviors that allow them to achieve their goals. This builds intrinsic motivation in academic areas where the student may not have been motivated previously because they are motivated by achieving a goal; not solely by their interest in the content (Förster & Souvignier, 2014). Students who believe they have the capacity to accomplish tasks through effort and personal resources are more likely to set personally relevant goals (Burns et al., 2018).

**Plan of Action**

To preserve instructional time, I utilized the personal goal setting approach in my classroom from November 15th through December 10th. To effectively implement this approach, I first gathered control data on my students. After observing them and gathering data on their behavior, I called a morning meeting. During the morning meeting portion of the day, I explained personal goal setting and how they should set goals. We practiced setting goals in other areas of our lives. I then presented them with the control data I collected. We set a personal goal to lower their instances of talking during instructional time from the previous data. Each following day we had another meeting and discussed how they were doing and set a new goal to improve their behavior and therefore preserve instructional time. See Table 1.

Table 1

*Timeline*

**Timeline**

|  |  |
| --- | --- |
| Day | Plan of Action |
| Days 1-2 | Teach lessons normally without personal goal setting approach. Record number of instances of student behavior causing a loss of instructional time. Record duration of each lesson in minutes. Determine a percentage of time lost to student misbehavior. |
| Day 3 | Introduce personal goal setting strategies. Model for students how to set personal goals and provide examples. Introduce control data. Discuss an attainable goal for the day. Set first goal. |
| Days 4-9 | During morning meeting, review data from the day before. Discuss why we achieved the results. Set an attainable goal for the day.  |
| Day 10 | During morning meeting, review data from the day before. Discuss why we achieved the results. Review progress since the beginning of the study. Discuss why we achieved the results. Set attainable goal for the day. |

**Data**

 I chose to conduct a whole class study to collect data on the instances of off topic conversation during instruction before and during the implementation of personal goal setting. The Table 1 outlines the data collected each day and is broken up by the subject the instruction was focused on. At the end of each day, the rows highlighted in green indicate the end of day totals for each category and if the students achieved the goal that they set that morning. See Table 2.

Table 2

*Daily Data Collection*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Subject | Amount of whole group instruction | Number of off-topic conversations | Ratio of interruptions to instructional minutes | Number of Instances per minute (Lesson Total)  | Number of Instances per minute (Daily Total) | Daily Goal | Goal Met? |
| Day 1 | Reading | 1:21-1:32 | 7 | 7/11 | .63 |  |  |  |
|  | Math | 9:30-9:39 | 7 | 7/9 | .77 |  |  |  |
|  | **Overall** | **20 min.** | **14** | **14/20** |  | **.7** |  |  |
| Day 2 | Writing | 12:47-1:09 | 14 | 14/22 | .63 |  |  |  |
|  | Reading | 1:27-1:47 | 30 | 30/20 | 1.5 |  |  |  |
|  | **Overall** | **42 min.** | **44** | **44/42** |  | **1.04** |  |  |
| Day 3 | Language Arts | 8:59-9:02 | 3 | 3/3 | 1 |  |  |  |
|  | Reading | 11:06- 11:29 | 5 | 5/32 | .217 |  |  |  |
|  | Science | 1:03-1:37 | 15 | 15/34 | .44 |  |  |  |
|  | **Overall** | **69 min.** | **23** | **23/69** |  | **.333** | **.333** | **yes** |
| Day 4 | Math | 8:49- 9:28 | 19 | 19/39 | .48 |  |  |  |
|  | **Overall** | **39 min.** | **19** | **19/39** |  | **.48** | **.2** | **no** |
| Day 5 | Math | 8:51- 9:39 | 5 | 5/48 | .10 |  |  |  |
|  | Reading | 10:50- 11:20 | 11 | 11/30 | .36 |  |  |  |
|  | Review | 2:40-2:48 | 8 | 8/8 | 1 |  |  |  |
|  | **Overall** | **86 min.** | **24** | **24/86** |  | **.66** | **.25** | **no** |
| Day 6 | Math | 8:46- 9:25 | 17 | 17/41 | .41 |  |  |  |
|  | Reading | 10:50- 11:20 | 19 | 19/30 | .63 |  |  |  |
|  | Science | 1:15- 1:34 | 9 | 9/19 | .47 |  |  |  |
|  | **Overall** | **90 min.** | **45** | **45/90** |  | **.5** | **.28** | **no** |
| Day 7 | Science | 1:47- 2:00 | 3 | 3/13 | .23 |  |  |  |
|  | **Overall** | **13 min.** | **3** | **3/13** |  | **.23** | **.28** | **yes** |
| Day 8 | Math | 8:55- 9:40 | 7 | 7/45 | .15 |  |  |  |
|  | Social Studies | 10:48- 11:15 | 4 | 4/27 | .14 |  |  |  |
|  | Science | 2:22- 2:27 | 1 | 1/5 | .2 |  |  |  |
|  | **Overall** | **77 min.** | **12** | **12/77** |  | **.15** | **.2** | **yes** |
| Day 9 | Math | 8:36- 9:14 | 5 | 5/38 | .13 |  |  |  |
|  | Social Studies | 10:44- 10:57 | 2 | 2/13 | .15 |  |  |  |
|  | Science | 2:34- 2:42 | 1 | 1/8 | .125 |  |  |  |
|  | **Overall** | **59 min.** | **8** | **8/59** |  | **.13** | **.14** | **yes** |
| Day 10 | Math | 8:46-9:37 | 5 | 5/51 | .09 |  |  |  |
|  | Social Studies | 10:45-11:15 | 3 | 3/30 | .1 |  |  |  |
|  | **Overall** | **81 min.** | **8** | **8/81** |  | **.09** | **.1** | **yes** |

*Figure 1:* Off topic conversations using personal goal setting

**Data Analysis**

As evidenced in Figure 1, the whole class demonstrated improvement in their abilities to remain focused during whole instruction rather than engaging in off topic conversations with their peers. Over the course of the entire study, students improved from having 1.04 instances per minute (day two), or interrupting about once per minute, to having .09 instances per minute (day ten) or interrupting about once every eleven minutes. The data clearly shows a significant drop in off topic conversations during instructional time beginning on day three, the first day that the personal goal setting was implemented. While the data spiked after that, it ultimately went back down, and the amount of conversation never went above the baseline after goal setting was implemented. This indicates that personal goal setting was an effective method to maintain student focus and motivation and therefore preserve instructional time.

**Conclusions**

 After reviewing the data, it can be concluded that implementing personal goal setting with my students did improve my ability to motivate students to remain on task, thus preserving instructional time. I was surprised by the results of my study. I expected the goal setting to be effective; however, it was shocking to see just how effective it was in such a small period. I would be interested to continue using this method to see if the results continue over a longer period.

 While I am excited by the results this study yielded, it is important to point out possible areas where my data may be skewed. The largest discrepancy in the data is the amount of instructional time each day. Since I was only monitoring whole group instruction, the instructional minutes each day varied dramatically. Furthermore, throughout the study I noticed that my students were much better and focusing on their goal in the morning. As a result, on days that the only whole group instruction the students were engaged in was in the morning, the students were likely more successful than on days that they were taught as a whole group for 60 to 90 minutes. Another possible source of error is the attendance rate of students. I did not track which students were absent each day during this study. As a result, students who often engage in off topic conversation could have skewed the data on days they were present versus days they were absent.

 Overall, despite possible areas of data skews, this method was highly effective, and I would use it again. There is abundant research to support this method’s use in the classroom and I personally experienced success while using it. Furthermore, this method can be implemented in either large or small group and with a diverse range of students.

**Plan for Future Action**

I would like to continue using this method in future placements as well as in my own classroom. I plan on implementing this method in a variety of subjects and manners in order to build intrinsic motivation in all academic areas, not just in student behavior. Additionally, I think it would be beneficial to set individual goals with students who are struggling more to help them individually alongside whole group goals. I would recommend this method because I had such positive results, and due to my research on the method supporting its use in classroom settings.

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