Erik Boice
EDCI505
Action Research Brief Rough Draft

The Correlation Between Self-Regulated Learning Training and Academic Behaviors in Third Grade Classes

Problem Statement:

Hilldale School and Brookfield School are private sister schools that have a similar accelerated curriculum. The schools have been experiencing different levels of academic success, possibly because of varied self-regulated learning abilities within the student body.

The study ultimately is seeking to discover whether training in self-regulated learning techniques taught to a third-grade class in an accelerated school will lead to increases in traits that have been shown to be indicators of educational success.

- Will training the teacher and students in self-regulated learning techniques encourage the students to have a greater willingness or desire to engage in learning and display effort and persistence?
- Can the students understand and begin to use the self-regulated learning tactics and procedures they learned, and do so in a purposeful and intentional way throughout the semester?
- Will encouraging the students to plan, monitor and self-evaluate their learning lead them to a greater self-awareness of how they learn more effectively?

Context/Setting:

The study takes place within the context of two schools, Brookfield School in Sacramento and Hilldale School in Daly City. Both are accelerated, independent, private schools that strive to achieve standardized testing scores in the top 90th percentile. I chose two classrooms of students in the third grade to study over the course of several months. With the help of teachers, I introduced self-regulated learning techniques that were new to both teachers and students in each class. Students were asked to use the techniques in their English language arts classes. While I had the enthusiastic consent of both teachers to experiment with self-regulated learning instruction, and the teachers did assist in some ways with the project, I was not in the classrooms daily.

Methods/Project Overview:

Intervention, data gathering and analysis:

Round 1: The data I analyzed in round one consisted of initial observations, interviews, and survey analysis.

Quantitative data was derived from two surveys measured on the Likert scale. The first is a version of the Self-Regulation Strategy Inventory created by Cleary (2006,) which was adjusted for third grade students. The second survey given was the Perceived Responsibility Scale by Zimmerman and Kitsantas (2005.) The Perceived Responsibility Scale survey was shortened to ten questions, and also adjusted for third grade students.

Qualitative data was derived from interviews with teachers and students, student journals and my observations. Observational data and written data from the student journals was collected throughout the semester at times both at specific and impromptu. I observed the classes occasionally as a passive observer and sometimes as a privileged, active observer. In both cases I audio recorded the class as well as took field notes. The focus of my observations was on what took place during the English language arts classes.

Round 2: All of the data collected during this round was qualitative, consisting of recordings of individual conversations I had with the students about their work, and classroom observations. The individual conversations were with both voluntary and arbitrarily chosen students. Classroom observations were not specifically planned but were always during the English language period.

Round 3: My data collection this round was limited because the school closures made it very difficult to conduct SRL training and observe students, especially without disrupting the remote learning that the teachers were trying to implement during the difficult time of transition. However, I was able to gain some quantitative data by conducting the same Self-Regulation Strategy Inventory and the Perceived Responsibility Scale through Google Classroom instead of in person.

Results/Project Findings

Round 1: When referencing how the students motivated themselves, the most common method was fear of a negative outcome if they did not complete the work. Being able to perceive the task as play was also motivating to many. The primary strategy the students relied upon when considering how they would complete a task was to rely on adults to guide them. When the students were asked to consider how they would evaluate whether a task was done well or not, most thought that the most important factor was whether they applied an appropriate level of focus to the task. Qualities about the work itself, such as creating something that is interesting, consistent, or complete were mentioned, but rarely compared to factors that were dependent upon the student themselves.

The Self-Regulatory strategy inventory suggested that the students are cognizant of the importance of finding a good place to work where they can minimize distractions. They are not afraid to ask questions in class and are not likely to give up when something is difficult. While the survey suggested that they are confident they can finish their work on time, the varied results on how they handle distractions suggests to me that the work may be completed at the last

minute. The Perceived Responsibility Scale suggested that the students feel largely responsible for their self-motivation and task completion.

While the training plan I put together did teach positive motivation, specific planning and goal setting, and project analysis based on multiple factors, I found that it was difficult to train all the students at once effectively because of the limited class time I had and the varying abilities of the students. In round two I continued to teach the broad subjects and strategies to the entire group, but added more one-on-one sessions so that I could discuss specific issues and strategies with the students that were unique to their situation.

Round 2: The ways the students motivated themselves seemed to change from looking forward to the project and beginning work on it because it might be fun to more general ideas about the importance of learning. In fact, the importance of learning for its own sake was the most common code I found in my transcription. Libraries, using parents, teachers and siblings for help to complete the projects were mentioned with similar frequency as the beginning of the semester. There was a dramatic increase in the mention of using lists and calendars, as well as establishing deadlines for themselves. There seemed to be a greater confidence in their own ability to complete the assignment than before. After completing their Black History Month project, the students at Brookfield shifted their priorities and overwhelmingly decided that time management was one of the most important factors in order to complete a successful project. After giving themselves more time during each step, the second most mentioned strategy that they would change for the next project was to follow the steps they had created more carefully.

In round three I would have liked to look more closely at the students' metacognitive analysis of their projects as well as deeply considering how their approach has changed to the next big project assigned to them. I would have collected data from the journals and attempting to understand and attempted to define whether the training and suggestions I gave them made a difference in their learning tactics over time. Because the schools have been closed, instead I examined the data I already had more closely and considered any trends in their learning tactics leading toward or away from the questions I originally asked about self-regulated learning.

Round 3: Of the five categories of adaptive motivation that were suggested by Cleary (2018), I found evidence of four in my round one transcription and reexamination of the data: interest in a subject, improving themselves, feeling confident about their abilities and the value of the knowledge they were gaining. It was clear that many students did adopt the more specific tactics that were suggested, mainly that of breaking down large projects into smaller tasks and creating schedules for when they would be completed. Although there was a great deal more self-evaluation in the second round, the nature of the timing of round two would naturally lead to this result. The way that the students would judge a successful project in round one was far more dependent on how much effort and concentration they put into the project. In round two, the question of why they did or did not perform the way they thought that they could was asked far more often, but again, I think that this is more because of the timing of the round rather than a shift in metacognitive knowledge. I cannot tell from my data if there was a marked increase in depth or frequency among most of the students.

At the beginning of the semester, 40 students took the Self-Regulation Strategy Inventory and the Perceived Responsibility Scale. I was able to get 22 students to take the same surveys again through Google Classroom during round three. The results of the Self-Regulation Strategy Inventory do not speak to a marked difference in SRL from the beginning to the end of the semester. 13 of 21 categories moved toward greater SRL tendencies, while 8 moved away. I did find it interesting that some of the categories that increased were those that we spent more training time on like making schedules and finding an appropriate place to study. Although, some of the other categories that we also spent time on, like finding multiple help sources, moved away from SRL tendencies. The Perceived Responsibility Scale also had mixed results, with seven categories moving toward greater self-responsibility and three moving away. The categories involving class participation especially reflected a move toward greater self-responsibility, while those which depended more on student ability moved away.

Discussion and Conclusions-

Throughout the semester, I did see a shift in the ways that the students motivated themselves, but I cannot correlate the change to the training in SRL. The students seemed to switch from motivating themselves by looking forward to the project and beginning work on it because it might be fun, curiosity, and the fact that it was new subject matter, to more general ideas about the importance of learning and possible financial value they might receive later. It is possible that the reason they adopted the importance of learning for its own sake can be attributed to the influence of parents and teachers. Cleary (2018) outlines five different types of motivation: self-efficacy, value, interest, growth mindset, and autonomy. In round three I reexamined the data and searched for evidence of students using the five motivators Cleary suggests. Although I did find evidence of five in round two but only four in round one, the difference in motivating factors between the rounds was mainly a shift between interest to value.

The second question I asked was whether the students could understand and begin to use the self-regulated learning tactics and procedures they learned, and do so in a purposeful and intentional way throughout the semester? It was clear that many students did adopt the more specific tactics that were suggested, mainly that of breaking down large projects into smaller tasks and creating schedules for when they would be completed, although far more students created steps than added timelines to them.

My measure of whether or not the SRL training had encouraging the students to plan, monitor and self-evaluate their learning, which lead them to a greater self-awareness of how they learn more effectively was difficult to assess. Between rounds one and two I did see a difference in the way that students evaluated a successful project. When the semester began, the students speculated that hard work, listening carefully, and focus would be the most important factors in determining whether a project would be successful. After completing their Black History Month project, the students at Brookfield shifted their priorities and overwhelmingly decided that time management was one of the most important factors in order to complete a successful project. However, in round three when I shifted the focus to questions that Cleary (2018) suggested were hallmarks of students who are developing supportive contexts within which to process and

interpret the meaning and relevance of their grades, my results were not very clear. The questions are: How well did I do? Why did I perform that way? And What do I need to do to improve? Although there was a great deal more self-evaluation in the second round, the nature of the timing of round two would naturally lead to this result. The way that the students judged a successful project in round one was far more dependent on how much effort and concentration they put into the project, while in round two, the question of why they did or did not perform the way that they thought they could was asked far more often, but again, I think that this is more because of the timing of the round rather than a shift or increase in metacognitive knowledge.

Ultimately, in the third-grade classes within which I worked, the SRL training seemed to be most impactful in the area of strategic planning and goal creation. The other SRL training may have also had an impact, however I was unable to see a correlation with clarity. With more time, I would have been able to focus the training more on reflection and consideration of what worked or did not in previous projects, which may have helped the students with more diverse motivation strategies as well as metacognitive knowledge.

Citations:

Cleary, T. (2006). "The development and validation of the Self-Regulation Strategy Inventory—Self-Report." *Journal of School Psychology* 44: 307-322.

Cleary, T. J. (2018). *The self-regulated learning guide: Teaching students to think in the language of strategies*. New York, NY: Routledge.

Zimmerman, B. and A. Kitsantas (2005). "Homework practices and academic achievement: The mediating role of self-efficacy and perceived responsibility beliefs." *Contemporary Educational Psychology* 30: 397-417.

Supplementary Material:

https://boiceportfolio.org/contact/