TEACHING HOW TO LEARN: THE EFFECTIVENESS OF STRATEGY-BASED EDUCATION IN BUILDING SELF-EFFICACY IN GRADE 8 STUDENTS

by

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Abstract:

This study consists of Likert scale results and convenience sampling interviews with 12-13-year-old students in a search to determine if the explicit teaching of learning strategies, specifically in the context of the Strategic Action Cycle (Butler, 1998), helps students to build skills of self-efficacy. The study uses mixed methods to focus on the strategy-based instructional method of the Strategic Action Cycle with students in a Grade 8 English classroom in a secondary school in Delta, British Columbia. This project settles on three major aspects that affect students' self-efficacy as identified by Albert Bandura (1977): their desire to learn and their beliefs about the importance of learning; their beliefs about their own abilities as a learner; and their positive work habits. The complexity of the process of learning often means that these three aspects of a student are intertwined, and each plays a role in determining a student's sense of self as a self-reliant learner.

Keywords: strategies, Strategic Action Cycle, self-directed learning, strategy-based learning, inclusive learning, self-efficacy, independence

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Definitions

Strategic Action Cycle: a progression of stages of a task that are generally followed in the following order: Interpreting Tasks and Setting Goals; Planning; Using Strategies; Monitoring; and Adjusting. However, the cycle is not necessarily linear (Butler, 1998).

Strategy: a specific action that can be taken by a student to support their learning (Bandura, 1991)

Self-Directed Learning – a style of education that allows for the student to be at the center by giving them choice in assessment and content.

Strategy-Based Learning – a style of education that focuses on the direct teaching of techniques and approaches that the student may take to support their own learning.

Self-efficacy - a student's ability to work through tasks on their own, after they have received instructions and clarification. This includes their beliefs in their ability to complete the work, and their beliefs in themselves as a learner (Bandura, 1977).

Inclusive Learning – an educational environment that respects student diversity and attempts to both remove barriers that prevent students from learning and value the variety of learning needs (Inclusive Education Canada, 2020).

Chapter 1: Introduction

It was a typical day in the staffroom during lunch break. Teachers were spread throughout the room in clusters talking about upcoming lessons and plans for the weekend. However, it wasn't long before the conversation turned in the direction it often did: "Is it just me, or are kids struggling more with following directions?" This regularly led to the same list of frustrations shared by other teachers: More and more students being identified as struggling learners, students that can't seem to work without one-on-one help, class sizes that just keep getting bigger, and fewer educational assistants to support all of these needs. Although teachers liked the direction of the revised provincial curriculum which focused on fully inclusive classrooms, they were also concerned about the elimination of the "streaming" programs (specialized classes that were initially intended to support the skill development of these struggling learners). Over and over, the voices expressed how much they wanted to help learners, and how important differentiation in teaching and assessment were becoming given the variety of learning needs. However, the voices also spoke of the overwhelming burden of trying to break the patterns of education without the professional development to provide teachers what they need. And as was usually the case, the conversation ended in the same place: "I can teach a kid to learn, but I can't teach them how to be independent."

1.1: Introduction

As a classroom teacher, I too have struggled with ways to increase student independence. As such, this research began as a search for ways to build capacity for self-efficacy and self-directed learning in my students. Might more explicit teaching of learning strategies help students to develop the skills of self-efficacy needed to support their learning, particularly at the secondary level and particularly in fully inclusive classrooms?

It is becoming increasingly important for students to understand how to learn. Rapid changes in technology have made it so that people working in many careers have had to learn new skills to stay current and relevant. At the same time, students also need strategies so they can learn independently and function well in today's inclusive classrooms. This has meant that self-efficacy has become a valuable quality for today's students because it allows them to learn new skills, often independently, and to believe that they can learn. As such, teaching these skills and beliefs of self-efficacy are one of the most important things a classroom teacher can do to help students to develop the independence and positive beliefs that they will need as they move forward in their academic studies and careers.

The topic of building self-efficacy has been the focus of much research (such as Candy, 1991; Zimmerman et al., 1992; Claxton, 2007; Hiemstra, 2013). Many educational researchers recognize the power of self-efficacy in learners of all ages and equate it to "survival in this changing world" as these skills allow learners to reach their potential in all subject areas and grade levels (Kranzow & Hyland, 2016, p. 4). The term 'self-efficacy' was originally coined by Albert Bandura, a psychologist and professor at Stanford University, in his 1977 article entitled "Self-efficacy: Toward a Unifying Theory of Behavioral Change". Bandura outlines his

definition of self-efficacy as a person's belief in their ability to accomplish tasks, and their willingness to attempt, based on this belief, the challenging tasks that they are faced with. Given this definition, Bandura acknowledges the complex relationship between self-efficacy has and motivation, self-confidence and learning strategies. Self-efficacy is not simply the ability to work on one's own. There has also been a significant amount of research on strategy-based learning, which is the use of methods to explicitly teach students how to learn the material, rather than only focusing on the content (Chan, 1994; Simpson & Nist, 2000; Mason et al., 2011; Hiemstra, 2013; Kranzow & Hyland, 2016).

Challenges arise in teaching the skills of self-efficacy because even though self-efficacy has been identified as significant in helping students to see future success, there is no clear path set with how to integrate it into a classroom (Simpson & Nist, 2000). This challenge is particularly problematic because the lack of guidance on implementation conflicts with the increasing evidence that a student's ability to access skills and strategies of self-efficacy helps to promote academic motivation and achievement (Pressley et al., 1987; Zimmerman & Martinez-Pons, 1988, 1990). However, many researchers have found that explicitly teaching learning strategies to students needs to be at the heart of self-directed learning, as this is key to developing self-efficacy (Weinstein, 1994; Mayer, 1996; Simpson & Nist, 2000). Guy Claxton (2007), American researcher on the topic of strategy-based learning, supports the need for more explicit learning strategies by referencing how many teachers often provide curriculum support for their students, helping to guide students through learning the content of the course, but they do not teach metacognitive awareness. Claxton states, "Helping them learn better is not the same as helping them become better learners" (p. 123). The teacher must make explicit what appears to be hidden.

Despite ample research on building learning strategies in students, little research has clarified a continuum of learning that could allow for students to understand the process of learning itself. In addition, there are also a variety of definitions of self-directed learning which has likely contributed to the lack of a consistent theory of self-directed learning and self-efficacy across the K-12 system. This inconsistent nomenclature makes it challenging for classroom teachers to understand exactly how, or even why, to build and support self-directed learning in their classrooms. Similar challenges can be found in the area of strategy-based learning, where there is research that outlines strategies and how to teach them to students (such as Thomas et al., 1988; Simpson & Nist, 2000; Mason et al., 2011) yet such research has focused mainly on subject or content specific strategies to support students in writing academic papers, reading comprehension exercises, or studying for tests. A lack of clarity in self-directed and strategy-based learning is significant since self-directed learning has been found to build the skills of self-efficacy. This research project, then, attempts to examine how Butler's Strategic Action Cycle (1998) can function as a unifying theory that helps to frame the explicit teaching of learning strategies as the path to student self-efficacy.

The Strategic Action Cycle (SAC) was developed by Deborah Butler (1998) at the University of British Columbia as a tool to clarify the complexity of the internal learning process. Even recently, Butler has stated that the relationship between the student and the learning environment is a significant part of self-regulation because a student's ability to take action is shaped by the experiences, knowledge, beliefs, emotions and motivations that they bring to the learning environment. Butler (2020) suggests that the Strategic Action Cycle helps to clarify the process of learning by breaking down the process of inquiry into five stages of "interpreting tasks, planning, enacting strategies, monitoring, and adjusting" (p. 47). Butler

initially designed the SAC as a tool to support the professional learning of teachers, not students; however, the purpose of this research project is to examine whether explicitly teaching the Strategic Action Cycle to students can help them to become more independent learners.

1.2 Research Question

Self-efficacy and learning strategies are important to a student's success in school. As such, my research aims to address the following question: Can explicitly taught learning strategies in the framework of Butler's Strategic Action Cycle help students to develop more self-efficacy in their learning? Relatedly, this study explores what strategies are most helpful to students. Does having a visual representation of the strategies help to increase chances that students will use them? Will helping students to develop an understanding of learning strategies increase their belief in the importance of learning? Will it increase their confidence in themselves as learners? Ultimately, the aim of this study is to explore the use of the SAC in developing self-efficacy in students in a Grade 8 classroom who are in their early years in high school when the transition to high school can be a struggle.

In this chapter I have outlined my motivation as a classroom teacher for exploring self-efficacy and self-directed learning. It seems clear that self-efficacy is crucial in determining whether a student is successful in their academic and personal lives. I would like to know how such self-efficacy can be developed.

In chapter 2, I outline the scholarship that points to specific aspects that can determine whether a student is able to build the skills of self-efficacy and how their habits and beliefs in the importance of learning and in their own abilities can impact their learning. These attributes of self-efficacy are intertwined in allowing a student to see both academic and personal success.

The interrelationship between these themes will also become important in understanding the data presented in chapter 4 and the analysis in chapter 5. I hope to find if strategies for success in learning can be made explicit by the classroom teacher.

Chapter 2: Literature Review

The concept of self-directed learning was popularized by Malcolm Knowles' in his 1975 book entitled *Self-Directed Learning: A Guide for Learners and Teachers*. The publication brought awareness to the issue of self-directed learning, leading scholars such as Paul Guglielmino (2008) to develop instruments that would allow for empirical measurement of a learner's ability to be self-directed. When Malcolm Knowles wrote his educational guide on self-directed learning he equated the importance of it to survival. He argued that being able to learn on one's own is a "basic human competence" that "has become a prerequisite for living in this new world" (pp. 16-17). In the years that followed, many other researchers began to explore a variety of concepts within the discipline of self-directed learning leading to a wealth of research (such as Candy, 1991; Grow, 1991; Hiemstra, 2013; Kranzow & Hyland, 2016). Since the mid-1970's, most of the studies have focused on finding a correlation between strategies of learning and a students' ability to be self-directed, with the goal being to find the strategy or system of strategies that were most effective overall (Simpson & Nist, 2000). Current researchers agree with Knowles' idea that as the world continues to evolve, self-directed learning is a critical piece in what allows learners to cope and succeed in life. Self-directed learning has been called a critical competency that allows people to function in the world (Altbach et al, 2009; Guglielmino, 2008; Kranzow & Hyland, 2016).

Given the importance of self-directed learning, it has been the topic of a significant amount of research over the past few decades (Candy, 1991; Zimmerman et al., 1992; Claxton, 2007; Hiemstra, 2013). This research agrees with the assumption that self-directed learning is crucial to learners because of the complex global environment (Kranzow & Hyland, 2016). Philip C. Candy (1991), an Australian educator, points out that the concept of self-directed learning comes

from a constructivist view of learning, as constructivists view learning as an ongoing process in the growth and transformation of understanding, rather than a process of amassing information. However, there has been no agreement among educational researchers on what self-directed learning actually is (Kranzow & Hyland, 2016). This lack of consensus led educational researcher Gerald Grow (1991) to compare self-directed learning to the North Star to emphasize its importance conceptually, stating that although "few people have ever defined self-directed learning with precision … [it] is an immensely useful concept for orienting oneself to education at all levels" (p. 5). Instead of a consistent definition, educational researchers have agreed that self-directed learning is generally characterized by learner autonomy. As learners are engaged in the process of learning, they can reflect on their own learning and develop independent learning skills. Although the ability to work independently is developed with age, it is also a skill that is learned and can be taught in various situations and throughout the person's life (Candy, 1991; Grow, 1991). The fact that independence can be learned is particularly significant to classroom teachers: once a person has developed the ability to be self-directed in one situation, they are able to transfer some of those skills to new situations (Grow, 1991).

Education is complex given the number of variables that occur in a classroom. This complexity means that self-directed learning doesn't just include the skills that the students have, but it also includes their motivation, the learning environment created in the classroom, and their peer relationships (Zimmerman et al., 1992). In other words, for a student to gain the learning strategies needed for academic success, there are many elements that need to work together to allow the development of these skills. It is the complexity of the relationship between all of these elements of the learning process that has made consistency in self-directed learning so challenging. This is where the initial research into self-directed learning that emerged in the late

1970's took us: an acknowledgement that classrooms are complex and require many factors to be effectively intertwined for students to find success.

In the mid-1980's and 1990's the research on self-directed learning changed focus and began examining the impact of strategic intervention. During this time, many educational researchers found that students benefitted from strategy-based learning, which includes having a variety of learning strategies to use, as well as being able to evaluate and modify the use of these strategies in order to increase learning (Candy, 1991; Chan, 1994; Pressley, 1995; Simpson & Nist, 2000). For teachers, this means teaching students how a strategy works in combination with why it works (Simpson & Nist, 2000). Candy (1991) agrees: learning strategies are important as they increase students' "curiosity, critical thinking, and the quality of understanding" (p.187).

Despite the importance of learning strategies, many educators assume that students have internalized them simply from completing course work through their school career (Zimmerman, 1998). As Grow (1991) states, internalized learning strategies are particularly important as learning requires a complex set of skills that not all learners spontaneously acquire. Therefore, direct teaching of the strategies to build self-efficacy is possible, and, in fact, necessary for the learners who are unable to acquire the strategies without direct intervention. The correlation between learning strategies and achievement is particularly important in an educational setting, as it demonstrates that students will find higher academic success once they have internalized the strategies that help them to know how to learn. Significantly, the research of the 1980's and 1990's allowed for clarity on what effective strategy instruction could look like (Simpson & Nist, 2000). This clarity has benefitted many educational researchers, including Deborah Butler (2002) of the University of British Columbia, and her development of the Strategic Action Cycle, a framework of strategy-based learning that underpins this current project.

Butler (2002) found that whether a student's outcome in the classroom can be improved or not is dependent on the preparation of the teacher to do so. This continual learning by classroom teachers is important given the complexity of classroom learning. As well as having to meet the needs of all their students, teachers are often under pressure to do a variety of tasks including adapting classroom practices to: integrate new technologies; align practices to reflect shifting cultural values, structures and resources; include students with disabilities; as well as to "realign practices in light of evolving learning theories" (Butler et al., 2004). To support this, Butler suggests approaches to learning that move away from traditional models of lecture-based teacher professional development and instead encourage a model that is based in collaboration between teachers (Butler et al., 2004). These collaborative models encourage teachers to work together to create communities of practice, or communities of learning, that aim to use the inquiry model to examine the problems that teachers face in their unique context (Butler et al., 2004).

The communities of practice are created to encourage teachers to build their knowledge together, and then use that collective knowledge to try new practices and reflect on their efficacy. Many researchers refer to the effectiveness of this model of teacher professional development by discussing the authenticity of having teachers guide their own development and growth (Ball, 1995; Borko & Putnam, 1998). Giving teachers responsibility for their own professional development through the creation of such professional learning communities helps to increase teachers' willingness to take risks with their assessment and planning, and to encourage community among school colleagues.

In her 2002 research, Butler worked with a group of teachers in an elementary school, using the community of practice approach, to identify and build skills in their area of concern. Butler's work with this group of classroom teachers used the model and the working structure of

the process of inquiry that is shown in Figure 1. This process was later edited and re-named the Strategic Action Cycle.

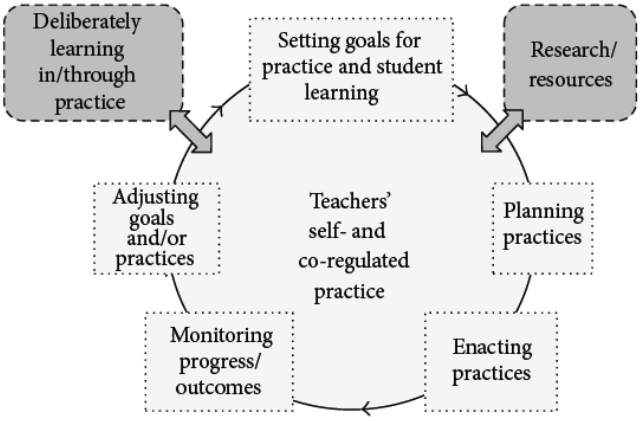


Figure 1: The Strategic Action Cycle (Butler, Schnellert, & Cartier, 2013, p.2).

After working with this group of teachers, Butler recognized the parallel between the process used by teachers in shaping their professional development and the recommendations given to create self-regulating learners (Butler et al., 2004). The teachers in this community of practice also identified and set goals, planned in a way that allowed them to achieve those goals, monitored student progress in their classrooms, and then adjusted as needed (Butler et al., 2013).

Butler's research demonstrates the effectiveness of both Strategic Content Learning (SCL) and the Strategic Action Cycle (SAC) in building self-efficacy in classroom teachers; however, the question remains of whether it would effectively do the same for students, particularly for adolescents who are in greater need of independence in learning. It is this connection between strategic content learning and self-regulation that this project considers. It is my goal to examine this connection with adolescent students, helping to fill a current gap in the strategic learning research.

To support the development of learning strategies, Butler (2002) divides the process of learning into the Strategic Action Cycle shown in Figure 1. In this cycle, the first stage in becoming more self-regulated is to analyze the task that has been given. This is critical to the process of learning as students will use their perceptions of the demands of a task to guide all their decisions that come next. In this stage, to support student efficacy, Butler suggests that teachers may lead whole class discussions to define marking criteria, or they may ask students to work in small groups or independently to interpret instructions. Teachers may also ask students to submit lists of expected criteria. Through this facilitation, teachers are encouraging students to take control of the work, rather than only explaining to students what the task is.

Butler (2002) offers several suggestions in the stage of enacting strategies, such as: teachers can lead class discussions, or ask students to work in small groups or independently, to brainstorm strategies that may be more effective in meeting the requirements of the task given. Butler (2002) also suggests that students could be encouraged to complete a planning chart where they outline an assignment they have been given in one column, followed by a row that lists the strategies that they plan to use to complete that assignment. This chart becomes the checklist that students can refer to help remind themselves of the strategies they used in the past, which can then be combined with self-monitoring whether the strategies they used were effective or not. Butler (2002) recommends students to be part of the process of constructing knowledge throughout all of the stages, including the self-monitoring stage, as students should be encouraged to reflect by assessing their work on the assignment criteria, rather than using teacher feedback. This process will allow students to develop a stronger sense of what quality work looks like, which will, in turn, give them the skills and confidence to create it, rather than depending on teachers to define quality work for them.

Tools such as Butler's Strategic Action Cycle are a vital part of the process of learning. Teachers should explicitly teach students to reflect on effective strategies and to use those strategies within the continued cycle of task analysis, application of strategies, and monitoring (Harris & Graham, 1996; Butler, 2002). Given the complexity of learning, the stages of the Strategic Action Cycle must be combined with building students' positive self-perceptions and perceptions of self-efficacy. This is a crucial component of learning since these perceptions influence every stage of the learning including the goals that students set (whether they commit to those goals or not) and their choice of strategy (Borkowski, 1992; Bandura, 1993; Schunk, 1994; Butler, 2002). Most significantly, research shows that positive beliefs in self-efficacy can cause students to link their outcome to factors that are within their control, such as the strategies they choose. At the same time, research shows that negative beliefs are reflective of a student's misconception of failure coming from their inability and that any success that they find is due to luck (Borkowski, 1992; Schunk, 1994; Butler, 2002). As these belief systems demonstrate, it is knowing how to learn that predicts future success and not a student's innate intelligence.

To be successful academically, students need a variety of learning strategies. This means not just for approaching academic content, but also strategies that can help them with the variety of tasks that are required in an educational environment, such as time management and task organization (Butler, 2002). Butler says that better learning happens when students are explicitly taught when, where, and why strategies are useful. This explicit teaching of strategies gives students the ability to choose strategies that work for their learning process within their particular educational context (Butler, 2002).

Butler (1995, 1998b, 2002, 2004), also suggests that explicitly reflecting on the process of learning will help students to become more self-regulated. Therefore, explicit teaching of the

Strategic Action Cycle, as well as the learning strategies that lie within each stage, is vital as students generally use strategies and approaches that have worked in the past when they come across expectations that are similar to those they have encountered before (Butler, 2002). The use of past strategies can be problematic as many teachers assume that students internalize effective learning strategies simply by completing tasks. However, the explicit teaching of a variety of learning strategies becomes more integral to student success. Other research on strategy-based learning shows that its efficacy is dependent on students' involvement in the construction of strategies that are used in the context of meaningful learning activities (Palinscar & Brown, 1988; Pressley et al., 1992). Giving students a voice in the development and use of learning strategies helps students to feel a greater sense of ownership over their learning (Butler, 1995, 1998, 2002). Butler (2002) says this sense of ownership is crucial, as it shifts the attitude that students have towards their work, helping to create the beliefs that build independent learners.

The justification for self-directed learning particularly through the direct teaching of learning strategies is clear. Research shows the significance of involving students in the process of learning and in explicitly teaching strategies within this process. Given that students rely on the strategies they have used in the past, it is crucial that teachers teach effective learning strategies continuously throughout a student's education to make the process of learning explicit for students. Butler's research in professional learning communities and the preparation of teachers shows how effective this process has been in creating self-directed learning for teachers. I rely on Butler's view that the explicit teaching of learning strategies can apply to adolescent learners who can develop self-efficacy and thereby become more self-directed learners. An increasingly globalized and technological world requires self-efficacy skills to see success, emphasizing how important it is that students can understand how to learn. It is an awareness of

this process of learning that empowers students to rise to the challenges of a modern world. In the next chapter I will detail the methods that I used to explicitly draw attention to learning strategies with my Grade 8 students in the context of Butler's Strategic Action Cycle.

Chapter 3: Methodology

3.1 Overview of Research Methodology

The research paradigm used in this study is action research since the research is focused on understanding the experiences of students in my own classroom. The end goal of my research is to discern how helpful the Strategic Action Cycle (SAC) is in giving students the power to develop strategies for their own learning across subject areas in Grade 8 during the critical transition from elementary school to the beginning of high school in British Columbia. This understanding can help teachers use the SAC explicitly to help students develop a stronger sense of internal motivation and to take ownership of their own learning.

Action research combines both theory and practice by changing and reflecting on a situated problem in the context of a classroom where the teacher serves as researcher (Avison et al., 1999). This positionality allows the teacher to follow the process of inquiry to identify a problem, intervene in the situation, and reflect on the results (Avison et al., 1999; Sagor, 2000). Action research is a method of research that is particularly relevant to educational contexts as the practitioner who is also the one who uses the results identifies a problem and seeks to find a workable solution in a particular context (Sagor, 2000). I follow the model of action research that was proposed by Richard Sagor in his 2000 book entitled *Guiding School Improvement with Action Research*. In this text Sagor describes the process of educational action research as undertaken by a classroom teacher who is looking to identify and act on a problem area within their classroom. I use the seven-step action research process that he outlines: select a focus, clarify theories, identify a research question, collect data, analyze data, report results, and take informed action. Initially, my focus was on creating more independent learners as a result of many discussions at staff and department meetings about teachers' concern for students,

particularly struggling learners, and their perceived learned helplessness. To understand how to create more independence, I researched self-efficacy and self-directed learning, particularly the theories of Deborah Butler, Albert Bandura, P.C. Candy, Malcolm Knowles, Dale Schunk, Gerald Grow, Guy Claxton, and Roger Hiemstra. Although many of the researchers had much to add to the theoretical conversation, it was Deborah Butler's Strategic Action Cycle (SAC) that formed the framework on which my research is based, shaping the research question on whether explicitly teaching learning strategies, such as the SAC, would help to build self-efficacy in students.

The collected data came in multiple forms, including an adapted form of the Motivated Strategies for Learning Questionnaire (MSLQ) that was used to form quantitative data of the skills of self-efficacy. In addition, students were given the opportunity to participate in discussion groups where they could explain their own use of the SAC and its connection to any growth that they had seen over the research period. Sagor encourages multiple forms of triangulated data to ensure reliability and validity. After I collected the data, I analyzed it through the lens of action research which encourages the researcher to continually view the research with two questions in mind: "What is the story told by this data? Why did the story play itself out this way?" (Sagor, 2000). By identifying the story in the data, I could address my priority of developing self-efficacy in adolescent learners.

3.2 Context

This study focused on my Grade 8 English class at a secondary school in British Columbia. I saw my students as ideal for this study because they are just beginning their high school careers and need more independent learning. As well, younger high school students have more time to develop, reinforce, and benefit from the strategies of the SAC. The class consisted of 25

students, 14 females and 11 males, all of whom consented to participate in the study. My school is a Grade 8 to Grade 12 school in an affluent area just outside Vancouver (Kennedy, 2017). The school has over 1000 students attending, with a relatively even ratio of male to female. In the 2020-2021 academic year there were 1351 students who were registered to attend classes in the building, 716 of whom were male, 635 of whom were female (see Appendix 12). The school is in a neighbourhood in the wealthiest area, with families earning over $45,000 more than all other areas (Kennedy, 2017). It is also the area with the fewest amount of single parent families, and where those single parent families earn a high income (Kennedy, 2017). Such details are significant because sociological variables can have an impact on children's educational development and access to opportunities. It also seems that these opportunities may affect a child's beliefs about the importance of education.

This group of students was particularly interesting because it was the first year where classes were grouped in cohorts as a response to the COVID-19 pandemic. This meant that students were placed in learning groups which determined all their classes for the academic year. Having the same group of students together created a unique bond among the students. As well, to enable the students to be placed into these groups, administration decided to eliminate the courses that grouped students by ability. This created classes that were much more diverse in their needs, rather than separating a portion of the struggling learners into specialized classes. Hence, the classroom was fully inclusive of all learners.

3.3 Data Collection and Assessment Instruments

Questionnaires

Independence was measured using a modified version of the Motivated Strategies for Learning Questionnaire (MSLQ) that was developed by R.R. Pintrich and E.V. DeGroot (1990). Since its publication, the questionnaire has been widely studied and used by teachers, although generally at the post-secondary level. It has also been used in a variety of countries and has been found to be reliable in predicting academic success based on self-regulated learning strategies (Credé & Phillips, 2011). The MSLQ has also been cited and studied in numerous academic works and is highly regarded and trusted (Credé & Phillips, 2011). The MSLQ takes the form of a Likert Scale, with 81 items for students to self-report and measure their level of independence and their use of positive learning strategies.

I typed out the modified MSLQ into a Google Form which I then shared with students via their district email address. The 81 items in the MSLQ were reduced to 25 items to better relate to the context. As the students were in Grade 8, they were new to the school and were in a class combined with students from all the feeder elementary schools in the area. Given their lack of familiarity with each other, they would not be able to compare their learning and achievement to their classmates. For this reason, items that asked students to rate their academic performance as compared to their peers (i.e. “Compared to others in this class, I think I’m a good student”, “My study skills are excellent compared with others in this class”) were removed. As well, since the questionnaire was given within the first week of class, the teaching of course content had not started yet. Therefore, items that asked about the content of the course (i.e. “I think that what we are learning in this class is interesting”, “I’m certain I can understand the ideas taught in this course”) were also removed. Finally, other items were removed due to their lack of relevance to my course. For example, I removed any items that referred to tests (“I feel my heart beating fast when I take an exam”) as I do not use tests as a summative assessment strategy.

The MSLQ was designed to be completed on a seven-point Likert scale that ranged from one “not at all true of me” to seven “very true of me”. For simplicity, the seven-point scale was also modified to a five-point scale. This was done because, in the original questionnaire, no labels were given to the points on the scale between one and seven. This has the potential to make the questionnaire a subjective measurement that could differ from student to student and context to context. To avoid this, descriptors were added to some items in the Likert scale to help students to apply the scale more consistently. The details of this can be found in Appendix 7: Adapted MSLQ; this is where the complete questionnaire that the students were given is located.

In the MSLQ, some of the items are also worded negatively (i.e. “I have an uneasy, upset feeling when I complete assignments”, “When I am completing an assignment I think about how poorly I am doing”). When these are recorded in the Likert scale table in chapter 4, those items are reversed. In other words, the highest end of the scale, “Very true of me” is recorded on the lower end of the table as it is negative for students to hold these beliefs consistently. Similarly, “Not true of me, at all” is recorded on the highest end as it is positive for students to not have these views. All students were assigned a pseudonym and completed the questionnaires during class times on Wednesdays when another teacher was able to be present. This was done in case students forgot their assigned pseudonym then the other teacher would be able to give it to them and prevent me from knowing the student’s identity. This was done to avoid any potential bias in the treatment of students.

Discussion Groups

Recorded interviews with small groups of students were completed in the final days of the course to help clarify any aspects of their written questions that required it. The final question in the final MSLQ asked for their participation, and these answers were viewed immediately in order to

contact interested participants. Of the 25 students in the course, 12 consented to being interviewed, in three groups of four. The groups were determined based on friend relationships that I observed during class time with the hope that close relationships would encourage honesty and fulsomeness in their answers. I facilitated the discussions with students over two class blocks, for about 15 minutes per group, with two of the groups happening in one day, and one on the second day. During the discussion groups, the students were recorded, audio recordings only, not video. To facilitate the discussion, students were given a set of hand-written questions on the board in the conference room. Students were told that they could address all, some, or none of the discussion questions. The list of guiding questions students were given is available in Appendix 10.

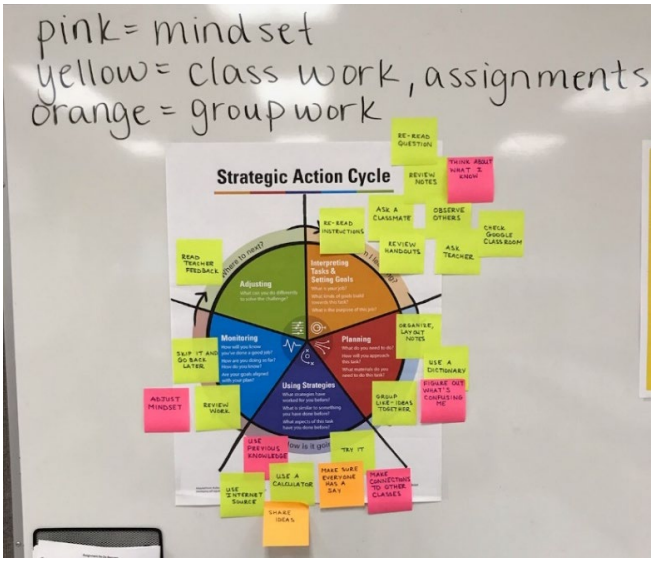
3.3 Research Design

This study was designed to follow the post-positivistic belief that reality can be found, controlled and measured (Mertens, 2019). I controlled the reality of the students' experience with the Strategic Action Cycle by facilitating class and individual discussions around learning strategies. I also measured the reality of their experiences with the Motivated Strategies for Learning Questionnaire. Finally, I aimed to observe the students in an objective way by facilitating the discussion groups rather than using a strict questionnaire that limited what students were able to discuss (see Mertens, 2019). Students were taught the Strategic Action Cycle with the belief that that this intervention has the possibility to work for all students, regardless of social variables.

To begin the research, students were given the MSLQ questionnaire. All names were changed for confidentiality purposes, and each student was assigned a random pseudonym. All questions on the questionnaire were optional, and I reminded the students that they could answer as many questions as they liked. After completing the initial questionnaire, I introduced the

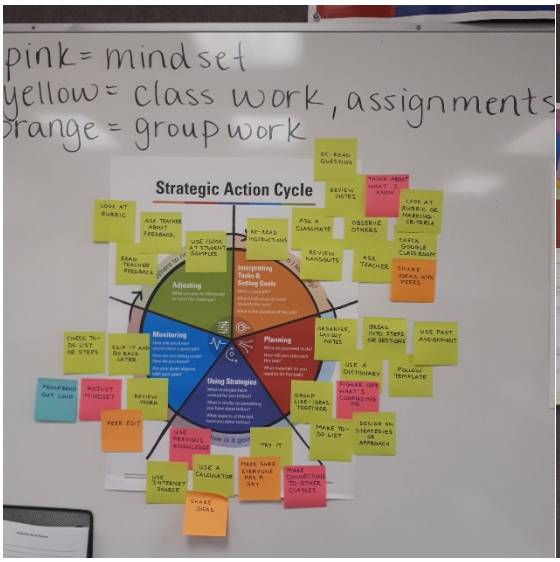
concept of the Strategic Action Cycle to students with a graphic organizer displayed on the classroom wall. I posed the following question: “How do you get unstuck, once you’re stuck?” Students discussed this with their table partner, sharing their answers with the class after a few minutes of brainstorming with their partner. As they shared the ways they get “unstuck” with a learning experience, I recorded their list of strategies on the board. Their answers were not limited to strategies that could be used only in my English class, and students were encouraged to think of ways that they get “unstuck” in other classes as well. Once the list on the board was complete, each of the stages of the Strategic Action Cycle were explained to the students and I provided details of what the stages of the SAC may look like in a particular assignment. The students then returned to their partner to discuss which stage of the action cycle they would find the strategies most helpful, and why. Again, this was shared and discussed as a class. Once the class agreed on which strategies would be beneficial in certain stages, I wrote them on stickie notes that I affixed on the poster. If a strategy is used in multiple stages, I noted that as well by writing the strategy in all the stages where it applies. To make it easier for students to use the cycle, I placed the strategies on color coded sticky notes to reflect the following categories that the students identified: class work or assignments, group work, and mindset. Diagram 3.1 shows the students’ organization of the poster after this initial discussion.

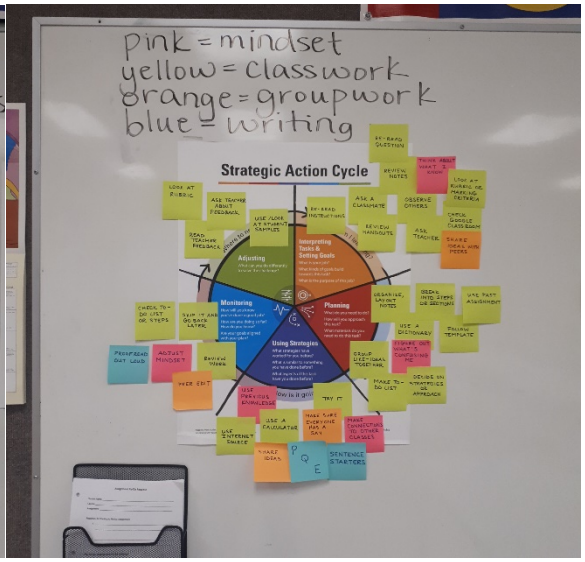
Diagram 3.1



I referred to the graphic organizer continuously throughout the course, particularly when students said they needed help. Students were encouraged to refer to the SAC poster and try the strategies identified there to overcome their obstacle. When new coursework or assignments were given, I gave students time at the beginning of class to discuss which strategies would be most helpful in supporting their completion of the task. This would be, again, discussed with table partners, and then shared as a whole class. Throughout these discussions new strategies were introduced, recorded on stickie notes, and then affixed to the poster in the stage where students believed that it would be most helpful. This led to further strategies being added to the poster, and even a new category being created. These are reflected in the following diagrams: 3.2, which was completed one month into the quarter, and 3.3, which was completed six weeks into the quarter.

Diagram 3.2 **Diagram 3.3**





In the last few days of the quarter, I gave the students the Motivated Strategies for Learning Questionnaire again, with all questions again being optional. I added the final question to the second MSLQ which asked students, in a yes or no format, if they were interested in participating in the discussion groups.

3.4 Ethical Considerations

As Grade 8 students are under the age of consent, the study required parent and guardian approval. One of the more significant challenges of research with this age group is in the nature of young adolescent learners. They are a vulnerable population, both emotionally and psychologically. Many have negative associations with school; some have experienced continuous struggle; lack of, or ineffective, support; lack of parent involvement; or overactive parents who are overly involved in the student's academic and personal lives; among other complexities. It is a reality that not many of them see their learning in a positive way which often leads them to negative self-talk. Measures were taken to protect students, such as using false

names, and ensuring that recordings and MSLQ answers were password protected on my laptop. It is also important to note that students were given the opportunity to articulate their growth privately with a fellow student, and only publicly at their discretion. (Note: All data will be destroyed in one year, after completion of the research project).

In this methodology chapter I detailed the methods that were used to complete the action research. I explained the steps that students followed during the research study, as well as the data collection methods that were used. In the next chapter (chapter 4) data will be presented from the modified MSLQ Likert Scale survey that was completed by students both at the beginning of the course, and near the end of the course. I will also present the trends and patterns that were found in these questionnaires that allowed me to reach the conclusions that I did. These results were triangulated with the discussion group transcripts to demonstrate how effective it was to teach and use Butler's Strategic Action Cycle explicitly in relation to supporting student growth in self-efficacy. An analysis of the discussion groups follows in chapter 5.

Chapter 4: Survey Data And Discussion

4.1 Data Collection

During the first week of the course, I gave students the modified version of the Motivated Strategies for Learning Questionnaire. The MSLQ records students' answers in a Likert Scale in the following order: Very true of me, Mostly true of me, Sometimes true of me, Sort of true of me, Not true of me at all. This initial survey is referred to in the tables that follow as the first survey. I typed this Likert scale out into a Google Form that students answered with my support during class time. In the last week of the course, I gave the students the survey again, with the same questions asked in the same order. This survey is referred to in the tables that follow as the second survey. Google Forms produces pie charts of student answers, which can be viewed, for both the first and second MSLQ, in Appendix 8 and 9 respectively. Table 4.1 is a breakdown of student answers on both surveys. When I organized the results of the survey, I looked for patterns in the questions and found three major themes in the questions that I chose from the MSLQ. In the table, questions from the MSLQ are re-organized into three separate charts to reflect these themes: motivation and desire to learn, behavior or work habits and beliefs about abilities. These themes are also reflective of Bandura's definition of self-efficacy, which, as outlined in Chapter 1, sees the intertwined relationship between motivation, learning strategies and confidence in creating self-efficacy. When looking at the results, the chart only tracks the number of students who identified their opinion in each level of the Likert scale; it does not track individual student responses. That is, which student gave which response is unknown.

Table 4.1

Categories for Questions	Question Numbers	Question	Very True (or Positive End)		Mostly True		Sometimes True		Sort of True		Not true at All (or Negative End)	
			First	Second	First	Second	First	Second	First	Second	First	Second
Desire to Learn – Beliefs About the Importance of Learning (Motivation)	1	I prefer class work that is challenging so I can learn new things.	3	2	12	9	7	10	2	4	1	--------
	2	It is important for me to learn what is being taught in this class.	18	18	4	7	2	--------	-------	--------	-------	---------
	3	I think I will be able to use what I learn in this class in other classes.	7	4	13	13	3	8	2	--------	--------	--------
	4	I often choose assignment topics I will learn something from even if they require more work.	3	1	12	6	10	16	-------	--------	-------	2
	18	Even when assignments are dull and uninteresting, I keep working until I finish.	13	14	9	9	1	1	1	--------	1	1
	21 (reverse)	I find that when the teacher is talking I think of other things and don't really listen to what is being said.	6	3	7	13	9	7	3	1	-------	--------
	24	I work hard to get a good grade even when I don't like the class.	16	14	6	6	3	2	-------	2	-------	--------

This section of the chart looks at both the first and the second MSLQ results for questions that I determined were reflective of the students' beliefs about the importance of learning. The numbers in the chart indicate how many students chose each level on the Likert scale. With the second survey, for most of the statements, fewer students fell in the far positive side of the chart where they would state that the statements were "Very true" of them. The number of students at

the negative end of the Likert Scale stayed the same. Overall, when looking at both the first and the second questionnaire, students' beliefs about the importance of learning showed a general decline in the students' positive beliefs. More students moved from the positive end of the Likert scale to the middle, while the negative end stayed relatively the same. Therefore, over the course, fewer students identified positively with statements about their desire to learn. What this means is discussed in chapter 5.

Table 4.2

Categories for Questions	Question Numbers	Question	Very True (or Positive End)		Mostly True		Sometimes True		Sort of True		Not true at All (or Negative End)	
			First	Second	First	Second	First	Second	First	Second	First	Second
Beliefs About Abilities (Meta-Cognition)	5	I am sure I can do an excellent job on the problems and tasks assigned for this class.	6	5	11	12	6	6	2	2	-------	--------
	6 (reverse)	I have an uneasy, upset feeling when I complete assignment.	7	6	8	10	6	5	3	1	1	3
	7	I think I will receive a good grade in this class.	9	8	9	8	4	5	1	2	2	2
	9 (reverse)	When I am completing an assignment I think about how poorly I am doing.	1	1	8	7	5	5	6	7	5	4
	13 (reverse)	It is hard for me to decide what the main ideas are in what I read.	4	2	7	8	8	6	4	6	2	2
	20 (reverse)	I often find that I have been reading for class but don't know	4	3	12	11	7	9	1	2	1	--------

		what it's all about.										

The items on the MSLQ that I aligned with their beliefs about their abilities showed some shifting between the first survey and the second survey. Again, the results stayed basically the same as given that the changes were only visible in a student or two, these changes are not worth noting. Overall, this category of the students' beliefs about their abilities showed a decrease in students identifying with the positive end of the scale as, like Table 4.1, more students moved from the positive end of the scale to the middle. Therefore, over the course, fewer students also identified positively with statements about their abilities as a learner. What this means is discussed in chapter 5.

Table 4.3

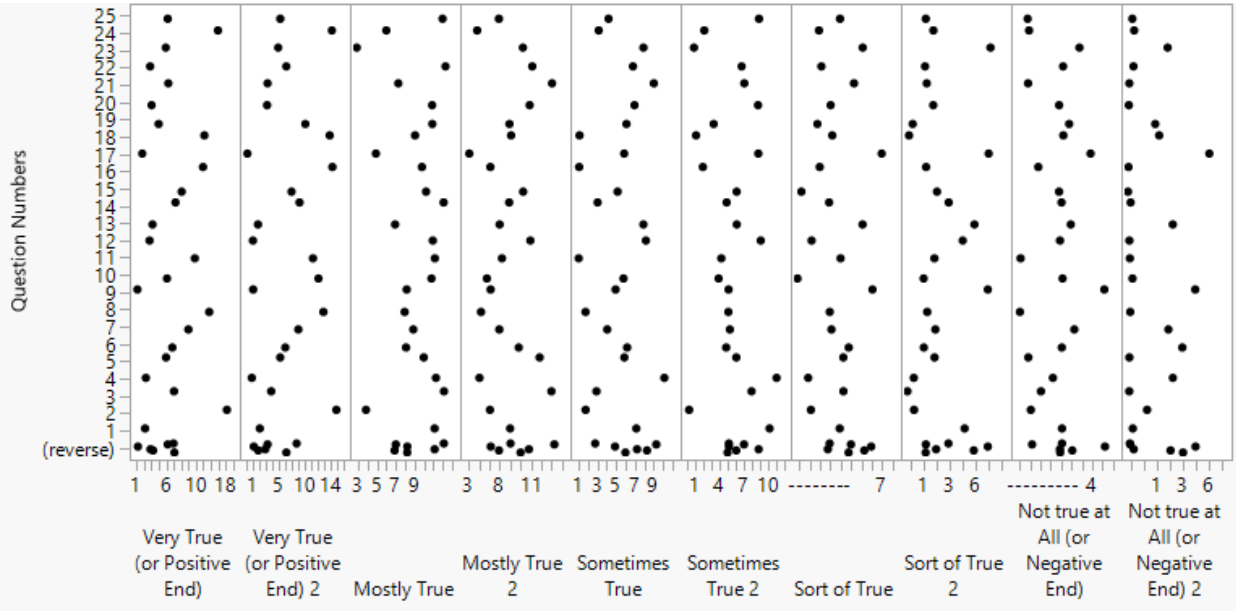
Categories for Questions	Question Numbers	Question	Very True (or Positive End)		Mostly True		Sometimes True		Sort of True		Not true at All (or Negative End)	
			First	Second	First	Second	First	Second	First	Second	First	Second
Positive Work Habits (Behavior)	8	Even when I do poorly on an assignment I try to learn from my mistakes.	14	13	8	6	2	5	1	1	-------	--------
	10	When I am completing an assignment, I try to put together the information from class and from my binder.	6	12	12	7	6	4	------	1	1	--------
	11	When I do assignments, I try to remember what the teacher said in class so I can answer the questions correctly.	10	11	12	8	1	4	2	2	-------	--------
	12	I ask myself questions to make sure I	4	1	12	11	8	9	-------	4	1	--------

		know the material I have been working with.										
	14 (reverse)	When work is hard I either give up or complete only the easy parts.	7	8	13	9	3	5	1	3	1	--------
	15	When I think about assignments, I put important ideas into my own words.	8	7	11	10	5	6	------	2	1	--------
	16	I always try to understand what the teacher is saying even if it doesn't make sense.	13	14	11	7	1	2	--------	1	--------	--------
	17	I work on practice exercises even when I don't have to.	3	--------	5	3	6	9	7	7	4	6
	19	I use what I have learned from old assignments and my binder to do new assignments.	5	10	12	9	6	3	--------	--------	2	1
	22	When I am studying a topic, I try to make everything fit together.	4	6	13	11	7	7	--------	1	1	--------
	23	When I'm reading I stop once in a while and go over what I have read.	6	5	3	10	8	1	4	7	3	2
	25	When reading I try to connect the things I am reading about with what I already know.	6	5	13	8	4	9	2	1	--------	--------

This chart on the students' positive work habits, showed a more significant increase in the number of students that were identifying with the "Very true" or positive end of the Likert scale. For two of the statements there were large increases: "When I am completing an assignment, I try to put together the information from class and from my binder" showed an increase of six students who stated that this was "Very true", while "I use what I have learned from old assignments and my binder to do new assignments" showed an increase of five students. Although many of the other statements showed an increase or decrease, it was often by a student or two. The statement "When I'm reading I stop once in a while and go over what I have read" showed the most drastic change, as seven more students identified that this statement was "Mostly true of them", and seven fewer stated that it was "Sometimes true" of them in the second survey. This shift demonstrates that for the most part, students identified a positive change in their work habits. Overall, students demonstrated a significant shift in their understanding of positive work habits as in the second survey a larger number of students found statements about work habits to be true of them more often. This shift aligns with the fact that many of the class discussions were around strategies that students could use to complete assignments and which strategies they may find helpful for particular assignments. Therefore, it seems likely that students would be able to recognize whether these strategies were helping them to know how to complete class work.

The survey data displayed here records the results from both the first and second modified Motivated Strategies for Learning Questionnaire that students completed during the course. This data is visually represented in the scatterplot diagram seen in Diagram 4.1 on the following page.

Diagram 4.1



There are some significant trends in the data. The MSLQ data indicates that students saw a decline in the positive attitudes towards the importance of learning and their abilities, although marginally so. However, there was an increase in the students' positive work habits. This increase in positive work habits is important as it demonstrates that throughout the course, my students developed the ability to recognize and use strategies that would help them to work with more self-efficacy. In the next chapter I engage with the data and include what I found during the discussion groups that were completed in the final days of the course.

Chapter 5: Group Discussions

As evidenced in the scatterplot matrix of the Likert Scale data that is seen in Diagram 4.1, these questionnaire results were not particularly revealing. The variety of answers in the Likert scale make it very challenging to determine the overall growth of the students. Therefore, triangulating this data with the discussion group data ensures a better understanding of the students' experiences with the Strategic Action Cycle.

5.1 Data

The scatterplot diagram demonstrates that the patterns are not consistent enough to warrant statistical significance of the data presented. Instead, the scatterplot demonstrates the variety of student responses, and the shift between the first survey and the second survey. Although this makes it challenging to determine the effectiveness of integrating the Strategic Action Cycle and direct teaching of learning strategies, the patterns of change outlined in Chapter 4 also demonstrate that the students moved away from the higher and lower ends of the Likert Scale, and moved more towards the middle of "Sometimes true" and "Sort of true". The more significant changes were in the questions that asked specifically about positive work habits. This provides some evidence that explicitly teaching learning strategies made students more aware of the strategies that they use that either allow or impede their academic success. However, the variety of answers, and the shifting that happened between the first survey and the second survey make the Likert Scale data challenging to understand. This places a stronger weight on the discussion groups.

The discussion groups held in the final days of the quarter indicate that students believe in explicitly teaching them learning strategies helped them to become more independent in their

learning. At the same time, their comments during the discussions with their peers reflect what the Likert scale data demonstrates. In the Likert scale data, the number of students identifying positively with statements around both their beliefs in the importance of learning and their abilities showed a decline. Similarly, in the discussion groups, very few of the students spoke about either of these beliefs. However, in the Likert scale data, there were a few statements that showed a significant growth in the numbers of students identifying positively with those statements around positive work habits. In the discussion groups students spoke often about the benefits of the positive work habits they learned, particularly the process of building the learning strategies on the Strategic Action Cycle poster (as seen in diagrams 3.1, 3.2 and 3.3 on pages 25 and 26). However, students also spoke about the importance of having a variety of strategies to accommodate the unique learning needs of each student. Therefore, regarding one of my supplementary research questions, there was no specific strategy that the students found most helpful. The full transcripts of the students' discussions are contained in Appendix 11. When analyzing their discussions, I found that overall, students found the explicit teaching of learning strategies, in the context of Butler's Strategic Action Cycle, to be helpful to their learning. In particular, they identified that this process: helped organize their thoughts initially, helped them focus, provided a visual reminder that was easy to access, gave them ownership over the strategies, gave them options, built independence, and was applicable to activities outside of school. A snapshot of the students' comments relating to three aspects of self-efficacy is contained in Table 5.1a, 5.1b, and 5.1c**.**

Group one was all females and was made up of friends who had known each other over many years: Janice, Olivia, Sarah and Ashley. When I was arranging the order of the groups, they asked to go first on the last Monday of the course. Their discussion lasted approximately 15

minutes. They were chatty and enthusiastic to share their thoughts which often meant that they talked over each other and finished each other's sentences. For the most part, when one student was speaking, the others were muttering in agreement or nodding along, eager to jump in with their opinions. Sarah was the only student who spoke of not wanting to build independence and preferring to be taught exactly what to do. Sarah also spoke of the strategies that didn't work for her mainly because she feared making mistakes, especially in front of peers. However, she also said that she liked being reminded of strategies. Janice and Olivia are both high achieving students in all their academic subjects and spoke of enjoying the freedom to choose the strategies that worked for them. Ashley is designated with the BC Ministry of Education code Q, or Learning Disability. She has deficiencies in literacy and numeracy and receives support from the Learning Support programme to help her to work through her challenges. Her comments were therefore most noteworthy; she too liked having the poster to help her work. None of the students spoke explicitly about the importance of learning. However, their negative comments about peer editing made it clear that learning was important to them as they spoke of being frustrated when other students try to change their ideas or phrasing. A summary of their ideas in relation to the three aspects of self-efficacy follow in Table 5.1a.

Table 5.1a

Group	Name of Student	Comments Regarding Beliefs About Importance of Learning	Comments Regarding Beliefs about Abilities as a Learner	Comments Regarding Positive Work Habits
1	Janice		- SAC helped her to become more independent, have more confidence - Liked having	- Found SAC most helpful when frustrated - Likes double checking with others

			freedom to choose	- Didn't like peer editing - Wants to keep building strategies for other classes - Liked variety of strategies
	Olivia		- Liked having freedom to choose	- Visual of poster helped - Didn't like peer editing
	Sarah		- Likes being told what to do	- Didn't like "try it"or peer editing - Liked variety of strategies
	Ashley		- Needs time to process - Liked having freedom to choose	- Visual of poster helped - Liked variety of strategies

Group two was a mix of males and females, and a mix of old friends and new: Rianna, David, Peter and Wade. Rianna and Wade had been friends for years, whereas Peter and David were new to the group. All the students got along well with each other and their Physical Education teacher, who was also the teacher that was present when the students completed their surveys, reported that they often chose to play on teams with each other as they all play sports outside of school. This group of students were more reluctant to speak and needed more prompting questions to keep the conversation going. Their discussion occurred just after group one and lasted approximately 11 minutes. The conversation was mainly dominated by Rianna, although they were all conscious of making sure that everybody had the chance to share. Most of

their discussion was around the design of the SAC poster and their thoughts that it should have been arranged differently. They spoke of wanting the stages of the Strategic Action Cycle to be a line rather than a circle to help organize the stickie notes more clearly. Peter and Wade have Q or Learning Disability designations and receive both support from the Learning Support programme. This is significant because Peter and Wade both spoke of enjoying the variety of strategies because it gave them a choice of how to complete work. Peter also noticed a growth in his ability to work independently and said that he had been using the SAC strategies outside of school. Rianna also receives support from the Learning Support programme because of her anxiety and perfectionist tendencies, although she is not formally designated. She noticed how the SAC helped her to take learning opportunities and break them into steps and create a "to-do list" which helped to ease her anxiety in completing assignments. A summary of their ideas in relation to the three aspects of self-efficacy follow in Table 5.1b.

Table 5.1b

Group 2	Name of Student	Comments Regarding Beliefs About Importance of Learning	Comments Regarding Beliefs about Abilities as a Learner	Comments Regarding Positive Work Habits
2	Rianna			- SAC helped her break work into steps - Visual of poster helped - Used SAC outside of class - Liked variety of strategies
	David			- Visual of poster, and Google Classroom copy helped

				- Used SAC outside of class - Liked variety of strategies
	Peter		- SAC helped him to become more independent	- SAC helped him break work into steps - Visual of poster, and Google Classroom copy helped - Used SAC outside of class - Liked variety of strategies
	Wade		-	- Liked variety of strategies

Group three was a close group of friends who had known each other since early elementary school: Elizabeth, Patty, Matt and Aaron. They asked to go on the final day of the discussion groups because they didn't want to follow another group in case they ran out of time for everything that they wanted to say. They were enthusiastic, chatty, and eager to share, and I could see one person trying to speak when someone else was explaining their ideas. Their conversation was the longest at almost 20 minutes, and their answers were the most thorough, with each student speaking for a minute or so every time they shared. They spoke explicitly about the strategies that they gained from applying the Strategic Action Cycle, and every group member also spoke of using the strategies from the Strategic Action Cycle for their hobbies outside of school. Although they didn't speak directly of the other two aspects of self-efficacy (beliefs about the importance of learning, beliefs about self as learner), they recognized that the strategies from class would help them with learning in general. This recognition demonstrates

that they are aware of their abilities as learners as they were able to tell me about how the Strategic Action Cycle helped them to learn. The fact that they saw the benefits of the strategies while working in my classroom and began to independently apply them to their hobbies also demonstrates that they are aware that learning and improving are important to them. A summary of their discussion follows in Table 5.1c.

Table 5.1c

Group	Name of Student	Comments Regarding Beliefs About Importance of Learning	Comments Regarding Beliefs about Abilities as a Learner	Comments Regarding Positive Work Habits
3	Elizabeth			- Liked variety of strategies - Used SAC outside of class
	Patty			- Liked variety of strategies - Visual of poster helped - Used SAC outside of class
	Matt			- Used SAC outside of class
	Aaron			- Liked variety of strategies - Visual of poster, and Google Classroom copy helped - Didn't like "skip it" - Used SAC outside of class

In all of the discussion groups, only three of the students (Ashley, Peter and Wade) discussed how the learning strategies helped them to organize their thoughts in the beginning stages of class work that they were given. Interestingly, all three of the students are designated with British Columbia Ministry designations of Q, or Learning Disability, in the areas of written expression. This suggests that students who struggle with written expression may find the process particularly helpful in getting their ideas organized when they were beginning any assignment. As Ashley said, she found the strategies helpful *"Cause it told me things I can do like make a to-do list, try it, see if it works, go back to previous works, review more stuff, and then I have a decent spot I can start at"* (lines 6-7). Ashley continued,

> *some parts I didn't really get when you said in shorter form what to do, and then I see other kids doing what they're meant to be doing, opening their binders and stuff. So I know where to get started, then I just carry on with my work and I'm super focused in it, and I get it done. But I just need that boost and then I start* (lines 118-122).

Rianna agreed with Ashley's feeling that the steps of the Strategic Action Cycle helped to organize her. Butler (1998) identifies the steps as: interpreting the task, setting goals, planning, using strategies, monitoring and adjusting. Rianna found these steps helpful as she stated,

> *The steps did help because when they broke down the assignments it helped me feel more organized, it was kind of like a to-do list. So it broke it down for me. It was really easy then. It made everything easier and you didn't have to go through those complicated strategies. It made everything specific and detailed. So it really helped"* (lines 155-158).

Peter also found these steps to be helpful, as he said that *"If you look at the way it's laid out I can follow the steps and it just makes the assignment easier"* (lines 159-160). Rianna expanded again on the steps, particularly how they built her confidence in her abilities. She explained that *"When you look at the steps, it really just flattens everything, and it's just like, 'ok, I'm going to do this, it's going to be done, I'm good"* (lines 237-239). Therefore, these three students, all of

whom are identified with learning disabilities in the area of written expression, found the focus on strategies and the Strategic Action Cycle to be helpful in the initial stages of organization that happen just after work has been given.

For students, after an assignment or class work is given, they need to be able to focus, despite distractions, to complete the work. Across the different discussion groups many of the students identified that this was a particularly stressful part of the process for them, as it requires self-regulation and self-discipline to be able to work quietly in a classroom environment. However, many of them also spoke of how the explicit learning strategy instruction gave them a clear goal and procedure to follow, which made it much easier for them to maintain their focus to complete work. In other words, when students know what to do, and how to do it, they are more productive. Janice said that "*whenever I sometimes get bored, or annoyed about an assignment, or I just don't want to start my work I might go and look and see if I can add any more steps to help me spread everything out"* (lines 9 – 11). Olivia spoke of the stress that she feels when completing work, but then identified the benefits of the strategies:

> *It's helpful cause then it helps to remind you that you have notes and you could just look at them and then use them. Cause sometimes it's stressful, I don't even think about what I could use or what to do. But then when I look at that and it kind of reminds me that 'Oh yeah, I have notes, I could just use that!'" (lines 123-126).*

Sarah agreed with Olivia, excitedly expressing that *"Yeah! It reminds you of strategies"* (line 127). Peter also spoke of the stress that he often feels with class assignments, and how that often causes him to over-think what he is doing: *"Overthinking things can put too many ideas into your head at once. Looking at the chart you can kind of re-fresh your mind and you can just base it on one idea"* (lines 240-241). Therefore, despite the over-thinking that may happen, Peter

found that the emphasis on learning strategies helped give him a focus, which would help to ease any stress that he felt.

In addition, many of the students communicated the benefits of having the SAC poster visible in the classroom, with the stickie notes of strategies that they had written. I also took a picture of the poster, every time it was updated with new strategies, and posted this in their Google Classroom so that they could access the poster from their desks, as well as from outside of the classroom. Many students talked about how having the poster at the front of the classroom provided a visual reminder of the strategies, and that it made the information of which strategies they could use easier to access. Rianna said, *"I would just turn and all the strategies would be there, they'd be detailed"* (line 164). Patty agreed with Rianna, saying that

> *It did help to have a poster because I feel like otherwise I would have forgotten to use it. Because since it was there, and like, right at the front of the classroom kind of, you could see it from all directions. It really helped. If you were, like, stuck or something, you would just naturally look around the classroom, and that bright poster would be there, and you're like 'ok'"* (lines 279-283).

I used colored stickies to separate the strategies into categories to make it easier for students to identify the strategy, or strategies, that they may want to use. Peter talked to the benefits of this, saying that the poster was visually appealing because of the colors: *"It's really colorful so out of your peripheral vision you can see it, and then you're like 'Oh there, I can look at that'"* (lines 260-261). For Patty, my decision to color code and categorize the stickies also helped her. She said, *"So I feel categorizing the stickie notes and, like, writing down the strategies, it really helped because it would tell like what the most suitable strategy for each category"* (lines 273-275). For Aaron, whose desk was further to the back of the room, it having the poster on Google Classroom was particularly helpful. He said, *"Sometimes, like, I looked to my past assignments*

to see feedback and everything, and it's right there in Google Classroom, so if I'm stuck I can just go there" (lines 285-286). Therefore, having easy access to the SAC poster was also something that students found to be useful as it gave them the choice of how and when to engage with the strategies. Students enjoyed having control over how to learn and this reflects what Butler (2013) found in her research; she discusses how students must have deliberate control over their learning for the growth to be most effective. She states that although explicitly teaching strategies is beneficial, self-efficacy is more likely to be encouraged when students help to build the strategies from their own knowledge. This gives them a deeper sense of ownership over the strategies, rather than feeling like the teacher is requiring them to complete work in a particular way. Having students work in table partners to brainstorm strategies had two benefits that students identified in their discussion groups: they felt that the strategies were their own, and the variety of strategies to choose from gave them a feeling of both freedom and security. This was particularly evident with several of the students who spoke of the poster, on its own, not being helpful. Patty said, *"With only the poster, it's too generalized. But I feel like with the stickie notes on it, it was better"* (lines 313-314). It was the specific strategies that the students needed because those strategies gave them guidance and structure, but still with the ability to choose the strategies that worked for them. Many of the students talked about the benefits of this, including Olivia who indicated that *"It's good that we get to choose"* (line 105). Ashley explained why this power to choose was so important to the students when she stated that *"everyone has their own opinion on what is helpful to them"* (lines 117-118). The variety of learning styles is significant, as the students were aware that not all of them work in the same way. This is also echoed in Butler (2013) that students need to contribute to the discussion of strategies to feel more invested in using them.

It is significant that, at grade 8, students are aware of the variety of their learning needs and learning styles. This applied not only to using the strategies made available on the poster, but also the variety of strategies that were discussed and recorded. As Janice stated, "*It's not required, but it's an option for when you're not in the mood. And I feel like the steps in the poster was really helpful cause it didn't say you had to go that way but it gave you the basics and if you wanted to follow it you could"* (lines 129-131). Ashley indicated similar feelings by suggesting that *"If it was required, just saying, if it was required then I'd feel more stressed to do my work and put all these things in my work, and then I would just forget about what I was mainly focusing on. I'd get off-track"* (lines 132-134). Therefore, both Janice and Ashley spoke of how students need to have ownership of their learning right from the start. Although Janice and Ashley explained that students need guidance from teachers, they also appreciated when that guidance is given with options that allow students to choose what works best for their learning needs.

Many of the students also recognized that the variety of strategies was important to meet the complex needs of a group of students. Wade commented on the number of strategies that were recorded on the poster: *"There wasn't too many, it was just because different ones worked for different people"* (line 208). Peter agreed, stating that *"I think it is good to have so many strategies cause different people have different ways of solving things so, I guess, maybe, different strategies work for different people"* (lines 210-211). Patty discussed similar ideas when she talked about simply providing guidance to students. She said,

> *Cause if you specify the task too much, then I feel like it kind of narrows down what you think helps you, and it doesn't let you realize whether these strategies really help you or not. Cause when you specify the task it makes you feel like you have to do that"* (lines 320-323).

Aaron agreed with Patty's comments that forcing students to use strategies would limit their ideas, as he also praised the variety of strategies stating that they helped because *"you know what you can use but you also have room for your own thought process"* (lines 325-326). Elizabeth said it is important for students to be encouraged to think for themselves, as *"we all have different ways of thinking and different personalities"* (line 355). Rianna agreed with the significance of student choice, but also indicated that being given the choice to reference the list of strategies was helpful in easing any stress and anxiousness that comes from the class assignments. She said, *"At least having a selection, and there was options, and just knowing they're up there is really good"* (lines 212-213). Previous studies on self-efficacy such as: Bandura (1977), Zimmerman (1998), Schunk (1994) and Butler (2013) found a similar connection to what students indicated during discussion groups: independence is more likely to be created when students have a voice in their own education.

As I started this research in order to determine if explicitly teaching learning strategies would create more self-efficacy, many of the students spoke to how the Strategic Action Cycle helped them to develop one aspect of self-efficacy, which is independence. As Olivia said in regards to the poster of strategies, *"For me, I think having it there in class was actually kind of helpful cause then I could just look, for different stuff, I could just look and see what I'm supposed to do or what I can do to help me get unstuck"* (lines 23 – 25). Janice agreed with this, saying that

> *I feel like, for the Strategic Action Cycle, it was important for us to learn about it because I feel like you would want us to be more independent and have confidence so it's not like we would have to ask the teacher for everything. So this is a way for us to figure it out on our way other than having to… like have something in the back of our minds we could use whenever we're stuck to get unstuck. Figure stuff out. It was really helpful to have* (lines 48 – 53).

Peter agreed with Janice's discussion of not relying on me as the teacher: *"Instead of asking you to come over, you could try to be independent and look up at the poster or look at it on Google Classroom and find out strategies, maybe, that could help you get past your block"* (lines 170-172). David and Peter agreed with the importance of working through challenges alone, particularly when they are not in school. As David said, *"It was also helpful on Google Classroom when you're not in class, like if you're at home, and you're struggling"* (lines 173-174). Peter immediately agreed, stating, *"Yeah, cause you don't have a teacher at home"* (line 175). Having skills and strategies became important to students, as they found it beneficial for times when they were working on assignments at home, or even during class time when I was helping another student.

Most importantly, some of the students spoke of how they began to use the strategies that had been brainstormed on the Strategic Action Cycle in areas outside of their academics. Elizabeth said, *"This is my first time seeing a poster like this, and it didn't only help for school, it also helped for everything in general, I guess, it really helped me to break down all my steps to do daily tasks and stuff"* (lines 287-289). Patty agreed with Elizabeth, stating that *"I feel like the most important thing from the Strategic Action Cycle for me was that, realizing that I already did these things but I can use them to help myself in other circumstances"* (lines 368-370). These other circumstances were also commented on by Matt and Aaron. Matt said: *"I do coding and it actually helped me break down the steps for when I'm actually making a game or something"* (lines 333-334). Aaron found the strategies more helpful with music, stating: *"I have guitar lessons, so it also helped encourage me kind of because sometimes it's confusing and I didn't know if what I was doing was right or wrong"* (lines 335-336). The fact that some of the students began to apply the learning strategies in areas outside of my English class, particularly to their

extra-curricular activities and chores, demonstrates the practical application of learning strategies in a wide variety of learning environments.

Overall, the students found that explicitly learning strategies, in the context of Butler's Strategic Action Cycle, helped them. Rianna commented on this, saying that *"Overall, it's an amazing device for us to use in class and I'm really happy that we got to use it"* (lines 266-267). David agreed, stating that overall *"It was very helpful"* (line 268). Aaron also found the Strategic Action Cycle beneficial, saying: *"It gave me strategies to use which really helped me"* (line 363-364). Overall, students spoke highly of the experience indicating that learning about the Strategic Action Cycle, and working through the process of discussing and learning strategies that support their learning, helped them to become more independent learners.

It is clear from the discussion group data that students found the Strategic Action Cycle and the process of explicitly discussing and building up learning strategies to be helpful to their learning both in and outside of the classroom. This is particularly evident because the students articulated their feelings of confidence in their abilities and their recognition of being able to work more independently. The Likert Scale data and discussion groups also demonstrated that students found an improvement in their ability to recognize positive work habits, and to make use of those habits with their classroom assignments. However, the Likert Scale data for the two remaining categories (their beliefs in the importance of learning, and their beliefs in their own abilities) indicates that this area needs further investigation.

This apparent disagreement between the data points leaves one question unanswered: if the students found the Strategic Action Cycle to be so helpful, why didn't the modified MSLQ results reflect this? Because my students were not explicitly asked to address the modified MSLQ in their discussion groups, there can only be speculation about why the questionnaire

showed a decline in positivity towards two of the aspects of self-efficacy: the students' beliefs in their abilities as a learner, and the students' beliefs in the importance of learning. It is possible that the students had an overly positive impression of themselves and their learning at the beginning of the quarter in November, but by the end of the course in February they had developed a more realistic impression. When reviewing the data points through this lens, it's not that the students became more negative in the end but their answers in the first questionnaire were an optimistic, not realistic, representation of their skills.

The limitations outlined in chapter 5 also indicate two major influences on the study: the COVID-19 pandemic, and the assessment practices in the province of British Columbia. The lingering COVID-19 pandemic has impacted all individuals and the effect of it will take a long time to determine. It is possible that the difficulties of the pandemic caused the students to view themselves and their learning potential more negatively. The structure of the academic year also meant that my students had no indication of their academic standing when they completed the first questionnaire; but by the second questionnaire they had received their mid-quarter reports cards and had a percentage grade attached to their work. It is possible that having a grade caused them to view their learning more negatively. The structure of my study could also indicate that those students who became more negative in their views were not the students who agreed to participating in the discussion groups. Finally, it is also possible that the students did not enjoy the format of the Google Form, whereas the discussion groups allowed them to delve into the complexity of their experiences. Each of these, and many more, are probable explanations for the disparity between the modified MSLQ data and the discussion groups. Without being able to address this disparity with the students, it can only be speculated. This lack of clarity demonstrates that the Strategic Action Cycle needs further research even though, overall, my

students were able to see the benefits of the process and learning strategies that were discussed with the Strategic Action Cycle.

As self-efficacy is intertwined with a student's ability to develop and use the learning strategies, it is crucial that future studies continue to examine the importance of all three of these factors: the desire to learn, confidence in self as learner and positive work habits. When viewed through the lens of Bandura's definition of self-efficacy, the positive work habits that the students pointed out in the discussion groups are significant. In his research Bandura (1977) discusses how self-efficacy must be perceived through behaviors rather than personality traits, as behaviors and skills are more easily taught and evaluated for effectiveness. Bandura (1977) also acknowledges the myriad of factors that can impact self-efficacy such as: social environment, situation, complexity of task, personality of teacher, among others. The variety of factors that can impact student success can make it challenging to evaluate growth in self-efficacy as moments of success or failure cannot be assumed to lead to an overall development of self-efficacy (Bandura, 1977). This helps to provide a valuable lens through which to view the variability of the student responses in the MSLQ data as students may not have been able to separate their personal experiences with the course, the course content, their classmates, or my teaching style, among other potential factors in their personal lives, from their overall development of the positive beliefs and behaviors of self-efficacy.

However, my Grade 8 students showed development in their positive work habits and articulated the benefits of using the strategies from the SAC, such as working more independently. Therefore, Butler's Strategic Action Cycle, as her research demonstrates, is a useful tool for both teachers and students as it clearly outlines the process of developing self-directed learners. The SAC can work to create a continuum of learning that makes clear to

students how to proceed, step by step, through any assignment that they are given by their teacher. This helps to build their knowledge of strategies that may work to support their learning. The structure and guidance provided by the SAC is significant, as Bandura (1977) argues that when looking at the development of self-efficacy "it is important that subjects understand what kind of behavior will be required and the circumstances in which they will be asked to perform them" (p. 204). Therefore, Bandura's theory of self-efficacy makes clear that for students to see success, they need to know how to approach learning. Butler's (2002) research demonstrates a similar conclusion as Bandura's: that a student's success is dependent on the strategies they have for organizing their time and their work.

In my research, although the students did not build all of the beliefs of efficacious learners, they developed positive work habits which helped them to begin the steps to feeling more confident and motivated in their learning. This is the foundation of self-efficacy. Candy (1991) discusses the significance of learning strategies as his research has shown that a strategic approach to learning increases student curiosity, critical thinking, and quality of understanding. He demonstrates that increases in these domains helps to support a growth in confidence as these qualities help students to attribute their success to their own efforts. This is an important first step in the creation of self-efficacy as seeing the connection between efforts and achievement helps students to develop confidence in themselves as learners. As self-efficacy is crucial for success in today's world, the Strategic Action Cycle can go a long way in helping students to develop the beliefs and habits that they need to find success in a modern world.

5.2 Possible Limitations

Though this study provides evidence that the Strategic Action Cycle is a valuable tool in building the skills that are necessary for self-efficacy, there are some realities that warrant consideration:

1. Struggling learners often have a negative relationship with their own learning. This could have impacted how they answered the questionnaire items, particularly those that ask them about their own attitudes towards learning and themselves as learners. For many of them, their struggles have been ongoing for a long time and reversing these habits of negativity will take many years of teaching them to recognize their own strengths and capabilities.
2. To help slow the spread of COVID 19, high schools in British Columbia, Canada were put on the quarter system beginning in September 2020. This meant that students had only two classes a day for ten weeks. Therefore, classes were more intense and for a shorter period of time. This time frame limited the amount of growth that a student can demonstrate, as significant academic growth takes a longer period of time.
3. The final survey was completed after students had been given one formal report card. Although assessment of learning in class was normally communicated using the 4-point proficiency scale (beginning, developing, accomplishing, extending), students were given a formal mid-quarter report that required a percentage grade. For students, this would have been the first time that they saw a percentage associated with their work in my course, which may have negatively affected their perception of their abilities, possibility for improvement and potential achievement of learning. This may have impacted their answers on the second survey.
4. Not all of the students consented to participation in the discussion groups, which means that not all of the students' experiences are represented.

Chapter 6: Conclusion

To those teachers in that staff room, I am now able to suggest a process of teaching self-efficacy that my students found beneficial. As a classroom teacher, I understand my colleague's frustrations with the overwhelming diversity of student needs and potential tools available to support these needs. However, Deborah Butler's Strategic Action Cycle provides a clarifying framework that helps students to understand the process of learning specific learning strategies as well as their role as learners. In reference to the research questions, this research demonstrates that explicitly teaching learning strategies in the framework of Butler's Strategic Action Cycle helped my students to develop knowledge and confidence in using learning strategies, which is the beginning stages of developing self-efficacy. Students did not find any one strategy to be most helpful. Instead, they found the variety of strategies to be most beneficial due to the variety of student learning needs. My students found the visual representation of the strategies, both on the classroom wall and in digital format, incredibly helpful as it gave them the ability to access and view the strategies as they needed them both in and out of the classroom.

With regards to the final two research questions, further research is needed as my students did not observe a noticeable improvement in their beliefs towards the importance of learning, or in their confidence in themselves as learners. In the discussion groups, however, several students discussed how the Strategic Action Cycle benefitted them both in class and in their extra-curricular activities. And although many of them did not explicitly mention a growth in confidence, their comments about finding learning easier demonstrate this connection. Therefore, future research may find that explicitly asking students about their growth in confidence may help to clarify its connection to the Strategic Action Cycle. As well, the socioeconomic factors of the neighbourhood may have impacted on the students' attitudes towards learning as children

from higher social classes are often afforded more opportunities that may impact their academic abilities, confidence, and perception of education. Therefore, future research could explore the usefulness of the Strategic Action Cycle with students from a variety of socioeconomic backgrounds. Finally, the structure of the education system in response to the Covid-19 pandemic meant that students were not given the time needed to be able to see the significant growth that is more likely to occur in a semester or linear school year. Therefore, future research would also benefit from exploring the effectiveness of Butler's Strategic Action Cycle over a longer period of time. This would allow the researcher to determine if the strategies supported the students' growth in multiple subject areas over time. As well, a longer focus could potentially allow students to develop more long-lasting work habits and attitudes towards their learning.

This research demonstrated that my Grade 8 students found improvement in developing their learning strategies after acquiring knowledge and understanding of Deborah Butler's Strategic Action Cycle. Therefore, the SAC can provide classroom teachers with a useful approach to learning that can support students in developing the habits that they need to develop self-efficacy.

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APPENDICES

Appendix 1

Delta School District Research Application

Delta School District
"Where Learning Matters"

Operations

OPERATIONS #5470

RESEARCH APPLICATION - DELTA

APPLICATION FOR THE CONDUCTING OF RESEARCH IN DELTA

This application must be submitted no later than January 31 of any school year in which the research is to be conducted. The application will be reviewed by the Director of Curriculum and Instruction, and in some cases, by other administrators where appropriate.

Please submit ONE COPY of this application form, and any support materials to:

DIRECTOR OF CURRICULUM AND INSTRUCTION
DELTA SCHOOL DISTRICT
4750 57 STREET
DELTA, BC V4K 3C9

TO BE COMPLETED BY APPLICANT:

NAME: Tracey Rempster

ADDRESS: 11584 Lyon Rd. - Seaquam Secondary

ORGANIZATION: Trinity Western University

TELEPHONE:
(RES.) 604 825 5268 (WORK) 604 591 6166 (FAX) 604 591 5800

TITLE OF PROJECT: Show me how : The effectiveness of the Strategic Action Cycle in building self-efficacy in struggling learners.

Page Two

SECTION A - Overview of the project:

1. Title and purpose of the research project:
The purpose is to explicitly teach learning strategies and then examine whether this leads to more independence.

2. Brief statement of project design:
Students in my grade 8 English class will be taught various strategies in each stage of working on a task. Every two weeks they will complete a Google Form asking them if they feel more confident as learners. The teacher will observe 1:1 support needed.

3. A copy of the proposal must be attached.

4. A letter of approval from your University's Screening Committee must be attached.

5. Date of application: Oct. 28, 2020

6. Date on which the project is intended to commence: Nov. 19, 2020

7. Date by which the project is intend to conclude: March 30, 2021

SECTION B – School(s) involvement:

1. Grade/age level(s) of students to be involved: Gr. 8

2. Numbers/divisions of students to be involved: 26

3. Please indicate as clearly as possible how much time you would require to complete your procedure with each student, class and school.
Every two weeks, students will be given 10-15 minutes in class to complete the Google Form.

4. What specific related reference is there in a prescribed or authorized program of studies for the need or application of such a project?
It is a requirement for my Masters that I conduct a research project.

5. Is the treatment/experiment to be conducted by the regular teacher(s)?
   a) YES [✓] NO [ ]
   b) If no, explain who is to instruct students and what teacher certification the person(s) hold:

Page Three

6. Explain exactly what responsibility/cooperation is requested of the teacher(s) and/or principal(s):
I am the classroom teacher, and the primary researcher.

7. What provision is planned/required for in-service for the teacher(s) to train them to participate?
I have taken Masters courses in research methods and design, and am completing this under the supervision of a professor.

8. How much of the teacher(s) own time is required?
N/A

9. Specify which school(s) are requested to participate (name schools or indicate size and/or nature of student population required).
Seaquam Secondary

10. Parental consent must be obtained before students in Delta School District are involved in research activities. Please attach proposed drafts of informational letters to parents and consent forms so that they may be reviewed. If your request is approved, you will be expected to review these documents with the principals of all schools involved.

11. What (if any) hazards are there to the students' health and well-being (for example, does/should each participating student require a medical examination before commencing the experiment?).
Given that the questions are about confidence and learning, some students might struggle to talk about these vulnerabilities.

12. How will confidentiality of the gathered data be maintained?
On the Google Forms, students will use an assigned fake name. The master list of names will not be known to the teacher.

13. What are the plans for future use of the data as part of this study or use beyond this study?
The data will be used in a Knowledge Translation project to partially meet the requirements of a Masters in Educational Studies degree.

14. All records compiled during the course of the study which identify specific students, must be returned to the school district. When returning such records, the researcher must state in writing that no copies of the records have been retained by the researcher or associates of the researcher.

Page Four

SECTION C – Costs:

1. There are: a) no costs to Delta School District [✓]
   OR b) the following assistance from Delta School District is requested:

   i) Supplies (itemize):

   ii) Equipment (itemize):

   iii) Other (itemize):

SECTION D – The Applicant:

1. Respond to any of the following which apply:

   a) This project is for the partial fulfilment of the following university degree/course:
   Masters in Educational Studies : Special Education

   b) Other reasons for wishing to undertake the project:

2. I have consulted with the following person(s) who have/will be assisting me with the design and execution of the project.
   Zack Lund

3. My training and experience in education is summarized as follows (included reference to training and experience in designing the conducting research):
   I have taken two courses in research design at the Masters level and work under the supervision of Dr. Allyson Jule the Dean of Education at Trinity Western University.

4. As a condition of approval, I will submit a copy of the full report of my findings to the Superintendent of Schools at the conclusion of my study.

SIGNATURE OF APPLICANT Tracey Dumpert

May, 1992; Reviewed August 1993; Reviewed May 1997; Revised February 1999; Revised October 2003; Revised December 2007, Revised April 2009

TO: The Director of Curriculum and Instruction

INFORMATION ONLY

RE: Request to Conduct Research

Submitted by: Tracy Dempster

1. I have reviewed this proposal with the members of my staff who would be participating in the project and:

   a) I recommend the school's participation [✓]

   b) I do not recommend the school's participation [ ]

   c) I will recommend the school's participation if the following conditions are met:

2. The following teachers and/or classes will be involved in the project:
   Tracy Dempster, Zack Lund
   PE 8, Eng 8 - quarter 2 cohort at Seaquam

DATE: Oct. 27, 2020 SIGNED: [signature] Principal

Seaquam School

NOTE TO APPLICANT:
If your application is approved, this form will be distributed to school principals. While the district committee gives general approval to research requests, the involvement of specific schools is the prerogative of the school principal.

May 1992
Reviewed August 1993
Reviewed May 1997
Revised February 1999
Revised October 2003
Revised December 2007
Revised April 2009

Appendix 2

Human Research Ethics Board Application - Request for Ethical Review of Human Research

TRINITY WESTERN UNIVERSITY

Human Research Ethics Board - Trinity Western University

Request for Ethical Review of Human Research

HREB File No.:_____

NOTE: This form is for all studies conducted by **faculty, staff, or graduate students** involving data collection from human beings. **The Request for Analysis of Existing Data** form should be used for studies that only involve secondary analyses of *existing* data sets.

Please read the "Guidelines for filling out the Request for Ethical Review Form" before filling out this form. It contains important information that will assist you in completing this form. You will find the guidelines in the same section of the HREB webpage as this application form.

Principal Investigator: Tracey Dempster **Phone:** 604-825-5268

Department: Masters of Educational Studies - SPED **Email:** traceylynndempster@gmail.com

Address: Unit 21-22900 126th Ave, Maple Ridge, BC, V2X 0W9
(Street Address or PO Box, City, Province, Postal Code)

You are: ☐ Faculty ☐ Staff ☒ Masters Student ☐ Doctoral Student ☐ Research Fellow

If you are a student/research fellow:

Name of Supervisor: Dr. Allyson Jule **Phone:** 604-513-2105 ext.

Department: Dean of Education **Email:** allyson.jule@twu.ca

Address: Vernon Strombeck Centre, Langley City
(Campus Office Location)

A. GENERAL INFORMATION

1. **Title of project:**

   Show me how: The effectiveness of the Strategic Action Cycle in building self-efficacy in struggling learners.

2. **Have you applied for funding for this project?**

   ☐ Yes ☒ No

   List all sources of funding (e.g. granting agencies, internal funding, corporate funding). Give exact titles of all grants.

3. **List all other investigators in this project.**

   Name: Zack Lund

Revised September 2019

Institutional Affiliation: Delta School District

Email: zlund@deltasd.bc.ca

4. **Proposed research expected to be conducted between** 11/19/2020 (mm/dd/yyyy) **and** 03/30/2021 (mm/dd/yyyy)

5. **Location where the research will be conducted:**

Off-campus? ☒ Yes ☐ No

School board or community agency? ☒ Yes ☐ No

Location(s) in Canada? ☒ Yes ☐ No

International location(s)? ☐ Yes ☒ No

Online? ☒ Yes ☐ No

Other? ☐ Yes ☒ No

Please provide details for all items to which you answered yes.

The research will be conducted in my classroom in Delta School District. Online surveys will be conducted with the students to guarantee anonymity, and to support any students with learning designations that require adaptations of technology over pen and paper. The online survey will be done through Google Forms, as Delta School District already has consent from parents for students to access Google apps, and that documentation is stored in the students' files.

6. **Describe the scholarly review of this project. Check all that apply.**

☒ Approved by a thesis committee or equivalent.
☐ Departmental/local peer review prior to submission for ethics review.
☐ External scholarly review prior to funding. Specify review committee:
☐ No scholarly review.
☐ Other – please specify:

7. **Who will actually conduct the project, and what are their qualifications (e.g. a course in research methods; a completed PhD; training in interview skills)?**

I, Tracey Dempster, will conduct the project. I have taken both EDUC 504, and EDUC 601A, two Masters level courses that teach research methods. I also have a Bachelor of Education teachable in Counselling, which gives me the skills to interview from an objective standpoint, and to phrase questions in a way to limit the potential harm.

(a) Describe any training that will be provided to research assistants.

Zack Lund is a colleague at Seaquam Secondary, and has been working with me for two years as part of a team of Seaquam teachers, to develop our understanding of the Strategic Action Cycle, and how to support students. We are both versed in the theory of the cycle as outlined in the text "Developing Self-Regulated Learners", and have been working together to develop strategies to build self-efficacy in students. With the current quarter system, and grade 8 students placed into cohorts, Zack and I will be teaching the same students - they will have PE with him in A block, and English with me in block B. Our aim in quarter two is to meld the two courses, teaching more of a blended PE and English course in order to support this study. So at points throughout the quarter, we will team teach. As a fellow teacher, Zack already has training in confidentiality with the profiles of students, and in supporting their learning needs. To allow me to carry out the research for this study, he will be trained in confidentiality of the study data, and protecting the data from both the students, other teachers, and parents. He will not have access to the survey data that is completed by the students,

however, he will be trained to not encourage students to talk about what they wrote in their surveys, either in the Likert scale recordings, or the open-ended questions.

(b) **If the project involves community members in the collection and/or analysis of data, describe their status within the research team (e.g. employees, volunteers, participants) and the type of training they will receive.**

N/A

8. **Real or potential conflict(s) of interest:**

(a) **Will the researcher(s), members of the research team, and/or their family members receive any personal benefits?**

☐ Yes ☒ No

If yes, specify.

(b) **List any pre-existing relationships between the researcher(s)/assistant(s) and research participants (e.g. classmates, colleagues, counsellor-client, professor-student, pastor-congregant).**

The researcher and the assistant have been teaching together for years, and have developed a professional relationship working together on this basis of this research, prior to the formal study.

If the researcher(s)/assistant(s) are in a *position of responsibility or power over* the participants (e.g. their teacher, pastor, supervisor, employer), describe the steps that will be taken to ensure that potential participants feel no pressure to participate in the project.

When the study is first introduced to the students, they will be informed that it is optional, and that they can opt out at any time if it becomes uncomfortable to talk about their learning. They will also be informed that all of the questions in the survey are optional, so they can answer as many of the questions as they like. If they opt to participate, all students will be given time during class to complete the surveys to monitor their feelings towards the strategy based program. Students will be given a pen name, which they will use on all reporting so that their progress can be effectively tracked. However, the master list of which pen name goes with which student will be in the possession of the Head of Learning Assistance, who will not have access to the research data, only the list of names. This will guarantee that it is not clear who has reported success and who hasn't. This will prevent the researcher and assistant from treating particular students differently. Having the students complete the work in class is not to pressure them to participate, but to acknowledge that some of the students may not have access outside of school to the technology needed to complete the survey.

(c) **Describe the type of decision-making processes that are in place for collaborative research studies. Attach Terms of Reference if they exist.**

B. Summary of Proposed Research

1. **Describe the purpose and scholarly rationale for the project. Comment on the question(s) you intend to answer/the knowledge you hope to generate.**

The study was developed to attempt to create students who are more self-motivated, as a concern is often expressed by teachers at Seaquam Secondary of the "learned helplessness" demonstrated by students who also receive Learning Assistance support. This will help these students in all aspects of their academic careers, not simply in literacy classes such as mine. This project is seeking knowledge to understand

whether a strategy focused educational practice will create stronger self-efficacy in struggling students - in other words, teaching students how to learn, instead of teaching them what to learn. If the program is successful in building learning based skills in the students, it should help to build their self-confidence in themselves as learners.

2. **Describe the methods chosen to fulfill the purpose of the study. Be specific and provide details. Assume that HREB members are not familiar with the norms of your discipline.**

   (a) **What procedures, formal or informal, will be used to collect data (e.g. on-line surveys, experimental manipulation, open-ended interviews, focus groups, unscripted conversation)? Attach copies of all questionnaires, interview scripts, experiment protocols, and/or other non-standard test instruments. Note: If you are using a published survey or test instrument, give the full citation to identify it and its author and source.**

   This study will be completed by a group of grade 8 English students at Seaquam Secondary in Delta, British Columbia. These students were chosen for this study as they are just beginning their high school career, and so are often more receptive to new techniques. As well, younger high school students have more time left in their academic career in order to reinforce the strategies, as opposed to students in the upper grades.

   This study follows the embedded design process through the lens of the pragmatic mixed methods paradigm (Mertens, 2019). Initially, the grade 8 students are simply introduced to the concept of the Strategic Action Cycle, with a graphic organizer displayed on the classroom wall. Each of the stages is explained to my students enrolled in their grade 8 English class at a BC secondary school. Here I provide details of what SAC may look like in any particular assignment. Students are also given a questionnaire, called the Motivated Strategies for Learning Questionnaire developed by Paul R. Pintrich and Elisabeth V. DeGroot, that has thirty-nine items to measure their level of independence. This scale has been modified to make the phrasing clearer to students in grade 8. At points throughout the course, the guiding question is posed: "How do you get unstuck, once you're stuck?" Students discuss this with their table partner, sharing their answers with the class after a few minutes to brainstorm with their partner. As they share the ways that they get unstuck, I record their list of strategies on the board. Once the list on the board is complete, the students return to their partner to discuss which stage of the action cycle they would find the strategy most helpful, and why. Again, this is shared and discussed as a class. Once the class agrees on which strategies would be beneficial in certain stages, those strategies are written on stickie notes that are affixed on the poster. If a strategy is used in multiple stages, that is noted as well, by writing the strategy in all of the stages where it applies.

   The graphic organizer is referred to continuously throughout the course, particularly when students say they need help. I encourage them to refer to the poster, and to try the strategies identified there to overcome their obstacle. If none of the Action Cycle strategies work, I connect with the student, and then to the full class, ending with identifying it on a stickie that is placed on the poster in order to continue to build the strategy bank. Throughout this process, I record the number of questions asked by students that are participating in the study, or the length of time where the students in the study require one-to-one assistance.

   Once every two weeks, students are asked to fill in a Google form that asks them to record whether they have found the strategies helpful and how it impacted on how much help they need from the teacher. This will be done using the General Self-Efficacy Scale (GSE) developed by Ralf Schwarzer and Matthias Jerusalem (1995). On the form there are open-ended questions to allow for students to elaborate or expand on their answers. This form is filled in during class time. As well, all names are changed for confidentiality purposes. The names are not known to the teacher, in order to encourage

honesty in student reflections. All of the questions are optional, and students are reminded that they can answer as many questions as they like.

The two questionnaires to be used are: Pintrich, R. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance, Journal of Educational Psychology, 82, 33-40.

Health Research Board of Ireland. (2018). *General Self Efficacy Scale (GSE)* [Chart]. Retrieved from https://www.drugsandalcohol.ie/26768/1/General_Self-Efficacy_Scale%20(GSE).pdf.

Students will be randomly selected at each stage of the study (beginning, middle, end) to be interviewed in focus groups on their feelings, to extend on the qualitative data provided in the optional narrative sections. These interviews will be conducted during class time, and students will be given the opportunity to see their comments, and approve them, prior to the interview notes being recorded.

(b) What kinds of data will be generated (e.g. standardized test scores, audio-recordings, journal entries), and where and how will they be obtained?

Two kinds of data will be generated, Likert scale questionnaire results that will determine students' understanding of the strategies taught, ability to use the strategies taught, their feelings of whether it has supported a more independent work style during class time, and whether they like the methods used. Students will also be given an optional section to write narrative feedback if they want to express opinions that are not reflected in the Likert scale items. As this is optional, it is not certain whether this section will generate data or not. These will be collected through a Google form, and stored on the researcher's private laptop, organized in folders labelled by the student's pseudonym. Students will be randomly selected at each stage of the study (beginning, middle, end) to be interviewed in focus groups to extend their answers from the narrative questions. This will generate themes and potential feedback to modify the procedure as the experiment is in process.

(c) What are your anticipated analysis procedures (e.g. statistical analysis of aggregated data, qualitative analysis of interview transcripts)? Explain how these procedures will achieve the intended purpose of the study.

The Likert scale data will be analyzed using the stastical procedures of scatterplots. This will be done per student, as well as holistically. This will help to determine if individual students have noticed a change in their ability to work independently. The data will be viewed holistically to determine the rate of change across all of the participants. This will be compared with the researcher and research assistants calculating of instances of dependent work to see if there is a correlation between what is noticed by us, and what is reported by the students. This will achieve the intended purpose of the study by looking at overall whether students found the strategies helpful, and whether the researcher and research assistant are tracking noticable changes in independent working behavior.

C. Selection and Recruitment

1. Indicate the source of participants (e.g. first year psychology student participant pool, other Trinity students, elementary or high school students, medical patients, aboriginal peoples or communities, general public). What will be the criteria for selection and exclusion?

Participants will be grade 8 students in my English 8 class at Seaquam Secondary. Given the nature of teaching strategies, all students in the class will all be given the intervention of strategy based educational practices, however students will complete the questionnaires and reflections on a voluntary basis.

2. **Will vulnerable populations be recruited (e.g. children, people who are cognitively or mentally challenged, economically marginalized, institutionalized)?**

☒ Yes ☐ No

If yes, describe the steps that will be taken to ensure that there will be no coercion to participate in the project, and the measures in place to protect participants from being harmed through their participation.

When the study is introduced to students, and in the consent letter that is sent home to parents and guardians, it will be made clear that participation of the students is optional. Although due to the nature of a classroom, all students will receive the intervention, the decision to participate in the survey portion will be explicitly made optional. Students will also be monitored closely during time given to record progress to ensure that negative emotions are not raised by their reflections on their educational experiences. If students express emotional distress, the study will be immediately halted for them, and they will be referred to their grade counsellor for emotional counselling. This will not be handled by the classroom teacher to avoid conflict of interest, as the classroom teacher is the primary researcher.

3. **Describe how and by whom participants will be recruited. Attach a copy of all recruitment materials (e.g. letters, flyers, posters, emails) in the form in which they will be used. If recruitment will be oral, attach a script.**

The students will be invited to participate during the first block of their English 8 class in quarter 2. At that time they will be given a paper copy of the letter that outlines the details of the study. The script of this introduction is attached.

(a) **Is it reasonable to anticipate that some or all of those to be recruited do not speak English or speak English as a second language with varied degrees of proficiency?**

☒ Yes ☐ No

If yes, describe how recruitment will occur, if recruiters will speak the language of potential participants, and/or if recruitment materials will be translated or interpreters will be used. Attach any translated materials.

Parents and guardians will be offered a translation of the consent letters, if they request it, or if students report that English is not spoken at home. The translations will be completed by the International Coordinator (Mandarin and Cantonese), or the Career Counsellor (Punjabi, Hindi).

(b) **Will participant observation be used?**

☒ Yes ☐ No

If yes, explain how the researcher will participate in the community (e.g. living there for a period of time, visiting at regular intervals, attending public functions).

Students will be observed during regular classroom instruction, during independent work time. They will be observed by both the classroom teacher (also the researcher), and the research assistant. This observation will take the form of noticing instances of independent work, as well as the specificity and quality of questions asked when assistance is sought. Both the teacher and the research assistant will be recording the amount of time spent 1-1 with students. This recording will happen once a week for every participating student.

4. **Minimum number of participants required:**

5

5. **Amount of time commitment required per participant (for all parts of the study):**

   For the recording of data, students will be given 15-20 minutes once every two weeks.

D. Risks and Benefits

1. **Risks to participants as individuals or community members may take various dimensions. Will this research involve:**

   (a) **Questions about personal, sensitive, or incriminating issues?**

   ☐ Yes ☒ No

   (b) **Psychological or emotional risks (e.g. feeling uncomfortable, anxious, embarrassed, upset)?**

   ☐ Yes ☒ No

   (c) **Physical risks (e.g. physical discomfort, administration of any substance, invasive contact for taking of samples)?**

   ☐ Yes ☒ No

   (d) **Economic or social risks (e.g. possible loss of status, privacy, reputation)?**

   ☐ Yes ☒ No

   (e) **Legal risks (e.g. potential apprehension, arrest, association with a legally compromised group)?**

   ☐ Yes ☒ No

   (f) **Risks due to potentially controversial research procedures (e.g. shock, treatments with potentially harmful side-effects)?**

   ☐ Yes ☒ No

   (g) **Danger due to location (e.g. war torn country, political instability, area of disease outbreak)?**

   ☐ Yes ☒ No

   (h) **Risks not mentioned above?**

   ☐ Yes ☒ No

   (i) **More than minimal risk, i.e., risks beyond that which the participant encounters in their usual daily life?**

   ☐ Yes ☒ No

   If you answered yes to any of the above, describe the risks involved and explain the measures that will be taken to manage or minimize them.

   As there are students with designated learning challenges, these students have documented struggles with learning. Asking them to reflect upon their learning, and the strengths and weaknesses of their skills, may bring up emotional experiences for students, as it is requiring them to reflect and write about their vulnerabilities. This will attempt to be mitigated by teaching the strategies for a period of time of two weeks prior to asking students to reflect. This will be done so that they have seen a level of success prior to reflecting on where they used to be. This will also work to create a relationship with the classroom teacher, so that trust is established.

2. **Will deception or intentional non-disclosure be involved in the research (e.g. an approach that withholds, misrepresents, or misconstrues the purpose for which the study is being undertaken)?**

   ☒ Yes ☐ No

If yes, describe and justify.

Students will not be told that the goal of the research study is to see if the intervention improves their self-efficacy skills. This is to ensure that students continue to ask for help as they need it, as I am concerned that if the students are aware that their independence is being observed, they may feel shame or guilt for asking for help when they need it for fear of comprising the data, or fear of it "counting against them" in some way. As it is important that students ask for help when they need it, they will simply be told that the aim of the study is to see if the intervention of teaching strategies works in improving their skills.

3. **Benefits may take various forms. Describe:**

   (a) **Potential direct benefits to participants from involvement in the study.**

   Students who feel more involved in their learning may notice a growth in their confidence in their academics, as well as other areas of their lives. Being given the opportunity to think about how they learn best could also benefit students by helping them to understand themselves better, which could therefore allow them to achieve better in their classes. This would also give them back more of their free time, instead of spending time after school, at lunch, or in the evening, working with tutors or extra help support programs.

   (b) **Potential direct benefits to the community from involvement in, or hosting of, the study.**

   If students develop the skills to work more independently, this could benefit the community in that other teachers would notice a shift in their class dynamics, and potentially in their class averages.

   (c) **Potential benefits to the scientific/scholarly community or broader society that justifies the involvement of participants in the study.**

   If the invention is successful, there is the potential that this research could be extended into other classrooms, by other teachers.

4. **Will an incentive or compensation be offered to participants?**

   ☐ Yes ☒ No

   If yes, provide details and justification for the type and value of incentive or compensation offered.

   If no, explain why.

   Students will be asked to participate on a voluntary basis, in hopes that this will make the qualitative aspect of the research more honest and reflective of the students' experiences. As the topic of the research could potentially be emotional for some of the participants, who are a vulnerable population already, it is not appropriate to offer incentives to participate. Rather, the student themselves, after discussions with their parents or guardians, need to decide if they are prepared and willing to participate.

   Where incentive or compensation is offered, describe how it will be affected should a participant choose to withdraw from the study.

E. Informed Consent Process

1. Investigators are required to obtain informed consent from all participants before they become involved in the study. Use the guidelines found at twu.ca/research/research-services/research-ethics/guidelines-informed-consent.
   A copy of the consent form should be left with the participant (does not require signatures).

   (a) Informed consent from parents or guardians is required when research participants are less than the age of majority (the exception is underage university students, who are assumed to be capable of consenting for themselves), or incapable of giving fully informed consent (e.g. persons with cognitive impairments). Where consent is provided by a parent or guardian, assent should also be obtained from the research participant to the extent possible.

   The age of majority varies depending on the province where you will be conducting your research. It is:

   - 18 years of age in Alberta, Manitoba, Ontario, Prince Edward Island, Quebec, and Saskatchewan;
   - 19 years of age in British Columbia, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, and Yukon.

   Please indicate who will consent to your study:

   ☒ Research participant ☒ Parent/Guardian

   (b) Will consent be in written form? (Note: Consent is ordinarily to be obtained in written form unless there is justifiable reason for oral consent.)

   ☒ Yes ☐ No

   If no, explain why oral consent is preferred and how consent will be recorded. Justification must be given as to why oral consent needs to be used instead of written consent.

   (c) Describe the process that will be followed to obtain informed consent (and assent, if applicable) and attach all related documents (e.g. letter of information, screening materials, consent form, script for oral consent and/or assent).

   All parents and guardians will be sent an email prior to the study, in early November, explaining the nature of the study and the purpose and benefits for students who participate. Parents and guardians will also be informed that their child has been given a consent letter, that they will be bringing home, and asking for the letter to be returned by the end of November. Parents and guardians will also be reminded that they can request a translated version of the consent letter if they prefer, or if students report that English is not the language spoken in the home. Mandarin, Cantonese, Hindi and Punjabi translations will be made available to parents who request them.

   (d) Will any information collected in the screening process be kept from those who are excluded or do not choose to participate?

   ☐ Yes ☒ No

   If yes, describe how individuals will be informed that they will not have access to this information.

If no, describe the process and conditions under which the information will be made available.

The opportunity to participate will be offered to all students in my English 8 class, so the screening process will only include the consent letter, as well as the explanation given in class as to what the study will look at. This will be shared with all students.

(e) Consent Form Checklist

The following information *must* be included (check off each item used).

- ☒ Pages are numbered appropriately.
- ☒ The final version must bear the actual date of approval by the HREB as a header or footer on every page. Subsequent versions of the consent form must bear subsequent dates of approval.
- ☒ Potential participants should be referred to in the second person ("you," not "I").
- ☒ Lay and age appropriate language is used throughout.
- ☒ Title of project.
- ☒ Name, department, institution and telephone number of all investigator(s) and faculty advisors.
- ☒ Description of the purpose of the project and procedures in which participants will participate.
- ☒ Statement ensuring the confidentiality of the participant unless not required.
- ☒ Statement of the time commitment required of a participant (for each stage, if the study is being conducted in multiple stages).
- ☐ Statement of any reasonably foreseeable potential risks, discomforts, and inconveniences to the participant for participating in the project, and how these will be managed.
- ☒ Statement of the possible benefits to the participant.
- ☒ Detailed statements of confidentiality including how data will be stored and disposed of and, if applicable, how long it will be retained after the study is complete.
- ☒ Details of any remuneration, compensation, or incentives to be offered to the participants, including how and when it will be awarded and what will happen should a participant withdraw.
- ☒ Statement: "If you have any questions or desire further information with respect to this study, you may contact [Principal Investigator's Name] or one of (his/her) associates at [telephone number and/or e-mail address]."
- ☒ Statement: "If you have any concerns about your treatment or rights as a research participant, you may contact Elizabeth Kreiter in the Office of Research, Trinity Western University at 604-513-2167 or researchethicsboard@twu.ca."
- ☒ Statement of consent, explaining the participants' right to refuse to participate or withdraw at any time without jeopardy.
- ☒ Statement of the steps to be taken in order to withdraw along with a clear indication of any point after which withdrawal is no longer possible.
- ☒ Statement indicating what will be done with data gathered from participants who withdraw.
- ☒ Statement: "Your signature below indicates that you have had your questions about the study answered to your satisfaction and have received a copy of this consent form for your own records."
- ☒ Statement: "Your signature indicates that you consent to participate in this study."
- ☐ Where relevant, add the following to the above statement: "and that your responses may be put in anonymous form and kept for further use after the completion of this study."
- ☒ (For parental consent forms only, statement: *"I consent/I do not consent (circle one) to my child's participation in this study."*)
- ☒ Spaces for the participant's (or parent/guardian's) signature(s), date, and printed name.

Note: If you are using an online survey, instead of the statements above regarding signatures, use the following statement. (If you are collecting data anonymously or do not wish to retain the data for further use, modify the statement accordingly.)

☐ By clicking "continue" you are indicating that you consent to participate in this study and that your responses may be put in anonymous form and kept for further use after the completion of this study. Please print a copy of this consent form for your own records.

2. **If the project involves using information, people, or facilities from a recognized community (e.g. Aboriginal group), or agencies or institutions outside of TWU (e.g. schools, hospitals, other universities, churches, businesses), permission must be obtained.**

   (a) **If the agency/institution has its own REB, obtain and attach a copy of the Certificate of Approval from that REB. If it does not have an REB of its own, attach a copy of a letter from someone in authority at that agency/institution granting permission to use their information, people, and/or facilities.**

   Permission letters should be on agency/institution letterhead and *must* include the following:

   ☐ Date (must be current).
   ☐ Name of investigator(s) who is being permitted to conduct the project.
   ☐ Name or description of the study that is being approved.
   ☐ Name, signature, and position of the person who is providing the permission.

   Permission should be obtained from other agencies/institutions prior to or simultaneously with your application to the TWU HREB. Please provide a list of the agencies/institutions involved.

   Delta School District

   (b) **If written consent is not appropriate for cultural or other reasons, provide justification and describe any alternative forms of consultation.**

F. PRIVACY: ANONYMITY AND CONFIDENTIALITY

1. **Will data be collected in a manner that enables researchers or others to match the identity of participants with the information provided?**

   ☐ Yes ☒ No

   If yes, explain.

2. **Will data be treated as confidential during research and dissemination processes?**

   ☒ Yes ☐ No

   If no, describe any condition in which confidentiality cannot be guaranteed or must be breeched (e.g. use of focus groups, duty to report) OR reasons why confidentiality is not necessary in this study.

3. **Will data be collected over the Internet using commercial online survey tools (e.g. Survey Monkey)?**

   ☒ Yes ☐ No

If yes, please describe what measures are in place to ensure that no identifying information, including email addresses, will be collected OR what steps will be taken to inform participants that full confidentiality cannot be guaranteed.

Students will be completing a Likert scale reporting of their confidence and feelings of self-efficacy. This will be completed through Google Forms, as this is the platform that our district supports. Students will be given a pseudonym that will be used to keep a running record of their reports. The master list of these pseudonyms will not be known by the teacher (researcher) or research assistant. It will state in the consent form, and will be orally repeated to students, that they should not reveal their pseudonym to anyone else, with the exception of their parent or guardian. The pseudonyms, with the students correct age, will be used in the study.

Note: If the commercial online survey tool has servers located in the United States (e.g. Survey Monkey), participants must be informed that their data will be stored in the United States and participant to the US Patriot Act.

4. **Will anyone other than the researcher(s) and assistant(s) listed in this application have access to the data?**

☐ Yes ☒ No

If yes, explain:

If the services of others are required (e.g. transcriptionist, interpreter) will they sign a confidentiality agreement?

☐ Yes ☒ No

If yes, attach relevant documents. If no, explain.

The only information that any one else will have access to is the paperwork (consent form, letter to parents, recruitment script). None of this documentation has any confidential information about the students that are participating.

5. **Please describe the procedures for handling data.**

   (a) **Explain how hard copies, written records, computer files, videotapes, audio recordings, etc., will be kept secure during the research process and how data will be disposed of after the study is completed. Indicate who is responsible for data monitoring, analysis, and disposal.**

   All of the Google forms data will be stored in my Delta Learns account folder, which is Google based account. This account is password protected, as is my work laptop that I complete all of my work on. These passwords are not the same. Any interview notes and recordings would be uploaded to this same account, and stored in the research folder that has been created there.

   (b) **Will data be kept for future use after the study is completed?**

   ☒ Yes ☐ No

   If yes, indicate for how long.

   It could range from 5 to 10 years as the researcher may consider pursuing further studies.

   If you intend to keep the data indefinitely, provide justification and describe how anonymity or ongoing confidentiality will be ensured.

G. Debriefing and Dissemination

1. **Participants should be debriefed at the end of their participation in the entire project. If the study has involved deception or intentional non-disclosure, participants must be made aware of this in the debriefing process.**

   (a) **Describe plans for adequate and timely debriefing. Attach any written documents or a script of the basic debriefing that will be given to participants/communities at the completion of their participation.**

   In the final block of English 8, students will be given the opportunity to participate in focus groups, where they talk about their experiences with the Strategic Action Cycle. Sample discussion questions are provided in the attached document. Following this discussion, students will be debriefed on the overall purpose of the study, using the script also attached.

   (b) **Will participants/communities be given the option of withdrawing their data following debriefing?**

   ☒ Yes ☐ No

   If no, explain why.

2. **Describe plans for informing participants of the results of the research project after completion.**

H. Submission Checklist – Required

These items are to be submitted with your application. Incomplete applications will not be reviewed. Items with an asterisk (*) must be included with all applications. Please write N/A for items that are not applicable.

- ☒ * Letter of initial contact, advertisement, or other recruitment documents, or script of verbal recruitment.
- ☒ * Participant and/or parental consent form or oral script.
- ☐ Script for obtaining assent (required when there is a parent/guardian giving consent).
- ☒ Agency permission letter(s).
- ☒ Copy of questionnaire(s), test(s).
- ☐ Explanatory letter with questionnaire(s), test(s).
- ☐ Sample questions for interview(s).
- ☒ Sample questions for focus group(s).
- ☒ * Debriefing document and/or oral script.
- ☐ Other documents required by study procedures (e.g. confidentiality agreements).
  Please specify:

I. Submission

Please submit one original signed application with all required attachments, and one copy of this application with all required attachments to Elizabeth Kreiter, HREB Coordinator, Reimer Student Centre, 2nd floor.

J. Signatures

Your signature indicates that you agree to abide by all policies, procedures, regulations, and laws governing the ethical conduct of research on humans. Guidelines may be found on the TWU website. Any changes in

protocol, procedures, or consent forms made after HREB approval will be submitted to the Human Research Ethics Board for review prior to implementation.

Tracy Rempel — Oct. 28, 2020

Principal Investigator — Date

The signature of the supervisor below indicates that the supervisory committee has reviewed and approved the student's proposal and attests to the scientific and scholarly merit of the project. It also indicates that the supervisor has assisted the student in the preparation of this application.

Oct. 29, 2020

Student/Research Fellow's Supervisor — Date

The signature of the administrator indicates that adequate infrastructure is available to conduct this research. (Please note, if the Chair or Director is also the Principal Investigator, a Co-Investigator, or the supervisor of the student applying, he/she cannot sign as Chair/Director as well. An alternate administrative signature must be provided.)

October 29, 2020

Chair/Director — Date

FOR HREB USE ONLY

☐ *Approved with no modifications required* ☐ *Approved pending minor modification* ☐ *Not approved, or deferred pending major modification*

Signature of HREB Chair or alternate: _____ Date of review: _____

Date of final approval with all required modifications: _____

Appendix 3

Approval Letter from Delta School District

Delta School District
Inspired Learning

November 27, 2020

Dear Ms. Dempster,

Please accept this letter as Delta School District approval for your Masters of Educational Studies research study through Trinity Western University: "*Show me how: The effectiveness of the Strategic Action Cycle in building self-efficacy in struggling learners.*"

I wish you all the best with your data collection and analysis. I am keen to read your findings upon completion.

Sincerely,

Neil Stephenson
Director of Learning Services
Delta School District
nstephenson@deltasd.bc.ca
(604) 952-5069

Appendix 4

Approval Certificate from Human Research Ethics Board Trinity Western University

TRINITY WESTERN UNIVERSITY

Human Research Ethics Board
22500 University Drive
Langley, BC | V2Y 1Y1
HREB@twu.ca | 604-513-2167

HREB Certificate of Approval

To: Tracey Dempster

From: Bill Badke, HREB Co-Chair

Re: Show me how: The effectiveness of the Strategic Action Cycle in building self-efficacy in struggling learners

HREB File No.: 20G14

Effective: YYYY MMM DD Expiry: YYYY MMM DD

Approval Period: ☑ One year ☐ Three years

Approval Type: ☑ New ☐ Continuation ☐ Amendment

Certification: William Badke Digitally signed by William Badke Date: 2020.11.24 12:58:38 -08'00'

The Trinity Western University Human Research Ethics Board (TWU HREB) has reviewed and approved the research proposal and concludes that the proposed research meets appropriate standards of ethics as outlined by the current *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*.

This approval is subject to the following conditions:

1. Approval is granted for the research and purposes described in the application only.
2. Any modification to the research or research materials must be submitted to the HREB for approval before implementation.
3. Any deviations to the research or adverse events must be submitted to the HREB as soon as possible.
4. This approval is valid for the indicated approval period and a Request for Continuing Approval must be submitted and approved by the above expiry date.
5. A Final Project Report form must be submitted to the HREB when the research is complete or terminated.
6. Trinity Western University may request to review research documentation from this project to demonstrate compliance with this approved protocol and with the TWU Policy concerning Research Ethics with Human Participants.

Funded Research

Send a copy of this Certificate, with the HREB File Number in the subject line, to the Research Grants Officer at Sue.Funk@twu.ca.

Appendix 5

Script for Study Introduction

Script for Introducing Research Study to English 8 Class

TD: I am currently working towards my Masters degree, and as part of my degree requirements, I have to conduct a research study. A research study is like a science experiment, where you come up with an idea of what you think might happen, and then you create an experiment to figure out whether your idea is correct or not.

I've been thinking a lot, and wondering a lot, about how to help students be better learners. I wonder whether I'm helping students in a way that will actually give them the type of help that will give them the skills that they need to work really well even without me. This has been really important to me, as I think a lot about students with learning challenges. Before this year, I taught in a program to support these students, and many of them would have me as their English teacher for all 5 years of their high school life. Most of them I taught for at least 3 years, from grades 8 – 10. And then they would have a different teacher for grade 11, and they would have a lot of struggles. So I started to wonder whether I was doing a good job as a teacher if these students couldn't work without me.

So I'm wondering that if I do a better job of teaching you HOW to learn, you'll be ok learning no matter who your teacher is. So that's what I'd like to see with you. I'll spend some time every week giving you strategies and ways to approach your learning, and we'll talk a lot about how those strategies may help you in Math class, or Science class, or wood working class. Whatever class! And maybe even outside class too, when you go to learn a new hockey play, or a new dance routine, or you take a first aid course. And once every two weeks, I'm going to give you some class time to answer a Google survey about whether spending time on learning these strategies is helping you to be a better student.

Just to make sure that you're being honest, and not worried about saying things that you think may hurt my feelings, I'm going to give you all a pretend name that you'll use every time you complete the survey. This means that if you're not seeing it make a difference at all, that's ok! You can tell me that, and I won't know who said it until you've already finished English class with me. But if learning how to learn was really helpful for you, that's great too!

If you'd like to do this, I have a letter that needs to go home to your parents, to get their permission. You'll need to bring this letter home, and have your parents sign it, and you'll bring it back to me as soon as you can. I also sent an email to your parents explaining all of this, and I attached the letter for them to keep. After you talk to your parents, you or your parents can also email or call me if you have any questions. Most importantly, if, at any time in the quarter, you decide that you don't want to fill in the survey any more, you or your parents can just let me know, and you won't have to keep going. Sometimes you may not want to keep going with the study if talking about your learning makes you feel sad or scared. You can also go to see your counsellor at any time, and they can help you.

Before I give you the letter to take to your parents, do you have any questions?

Appendix 6

Consent Letter Sent to Parents

SEAQUAM SECONDARY SCHOOL
11584 Lyon Road, Delta BC V4E 2K4
P: (604) 591-6166

Oct. 30, 2020

Dear Parents and Guardians,

You are receiving this letter as your child is being invited to participate in a research study.

The title of the project is: "Show me how: The effectiveness of the Strategic Action Cycle in building self-efficacy in struggling learners", and is being conducted by myself, Tracey Dempster, an English and IB Theory of Knowledge teacher at Seaquam Secondary. As part of my professional learning, I am also a Masters of Educational Studies Candidate at Trinity Western University in Langley, BC. To meet the requirements of my Master's degree, I am asked to conduct academic research, and have chosen to complete my research study with my English 8 class in quarter 2. I will complete this project under the supervision of Dr. Allyson Jule, the Dean of Education at Trinity Western University.

The purpose of this project is to study whether explicitly teaching students learning strategies will help them to become more independent in their learning. In order to study this, a poster of the different stages of learning will be hung in the classroom. Throughout the quarter students will be asked to reflect on the question "How do I get unstuck when I feel stuck?" Their answers to this question will be the strategies that can be used to help support their learning. These strategies will be placed on the poster so that students can refer to them when they feel like they don't know what to do next with a task given during class time. The research will aim to see whether having students think about strategies, and be explicitly taught new strategies, will help them to take more ownership of their own learning. Once every two weeks, students will fill in a Google Form that asks them about their learning, and whether they feel like the strategies are helping them to work more on their own. It is possible that I will have to interview students to clarify any answers on the Google Form that are not clear. Filling in the Google Form will take approximately 10-15 minutes every two weeks, and if all students consent to the study, will be completed during class time.

If you have any questions or desire further information with respect to this study, you may contact Tracey Dempster at 604-591-6166 or tdempster@deltasd.bc.ca as your child's teacher, and the researcher in this study. You are also welcome to contact my supervisor, Dr. Allyson Jule, at allyson.jule@twu.ca, or 604-513-2105.

If you have any concerns about your child's treatment or rights as a research participant, you may contact Elizabeth Kreiter in the Office of Research, Trinity Western University at 604-513-2167 or researchethicsboard@twu.ca.

Your child may refuse to participate or withdraw at any time without jeopardy. In order to withdraw, it should be communicated to me, through email, that your child would like to be removed from the study. At this point I will remove them from the list, and the data will be destroyed immediately.

Your signature below indicates that you have had your questions about the study answered to your satisfaction and have received a copy of this consent form for your own records.

Your signature indicates that you consent to participate in this study.

Please sign this form, and give it to your child to return to Ms. Dempster by Nov. 15, 2020.

I consent/I do not consent (circle one) to my child's participation in this study.

Parent/Guardian's Printed Name: _____

Parent/Guardian's signature(s) _____

Date _____

Appendix 7

Adapted MSLQ

Copy of the Google Form that was filled in by students – once at the beginning of the quarter, and once near the end of the quarter.

Think About Your Own Learning

*Required

1. Name (don't forget to use the fake name that you were given on the cue card!) *

2. 1. I prefer class work that is challenging so I can learn new things.

Mark only one oval.

- ◯ Very true of me, in all of my classes.
- ◯ Mostly true of me, in most (5-7) of my classes.
- ◯ Sometimes true of me, in some (3-4) of my classes.
- ◯ Sort of true of me, in a 1 or 2 of my classes.
- ◯ Not true of me, at all.

3. 2. It is important for me to learn what is being taught in this class.

Mark only one oval.

- ◯ Very true of me (I absolutely believe this.).
- ◯ Mostly true of me (Most of what we learn is important, but some things won't be.).
- ◯ Sometimes true of me (It depends on what we're learning.).
- ◯ Sort of true of me (I might need a bit of what we learn, but it's mostly pointless.).
- ◯ Not true of me, at all (None of what we learn is important.).

4. 3. I think I will be able to use what I learn in this class in other classes.

Mark only one oval.

- ◯ Very true of me (I absolutely believe this.).
- ◯ Mostly true of me (I think that I'll use most of what we learn, but not all of it.).
- ◯ Sometimes true of me (It depends on what we're learning.).
- ◯ Sort of true of me (I think that I'll be able to use a bit of what we learn, but most of it will only be useful in English.).
- ◯ Not true of me, at all (I won't use anything that I learn in English class.).

5. 4. I often choose assignment topics I will learn something from even if they require more work.

Mark only one oval.

- ◯ Very true of me (I do this all of the time.).
- ◯ Mostly true of me (I do this most of the time, but not all of the time.).
- ◯ Sometimes true of me (It depends on the project, and the subject area.).
- ◯ Sort of true of me (I do this every once in a while, on an assignment that I'm particularly interested in, or in a class that I'm particularly interested in.).
- ◯ Not true of me, at all (I never do this.).

6. 5. I am sure I can do an excellent job on the problems and tasks assigned for this class.

Mark only one oval.

- ◯ Very true of me (I will do an excellent job on everything given.).
- ◯ Mostly true of me (I will do an excellent job most of the time, but not all of the time.).
- ◯ Sometimes true of me (It depends on the what problem or task is given.).
- ◯ Sort of true of me (I will do an excellent job on a few problems and tasks.).
- ◯ Not true of me, at all (I will never do an excellent job.).

7. 6. I have an uneasy, upset feeling when I complete assignments.

Mark only one oval.

- ◯ Very true of me (I get this feeling on everything given.).
- ◯ Mostly true of me (I get this feeling most of the time, but not all of the time.).
- ◯ Sometimes true of me (It depends on the what problem or task is given.).
- ◯ Sort of true of me (I get this feeling on a few assignments a year.).
- ◯ Not true of me, at all (I never get this feeling.).

8. 7. I think I will receive a good grade in this class.

Mark only one oval.

- ◯ Very true of me (I will do very well.).
- ◯ Mostly true of me (I will do ok, but not good.).
- ◯ Sometimes true of me (I will get good grades on a few assignments, but will mostly be average.).
- ◯ Sort of true of me (I will get good grades on some assignments, but will not do well.).
- ◯ Not true of me, at all (There is no hope that I will get a good grade.).

9. 8. Even when I do poorly on an assignment I try to learn from my mistakes.

Mark only one oval.

- ◯ Very true of me (I read the teacher's feedback carefully, and talk to them if I'm not sure what they mean.).
- ◯ Mostly true of me (I often read the teacher's feedback, but not always.).
- ◯ Sometimes true of me (I sometimes read the teacher's feedback, but it depends on the subject.).
- ◯ Sort of true of me (I read teacher's feedback every once and a while.)
- ◯ Not true of me, at all (I only look at the grade, and never read the feedback.).

10. 9. When I am completing an assignment I think about how poorly I am doing.

Mark only one oval.

- ◯ Very true of me (I always question what I'm doing, and think that I'm going to fail.).
- ◯ Mostly true of me (I often question what I'm doing, and generally think that I'm not going to do well.).
- ◯ Sometimes true of me (I sometimes question what I'm doing, and sometimes think that I'm not going to do well.).
- ◯ Sort of true of me (I rarely question what I'm doing, and only think that I'm not doing well every once in a while.)
- ◯ Not true of me, at all (I never think about not doing well.).

11. 10. When I am completing an assignment, I try to put together the information from class and from my binder.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

12. 11. When I do assignments, I try to remember what the teacher said in class so I can answer the questions correctly.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

13. 12. I ask myself questions to make sure I know the material I have been working with.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

14. 13. It is hard for me to decide what the main ideas are in what I read.

Mark only one oval.

- ◯ Very true of me (It is always hard to find the main ideas.).
- ◯ Mostly true of me (It is often hard to find the main ideas.).
- ◯ Sometimes true of me (It is sometimes hard to find the main ideas.).
- ◯ Sort of true of me (It is rarely hard to find the main ideas.)
- ◯ Not true of me, at all (It is never hard to find the main idea.).

15. 14. When work is hard I either give up or complete only the easy parts.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

16. 15. When I think about assignments, I put important ideas into my own words.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

17. 16. I always try to understand what the teacher is saying even if it doesn't make sense.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

18. 17. I work on practice exercises even when I don't have to.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

19. 18. Even when assignments are dull and uninteresting, I keep working until I finish.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

20. 19. I use what I have learned from old assignments and my binder to do new assignments.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

21. 20. I often find that I have been reading for class but don't know what it's all about.

Mark only one oval.

- ◯ Very true of me (This always happens.).
- ◯ Mostly true of me (This often happens.).
- ◯ Sometimes true of me (This sometimes happens.).
- ◯ Sort of true of me (This rarely happens.)
- ◯ Not true of me, at all (This never happens.).

22. 21. I find that when the teacher is talking I think of other things and don't really listen to what is being said.

Mark only one oval.

- ◯ Very true of me (This always happens.).
- ◯ Mostly true of me (This often happens.).
- ◯ Sometimes true of me (This sometimes happens.).
- ◯ Sort of true of me (This rarely happens.)
- ◯ Not true of me, at all (This never happens.).

23. 22. When I am studying a topic, I try to make everything fit together.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

24. 23. When I'm reading I stop once in a while and go over what I have read.

Mark only one oval.

- ◯ Very true of me (I always do this.).
- ◯ Mostly true of me (I often do this.).
- ◯ Sometimes true of me (I sometimes do this.).
- ◯ Sort of true of me (I rarely do this.)
- ◯ Not true of me, at all (I never do this.).

25. 24. I work hard to get a good grade even when I don't like the class.

Mark only one oval.

- Very true of me (I always do this.).
- Mostly true of me (I often do this.).
- Sometimes true of me (I sometimes do this.).
- Sort of true of me (I rarely do this.)
- Not true of me, at all (I never do this.).

26. 25. When reading I try to connect the things I am reading about with what I already know.

Mark only one oval.

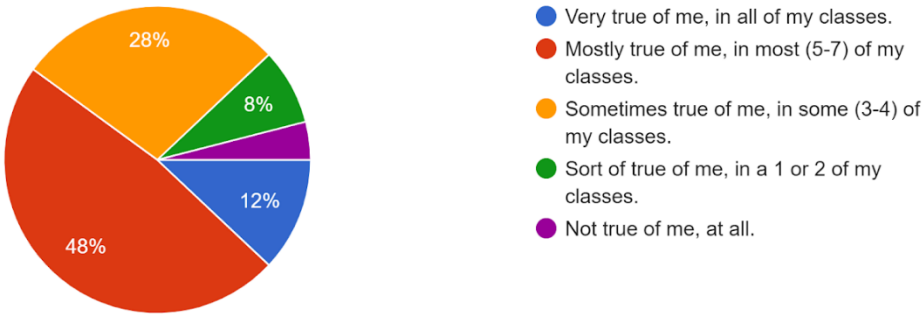
- Very true of me (I always do this.).
- Mostly true of me (I often do this.).
- Sometimes true of me (I sometimes do this.).
- Sort of true of me (I rarely do this.)
- Not true of me, at all (I never do this.).

Appendix 8

First Questionnaire Student Answers

1. I prefer class work that is challenging so I can learn new things.

25 responses



2. It is important for me to learn what is being taught in this class.

24 responses

3. I think I will be able to use what I learn in this class in other classes.

25 responses

4. I often choose assignment topics I will learn something from even if they require more work.

25 responses

5. I am sure I can do an excellent job on the problems and tasks assigned for this class.

25 responses

6. I have an uneasy, upset feeling when I complete assignments.

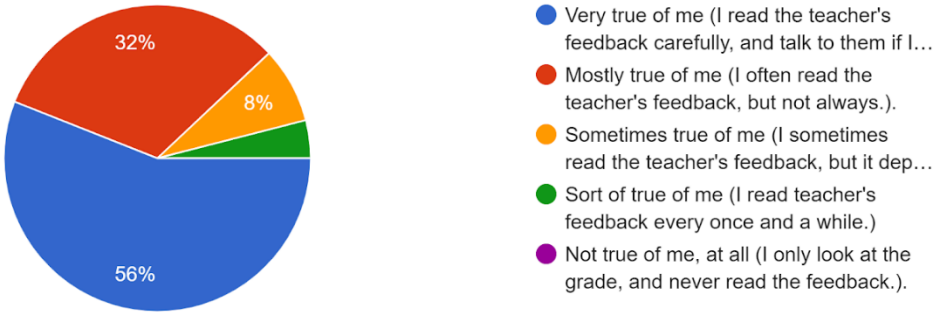
25 responses

7. I think I will receive a good grade in this class.

25 responses

8. Even when I do poorly on an assignment I try to learn from my mistakes.

25 responses



9. When I am completing an assignment I think about how poorly I am doing.

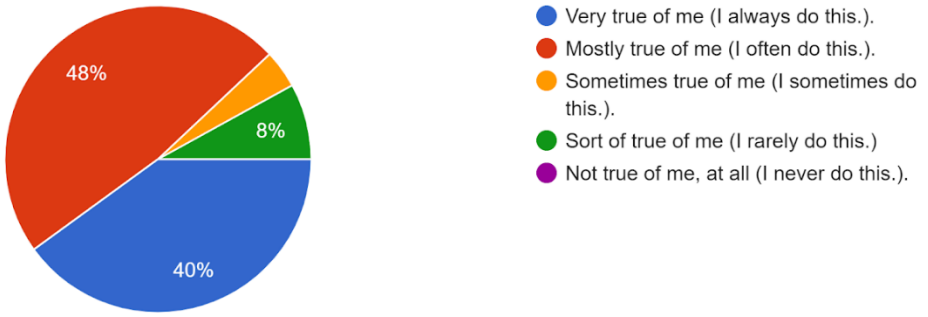
25 responses

10. When I am completing an assignment, I try to put together the information from class and from my binder.

25 responses

11. When I do assignments, I try to remember what the teacher said in class so I can answer the questions correctly.

25 responses



12. I ask myself questions to make sure I know the material I have been working with.

25 responses

13. It is hard for me to decide what the main ideas are in what I read.

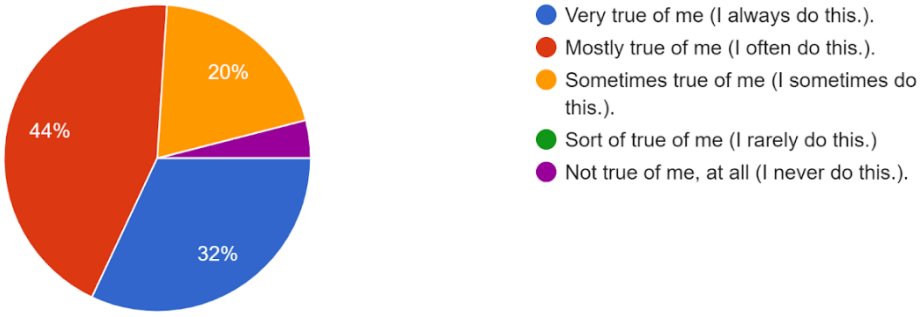
25 responses

14. When work is hard I either give up or complete only the easy parts.

25 responses

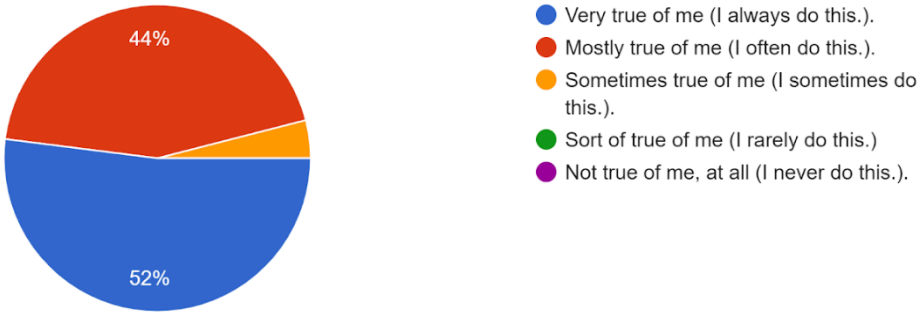
15. When I think about assignments, I put important ideas into my own words.

25 responses



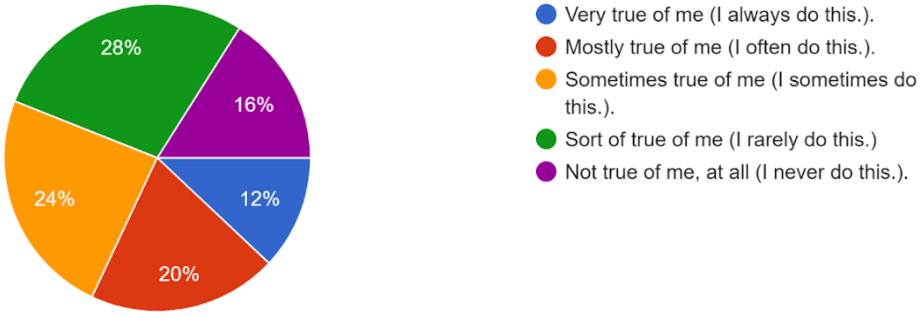
16. I always try to understand what the teacher is saying even if it doesn't make sense.

25 responses



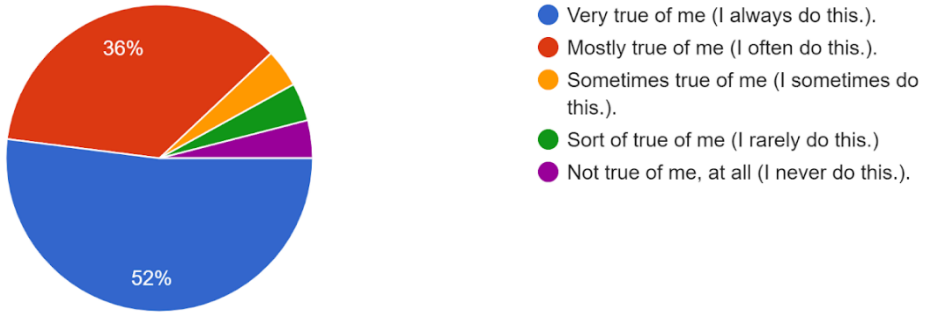
17. I work on practice exercises even when I don't have to.

25 responses



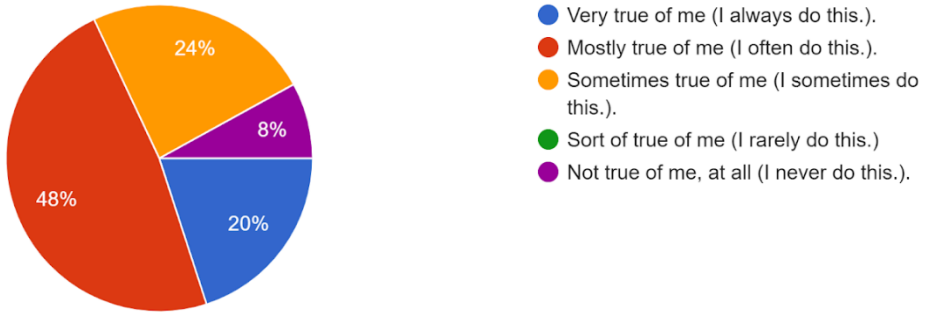
18. Even when assignments are dull and uninteresting, I keep working until I finish.

25 responses



19. I use what I have learned from old assignments and my binder to do new assignments.

25 responses



20. I often find that I have been reading for class but don't know what it's all about.

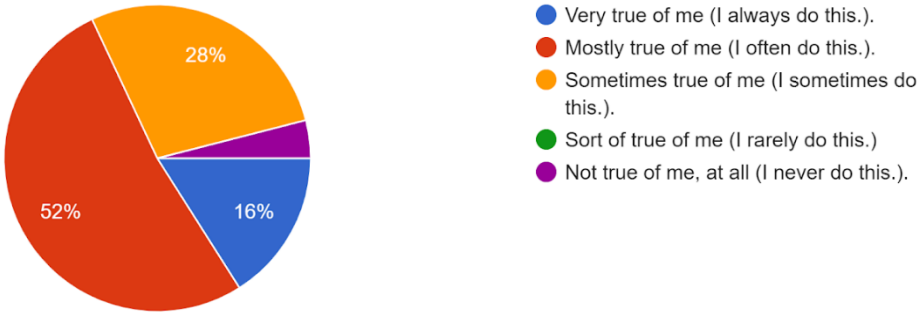
25 responses

21. I find that when the teacher is talking I think of other things and don't really listen to what is being said.

25 responses

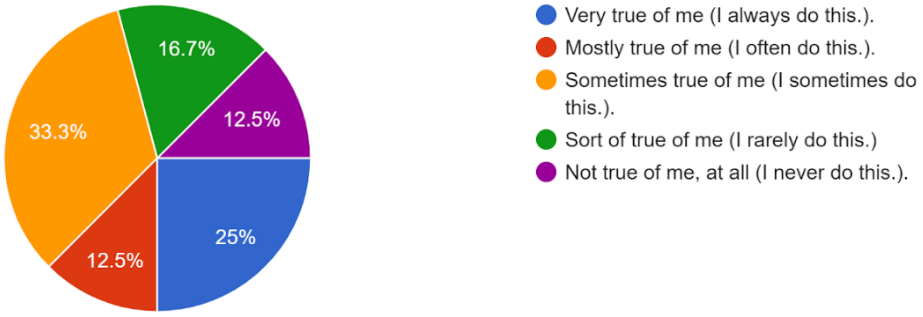
22. When I am studying a topic, I try to make everything fit together.

25 responses



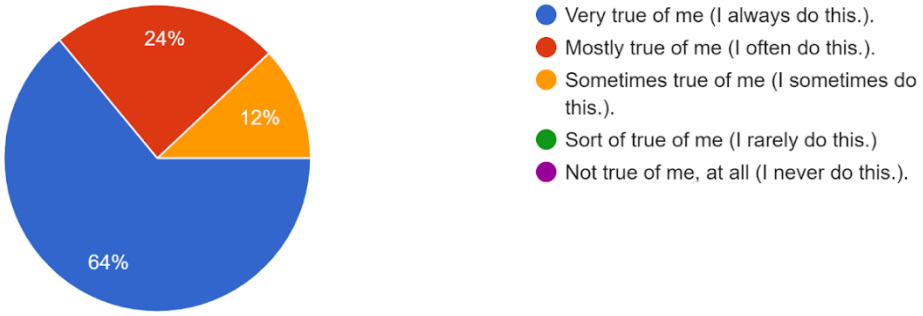
23. When I'm reading I stop once in a while and go over what I have read.

24 responses



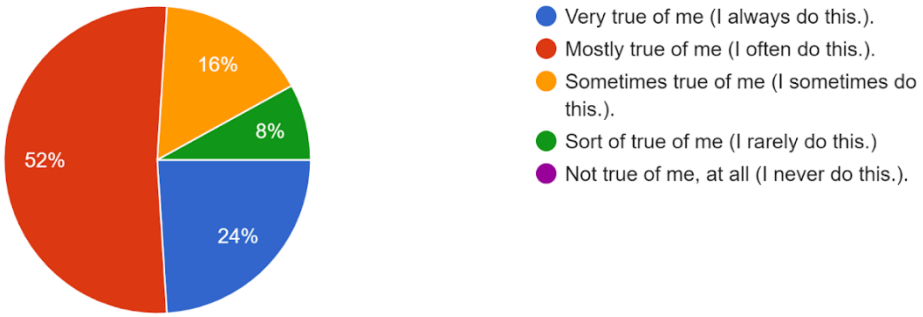
24. I work hard to get a good grade even when I don't like the class.

25 responses



25. When reading I try to connect the things I am reading about with what I already know.

25 responses



Appendix 9

Second Questionnaire Student Answers

1. I prefer class work that is challenging so I can learn new things.

25 responses

2. It is important for me to learn what is being taught in this class.

25 responses

3. I think I will be able to use what I learn in this class in other classes.

25 responses

4. I often choose assignment topics I will learn something from even if they require more work.

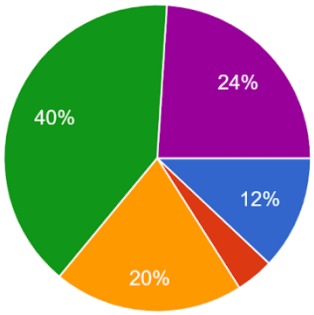
25 responses

5. I am sure I can do an excellent job on the problems and tasks assigned for this class.

25 responses

6. I have an uneasy, upset feeling when I complete assignments.

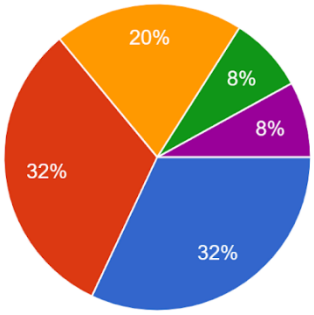
25 responses



- Very true of me (I get this feeling on everything given.).
- Mostly true of me (I get this feeling most of the time, but not all of the time.).
- Sometimes true of me (It depends on the what problem or task is given.).
- Sort of true of me (I get this feeling on a few assignments a year.).
- Not true of me, at all (I never get this feeling.).

7. I think I will receive a good grade in this class.

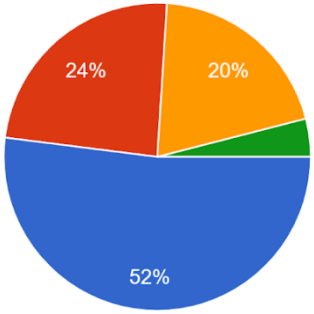
25 responses



- Very true of me (I will do very well.).
- Mostly true of me (I will do ok, but not good.).
- Sometimes true of me (I will get good grades on a few assignments, but will mostly be average.).
- Sort of true of me (I will get good grades on some assignments, but will not do…
- Not true of me, at all (There is no hope that I will get a good grade.).

8. Even when I do poorly on an assignment I try to learn from my mistakes.

25 responses



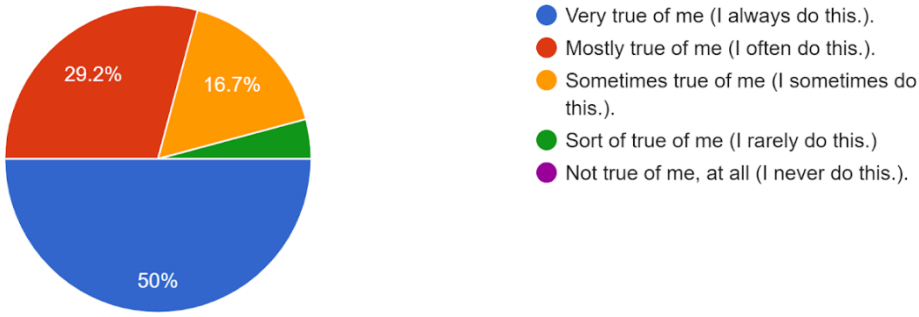
- Very true of me (I read the teacher's feedback carefully, and talk to them if I…
- Mostly true of me (I often read the teacher's feedback, but not always.).
- Sometimes true of me (I sometimes read the teacher's feedback, but it dep…
- Sort of true of me (I read teacher's feedback every once and a while.)
- Not true of me, at all (I only look at the grade, and never read the feedback.).

9. When I am completing an assignment I think about how poorly I am doing.

24 responses

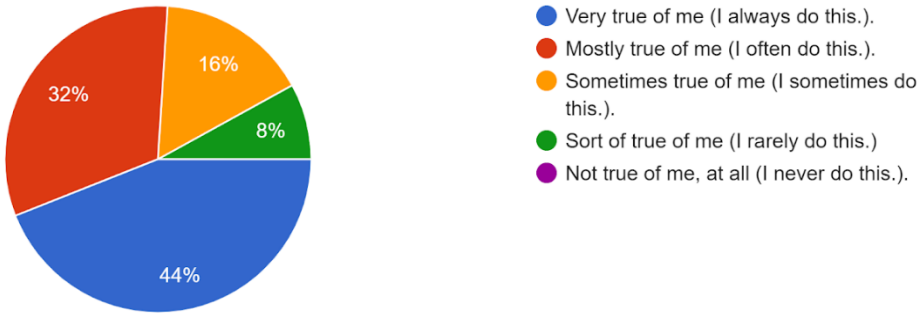
10. When I am completing an assignment, I try to put together the information from class and from my binder.

24 responses



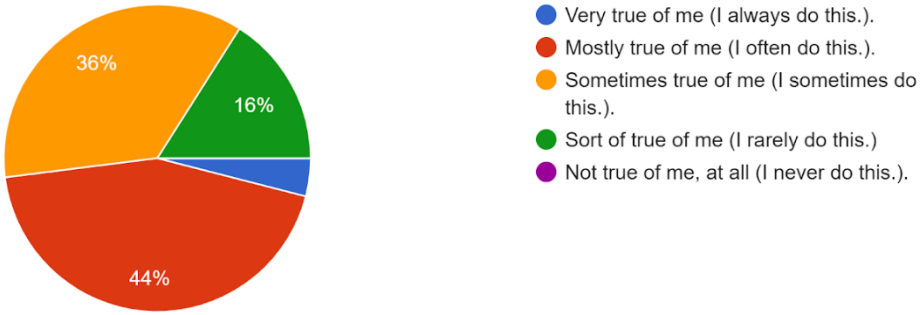
11. When I do assignments, I try to remember what the teacher said in class so I can answer the questions correctly.

25 responses



12. I ask myself questions to make sure I know the material I have been working with.

25 responses

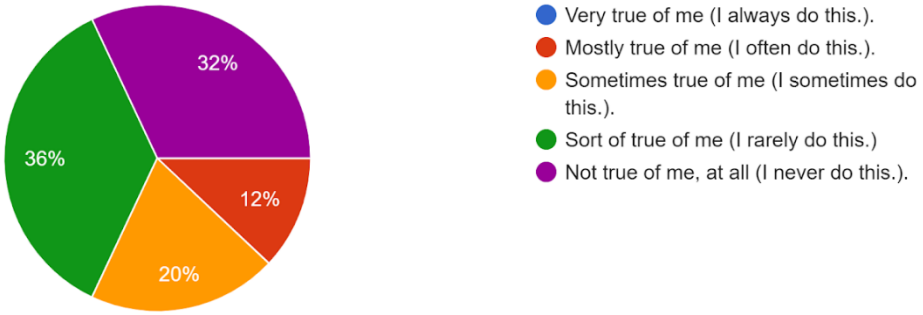


13. It is hard for me to decide what the main ideas are in what I read.

24 responses

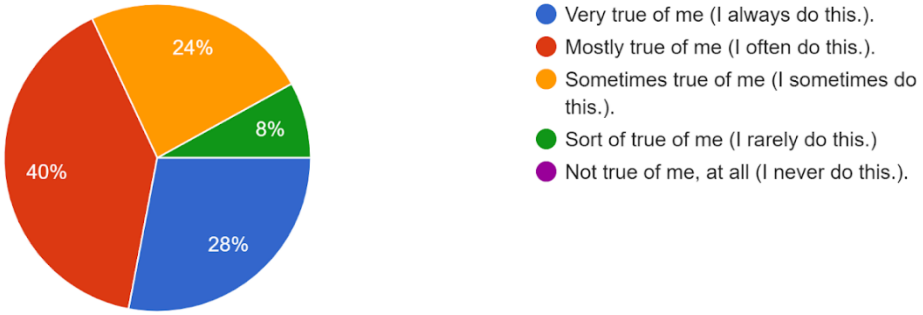
14. When work is hard I either give up or complete only the easy parts.

25 responses



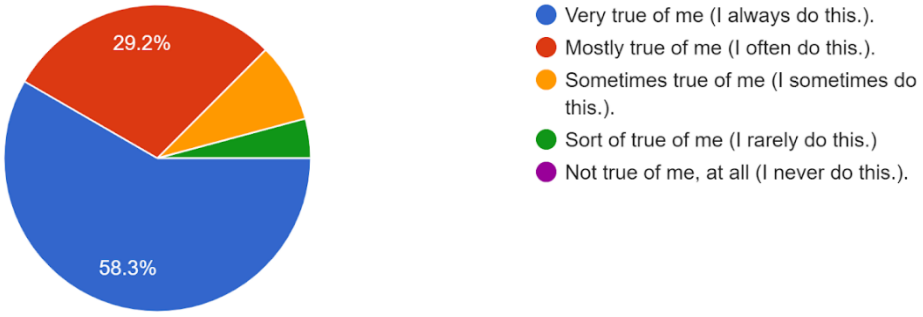
15. When I think about assignments, I put important ideas into my own words.

25 responses



16. I always try to understand what the teacher is saying even if it doesn't make sense.

24 responses

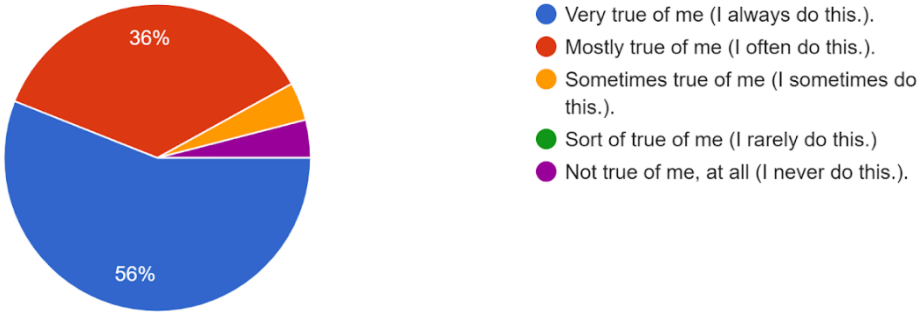


17. I work on practice exercises even when I don't have to.

25 responses

18. Even when assignments are dull and uninteresting, I keep working until I finish.

25 responses



19. I use what I have learned from old assignments and my binder to do new assignments.

23 responses

20. I often find that I have been reading for class but don't know what it's all about.

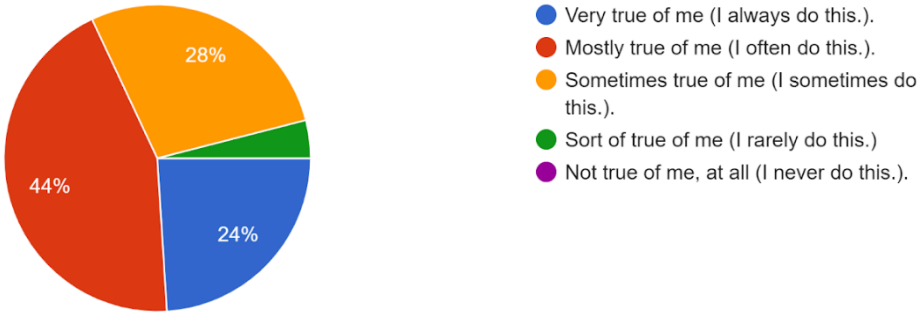
25 responses

21. I find that when the teacher is talking I think of other things and don't really listen to what is being said.

24 responses

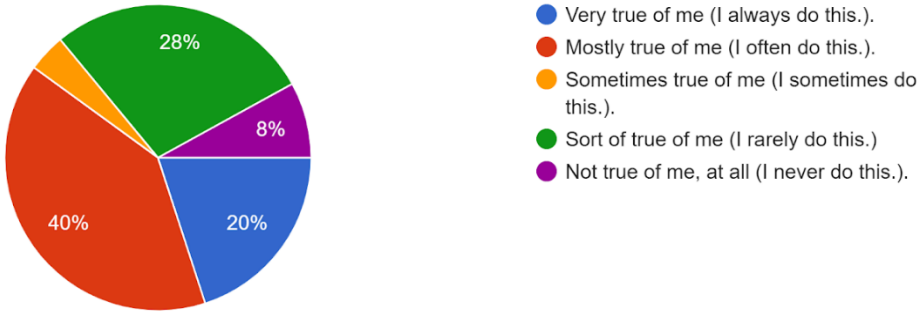
22. When I am studying a topic, I try to make everything fit together.

25 responses



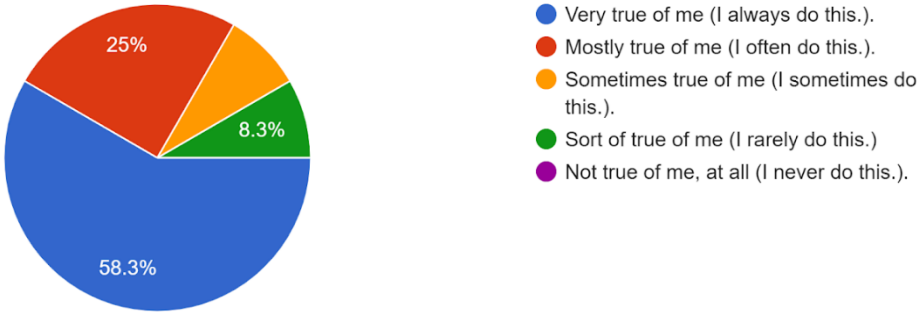
23. When I'm reading I stop once in a while and go over what I have read.

25 responses



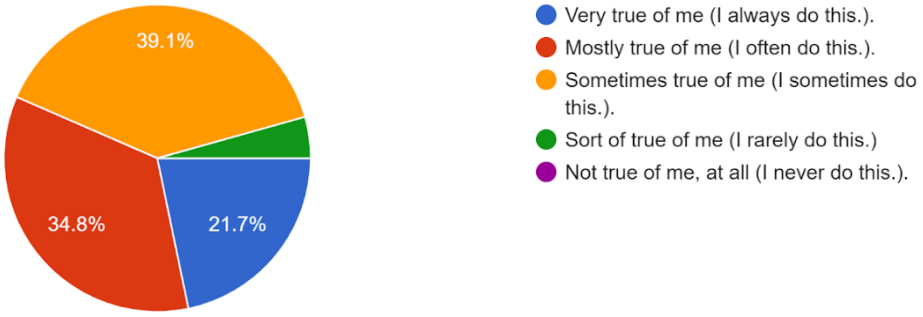
24. I work hard to get a good grade even when I don't like the class.

24 responses



25. When reading I try to connect the things I am reading about with what I already know.

23 responses



Appendix 10

Guiding Questions for Discussion Groups

- How did it help to show you all of the steps in any job that a teacher asks of you?
- How did it help to have the poster hanging on the classroom wall?
- How did it help to have the strategies on the poster?
- Which part of the Strategic Action Cycle helped you the most: knowing the steps, having the poster, or having the strategies to look at whenever you needed them?
- What part of the Strategic Action Cycle was not helpful?
- If a teacher were to use the Strategic Action Cycle again, what would you want them to know?

Appendix 11

Discussion Group Transcripts

Group 1: Janice, Olivia, Sarah, Ashley

A: If another teacher, like in a different class, I would want them to know that I go by understanding things visually more and it just helps me get started. And I need a few seconds to process things and put my ideas together. Split them up step by step cause that's the way I like things.

Me: So then, did the visual of the poster really help you?

A: Yeah. Cause it told me things I can do like make a to-do list, try it, see if it works, go back to previous works, review more stuff, and then I have a decent spot I can start at.

J: Sometimes I don't use the Strategic Cycle for everything I do, like assignments, but whenever I sometimes get bored, or annoyed about an assignment, or I just don't want to start my work I might go and look and see if I can add any more steps to help me spread everything out.

S: I didn't really like the fact that we were putting our own ideas onto the Cycle. I just, I like getting straight on instructions, I guess. I don't really like, I don't know.

J: Like working under pressure. Like this is what you're…..

S: Sort of. I guess I just don't really want to go off my own ideas. I don't know.

Me: Why not?

S: Just cause it's easier for me, I guess, to just get someone to tell me what to do rather than myself instructing me cause what if I'm not right about it, or ….

J: But I think what's nice is we got to discuss it or if we disagreed with something we could change it. Like sometimes there would be, we would just have this, it was nice because if we think we were wrong about something, we could talk and ask about it before we actually use the strategy and mistaked it to be a good change.

O: For me, I think, having it there in class was actually kind of helpful cause then I could just look, for different stuff, I could just look and see what I'm supposed to do or what I can do to help me get unstuck. But not all the strategies were helpful, but, most of them.

Me: Are there any of the strategies that stand out to you as being not helpful?

S: I feel like "try it" is sort of in between, just try it, like sometimes it could work, sometimes it could not cause what if you misunderstand?

J: And for proofreading we were talking about how sometimes when we proofread each other we get pressurized by how good the other person writes, and then we feel like we haven't wrote it good enough.

S: Yeah!

J: And then we want to change it.

O: And we want to change it.

J: And our idea before was already very impactful and then we change it again and then we mess it up.

S: That's a really good point.

O: That's what we did for one of the assignments. And then we stopped because….

J: We stopped….

O: Actually I think it was better that we stopped because we just finished the assignment and then showed it to them like "is it ok?" and then they just said "yeah, it's good."

J: Sometimes unintentionally you help the other person write in your own perspective, but you're not letting them write, so it's kind of like we're writing it for them. So I think it's better if we just write on our own, see what we lack and then fix it. And also you feel bad afterwards since you think you might have messed up something in their writing.

Me: Anything else you want to add?

J: I feel like, for the Strategic Action Cycle, it was important for us to learn about it because I feel like you would want us to be more independent and have confidence so it's not like we would have to ask the teacher for everything. So this is a way for us to figure it out on our own other than having to … like have something in the back of our minds we could use whenever we're stuck to get unstuck. Figure stuff out. It was really helpful to have.

S: For question 5, it's important for other teachers to know that we were the people who put the ideas on the poster because then they know not to think too highly of it.

Me: What do you mean? Explain that.

S: I don't really know. It's not like an official thing, maybe, or …

Me: Got it. So you don't want a teacher…. if you were going into your French class with Monsieur Brown next quarter, and he had the Strategic Action Cycle, with all of the strategies up there, you would want him to know that those were your strategies, not put up there by teachers.

S: Yeah.

Me: Or experts, or what have you. So it's not the only, be all, end all, answer.

S: It could be a good thing though because then they know that it works for you, the people who put it up there.

O: Yeah, but I think they should, if they want, they should add things that can help us which will be kind of helpful cause things that we don't actually use, do, or think about. Kind of like new ideas on how to do it. That'll be helpful.

J: Cause if we're in a new class then we have different problems that we need to face so it's like we need other strategies to fit the problem.

O: Yeah, like for, let's say Math, like you said for English we can use a dictionary but for Math if we use a calculator and they tell us that we can't, then I think that's…..

Me: So then that strategy goes off.

S: Yeah. Like no dictionaries. No French dictionaries to help you.

J: You can't, like, proofread in Math. [holds hand out to Olivia] "Help proofread my test!"

S: It would be important for them to know that this was created in an English class. And they know that not all of the strategies work for this sort of class.

A: I also feel like with Sarah, what she said, they should know that we made it. It's because they can add things in their specific class that can help them. But then it could be

stressful saying this was from a professional teacher because teachers know more stuff than us because, of course, because they teach it but if someone thinks the teacher made it, they want us to do all these things so it just pressurizes them in a way. But if they know other students made it they'll be like, "oh, I can just take this idea, try it out", and then maybe it will help them.

J: Yeah, and I feel like you might be really, if you're thinking this is what school, education, wants you to do then you might think that you're restricted to have to do it. But if they know it's us, we're the same age as them and we made it then they may be like, "Oh! This might have worked for them but it might not for me".

O: It's good that we can use it whenever we want, we don't have to use it cause then it just goes from, "Oh no, I didn't try it, I didn't ask someone and I didn't proofread it. Oh no! I didn't use a dictionary, that's not helping"

Me: So you liked that the strategies were optional, versus required?

All mutter agreement

S: What Janice was saying, the peer editing thing, they might think, "Ohmigosh, I have to peer edit now". But then if it was negative help, I guess?

A: And it helps with assignments cause if you're stuck on one part of an assignment you can skip it and think of something else you can do and then let others proofread it while you're doing something else. Cause that's what I had Heidi help me with. When I was writing half of my essay I told her to proofread it and then I started thinking of what I'll put in that. Cause, I mean, I have her opinion but I don't have my own opinion in there.

O: But sometimes it's good that we don't use their opinion. Yeah your opinion's nice, but it's my essay and I kind of want it to be what I'm thinking about and they might not be thinking about the same thing. So it's good that we get to choose.

S: With the last essay we just did, what if someone thinks that Tim was more … is handling the situation better than Donald had been. But then what if you think the opposite?

O: Yeah, and they're giving you ….

S: The wrong feedback. And maybe you might not notice that they're giving you the wrong feedback.

O: And if you change it then your essay's going to lower, it's not effective.

J: And if like others change it for you. We should know why they changed it. If they just change it for you, you're not going to know, "Oh. This part, I wasn't clear enough. I need to improve on it". Cause then you're just like, "Oh. They just changed it for me and it's good now".

O: Yeah, you can't really trust them, they're not perfect. You are, but they're not.

A: I also feel like the most helpful part for me, cause everyone has their own opinion on what is helpful to them, I think the strategies were more helpful cause some parts I didn't really get when you said in shorter form what to do, and then I see other kids doing what they're meant to be doing, opening their binders and stuff. So I know where to get started, then I just carry on with my work and I'm super focused in it, and I get it done. But I just need that boost and then I start.

O: It's helpful cause then it helps to remind you that you have notes and you could just look at them and then use them. Cause sometimes when it's stressful I don't even think about what I could use or what to do. But then when I look at that and it kind of reminds me that "Oh yeah, I have notes, I could just use that".

S: Yeah! It reminds you of strategies.

O: Yeah, it's like a reminder, I guess.

J: It's not required, but it's an option for when you're not in the mood. And I feel like the steps in the poster was really helpful cause it didn't say you had to go that way but it gave you the basics and if you wanted to follow it you could.

A: If it was required, just saying, if it was required then I'd feel more stressed to do my work and put all these things in my work, and then I would just forget about what I was mainly focusing on. I'd get off track and be like, "Oh, can you read my work and see if it's good or not?" And sometimes they'd just say it's good, right? But then you have this feeling inside that something's missing. But they don't know that you have this feeling or what you're trying to do, they just know that the grammar is good, yeah that's fine. But what about my ideas? Should I add anything to my ideas? Is there something I should do? For me, it didn't always work. Even if it does work, I still get side tracked to do what they told to do, and I forget what I was going to do or wanted to do.

S: Adding onto that, I feel like sometimes it can be a waste of time.

Me: What could be a waste of time?

S: Having peers edit. And then they don't actually really help you in a way, they're just like "Yeah, good, good job". But then it's like, "What did you do for me?" It just makes me mad.

O: Yeah. If they actually tell us it's wrong, or what's wrong, then that's actually helpful, But if they're just like, "Your essay's great, it's so good." Not saying any names

J: Yeah, the person might be like, I don't want to say something bad. Cause I don't want to change it. But then…..

A: You need those …..

Me: I understand what you're saying. I understand.

A: I also feel like if somebody gives me their idea, or their opinion, I can add onto that with my opinion, and it grows a good idea. Changing their opinion into my style of opinion and then doing what they told me to do but in my way.

Group 2: Rianna, David, Peter, Wade

R: The steps did help because when they broke down the assignments it helped me feel more organized, it was kind of like a to-do list. So it broke it down for me. It was really easy then. It made everything easier and you didn't have to go through those complicated strategies. It made everything specific and detailed. So it really helped.

P: I can agree, cause if you look at the way it's laid out I can follow the steps and it just makes the assignment easier.

R: On Google Classroom, we didn't use it, I felt I didn't use [the poster], it was just there. But it was still helpful to have in the classroom I feel. It was definitely helpful to have.

Me: So not so helpful on Google Classroom?

R: I would just turn and all the strategies would be there, they'd be detailed.

W: If you were across the classroom it was easier, if you were on the Chromebook working, you could just go on Google Classroom and it was easier to see it.

D: I think it was helpful having the poster with the strategies on Google Classroom and in the class because when you're struggling you can just look up and look at the poster or on Google Classroom if you want. At least it's there for you.

P: Instead of asking you to come over, you could try to be independent and look up at the poster or look at it on Google Classroom and find out strategies, maybe, that could help you get past your block.

D: It was also helpful on Google Classroom when you're not in class, like if you're at home, and you're struggling.

P: Yeah, cause you don't have a teacher at home.

Me: Did any of you use it at home?

R: Yeah.

P: For the essays.

D: Once to twice. When I was doing my essay and I was struggling or something then I could actually use it at home.

R: I kept two main strategies in mind, just not to overwhelm me, cause then I'll start getting, like I'll go everywhere in my mind, right? So I used, I kept two big strategies, like use feedback and like another one. And using those, like just keep on telling myself that, it was reassuring. And it was helpful.

Me: So jumping down to the fourth question, what was not helpful. Are you saying that there were too many strategies on the cycle?

R: I feel like certain strategies were kind of the same in some ways and they were kind of two of one, I guess.

P: The way it was sorted, I guess, for me, sometimes you have to search around.

R: Yeah, yeah. There were a lot of stickie notes for you, just having to look. There were like a lot of ideas but the ideas were really helpful.

Me: Can you think, in particular, of two that were too similar?

R: Ask teacher for help and ask classmate for help.

Me: You're thinking that we should have generalized it.

D: Just ask for help.

R: Yeah. Just ask for help.

D: For me what wasn't helpful was just some strategies just like, weren't really needed. Some of them I don't think that I ever, like, looked at.

R: Yeah, same.

D: But I used, I still used the whole cycle in general, like, I used it, but like some strategies I don't think I used.

Me: Can you think of one that didn't need to be up there?

D: Not really. I just know that I didn't use all of them.

P: Yeah, cause the ones that I couldn't, that didn't help don't usually cross my mind.

R: Exactly, like I kept two in mind from each kind of section and then that's all I could use.

P: It's the helpful ones that are more memorable.

W: There wasn't too many, it was just because different ones worked for different people. Just sometimes you had to look for a second to find the one you were looking for.

P: I think it is good to have so many strategies cause different people have different ways of solving things so, I guess, maybe, different strategies work for different people.

R: At least having a selection, and there was options, and just knowing they're up there is really good.

Me: So maybe I should have divided them differently, organized them differently on the poster, to make it a little bit more visually organized?

D: Maybe if it wasn't in a circle, if it was in a chart, and then you could just put the strategies more like that. Like columns or something like that.

R: They were all kind of, like, in each section they were just kind of an explosion of ideas.

P: I mean, that's also good, cause you could search for one that works for you and then you can keep that in mind.

Me: So something more linear.

P: Or maybe you could just organize the stickie notes in the circle better cause they're all kind of scattered around in different places, I mean.

D: If another teacher was to use it, I guess, I just want them to know that I've seen it before and that I know about it.

R: And, I don't know who the other teacher is, but for them to know that each student works differently. And they don't need to force it upon you to work a certain way. Cause it'll limit you, so not making them, they're not going to force you to use feedback or force you to ask someone else. They need to let you adjust to it yourself and see what fits you.

P: Specific strategies is good, but not, like, forcing it on someone.

P: I don't think that we did number 3.

Me: You kind of did.

P: I don't know how to explain it, cause all of them are helpful. The strategies are really helpful on the thing because that's kind of the main part I would say.

R: Yeah. Even you get mad at me when I overthink things to the max. But when you look at the steps, it really just flattens everything, and it's just, like, 'ok. I'm going to do this, it's going to be done, I'm good.

P: Overthinking things can put too many ideas into your head at once. Looking at the chart you can kind of re-fresh your mind and you can just base it on one idea.

R: Especially looking at the poster when I would look at it, it's just like a whole explosion.

D: Like even though I am saying that the whole circle could be more organized, it's still helpful that the poster was there, then I'm not trying to memorize all the everything.

P: It's been more helpful to have it then to not have it.

R: Especially since you covered so many ideas. That was really good. Even though it may not have been, it could have been in a better way, but it was still really good to have all those ideas there.

P: I'm sure everybody in the class has used it at least once. So that's, it's helpful for everybody.

D: I think also the fact that we've talked about so much in class, so you know in the back of your mind that it's up there. Since we talked about it so much, you're thinking about it. So you know it's up there to use. If we only talked about it once you wouldn't even think about it, right?

R: Yeah. You talked about it a lot which helped. It woke us up.

W: It reminds you.

R: It's here you for you, you have to, well you don't have it, it's going to be helpful, and showed us that.

P: It's really colorful so out of your peripheral vision you can see it, and then you're like, 'Oh there, I can look at that'.

R: That's a good point.

Me: So it's a good thing that I used the neon stickies instead of just the plain yellow?

D: Yeah, the colors kind of attract your eyes to it so even if you're not actually focusing on it, it's still, like, you see it, cause it's so bright colored.

R: Overall, it's an amazing device for us to use in class and I'm really happy that we got to use it.

D: It was very helpful.

Group 3: Elizabeth, Patty, Matt, Aaron

P: It did help to know the steps in the assignments, but I feel like the strategies were more helpful because the steps, like, I feel like the steps were too general and it's hard to actually like understand maybe like sometimes the difference between interpreting the task and like analyzing the work because sometimes analyzing the question can sometimes get confusing. So I feel like categorizing the stickie notes and, like, writing down the strategies, it really helped because it would tell like what the most suitable strategy for each category.

A: The strategies were more helpful because with the steps, they were a bit vague, but, because, like, I was kind of confused between monitoring and adjusting, but, like, the specific strategies did help me understand what each step meant.

P: It did help to have a poster because I feel like otherwise I would have forgotten to use it. [all others agreeing verbally while she's speaking "yeah"] Because since it was there, and, like, right at the front of the classroom kind of, you could see it from all directions. It really helped. If you were, like, stuck or something, you would just naturally look around the classroom, and that bright poster would be there, and you're like "ok". [lots of "yeah"s from other students, E: I agree with Patty"]

A: Sometimes, like, I looked to my past assignments to see feedback and everything, and it's right there in Google Classroom, so if I'm stuck I can just go there.

E: This is my first time seeing a poster like this, and it didn't only help for school, it also helped for everything in general, I guess, it really helped me to break down all my steps to do daily tasks and stuff.

Me: Like what?

E: Like dance. Cause, I think it was the monitoring or adjusting. But I think asking my teacher about feedback because since there were lots of students in my class they don't really, like, the teachers they don't really focus on each student, so it was after class I asked them which I never really did before cause I was kind of scared.

Me: What were you scared of?

E: I was scared cause I was kind of shy speaking in front of the class.

P: I think the part that wasn't helpful was, ok, so observing others did help me in PE more, but then I feel like for things that are more, cause that's where you would just do it, right, so then I feel like for things like Science, or maybe English, or maybe even Math, I feel like if you just watch the other person I feel like you don't actually understand what they're doing. And it kind of, like, messes up your thought process and how you understand things. So sometimes if I were to look at someone else's, like proofread someone else's essay, and I looked at their conclusion, I feel like it would be hard to get on my own train of thought and just get stuck on what they wrote and try to

find a way around that. So I guess sometimes it can get a little confusing if you would observe others to, like, do things that require a bit more thinking.

A: Especially with like English because in all the essays everyone would have their own interpretations of all the tasks and so you could get confused. And one of the strategies was to skip through the hard parts and go back later. That wasn't really helpful for me because if I don't do something in the right way, it will be on my mind for the rest of the time and it will cause more stress.

P: If another teacher was to use the Strategic Action Cycle, I would recommend, so before, with only the poster, it's too generalized. But I feel like with the stickie notes on it it was better. But if you specify the task too much, like you narrow down the strategies way too much, and do way too specific tasks, that makes it more confusing because it leaves less space for thinking what you can do. Because it kind of narrows down the little bubble between what I can do and what I can't.

Me: So when you say that, you mean, narrowing into "these are the only strategies that you can use here"?

P: Yes. Rather than people trying to find out what they really want to do. Cause if you specify the task too much, then I feel like it kind of narrows down what you think helps you, and it doesn't let you realize whether these strategies really help you or not. Cause when you specify the task it makes you feel like you have to do that.

A: I feel like there should be a medium between no specifications and saying, "This is the chart, use it" and, like, specific boundaries. So you know what you can use but you also have room for your own thought process.

M: There shouldn't be like, the strategies shouldn't be specified for only one part because many of them can be used in other areas too. Cause then it can actually make you feel like you're doing it wrong. It might just mess with your mind.

Me: Did you notice yourself using it in places outside of PE and English? I know that Mr. Lund and I were both talking about this, but did you notice it outside of school? It's ok if the answer's no.

M: I actually did, cause I do coding and it actually helped me break down the steps for when I'm actually making a game or something.

A: Same with me. I have guitar lessons, so it also helped encourage me kind of because sometimes it's confusing and I didn't know if what I was doing was right or wrong.

P: I don't know if it really helped me. I don't think it did. Because I haven't really done anything that's new the past year since Covid started, and this was the first time I was actually introduced to the Strategic Action Cycle so I feel like everything I was already doing, I already had a set way of doing it so I don't feel like I would really refer to it. Because most of the things, like swimming and skating, I already had lessons, and I already know how to do it, and how to get past those challenges when I'm stuck, so

I don't feel like I referred to it because I already had a solution. But when I was reading, cause now I have more free time for reading, this isn't related to the Action Cycle, but when you told me that you actually read aloud in your head I realized that I actually do that even though I didn't know that before. Because it plays in my head like a movie and I feel like, analyzing, understanding how I read books helps me understand what types of genres I enjoy more. So maybe that's related.

A: Similar to what [P] said, when you said that, I do do that. I knew that I do that, I just didn't know it was a thing. Cause when I'm reading aloud in my head, I kind of have, it's like I'm there witnessing it happening instead of just reading words off a page.

E: What they were talking about before about observing others, I agree with them because it did throw me off a bit because when we were writing essays, I read some other people's essays and it kind of limited the way that I thought a bit more, and since we all have different ways of thinking and different personalities, so I think next time I would try to work more independently and then peer edit others' essays once I've begun.

M: I agree to that, but also, observing others can also probably be motivation because you might want to do better than them. But everyone still has their different opinions and interpretations so it can throw you off.

A: Overall, I think that the Strategic Action Cycle helped me, to, an example would be that sometimes I had trouble with punctuation and telling where commas go and stuff, but proofreading out loud really helped me to know. It gave me strategies to use which really helped me.

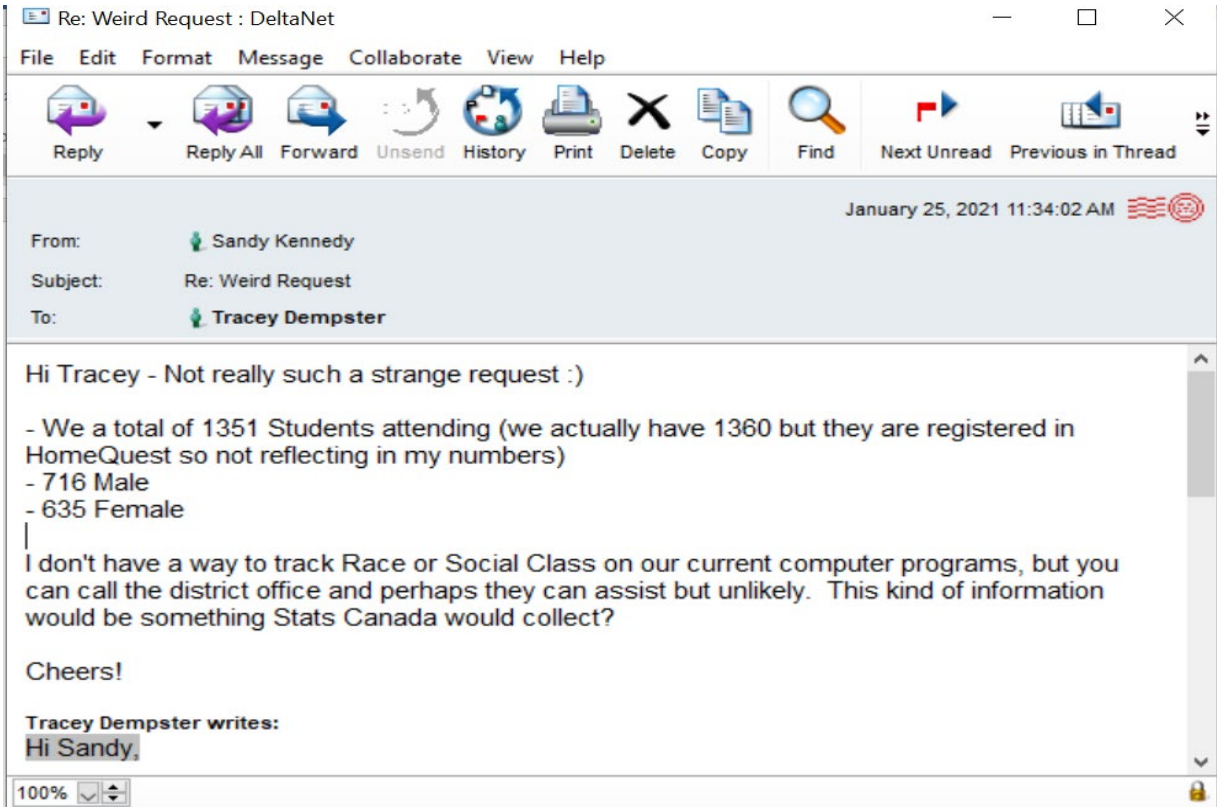
E: For what wasn't helpful, I think explaining adjusting and monitoring was a bit confusing for me cause it kind of seemed like the same thing to me. And the steps for the strategies for both of them could work for both.

P: I feel like the most important thing from the Strategic Action Cycle for me was that, realizing that I already did these things but I can use them to help myself in other circumstances. I think that was the most important thing for me. Because when I go back to teacher feedback or peer edit, I didn't actually realize I did these things to improve my work or to complete the task, right? But then after discussing those strategies, and understanding how they could be helpful, I think that actually helped me realize that I can actually use these not for only certain tasks but for other things too.

Appendix 12

Enrollment Information 2020/2021

Email from Sandy Kennedy, Student Records Clerk



Appendix 13

Study De-Briefing Script

Firstly, I want to thank you for your help with my study. I hope that you found participating in this study to be helpful. It all started because I wondered about the reasons for students sometimes needing more support from their teachers. I wondered why some students needed more help than others, why some types of assignments were more difficult, and whether I was helping my students in the best way possible. With this study, my goal was to see whether the Strategic Action Cycle would help with this, by giving you some clear ways to work through challenges on your own. I didn't want to tell you that I was looking at your ability to work on

your own after learning about these strategies, as I didn't want you to be embarrassed about asking for help whenever you needed it. In the end, I hope that it did help. I hope that you learned some valuable ways to take ownership of your own learning. Or more importantly, that you were reminded of some ways that you already knew, but you had either forgotten about them, or didn't even realize that it was a strategy that could help you. Either way, I hope that this will help you beyond English class – that the next time you need to learn anything, that you will remember that you have all kinds of ways to support your own learning. And you will realize that you're a more capable learner than you tend to realize.

Appendix 14

Discussion Group Transcripts – Highlighted for Major Themes

Theme
Beginning an Assignment
Focus During Class
Visual of Poster
Personal Ownership/Choice
Variety of Strategies
Independence
Application Outside of Class
Summative Comments

Group 1: Janice, Olivia, Sarah, Ashley

A: If another teacher, like in a different class, I would want them to know that I go by understanding things visually more and it just helps me get started. And I need a few seconds to process things and put my ideas together. Split them up step by step cause that's the way I like things.

Me: So then, did the visual of the poster really help you?

A: Yeah. Cause it told me things I can do like make a to-do list, try it, see if it works, go back to previous works, review more stuff, and then I have a decent spot I can start at.

J: Sometimes I don't use the Strategic Cycle for everything I do, like assignments, but whenever I sometimes get bored, or annoyed about an assignment, or I just don't want to start my work I might go and look and see if I can add any more steps to help me spread everything out.

S: I didn't really like the fact that we were putting our own ideas onto the Cycle. I just, I like getting straight on instructions, I guess. I don't really like, I don't know.

J: Like working under pressure. Like this is what you're…..

S: Sort of. I guess I just don't really want to go off my own ideas. I don't know.

Me: Why not?

S: Just cause it's easier for me, I guess, to just get someone to tell me what to do rather than myself instructing me cause what if I'm not right about it, or ….

J: But I think what's nice is we got to discuss it or if we disagreed with something we could change it. Like sometimes there would be, we would just have this, it was nice because if we think we were wrong about something, we could talk and ask about it before we actually use the strategy and mistaked it to be a good change.

O: For me, I think, having it there in class was actually kind of helpful cause then I could just look, for different stuff, I could just look and see what I'm supposed to do or what I can do to help me get unstuck. But not all the strategies were helpful, but, most of them.

Me: Are there any of the strategies that stand out to you as being not helpful?

S: I feel like "try it" is sort of in between, just try it, like sometimes it could work, sometimes it could not cause what if you misunderstand?

J: And for proofreading we were talking about how sometimes when we proofread each other we get pressurized by how good the other person writes, and then we feel like we haven't wrote it good enough.

S: Yeah!

J: And then we want to change it.

O: And we want to change it.

J: And our idea before was already very impactful and then we change it again and then we mess it up.

S: That's a really good point.

O: That's what we did for one of the assignments. And then we stopped because….

J: We stopped….

O: Actually I think it was better that we stopped because we just finished the assignment and then showed it to them like "is it ok?" and then they just said "yeah, it's good."

J: Sometimes unintentionally you help the other person write in your own perspective, but you're not letting them write, so it's kind of like we're writing it for them. So I think it's better if we just write on our own, see what we lack and then fix it. And also you feel bad afterwards since you think you might have messed up something in their writing.

Me: Anything else you want to add?

J: I feel like, for the Strategic Action Cycle, it was important for us to learn about it because I feel like you would want us to be more independent and have confidence so it's not like we would have to ask the teacher for everything. So this is a way for us to figure it out on our own other than having to … like have something in the back of our minds we could use whenever we're stuck to get unstuck. Figure stuff out. It was really helpful to have.

S: For question 5, it's important for other teachers to know that we were the people who put the ideas on the poster because then they know not to think too highly of it.

Me: What do you mean? Explain that.

S: I don't really know. It's not like an official thing, maybe, or …

Me: Got it. So you don't want a teacher…. if you were going into your French class with Monsieur Brown next quarter, and he had the Strategic Action Cycle, with all of the strategies up there, you would want him to know that those were your strategies, not put up there by teachers.

S: Yeah.

Me: Or experts, or what have you. So it's not the only, be all, end all, answer.

S: It could be a good thing though because then they know that it works for you, the people who put it up there.

O: Yeah, but I think they should, if they want, they should add things that can help us which will be kind of helpful cause things that we don't actually use, do, or think about. Kind of like new ideas on how to do it. That'll be helpful.

J: Cause if we're in a new class then we have different problems that we need to face so it's like we need other strategies to fit the problem.

O: Yeah, like for, let's say Math, like you said for English we can use a dictionary but for Math if we use a calculator and they tell us that we can't, then I think that's…..

Me: So then that strategy goes off.

S: Yeah. Like no dictionaries. No French dictionaries to help you.

J: You can't, like, proofread in Math. [holds hand out to Olivia] "Help proofread my test!"

S: It would be important for them to know that this was created in an English class. And they know that not all of the strategies work for this sort of class.

A: I also feel like with Sarah, what she said, they should know that we made it. It's because they can add things in their specific class that can help them. But then it could be stressful saying this was from a professional teacher because teachers know more stuff than us because, of course, because they teach it but if someone thinks the teacher made it, they want us to do all these things so it just pressurizes them in a way. But if they know other students made it they'll be like, "oh, I can just take this idea, try it out", and then maybe it will help them.

J: Yeah, and I feel like you might be really, if you're thinking this is what school, education, wants you to do then you might think that you're restricted to have to do it. But if they know it's us, we're the same age as them and we made it then they may be like, "Oh! This might have worked for them but it might not for me".

O: It's good that we can use it whenever we want, we don't have to use it cause then it just goes from, "Oh no, I didn't try it, I didn't ask someone and I didn't proofread it. Oh no! I didn't use a dictionary, that's not helping"

Me: So you liked that the strategies were optional, versus required?

All mutter agreement

S: What Janice was saying, the peer editing thing, they might think, "Ohmigosh, I have to peer edit now". But then if it was negative help, I guess?

A: And it helps with assignments cause if you're stuck on one part of an assignment you can skip it and think of something else you can do and then let others proofread it while you're doing something else. Cause that's what I had Heidi help me with. When I was writing half of my essay I told her to proofread it and then I started thinking of what I'll put in that. Cause, I mean, I have her opinion but I don't have my own opinion in there.

O: But sometimes it's good that we don't use their opinion. Yeah your opinion's nice, but it's my essay and I kind of want it to be what I'm thinking about and they might not be thinking about the same thing. So it's good that we get to choose.

S: With the last essay we just did, what if someone thinks that Tim was more … is handling the situation better than Donald had been. But then what if you think the opposite?

O: Yeah, and they're giving you ….

S: The wrong feedback. And maybe you might not notice that they're giving you the wrong feedback.

O: And if you change it then your essay's going to lower, it's not effective.

J: And if like others change it for you. We should know why they changed it. If they just change it for you, you're not going to know, "Oh. This part, I wasn't clear enough. I need to improve on it". Cause then you're just like, "Oh. They just changed it for me and it's good now".

O: Yeah, you can't really trust them, they're not perfect. You are, but they're not.

A: I also feel like the most helpful part for me, cause everyone has their own opinion on what is helpful to them, I think the strategies were more helpful cause some parts I didn't really get when you said in shorter form what to do, and then I see other kids doing what they're meant to be doing, opening their binders and stuff. So I know where to get started, then I just carry on with my work and I'm super focused in it, and I get it done. But I just need that boost and then I start.

O: It's helpful cause then it helps to remind you that you have notes and you could just look at them and then use them. Cause sometimes when it's stressful I don't even think about what I could use or what to do. But then when I look at that and it kind of reminds me that "Oh yeah, I have notes, I could just use that".

S: Yeah! It reminds you of strategies.

O: Yeah, it's like a reminder, I guess.

J: It's not required, but it's an option for when you're not in the mood. And I feel like the steps in the poster was really helpful cause it didn't say you had to go that way but it gave you the basics and if you wanted to follow it you could.

A: If it was required, just saying, if it was required then I'd feel more stressed to do my work and put all these things in my work, and then I would just forget about what I was mainly focusing on. I'd get off track and be like, "Oh, can you read my work and see if it's good or not?" And sometimes they'd just say it's good, right? But then you have this feeling inside that something's missing. But they don't know that you have this feeling or what you're trying to do, they just know that the grammar is good, yeah that's fine. But what about my ideas? Should I add anything to my ideas? Is there something I should do? For me, it didn't always work. Even if it does work, I still get side tracked to do what they told to do, and I forget what I was going to do or wanted to do.

S: Adding onto that, I feel like sometimes it can be a waste of time.

Me: What could be a waste of time?

S: Having peers edit. And then they don't actually really help you in a way, they're just like "Yeah, good, good job". But then it's like, "What did you do for me?" It just makes me mad.

O: Yeah. If they actually tell us it's wrong, or what's wrong, then that's actually helpful, But if they're just like, "Your essay's great, it's so good." Not saying any names

J: Yeah, the person might be like, I don't want to say something bad. Cause I don't want to change it. But then…..

A: You need those …..

Me: I understand what you're saying. I understand.

A: I also feel like if somebody gives me their idea, or their opinion, I can add onto that with my opinion, and it grows a good idea. Changing their opinion into my style of opinion and then doing what they told me to do but in my way.

Group 2: Rianna, David, Peter, Wade

R: The steps did help because when they broke down the assignments it helped me feel more organized, it was kind of like a to-do list. So it broke it down for me. It was really easy then. It made everything easier and you didn't have to go through those complicated strategies. It made everything specific and detailed. So it really helped.

P: I can agree, cause if you look at the way it's laid out I can follow the steps and it just makes the assignment easier.

R: On Google Classroom, we didn't use it, I felt I didn't use [the poster], it was just there. But it was still helpful to have in the classroom I feel. It was definitely helpful to have.

Me: So not so helpful on Google Classroom?

R: I would just turn and all the strategies would be there, they'd be detailed.

W: If you were across the classroom it was easier, if you were on the Chromebook working, you could just go on Google Classroom and it was easier to see it.

D: I think it was helpful having the poster with the strategies on Google Classroom and in the class because when you're struggling you can just look up and look at the poster or on Google Classroom if you want. At least it's there for you.

P: Instead of asking you to come over, you could try to be independent and look up at the poster or look at it on Google Classroom and find out strategies, maybe, that could help you get past your block.

D: It was also helpful on Google Classroom when you're not in class, like if you're at home, and you're struggling.

P: Yeah, cause you don't have a teacher at home.

Me: Did any of you use it at home?

R: Yeah.

P: For the essays.

D: Once to twice. When I was doing my essay and I was struggling or something then I could actually use it at home.

R: I kept two main strategies in mind, just not to overwhelm me, cause then I'll start getting, like I'll go everywhere in my mind, right? So I used, I kept two big strategies, like use feedback and like another one. And using those, like just keep on telling myself that, it was reassuring. And it was helpful.

Me: So jumping down to the fourth question, what was not helpful. Are you saying that there were too many strategies on the cycle?

R: I feel like certain strategies were kind of the same in some ways and they were kind of two of one, I guess.

P: The way it was sorted, I guess, for me, sometimes you have to search around.

R: Yeah, yeah. There were a lot of stickie notes for you, just having to look. There were like a lot of ideas but the ideas were really helpful.

Me: Can you think, in particular, of two that were too similar?

R: Ask teacher for help and ask classmate for help.

Me: You're thinking that we should have generalized it.

D: Just ask for help.

R: Yeah. Just ask for help.

D: For me what wasn't helpful was just some strategies just like, weren't really needed. Some of them I don't think that I ever, like, looked at.

R: Yeah, same.

D: But I used, I still used the whole cycle in general, like, I used it, but like some strategies I don't think I used.

Me: Can you think of one that didn't need to be up there?

D: Not really. I just know that I didn't use all of them.

P: Yeah, cause the ones that I couldn't, that didn't help don't usually cross my mind.

R: Exactly, like I kept two in mind from each kind of section and then that's all I could use.

P: It's the helpful ones that are more memorable.

W: There wasn't too many, it was just because different ones worked for different people. Just sometimes you had to look for a second to find the one you were looking for.

P: I think it is good to have so many strategies cause different people have different ways of solving things so, I guess, maybe, different strategies work for different people.

R: At least having a selection, and there was options, and just knowing they're up there is really good.

Me: So maybe I should have divided them differently, organized them differently on the poster, to make it a little bit more visually organized?

D: Maybe if it wasn't in a circle, if it was in a chart, and then you could just put the strategies more like that. Like columns or something like that.

R: They were all kind of, like, in each section they were just kind of an explosion of ideas.

P: I mean, that's also good, cause you could search for one that works for you and then you can keep that in mind.

Me: So something more linear.

P: Or maybe you could just organize the stickie notes in the circle better cause they're all kind of scattered around in different places, I mean.

D: If another teacher was to use it, I guess, I just want them to know that I've seen it before and that I know about it.

R: And, I don't know who the other teacher is, but for them to know that each student works differently. And they don't need to force it upon you to work a certain way. Cause it'll limit you, so not making them, they're not going to force you to use feedback or force you to ask someone else. They need to let you adjust to it yourself and see what fits you.

P: Specific strategies is good, but not, like, forcing it on someone.

P: I don't think that we did number 3.

Me: You kind of did.

P: I don't know how to explain it, cause all of them are helpful. The strategies are really helpful on the thing because that's kind of the main part I would say.

R: Yeah. Even you get mad at me when I overthink things to the max. But when you look at the steps, it really just flattens everything, and it's just, like, 'ok. I'm going to do this, it's going to be done, I'm good.

P: Overthinking things can put too many ideas into your head at once. Looking at the chart you can kind of re-fresh your mind and you can just base it on one idea.

R: Especially looking at the poster when I would look at it, it's just like a whole explosion.

D: Like even though I am saying that the whole circle could be more organized, it's still helpful that the poster was there, then I'm not trying to memorize all the everything.

P: It's been more helpful to have it then to not have it.

R: Especially since you covered so many ideas. That was really good. Even though it may not have been, it could have been in a better way, but it was still really good to have all those ideas there.

P: I'm sure everybody in the class has used it at least once. So that's, it's helpful for everybody.

D: I think also the fact that we've talked about so much in class, so you know in the back of your mind that it's up there. Since we talked about it so much, you're thinking about it. So you know it's up there to use. If we only talked about it once you wouldn't even think about it, right?

R: Yeah. You talked about it a lot which helped. It woke us up.

W: It reminds you.

R: It's here you for you, you have to, well you don't have it, it's going to be helpful, and showed us that.

P: It's really colorful so out of your peripheral vision you can see it, and then you're like, 'Oh there, I can look at that'.

R: That's a good point.

Me: So it's a good thing that I used the neon stickies instead of just the plain yellow?

D: Yeah, the colors kind of attract your eyes to it so even if you're not actually focusing on it, it's still, like, you see it, cause it's so bright colored.

R: Overall, it's an amazing device for us to use in class and I'm really happy that we got to use it.

D: It was very helpful.

Group 3: Elizabeth, Patty, Matt, Aaron

P: It did help to know the steps in the assignments, but I feel like the strategies were more helpful because the steps, like, I feel like the steps were too general and it's hard to actually like understand maybe like sometimes the difference between interpreting the task and like analyzing the work because sometimes analyzing the question can sometimes get confusing. So I feel like categorizing the stickie notes and, like, writing down the strategies, it really helped because it would tell like what the most suitable strategy for each category.

A: The strategies were more helpful because with the steps, they were a bit vague, but, because, like, I was kind of confused between monitoring and adjusting, but, like, the specific strategies did help me understand what each step meant.

P: It did help to have a poster because I feel like otherwise I would have forgotten to use it. [all others agreeing verbally while she's speaking "yeah"] Because since it was there, and, like, right at the front of the classroom kind of, you could see it from all directions. It really helped. If you were, like, stuck or something, you would just naturally look around the classroom, and that bright poster would be there, and you're like "ok". [lots of "yeah"s from other students, E: I agree with Patty"]

A: Sometimes, like, I looked to my past assignments to see feedback and everything, and it's right there in Google Classroom, so if I'm stuck I can just go there.

E: This is my first time seeing a poster like this, and it didn't only help for school, it also helped for everything in general, I guess, it really helped me to break down all my steps to do daily tasks and stuff.

Me: Like what?

E: Like dance. Cause, I think it was the monitoring or adjusting. But I think asking my teacher about feedback because since there were lots of students in my class they don't really, like, the teachers they don't really focus on each student, so it was after class I asked them which I never really did before cause I was kind of scared.

Me: What were you scared of?

E: I was scared cause I was kind of shy speaking in front of the class.

P: I think the part that wasn't helpful was, ok, so observing others did help me in PE more, but then I feel like for things that are more, cause that's where you would just do it, right, so then I feel like for things like Science, or maybe English, or maybe even Math, I feel like if you just watch the other person I feel like you don't actually understand what

they're doing. And it kind of, like, messes up your thought process and how you understand things. So sometimes if I were to look at someone else's, like proofread someone else's essay, and I looked at their conclusion, I feel like it would be hard to get on my own train of thought and just get stuck on what they wrote and try to find a way around that. So I guess sometimes it can get a little confusing if you would observe others to, like, do things that require a bit more thinking.

A: Especially with like English because in all the essays everyone would have their own interpretations of all the tasks and so you could get confused. And one of the strategies was to skip through the hard parts and go back later. That wasn't really helpful for me because if I don't do something in the right way, it will be on my mind for the rest of the time and it will cause more stress.

P: If another teacher was to use the Strategic Action Cycle, I would recommend, so before, with only the poster, it's too generalized. But I feel like with the stickie notes on it it was better. But if you specify the task too much, like you narrow down the strategies way too much, and do way too specific tasks, that makes it more confusing because it leaves less space for thinking what you can do. Because it kind of narrows down the little bubble between what I can do and what I can't.

Me: So when you say that, you mean, narrowing into "these are the only strategies that you can use here"?

P: Yes. Rather than people trying to find out what they really want to do. Cause if you specify the task too much, then I feel like it kind of narrows down what you think helps you, and it doesn't let you realize whether these strategies really help you or not. Cause when you specify the task it makes you feel like you have to do that.

A: I feel like there should be a medium between no specifications and saying, "This is the chart, use it" and, like, specific boundaries. So you know what you can use but you also have room for your own thought process.

M: There shouldn't be like, the strategies shouldn't be specified for only one part because many of them can be used in other areas too. Cause then it can actually make you feel like you're doing it wrong. It might just mess with your mind.

Me: Did you notice yourself using it in places outside of PE and English? I know that Mr. Lund and I were both talking about this, but did you notice it outside of school? It's ok if the answer's no.

M: I actually did, cause I do coding and it actually helped me break down the steps for when I'm actually making a game or something.

A: Same with me. I have guitar lessons, so it also helped encourage me kind of because sometimes it's confusing and I didn't know if what I was doing was right or wrong.

P: I don't know if it really helped me. I don't think it did. Because I haven't really done anything that's new the past year since Covid started, and this was the first time I

was actually introduced to the Strategic Action Cycle so I feel like everything I was already doing, I already had a set way of doing it so I don't feel like I would really refer to it. Because most of the things, like swimming and skating, I already had lessons, and I already know how to do it, and how to get past those challenges when I'm stuck, so I don't feel like I referred to it because I already had a solution. But when I was reading, cause now I have more free time for reading, this isn't related to the Action Cycle, but when you told me that you actually read aloud in your head I realized that I actually do that even though I didn't know that before. Because it plays in my head like a movie and I feel like, analyzing, understanding how I read books helps me understand what types of genres I enjoy more. So maybe that's related.

A: Similar to what [P] said, when you said that, I do do that. I knew that I do that, I just didn't know it was a thing. Cause when I'm reading aloud in my head, I kind of have, it's like I'm there witnessing it happening instead of just reading words off a page.

E: What they were talking about before about observing others, I agree with them because it did throw me off a bit because when we were writing essays, I read some other people's essays and it kind of limited the way that I thought a bit more, and since we all have different ways of thinking and different personalities, so I think next time I would try to work more independently and then peer edit others' essays once I've begun.

M: I agree to that, but also, observing others can also probably be motivation because you might want to do better than them. But everyone still has their different opinions and interpretations so it can throw you off.

A: Overall, I think that the Strategic Action Cycle helped me, to, an example would be that sometimes I had trouble with punctuation and telling where commas go and stuff, but proofreading out loud really helped me to know. It gave me strategies to use which really helped me.

E: For what wasn't helpful, I think explaining adjusting and monitoring was a bit confusing for me cause it kind of seemed like the same thing to me. And the steps for the strategies for both of them could work for both.

P: I feel like the most important thing from the Strategic Action Cycle for me was that, realizing that I already did these things but I can use them to help myself in other circumstances. I think that was the most important thing for me. Because when I go back to teacher feedback or peer edit, I didn't actually realize I did these things to improve my work or to complete the task, right? But then after discussing those strategies, and understanding how they could be helpful, I think that actually helped me realize that I can actually use these not for only certain tasks but for other things too.