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How Student-Led Goal Setting and Self-Monitoring of Progress Impacts Self-Efficacy Among Third Graders at an International School in Eastern Europe

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HOW STUDENT-LED GOAL SETTING AND SELF-MONITORING OF PROGRESS

IMPACTS SELF-EFFICACY AMONG THIRD GRADERS AT AN EASTERN

EUROPEAN INTERNATIONAL SCHOOL

by

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To my parents, Deb and Paul, my sister, Hannah, and my Aunt Judy for your support and encouragement throughout this journey. And to Baby Jacob, may you grow up to know that the only limits of what you can accomplish are the ones you impose upon yourself.

ACKNOWLEDGEMENTS

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CHAPTER ONE

Introduction

Noted author and professor C. S. Lewis once wrote, "the task of the modern educator is not to cut down jungles, but to irrigate deserts" (Lewis, 1944, p. 13). In my nine years of teaching international students from affluent families, I have often felt like an irrigator of deserts. While the students I work with are generally bright and have a variety of life experiences that enrich the class, some of them seemed to lack internal motivation and independence in the classroom. Most of the students had a desire to do well and be successful in school, but many appeared to miss the connection between work and learning that is necessary to reach success. I wanted to find a way to help my students increase their independence and take ownership in their own learning, and to believe in their own ability to get the results they desired. A person's beliefs about his/her ability to adapt his/her own behavior to achieve a desired goal or outcome is known in the psychology literature as the theory of self-efficacy (Arslan, 2012). With these reflections, I have posed the following research question: *How does student-led goal setting and self-monitoring of progress impact self-efficacy among third graders at an Eastern European international school?*

There are three parts to the first chapter of my Capstone. First, I will outline my background as a teacher and the experiences that have led to my interest in this topic. Second, I will talk about the purpose of my research on this topic. Third, I will talk about the potential benefits of this study, the implications for change in the way I teach, and the potential for change in goal setting protocols at my current school.

Researcher's Background

I am a White American woman who grew up in a suburban Minnesotan town. The student body of the primary and secondary schools I attended was made up predominantly of other White students with parents who had been born and raised in America. I attended college in a small Minnesota town, and fell in love with international travel through a semester I spent abroad in the Middle East. Through connections at my college, I was introduced to the concept of international school teaching.

I began my teaching career working at a private, English language boarding school in India through my student teaching practicum in 2006. Throughout my undergraduate coursework, I had spent a lot of my observation hours working at schools that had a high population of students on free and reduced lunch, and in urban school populations in the United States. It was quite a change, then, to move to a private school where annual tuition cost thousands of dollars. My school was one of many Hill Station schools in India that had been established by British missionaries in the 1800s. It was founded, and continues to serve, as a boarding school, so that children could receive an education in a more temperate environment while their parents completed their missionary work. When the British rule over India ended, my school continued to function as an elite boarding school, accepting an increasingly diverse and economically privileged population.

In the fifth grade class I worked with throughout my student teaching, I met students whose lives and upbringing differed considerably from my own. One student proudly showed me the box of pasta, sold all over India, with her face on the front, a perk of being the child of the company CEO. Another student, during a conversation about

frustrations, talked about how annoying it had been to fly coach on a recent flight. There was an unbelievable amount of wealth and privilege in this community, but as a boarding school, routines were set up to help students gain independence and control over their lives. There was an hour-long nightly study hall, where a rotation of teachers would supervise the students and help them to use effective study habits. Students were responsible for completing chores in their dorms. Frequent dorm inspections ensured that students were taking responsibility for their own belongings. While new students to the school often showed confusion or aversion to the working routines of the school, with time, the structure of the school environment helped to build up the students' work ethic, independence, and self-efficacy in caring for themselves and their academic work.

In 2008, I accepted my first full-time teaching job in a fifth grade classroom at a private international school in Kuwait. This school served 1,600 students who were predominantly Kuwaiti citizens or Arab students from neighboring countries. This day school was a top choice for wealthy national families who wanted their children to receive English language instruction. With tuition ranging from US$14,000-$18,000 per year, attending the school was also seen as a status symbol for many families.

I immediately saw many differences between the ways in which my students in Kuwait and India approached schoolwork. In Kuwait, most of the students came from homes where there were nannies, drivers, cooks, cleaning staff, and often tutors to assist with schoolwork. Nannies would escort the children to school every morning, often carrying the children's backpacks all the way to the classroom door. Homework might be turned in with handwriting that did not match the student's, and the student might have no idea what was written on the paper when questioned. While the students often verbally

expressed a desire to do well in school, or to achieve top marks, it often seemed like they had no idea of the steps needed to achieve that success.

The discovery of Kuwaiti oil in the 1930s led to an unimaginable influx of wealth in the country, and all Kuwaitis received monthly stipends from the government simply for being Kuwaiti citizens. This quick and unprecedented change in economic structure from a nomadic society whose trade focused around pearl diving, to one of the wealthiest nations in the world, had a significant impact on the culture of Kuwait. Kuwait now has more foreign-born workers living in the country than Kuwaiti citizens, and these foreigners provide the majority of service-based jobs. Many Kuwaitis, as a result of their monthly government stipends, are able to work reduced hours or hold jobs in title only in the Kuwaiti government. I saw the results of these changes in my classroom, where students often lacked an understanding of the work that comes in between a desire to do well academically and actually achieving academic success.

After four years in Kuwait, I decided to move to a private international school in a capital city of former-Soviet Eastern Europe. Since 2012, I have taught third grade at a K-12 school that follows the International Baccalaureate programs for all grades. The student body is truly international; students from more than 40 countries represent 70% of the school population and national students comprise the remaining 30%. Tuition at the school is approximately US$20,000-$28,000 per year, so the national students represent the wealthiest families of the nation. At the school we have children of former presidents, current parliament members, and CEOs of major companies. The international population is comprised of children of foreign embassy workers, international businesspeople, and non-governmental organization/foreign aid workers. For most

international families, tuition is provided by employers, who make the international posting attractive by covering the fees for English language, Western university preparatory programs at these international schools. National families pay the school fees themselves. Similar to Kuwait, the wealthy families often employ helpers at home such as nannies, cooks, drivers, and tutors. The culture is starting to change in the country, but for a long time, coming from a wealthy family with powerful connections was enough to ensure many economic and legal privileges in the country over less wealthy nationals. Again, along with this privilege, I have seen a general disconnect with my students when analyzing the academic results the students desire and the actual efforts they put into achieving these results.

Classroom Research

Throughout my four years at my current school, I saw the same struggles: students expressed the desire to do well in class, but often seemed to lack the understanding of the relationship between effort and academic success. When reflecting on classroom assignments or completing a self-assessment, students were often unable to articulate what they did well, what they needed to work on, or what they would do differently to improve the task if they completed it again. The use of rubrics, exemplars, and classroom discussions about work and results made some impact, but it did not seem to reach all students. While I had seen many students able to parrot what they should do in terms of work habits back to me, these skills and dispositions had not become entrenched in the culture of learning in my classroom. Parents, who often came from a traditional "drill and kill" instructional style background, had expressed a lack of knowledge on how to help their child be successful in our more flexible, student-centered

classrooms. This cultural clash between the constructivist, inquiry based instructional style in which I was trained, and what parents from different cultural backgrounds might expect out of their child's school based on their own educational experiences, created an atmosphere in which many children received mixed messages between home and school. Additionally, the level of privilege and assistance students experienced outside of the classroom had created an environment where it was difficult for students to see how their own efforts corresponded with their results, and what is required to achieve the results they desire. It became clear to me that the focus of my classroom research should be on improving my students' self-efficacy to help them develop the learning dispositions and skills necessary for academic success.

Purpose

During my study, I hoped to deepen my understanding on how increasing student ownership in the learning process could potentially help increase independence and self-efficacy in the classroom. I had seen students, parents, and teachers express frustration when students lacked the skills to independently move forward in their learning. Thus, my hope was that by implementing student-led goal setting in my classroom and assisting students in developing a plan and monitoring their own progress, they would be able to function more independently in their schoolwork and increase their self-efficacy.

Conclusion

Chapter One has focused on my background and personal experiences working with students from economically privileged backgrounds at international schools. I have described the student population at my current school and the overall lack of independent effort I have seen in their work in and out of class. I have explained how my observations

led me to my research topic of self-efficacy, and my desire to help my students gain independence and ownership in their own learning through goal setting and self-monitoring of progress.

In Chapter Two, I will summarize my literature review on self-efficacy and increasing student independence through goal setting. I will look at the areas of learning that self-efficacy affects, the causes of self-efficacy, and the effects of both positive and negative self-efficacy. I will examine ways that teachers can work with students to improve self-efficacy such as through goal setting. The purpose of goal setting, guidelines for goal setting, and advantages of student self-monitoring of goal-setting will all be explored as I attempt to answer my question, *How does student-led goal setting and self-monitoring of progress impact self-efficacy in a grade three classroom at an Eastern European international school?*

CHAPTER TWO

Literature Review

Introduction and Preview

My career as a primary school teacher at private international schools in multiple countries led me to use action research to examine ways to build positive self-efficacy in students. Because international schools mainly serve students from families who are economically privileged, in the form of either host country nationals who can afford the tuition or children of diplomats and foreign business workers, the student body has lived very comfortable lives. When students are at home, they often have their every need met immediately. I have found that this attitude often transfers to school, where many students desire to be successful, but may not be sure what to do to achieve that success independently. I chose to explore this topic so I could better help my students perform the work necessary to become independent and self-motivated learners.

In this chapter, I will explore the literature related to the question of this Capstone, which is, *How does student-led goal setting and self-monitoring of progress impact self-efficacy among third graders at an Eastern European international school?* First, I will examine the idea of self-efficacy. The literature selected will define what self-efficacy is and explore the different ways in which self-efficacy affects human beings. I will then further define the determinants self-efficacy and the effects of both positive and negative self-efficacy. Finally, I will clarify what the literature says teachers can do to help raise positive self-efficacy in their students, which includes using goal setting at school to help improve achievement.

With the background on self-efficacy laid out, the second section of this chapter will look at goal setting in the primary classroom. The purpose of goal setting, different types of goals, guidelines for setting goals, and methods of recording progress will all be examined in this section, to see how to maximize the positive effects of goal setting.

Finally, I will explore the benefits of students being in charge of setting their goals and self-monitoring their progress. I will examine different techniques students can use to keep track of what they are seeing, and why this is advantageous for students. This background information will inform my methods as I seek to answer my research question.

Definition of Self-Efficacy

Self-efficacy is an idea first explored by Canadian American psychologist Dr. Albert Bandura in the 1980s. Self-efficacy expectations are a person's beliefs about whether she/he can manage a behavior in order to successfully achieve a result and get the desired consequence (Arslan, 2012). People's beliefs about the extent of control they have over what they are able to accomplish and in events that have an impact on their lives help to create their self-efficacy.

A person's self-efficacy is shaped by many factors. Perceived self-efficacy is not merely a reflection of prior performances at a task, but also, a belief in the self that is formed from a variety of processes (Bandura & Locke, 2003). When people make greater accomplishments than they had in the past, they typically continue building their self-efficacy and satisfaction. However, people are less satisfied with smaller progress after making more significant progress (Bandura & Locke, 2003). To continue to build self-

efficacy after a successful experience, people must believe in their ability to achieve even greater goals.

Self-efficacy is said to influence one's behaviors and perceptions, and influences motivation, socialization, and self-evaluation of behavior (Bandura, 2012). Self-efficacy has an impact on nearly all parts of people's lives, such as whether they think productively or pessimistically, the degree to which they can motivate themselves and continue even in difficult conditions, how susceptible they are to stress and depression, and what types of life choices they make (Pajares, Johnson & Usher, 2007).

While self-efficacy affects a person's whole life, it is particularly important in looking at who a student is as a learner. Self-efficacy affects academic achievement, organizational productivity, entrepreneurship, and social relationships. These beliefs are formed not through a single task, but through a range of experiences (Bandura, 2012). Self-efficacy helps to explain why two students of equal academic ability might perform very differently on the same task (Pajares & Valiante, 2009). It is important to note that self-efficacy does not always correlate highly with ability levels, as there are many components that influence self-efficacy (Phillips & Gully, 1997). Students can have very high self-efficacy that helps them to achieve academic success through hard work even if their inherent ability level is lower. Conversely, students can have innate abilities but achieve lower results because their low self-efficacy prevents them from attempting a task. Significantly, self-efficacy perceptions are one of the best predictors of student behavior in school, as students tend to live up to the expectations they set for themselves, positive or negative (Phillips & Gully, 1997). While self-efficacy can be an excellent predictor of a student's achievements, one should note that self-efficacy only refers to

recognized capabilities, not to exact outcomes of learning engagements (Phillips & Gully, 1997).

Pajares and Valiante (2009) write that self-efficacy "mediates between the influences that are the sources of its creation and subsequent behavior" (p. 353). Because self-efficacy has such a direct effect on a student's academic output, teachers must both understand the causes of a student's self-efficacy as well as have ideas of how to support the student in developing positive behaviors to help the student maximize her/his learning. There are four major components that self-efficacy affects that must be examined. These areas are cognitive, motivational, affective, and selection processes (Bandura, 1993).

Self-Efficacy and Cognitive Processes

Self-efficacy has a significant impact on the way in which a person seeks and uses knowledge (Bandura, 1993). Much of human behavior comes as a result of goals people set for themselves based on what they think they can do. People with higher levels of self-efficacy will likely set bigger challenges in their goals than people with lower self-efficacy. The reason for this is because people's actions begin with their thoughts, and people with high self-efficacy will think about and visualize success, while people with low self-efficacy will visualize failure (Bandura, 1993). For people to be successful, they not only need skills to accomplish something, but also the belief that they can accomplish something. An important part of the cognitive process is whether students view ability as being acquirable or fixed. For students who believe it is fixed, being unsuccessful on a task will very likely lower their self-efficacy. For students who believe it is acquirable, struggles will make them more resilient (Bandura, 1993). Additionally, students who

believe that intellectual abilities can be developed tend to actually demonstrate higher academic achievement than students who believe their abilities are fixed (Dweck, 2012).

Self-Efficacy and Motivational Processes

While self-efficacy affects a person's attitude towards acquiring knowledge, and therefore the way a person acquires and uses knowledge, it also has a noticeable impact on the motivation a person has for learning and for other important life tasks. Motivation is the belief that a behavior will affect an outcome, as well as the level of the outcome. Therefore, self-efficacy plays a large role in the level of motivation a student has in reaching a desired outcome (Bandura, 1993).

Self-efficacy is related to motivation in many ways. First, people's beliefs affect which goals they select for themselves, the amount of effort put into reaching them, whether a person perseveres when there are obstacles, and how a person is affected by adversity in meeting the goals (Bandura, 1993). Students who have high self-efficacy usually attribute their failures to a lack of effort, whereas students with low self-efficacy believe their failures are based on their low ability (Bandura, 1993). These beliefs become a self-fulfilling prophecy, in which students often continue the same pattern and achieve the results they believe they will get, regardless of their actual ability.

Goal setting can play a significant role in motivation, because it gives students direction for their behavior and incentivizes achieving a goal to feel a greater level of self-satisfaction. There have been many studies that show that goals that are explicit and challenging help with sustaining motivation (Bandura, 1993). For example, a student's academic expectations are said to have a large impact on subsequent performance (Eccles

& Wigfield, 2002). The role of goal setting in increasing students' self-efficacy will be further explored later in this chapter.

Self-Efficacy and Affective Processes

Not only does self-efficacy affect cognitive and motivational processes, but it also has a notable impact on people's emotional states. People who have low self-efficacy will experience higher levels of stress and depression when faced with stressful situations, which will exacerbate anxiety, as they often feel they cannot control these feelings (Bandura, 1993). Some symptoms of the stress from threats include an accelerated heartbeat, rising blood pressure, the release of stress-related hormones, and reduced immune function. Excessive stress can affect students with low self-efficacy even if they are doing well in school. School-related anxiety can have little or no relationship with actual academic performance, but can be related to students' thoughts on their academic self-efficacy. A low sense of self-efficacy can produce depression when aspirations are not fulfilled (Bandura, 1993). When students are able to exercise control over potential stresses or threats, they are often able to lower their anxiety levels, which allows them to potentially increase their academic performance (Zukosky, 2009). When people work to build their self-efficacy, they can go through difficult situations without experiencing stressful reactions (Bandura, 1993).

Self-Efficacy and Selection Processes

Self-efficacy also affects social behavior. Students who have a high feeling of self-efficacy are more social, less aggressive physically and verbally, and less likely to engage in harmful behaviors (Bandura, 1993). Self-efficacy will affect people after their academic career; it can affect their entire life choice patterns. People with higher self-

efficacy believe they have a range of career choices, whereas people with low self-efficacy might feel trapped into a career they know they can be successful in but that does not challenge or fulfill them. People with high self-efficacy are more likely to take a risk in making a career choice to try a career that is both challenging as well as self-satisfying (Bandura, 1993).

Causes of Self-Efficacy

There are a variety of factors that form a person's self-efficacy. These factors can be both personal as well as situational (Phillips & Gully, 1997). The most significant influence on efficacy beliefs is the results students obtain from their work and how they interpret their efforts (Pajares & Valiante, 2009). Students often compare their performance with others, through grades or feedback received on their performance. As students compare themselves to others, the perceived differences can have strong implications on their own personal efficacy. When students believe they are performing better than their peers, their self-efficacy often increases. When they see problems in their own performance, their self-efficacy diminishes (Bandura, 1993).

Overall, as Arlsan (2012) notes, self-efficacy comes from four different sources. The first source is performance accomplishments, which come from students' performance in the classroom. If they are generally successful, their self-efficacy will be more positive, whereas unsuccessful experiences lead to negative self-efficacy. Second, vicarious experiences, where students compare their performance to that of their peers, can influence self-efficacy positively if they compare favorably, or negatively if they do not meet their peers' standards. Third, verbal persuasion is when students are convinced by positive (or negative) words from parents or teachers that they are capable or

incapable of completing a task. Finally, psychological state can influence a student's self-efficacy.

Effects of Positive Self-Efficacy

If students have positive self-efficacy, it can be an enormous advantage to their academic career. According to Bandura and Locke (2003), research has supported the theory that "efficacy beliefs contribute significantly to the level of motivation and performance" (p. 87). More specifically, there is a correlation between higher levels of self-efficacy and realizing academic goals (Kandemir, 2014). Students with higher self-efficacy will typically set higher goals for themselves, and thus produce higher results. Conversely, students with lower self-efficacy tend to set lower goals for themselves, and as a result are more likely to have lower achievement rates (Phillips & Gully, 1997). Self-efficacy also affects academic performance in every subject area (Pajares, Johnson & Usher, 2007). As a result, students with higher levels of self-efficacy are likely to perform well even in subjects that they struggle with.

Students with higher self-efficacy also tend to work more efficiently (Bandura & Locke, 2003). Students with higher levels of self-efficacy often begin a task and maintain the effort needed to succeed (Bandura & Locke, 2003). Other studies have shown that students who have high self-efficacy, regardless of actual ability level, are more likely to try new strategies, will rework problems when they struggle, and will complete their work more accurately than their peers with equal ability but with lower self-efficacy (Bandura, 1993). When faced with adversity, students with higher self-efficacy tend to set even higher goals for themselves, and work even harder to achieve them (Bandura, 2012). When students have high self-efficacy for a subject area they will typically show

more interest in the subject matter, as well as more perseverance and resiliency in the face of obstacles (Pajares & Valiante, 2009).

Outside of formal education, self-efficacy has a meaningful impact on the success and quality of a person's life. Studies have shown that students with higher self-efficacy tend to be more responsible and have more self-respect as adults (Kandemir, 2014). People's self-efficacy affects their regulation of emotional states, options they will consider, and choices they make. People with positive self-efficacy from early childhood will generally set their lives on a positive path (Bandura, 2012).

Effects of Low Self-Efficacy

While having positive self-efficacy leads to a variety of positive behaviors, having low self-efficacy can often lead to a variety of negative behaviors. If people have negative self-efficacy, they might become apathetic or despondent if they fail initially at a task, rather than just increasing their effort, like a person with high self-efficacy would. People who have low self-efficacy often give up on tasks early (Bandura & Locke, 2003). If students have weak self-efficacy they are less likely to be interested in learning, can struggle to concentrate on tasks, and may not want to face difficulties or may struggle to overcome them (Arslan, 2012). Students who have low self-efficacy will often avoid tasks or exert less effort and give up more quickly than students with high self-efficacy (Schunk, 1990).

Having low self-efficacy can delay opportunities for change. If students do not believe in their own self-efficacy, they are not likely to change even if they are in an environment that gives them many opportunities to create change (Bandura, 1993). The

negative self-efficacy perpetuates itself, leading students to feel trapped, helpless, and unable to change their negative thinking cycle.

Ways to Shape Self-Efficacy

Parents and teachers can play a large role in helping to improve a student's self-efficacy (Pajares, Johnson & Usher, 2007). To start with, teachers should attempt to find the factors contributing to students' self-efficacy so they can determine the best way to help their students maximize their academic potential (Pajares, Johnson & Usher, 2007). One way that teachers and parents can help support positive self-efficacy is through positive feedback that praises a child's efforts. Parents can have a significant impact on their children's self-efficacy by trying to build these positive beliefs, in addition to setting high standards for their children. If parents do not build the self-efficacy as well as have set expectations, their children might view a given expectation as too difficult and therefore become discouraged and/or disregard it (Bandura, 1993). Feedback from teachers, assessments, and peers can make a significant impact on self-efficacy. When the feedback focuses on progress as well as the efforts of the student, self-efficacy is enhanced. When shortfalls or problems are emphasized, self-efficacy deteriorates (Bandura, 1993).

The classroom environment can also impact self-efficacy. The way instruction is set up can help build students' sense of self-efficacy. To maximize student self-belief in a unit, teachers should start by modeling and using scaffolding strategies to introduce the topic. Students should have many opportunities to apply the new information in a variety of contexts. As students become more comfortable, they should be given more and more opportunities to work independently and to try self-directed activities that will help build

their personal efficacy. This gradual approach helps to build students' beliefs in what they can do independently (Bandura, 1993). Classrooms where students are encouraged and challenged in a developmentally appropriate manner, and where the students feel comfortable and able to express themselves, also help to develop positive self-efficacy in students (Arslan, 2012). Finally, to improve self-efficacy, students must feel a sense of control in the learning environment. They should feel a sense of agency and autonomy in the classroom rather than feeling like passive learners where the teacher makes all of the decisions. When learners feel empowered through their choices, their self-efficacy generally improves (Bandura, 1993).

Self-efficacy is a person's belief that her/his behavior can, or cannot, affect her/his ability to achieve a desired outcome. Self-efficacy affects people's cognitive processes in the ways in which they seek and use knowledge, motivation to complete tasks, affective processes in terms of the levels of stress and anxiety a person feels, and selection processes as a person selects a career and creates a life they want to live. While there are many different causes of self-efficacy, teachers are key professionals who can help students build their self-efficacy. In the next section, I will explore one way teachers can do this through the use of goal setting.

<center>**Purpose of Goal Setting**</center>

There are many reasons why goal setting can be an effective way to raise students' self-efficacy. By creating their own goals and actively working to accomplish them, students can redefine who they are as learners. Goal setting can help students increase their self-efficacy, or more specifically, their confidence in their ability to perform a variety of tasks. The accomplishment that students feel from fulfilling a goal

will help keep them motivated to continue the goal-setting process as a lifelong habit (Szente, 2007). Usually, students' appraisal of their self-efficacy can be raised by success in the classroom and lowered by failure, especially when students compare their performance to others (Schunk, 2003). Goal setting helps many students to define what they need to work on, and allows students to measure progress against themselves or a standard, rather than comparing themselves to others. Schunk (2003) supports the above assertion: "Goal progress and accomplishment convey to students that they are capable of performing well, which enhances self-efficacy for continued learning" (p. 160).

In addition to gaining independence and improving their self-efficacy, goal setting is a way for students to increase their self-determination, because they make choices about their lives and learning in the classroom. It also means they are developing important skills, such as decision-making, problem solving, and self-instruction (Chan, Graham-Day, Ressa, Peters, & Konrad, 2014). These learning skills are critical for ensuring future success, as they are skills that will be used throughout students' academic careers and into their working life. Empowering students to make choices and follow through within school gives them confidence not only as learners but also as the director of their learning.

Goal setting has the additional benefit of supporting students with a wide range of needs and from a variety of backgrounds. Even students with moderate disabilities show greater ownership in their learning when working towards specific goals (Zentall & Beike, 2012). While goal setting is often discussed in the context of middle and secondary students, it can be appropriate for lower elementary students as well. Starting the process of goal setting at a young age builds kids' decision making and problem

solving skills so that they can use these skills as they progress through their studies (Palmer & Wehmeyer, 2003). Student achievement in school can also be linked to goal setting. Research has shown that students with higher levels of achievements report having used goal setting more often than students with lower achievement (Cheung, 2004). Teaching students how to set goals in the primary grades can help them establish beneficial lifelong habits, such as identifying weaknesses and creating a plan to fix them, and continuing to strive for improvement rather than accepting the current status quo.

Goal setting benefits teachers as well as students. As students set and monitor their own behavioral and academic goals, teachers can play a role of checking in rather than mandating each process. As students successfully meet their goals, teachers can move on to the next task. Moore, Prebble, Robertson, Waetford, and Anderson (2010) note, "When students control their own behaviour, teachers can devote more time to skill development, rather than behavioural control" (p. 256). As students gain greater autonomy in their learning, teachers use their time for meaningful conferencing and support rather than micromanaging each part of the students' day.

Guidelines for Goal Setting

As teachers begin implementing goal setting in the classroom, there are many factors that need to be considered. Teaching students how to set goals needs to be deliberate and intentional. Students need to understand what goal setting is, and why it is important to their academic success. Students need to be given the autonomy to create goals that are meaningful and relevant to them, so that they are engaged in trying to meet their goals. They also need guidance in terms of how to transform their goals into a learning plan, and how to monitor and track their progress. This process should be guided

by the teacher, and include the explicit teaching of goal setting techniques (Cheung 2004).

Mastery vs. Performance Goals

Goal setting can take a variety of forms. There are two major types of academic goals: mastery goals and performance goals. Hidi & Harackiewicz (2000) have found that mastery goals, where students attempt to acquire new skills or improve their level of understanding, are more effective at motivating students. An example of a mastery goal is being able to use ten new science vocabulary words in context. Performance goals, which focus on ability instead of the effort put into a task and negatively affect student motivation. An example of a performance goal is a student's desire to achieve a perfect score on a science test (p. 160).

Teachers should teach the difference between the two types of goals, and give their students guidance in creating mastery goals. When goals are learning oriented, students show more motivation to overcome obstacles in their learning (Hidi & Harackiewicz 2000). When goals are performance oriented, students tend to have less motivation when they face an obstacle in their performance (Cheung 2004). Helping students continue working even when they face an obstacle is one of the major benefits of goals. Hidi and Harakiewicz (2000) wrote that mastery goals lead to "task involvement, self-efficacy, and interest in activities" (p. 165).

Specifics of Goals

Once students understand what a goal is and what kind of goals should be created, teachers need to work with students to help them develop goals specific to their own academic and behavioral needs. Goals should be developed in language that is clear, such

as "I Can" statements (Chan, et al., 2014). For example, a teacher could first have students identify negative thoughts about themselves, and then turn these ideas into positive statements that can be part of the student goal (Szente, 2007). A range of possible goal topics should be explored, with the student and teacher working together to choose which topics are most important. Students will be particularly interested in mastering goals on topics that are interesting to them, so goal setting should start with these types of topics and then move to other areas the student needs to work on (Hidi & Harackiewicz, 2000).

Students need to be taught the difference between specific and general goals. Szente (2007) notes that goals that are specific to a task, rather than more general in nature, help students to know what to do and begin to invest their time in working to achieve their goal. Specific goals are also easier for students to understand. For example, Schunk writes that goals only improve motivation and self-efficacy if they are specific enough in their standard so that students understand what they should work toward (Schunk, 2003). In addition to needing to be specific, Szente argues that goal setting should start with achievable goals at the beginning of the process, so that students begin feeling the momentum of success, and from there students can build towards larger-scale goals (as cited in Bandura, 1993). That is, it is to a student's benefit to create moderately difficult goals. After students have mastered a couple of small goals, they are ready to be further challenged with more complex or difficult goals (Schunk, 2003).

After a goal has been created, there are specific criteria that the goal must meet in order to be effective for the goal-setter. The goal must be specific, challenging but still attainable for the student, fully agreed upon by the student, and monitored with feedback

from the teacher and/or classmates (Moore, Prebble, Robertson, Waetford, & Anderson, 2010). Once goals have been formed that meet all of these criteria, they can be implemented in a classroom.

Following Through

The benefits of student goal-setting include having students who are clear about what their goals are. Additionally, students should receive timely feedback that gives specific examples of areas for improvement. It also allows students to self-assess their own work, and to monitor their academic growth over time (Chan, et al., 2014). Students should know what to look for as they begin to implement their goals. For students to monitor their own progress, they must have criteria against which to measure their progress (Moore, Prebble, Robertson, Waetford, & Anderson, 2010).

Teachers and students must work together as students try to reach their goals. At the beginning, students can benefit from creating step-by-step lists of what they need to do to accomplish the goal. Ongoing feedback is an important component of goal setting, as it helps to further motivate individuals to continue to try to attain their goals (Szente, 2007). Goals need to be referenced at different parts of the day by the teacher to keep them fresh on the students' minds. Prior to beginning the process, students need to be clear what their goals are and how they relate to the learning objectives and/or tasks. That is, students need to monitor their progress toward their goal, and after the activity, reflect on the progress (Schunk, 2003). By staying involved in the process of helping students to remember and work towards their goals, teachers can help increase the chance that students achieve their goals.

Recording Progress Through GAS

One method through which student goals can be measured is through the Goal

Attainment Scales (GAS), which was developed by Kiresuk and Sherman in 1968 (as

cited in Roach & Elliott, 2005). There are six steps in this process. First, the teacher

identifies the student's strengths and areas for improvement by using assessment data and

observations on student strengths and weaknesses in mastering the school curriculum.

The teacher then decides which behaviors to target and writes the goal in language that is

easily understood by the student. Next, the teacher decides on the instruction or

intervention that he or she will use to support the goal. From there, a GAS is constructed

on a five-point scale ranging from -2 for the worst possible outcome to 2 for best possible

outcome; 0 points signify no observable change in behavior (Roach & Elliott, 2005, p. 9).

Finally, the teacher implements the instruction or intervention, while graphing the GAS

ratings on a daily or weekly basis (Roach & Elliott, 2005). While this process is

described as being heavily teacher focused, it could easily be adapted to engage the

student in selecting a goal and monitoring process through the same rating system, with

the student and teacher working together to define what the different levels of attainment

would look like.

The GAS rating system has both advantages and disadvantages. Because of the

structured process, it is time efficient, inexpensive, and easy to use in a variety of

classroom settings. The disadvantages are that the tool can be subjective, as it is filled out

by people involved in the goal-setting process, who may be biased in their assessment

(Roach & Elliott, 2005). For example, a student who is invested creating a positive image

of themselves as a learner for their teacher would be more likely to boost their own rating.

When students cannot assess their progress independently, it is critical that they receive feedback from the teacher. Achieving positive feedback helps to raise motivation and encourage students to continue working to the best of their abilities (Schunk, 2003).

Advantages of Student Self-Monitoring of Progress

There are many advantages to students tracking their own progress towards meeting a goal, with the teacher providing feedback and guidance as is deemed necessary. As students become more comfortable with the goal-tracking process, less feedback and guidance should be needed from the teacher. Having students track their own progress is advantageous whether students meet their goals or not. The process of self-monitoring creates ownership and excitement in student learning. If students do not meet a specific goal, they can see what their goal was, reflect on how they fell short of the goal, and get additional feedback to make a plan to move forward (Chan, et al., 2014). The skills students gain from monitoring their own progress are just as important as the skills gained from setting their own goals. Self-monitoring and self-recording lead to "the completion of work, attention to task, and increased academic productivity and accuracy" (Moore, Prebble, Robertson, Waetford, & Anderson, 2010, p. 256).

Like any other skills, self-monitoring must be explicitly taught at the beginning of the school year before students can begin to complete this task with minimal assistance. While time must be given to teach students how to self-monitor early on, the goal is to decrease the time teachers spend on monitoring progress. Less time spent on monitoring students translates into more time for teachers to work on other important aspects of teaching, such as developing formative assessments and creating engaging lesson plans (Chan, et al., 2014).

The Process of Student Self-Monitoring

In addition to adapting the GAS tracking method to be more student friendly, there are a variety of ways in which students can take ownership in monitoring their own progress. One way is when students record either occurrences and non-occurrences of a behavior, or examples of actions that helped the student get closer to reaching the target goal or to reflect on barriers to success. Students could also complete a self-monitoring form throughout a unit, listing events or pieces of evidence that contribute to meeting their goals (Chan, et al., 2014). Then, at the end of a unit, students can reflect on what went well and identify areas for growth and improvement

Self-graphing is a second way in which students can record their progress. In this method, students have set criteria they are looking for, and each day they mark their progress on graph paper. This method has the added advantage of being visual, so that it is easy for students and teachers alike to quickly compare past and present performance, see progress, or look for patterns in learning (Chan, et al., 2014).

Even when students are self-monitoring their progress, it is essential that they also receive feedback from others, especially as they are learning to self-monitor. The instructor must teach students the methods they should use to seek feedback appropriately, such as first consulting another student about their work before going to the teacher, or signing up for a conference time with the teacher (Chan, et al., 2014). Students must also be taught how to read and respond to feedback from their teachers in order to use the feedback to improve as learners. Teachers should give feedback in a neutral way that focuses on the learning targets, and how students can meet them. For feedback to be effective, students must leave knowing what they should do next time and

how to make it better. An overall focus on growth mindsets, where feedback in the classroom is seen as a normal and positive aspect of learning, is important to ensure that all students are comfortable receiving feedback.

Students must evaluate their progress throughout the goal setting process. High self-evaluations raise self-efficacy because students can see their progress, which helps them to believe they are capable of tackling more challenging tasks. Low self-evaluations are not necessarily harmful, as long as students still believe that they can achieve if they make the appropriate changes (Schunk, 2003). For example, such students may need to work harder or longer to attain their goal, find another strategy that may be better suited to achieving their goal, or seek the help of a teacher or peer (Schunk, 2003, p. 164). As long as students are able to alter the steps they are taking to achieve a goal, they can still improve their confidence, even if their initial plan to achieve their goal did not have the desired effect.

Younger students may not independently be capable of spontaneously measuring their progress compared to older ones. Built-in routines, such as reflection time during the day or prompts for reflection, may help students to be successful in monitoring their own progress (Schunk, 2003). Typically around the age of eight, students become more interested in both the process and the product of schoolwork (Wood, 2007). As students become more interested in the process of learning, it is a good time for teachers to build on their reflection skills, and spend increasing time on the strategies that can help students become more effective learners.

The Value of Student Reflection and Self-Evaluation

Student reflection and self-evaluation are both critical components of goal setting. Self-evaluation, or self-assessment, is when students compare their previous performance on a task with their desired learning target. Checklists and rubrics can be an effective way for students to assess their progress (Chan, et al., 2014). After students have assessed their progress toward reaching their goal(s), they can either decide to continue working toward the same goal using new or additional strategies, or decide that they have met their goal and begin the process again with a new goal.

Goal setting is an important tool in helping to increase students' self-efficacy and independence. There are a variety of ways in which students can set goals and monitor their progress, but the literature notes that goal setting is advantageous to students as learners and that self-monitoring of the process can help increase student engagement in achieving their goals.

Summary

In this chapter, I have defined self-efficacy and examined how it affects students' behavior in a variety of contexts. I detailed the effects that self-efficacy has on cognitive, motivational, selective, and affective processes. The literature analysis shows how high self-efficacy can inspire students to persevere in the face of adversity, engage in new and difficult learning tasks, and respond positively to the challenges of school life. Causes of positive self-efficacy were examined, as well as ways for parents and teachers to help students improve self-efficacy. I further researched the effects of goal setting in primary classrooms. The purpose of goal setting in primary grades (as with any grade level) to help improve independence and self-efficacy was discussed, as well as guidelines for

setting and measuring goals effectively. Finally, the role of self-monitoring of progress, along with different methods to measure progress, were overviewed.

Looking Forward

In Chapter Two, I covered the literature on the topics of self-efficacy, goal setting, and student monitoring of goals. This information strengthened my desire to inquire into the question: *How does student-led goal setting and self-monitoring of progress impact self-efficacy in a grade three classroom at an Eastern European international school?* Teachers have an influential role in their students' self-efficacy and have the power to help improve their students' belief in themselves. In the next chapter, I will examine the methodologies I will use to look at student goal setting and its impact on self-efficacy in my third grade classroom. In Chapter Four, I will explain the results of this study.

CHAPTER THREE

Methods

Introduction and Preview

For this study, I chose to examine ways to help my culturally diverse third grade international students build positive self-efficacy through goal setting. My decision to study self-efficacy came from my experiences working at private international schools in various countries around the world. These schools serve both expatriate families who live abroad based on the job(s) the parents hold, as well as local students whose parents want their children to study in English and can generally afford the school's expensive yearly tuition. As a result of their families' affluence, students often have every need catered to at home by nannies, tutors, and maids. When the students are at school, they may desire to achieve good grades and show improvements in their learning, but they often struggle with the steps and work that come before achieving their desired results because they may not have learned skills in self-sufficiency at home. I wanted to find out how I, as a teacher, could better assist my students in reaching their goals.

After completing a literature review on the question, *How does student-led goal setting and self-monitoring of progress impact self-efficacy among third graders at an Eastern European international school?*, I created a plan to answer my question. This chapter lays out my plan to use mixed-methods as my research paradigm and the reason behind my choice, as well as the tools I used to collect my data. I explain the setting in which I conducted my action research, and the population that was involved. Finally, I detail the ethical considerations I took in my research, and wrap up the chapter with a summary and a preview of Chapter Four.

The Setting

I work at a private international school in a capital city in Eastern Europe. My school has approximately 380 students in pre-Kindergarten through Grade Twelve. In the primary school (pre-Kindergarten through Grade Five) there are 200 students, with two classes per grade. The school was founded 20 years ago to provide quality education to expatriate families living in the city. The language of instruction at the school is English. The student population can be divided into three groups. The first is the children of parents who work for various embassies or governmental agencies such as the European Union or United Nations, who serve 2-4 year posts in the city before moving to a new post. These children complete their education at various international schools around the world as well as possibly in their home country. The second group is the children of international business people, who may be in the city short term or indefinitely. These families may live in the city, and then return to their home country. Or, their position might be permanently abroad, so that the family moves from city to city and the children enroll in different international schools around the world. The third and final section of the population is host country nationals, who by school rules can only comprise up to one third of the school population. These might be local families who have a connection to an English-speaking country and want their children to complete a Western education, or families who want their children to study at a European or American university eventually, so that learning academic English is a priority for the family. For children from the embassy and international business communities, the parents' companies pay the US $20,000 - 28,000 yearly tuition. For local families, the families pay the tuition, so this part of the population is generally quite wealthy. Forty-two countries are represented

in the student body population. The staff is similarly diverse and made up of a combination of international teachers who have made working at international schools their career, teachers who are on sabbatical in their home country to have an adventure teaching internationally, and local host country teachers.

Because of the transient nature of our school population, the numbers at our school are constantly in flux. We follow the International Baccalaureate program at the primary, middle, and diploma level, a system that is used by many international schools around the world. With the language of instruction being English, we provide English as an Additional Language (EAL) push-in and pull-out support to approximately 25% of our primary school population. Students enter the school with varying levels of English from no English language skills to full English proficiency. Our school also has a Special Educational Needs support teacher who does push-in and pull-out support, so we are able to accept students at the school with mild to moderate learning disabilities and support needs.

My research took place from October 2015 - January 2016. The school year began at the end of August 2015, and I took the first six weeks of school to get to know my students before starting the study. My research, starting with the initial survey, began mid-October, and lasted for ten weeks in which the students measured their own progress and tracked their results. At the end of this period, I analyzed my data and drew conclusions related to my research question.

Data Collection

Mixed-Methods Research Paradigm

I chose a mixed-methods approach to complete my action research. This approach combined quantitative and qualitative research methods to give a more complete and stronger picture of data trends (Creswell, 2014). I examined quantitative data from Attitudinal Scales, as well as qualitative data from formal interviews, the Goal Setting Page, and teacher observations. Combining these different methods of data collection helped me triangulate data used in my study, so that it gave a stronger overall picture of student progress and I could more accurately and confidently describe my findings through the study (Mills, 2007).

Attitudinal Scales

Because my research examined whether student goal setting and self-monitoring of progress shaped self-efficacy, I was interested in comparing my students' attitudes at the beginning and end of the study. I began the study by having my students complete an Attitudinal Scale for various questions related to their self-efficacy (see Appendix A). Before they took the survey, I went through the vocabulary with the students, and answered questions as they came up. Since there is always a chance that students will answer questions in a manner that they think their teacher wants to hear, I assured the students that any answer they believed was acceptable because I wanted their papers to reflect what they thought of themselves as learners. Students were informed that the survey would have no impact on their grades, and that the information in the survey would be kept private. Students completed the surveys independently at their tables, with folders set up around them to provide privacy from the other students. I read each

question aloud as we went through the survey. I was available to answer queries from students who did not understand the questions.

Attitudinal scales were a useful tool because they helped me learn more about my students' self-efficacy and their perceptions of themselves as learners (Mills, 2007). A four-point Likert scale, where the students indicated whether they strongly agreed, agreed, were not sure, or disagreed about different statements related to self-efficacy, was used, since for third graders it is often easier for students to describe their feelings with a descriptor rather than a numerical value. Following the 10-week goal-setting period, my students filled out the same survey, allowing me to see any changes in their self-efficacy. This information became the quantitative data from my research.

Formal Interview

Following the completion of the attitude scales, I identified two students with low self-efficacy (who had answered mainly "I disagree" or "I'm not sure" on the Attitudinal Scales), two students with average self-efficacy (who had answered mainly "I agree" on the Attitudinal Scales), and two students with high self-efficacy (who had answered mainly "I strongly agree" on the Attitudinal Scales) to complete formal interviews. I had specific questions in the interviews to gather additional information about self-efficacy (see Appendix B). All interviews were audio recorded, and I took notes throughout the process as well. At the completion of the ten weeks of goal setting these same students had a second formal interview with the same interview questions. These interviews were done privately outside the classroom, with no other students or staff around.

Goal Setting Page and Observation

After completing their Attitudinal Scales, all students met with me or my teaching partner to set two goals for a ten-week period between October 2015 and January 2016. Prior to having the students choose their goals, I conducted whole-group classroom lessons on goal setting to help the students consider the areas they wanted to focus on during the first semester. I helped the students articulate their goals in written form. During the ten-week study, students recorded progress on their goals on a bi-weekly basis, rating their progress both numerically on an individual scale we developed together, as well as writing a minimum of three sentences each week outlining the progress they had made with their goals that week, and what their steps would be to continue working the following week. If students met their goal prior to the end of the ten-week study, we looked at the evidence together to ensure they had met the goal, and repeated the process to choose a new goal for the student to work on. I took notes on the progress I saw the students make at least once a week as well, including any comments they made about their goal setting, how they felt about school, and any changes in work habits or behaviors that I observed. The goal setting, weekly progress check-ins, and teacher observational notes were compiled on the same template (see Appendix C).

The Participants

The participants in my research study were the grade three students in my class and my teaching partner's class who gave their consent and had parental consent to participate in the study. In total, 20 students participated in the Attitudinal Scales, and 16 out of those 20 students allowed themselves to be interviewed or have their goal setting comments be used in my study. Of these 20 students, there were 10 girls and 10 boys.

When the study began, one of these students was seven years old, 18 of these students were eight years old, and one was nine years old. Of these students one receives EAL (English as an Additional Language) support, and two receive SEN (Special Educational Needs) support. Due to special political circumstances in the host country this year, we have more local students than should be allowed in the grade, with 7 local students and 13 international students representing twelve nationalities participating in my study.

To begin the study students completed the Attitudinal Scales on Self-Efficacy for the first time (see Appendix A) prior to any discussion of goal setting in October 2015. Following the survey I led a brainstorming session on what students already knew about goal setting, followed by three mini-lessons on goal setting, including information on performance vs. mastery goals, how to set a goal that is SMART (specific, measureable, achievable, relevant, and timely), and teacher modeling on setting goals that met these criteria. I then allowed students to choose their own two goals, and we conferenced to ensure that their goals met the SMART criteria. During the ten weeks of goal monitoring, students completed their notes on the Goal Setting Page (see Appendix C) twice a week, with approximately fifteen minutes of class time devoted during each session to recording progress, setbacks, and any other updates on the goals. I also recorded my own teacher notes on a weekly basis. Students had the chance to share their goals and updates with small groups and the whole class every two-three weeks, so that the students could learn from the successes or roadblocks of others. At the end of the ten-week period, students completed the Attitudinal Scales on Self-Efficacy for the second time (see Appendix A), with the same selected students answering the follow-up interview questions (see Appendix B).

Ethical Considerations

Many steps were taken to ensure that all steps in the research process were ethical and in accordance with Hamline University's Human Subjects Review requirement. To begin, I obtained permission from the Hamline University Human Subject Committee to start this study (see Appendix E). As part of that process, I obtained permission from my school administration to proceed with my research, after notifying them of all steps in my research process. The parents of students in my class signed letters so that their children could participate in my research, and the letter contained detailed information about the reasons behind my research, how the students would participate, and an assurance of the confidentiality and anonymity of the study (see Appendix D). Students also had to sign a letter in child friendly language saying they were willing to participate in my study. Only students who voluntarily agreed to participate were included, and they knew they could withdraw from the study at any time without any negative repercussions. All information I obtained through my study was for myself alone, and has been kept confidential from other people. Parents at my school sign papers indicating that someone in the family or on staff will be able to translate school documents from English into the language spoken by the parent when they are admitted to the school, so translation was not an issue. However, as an additional assurance my teaching assistant was available to translate the consent letter from English into the language of our host country upon request. Additionally, I held an open house hour where parents were invited to stop by to talk about my study where I could answer any questions or provide any clarification.

Data Analysis

At the completion of the study, I analyzed the data collected throughout the study. To begin, I looked at the Self-Efficacy Attitudinal Scales that the students had completed in October 2015 and February 2016 to look for overall trends and changes in the students' self-efficacy. I also looked specifically at the answers of the six students (two with low self-efficacy, two with medium self-efficacy, and two with high self-efficacy) whom I had targeted in my study. Additionally, I looked at the interviews I had completed with these students in October and February, and analyzed how those results compared with their answers on their Attitudinal Scales Survey. Finally, I looked at the Goal Tracking Sheet that the students had completed to see how their comments on their progress towards reaching their goals validated or conflicted with the quantitative data collected through the Self-Efficacy Attitudinal Scales.

Summary

In Chapter Three, I explained the methods and procedures that I used to answer my research question, *How does student-led goal setting and self-monitoring of progress impact self-efficacy among third graders at an Eastern European international school?* I began by explaining the reasons why I chose a mixed-methods research paradigm to complete my work and by going through the different data collection techniques I used, such as a survey, observation/field notes, and interviews. I described the setting of my school and gave demographic information about the students who participated in my study. Finally, I outlined the ethical issues I took into consideration throughout my research, and how I ensured that all of my subjects gave informed consent.

In Chapter Four I will detail what actually happened when I executed my action research. I will compare how my research corresponded with my plan and analyze the results I obtained from my research.

CHAPTER FOUR

Results

Introduction and Preview

In Chapter Three I explained the mixed-methods research project I designed for my study in order to find out: *How does student-led goal setting and self-monitoring of progress impact self-efficacy among third graders at an Eastern European international school?* In order to be able to triangulate my data, I used both quantitative methods, through my Attitudinal Scales based on the Likert Scale, and qualitative methods, such as follow-up interviews with students and my notes as well as the students' notes as they worked to achieve their goals, to collect data. In the two Grade Three classes at my Eastern European International School, 20 students and their parents consented to be a part of my study and participated in the ten-week process. The consent form students and parents signed can be found in Appendix D. In this chapter I will outline the data I collected throughout my study and analyze the outcomes that the data indicates.

Overview

This chapter is divided into four sections. In the first section, I will share the data from the initial self-efficacy Attitudinal Scales conducted in October 2015. In the second section, I will share data collected from my students through their Goal Tracking Pages as well as from my notes and their comments throughout the ten-week goal setting study. In the third section, I will review the results of the final self-efficacy Attitudinal Scale, conducted in February 2016, and look at overall changes in the class' self-efficacy beliefs. In the fourth section, I will focus specifically on the results of the six targeted

students: the two students with low self-efficacy, two students with medium self-efficacy, and two students with high self-efficacy.

First Attitudinal Scales Results

I began my study by administering an Attitudinal Scale on self-efficacy (see Appendix A) in October 2015. The students were told that this was the survey that they, along with their parents, had consented to taking, and that the purpose was to give me information about them as learners so I could become a more effective teacher. Students were reminded that this information would be confidential and would not impact their grades or report card in any way.

The results of my Attitudinal Scales showed that the majority of my students already had medium to high self-efficacy beliefs at the beginning of the study. Fifteen out of the twenty students agreed or strongly agreed with the statement "I think I am a good student". Sixteen of the twenty students agreed or strongly agreed with the statement "When I have a difficult assignment, I keep trying until I have completed it the best I can." Fourteen of the students disagreed with the statement "When I have a difficult assignment, I get frustrated and stop working", three were not sure, and only three agreed or strongly agreed.

While the majority of the student responses showed high or medium self-efficacy, there were also questions in which there was room for growth in students. For example, seven of the twenty students answered, "I'm not sure" to the statement "I know if I am doing a good job or a bad job in school", and one student disagreed with this statement. For the statement "I complete all of my assignments at school by myself", three students strongly agreed, five agreed, ten were not sure, and two students disagreed. Only nine of

the students agreed or strongly agreed with the statement "When I complete a task, I can reflect on how to do it better next time", while nine students were not sure and two students disagreed. Half of the students were not sure about the statement "I ask for help if I'm stuck on a difficult assignment", and five students were not sure or disagreed that they knew what they struggled with as a student.

Goal Tracking Pages and Discussions

After the initial Attitudinal Scale results were collected, it was time for the students to begin creating their goals. In my mini-lessons about goals, students showed that they already had background knowledge on the purpose of goals. Students knew that goals were something that you work on, and that you needed to choose one or two at a time or else it would be too hard to keep track of everything. When asked why people use goals there were a variety of answers. Students said goals could help you learn how to do something new, build on skills you already know, make your life better and/or easier, help you to believe in yourself more, make you practice so you get better, and find a way to accomplish something new and then work towards it.

As a class, we brainstormed some different goals students could have, including mastery goals and performance goals. I explained that for these goals the students should focus on mastery goals, where they focused on learning something new, rather than performance goals, which are looking for a specific outside outcome, such as achieving an A on a test. Guided by my instruction, we took the general goals of "I want to be a better writer" and "I want to be better in math," and turned them into SMART goals (goals that are specific, measurable, achievable, relevant, and timely). "I want to be a better writer" became "I want to use the writing process to publish two small moment

(fiction) pieces during journal writing time in the next ten weeks." "I want to be better at math" became "I want to practice my multiplication facts using the website XtraMath four days a week."

With our class example goals articulated, I showed the students how to use the modified goal attainment scales (GAS) to define what would constitute excellent effort (+2), some effort (+1), and minimal or no effort (+0) for attaining our example goal of "practicing my multiplication facts using the website XtraMath four days a week." This scale would be the same scale students used to self-monitor their own goals on their Goal Tracking Page (see Appendix C). We decided that for +2 the student would practice on XtraMath four days a week (the duration of practice is set by the XtraMath website, and lasts from 5-8 minutes, depending on the user's speed), for +1 the student would practice on XtraMath two or three days a week, and for +0 the student would practice on XtraMath once or not at all in a week.

Once the students understood these steps, they created their own two goals or chose their goals from the list we had brainstormed as a class. All students were able to speak with classmates or the teachers for assistance as needed, and when they felt ready they met with their classroom teacher for a goal conference. During the conference, the teacher helped the student to modify their goal if it did not meet the SMART criteria, and ensured that the indicators on the GAS would help the student be successful in meeting their goal. The most popular goals among the third graders included working on gaining speed and/or practicing basic addition, subtraction, and multiplication facts; improving at cursive handwriting; reading more; typing faster; learning new vocabulary from reading books; learning new computer skills; and writing more and/or longer fiction stories.

During the conference, the teacher also asked the student if there was anything specific she could do to support the student. Examples of support provided included signing students up for computer programs for improving typing and for practicing math skills, printing math fact worksheets for home use, setting up mentor meetings with Grade Five students to work on computer skills, and providing worksheets to practice cursive handwriting.

The Goal Tracking Pages demonstrate that the third graders not only improved in their content knowledge, but also their ability to think reflectively about how they can change their actions to achieve the results they desired. Self-efficacy is a person's belief that they can achieve a desired result by modifying their own behavior, and the students had many ideas of what they could do to be successful. Out of the 20 students who participated in the study, 15 regularly recorded analysis of their own behavior in explaining why they had or had not been successful in achieving their full +2 points for the week, and what they could do differently in the coming weeks to show further improvement.

Identifying Positive Behaviors

One theme that was evident in the data analysis was that students could identify the positive behaviors that had contributed to their success during the week toward reaching their goal. Some students listed general characteristics and learning habits that had helped them, such as "I was concentrating," "I practiced even extra (than the amount of practice I hoped to in the week)," "I really worked hard on it this week, and I am keeping up the good work from last week."

Other students were able to identify positive behaviors that were specific to their own learning goal. For instance, one student who was trying to increase the amount of time she spent reading noted that she had chosen a really interesting book to read for the week. Another student who was working on solving math story problems noted that he was not making silly (careless) mistakes with his word problems, because he was rereading the problems before starting to solve them. A third student who was working on her rounding skills noted that she was concentrating just on her rounding work instead of on all math skills during her math time at home so that she was not so scattered. For a student who was working on using the writing process to improve his fiction writing, looking carefully at his brainstorm and thinking about all of those ideas when writing helped him to add more details. A student who was working on his cursive handwriting noted that he wrote his homework in cursive, even though that was not a requirement. Two students who were trying to read at home for longer periods of time thought of ways they could keep the goal work time exciting, such as reading out loud to a sibling to add variation, or by reading in English and their mother tongue language. Other students noted the time that they had read that went over the time their goal requirements had specified. All of these comments showed that the goal setting and self-monitoring appeared to be helping the students to think about what specific actions they were taking, and then how those actions were helping them to reach their goal.

Creating New Plans

In addition to listing new actions they were already taking, the participants reflected by identifying new behaviors they could try or actions they could take to further improve with their goal. One boy who was focusing on increasing his vocabulary so he

could better understand the Calvin and Hobbes comics noted that he wanted to buy a dictionary to have at home, so he could continue his learning at home when the internet was out. Several students who were working on their reading noted that they wanted to seek help to find books that were either more challenging and/or more interesting to them. Several students noted at some point in the study that they needed to ask the teacher for more math questions, be it for problem solving or for basic skill practice. Additionally, several students wrote that they wanted to have time during the school day dedicated to independent work toward reaching their goals. For most of these students, a suggestion for improvement in one week was followed by an analysis the next week of how this change had helped them continue to improve.

Identifying Obstacles and Solutions

When students faced obstacles or behaviors that were preventing them from doing the work necessary to reach their goal, they were able to identify the obstacle and say what they needed to do to work around it. Examples of students' comments included "I need to stop daydreaming during work time," "I need to concentrate more," "I need to focus," "I need to start working right away when school begins in the morning," and "I need to not rush on my handwriting". These were common behaviors identified as being impediments to learning. A student who was working on his fiction writing noted one week that he needed to think before writing time about what he could write about because it was hard for him to think of ideas on the spot. The following week the same student wrote that he had been successful because he had thought of writing topics outside of designated writing times in class. A different student who was also focusing on her fiction writing noted that she had spent her time conferencing with a friend about her

friend's writing instead of writing herself, and noted that she needed to find a separate time to work on her own writing that day so that she could still complete the writing she had planned on. A student who shared that he was distracted by computer games at home as an obstacle to his learning noted that he should not waste time on the computer at home. To solve this problem, he asked his mom to take the computer away from him for the hour he was finishing his homework and working on his cursive so that he could focus on those tasks. The participants in the study saw obstacles as challenges that they could find solutions for, which is a characteristic of students with higher self-efficacy. The ways in which the majority of the third graders dealt with challenges to doing the work necessary to complete their goals shows that they were building up their strength and belief in themselves to be independent learners.

Identifying Obstacles Without Solutions

While 15 of the students recorded thoroughly what they were doing to reach their goals, the obstacles they were facing, and what they were doing to overcome these obstacles, the five remaining students were less detailed in their goal-setting notes. All five of these students had been classified as having medium to high self-efficacy through their Attitudinal Scale survey. Common reflections on progress towards reaching their goals included statements such as "I forgot to work on my goals on this week," or "I did not have the materials to complete my goal." However, none of these students appealed to a teacher for help to get the resources necessary to continue working on their goals. For the question of what they could do to continue improving on their goal, "I am doing fine/better" with no elaboration was a common refrain. Student also often wrote that they

would "do more" or "work harder," without elaborating on what that might look like or how it would differ from the current week's work.

Identifying the Learning from Goal Setting

At the completion of the ten weeks of goal setting, we had a class discussion on what the students felt the benefits of the goal setting had been. Many of the students shared that they felt focusing on specific goals helped them target skills they had previously felt were weaknesses, and that had now become strengths. As one student said, "Maybe when you have a lot of weaknesses and you want to work on them, then when you work on them they will change to strengths." Another student shared that the goal setting "really helped with time management, when it's time to do your goal, when to do your second goal, and it helped us understand what it was. It helped me with time management to spread my time and be more balanced, like first you do one thing and then another thing." A third student shared that he thought the goal setting had been successful because he had learned new things and made his work even better. Self-efficacy can suffer when students compare their work to other students and focus on the difference in output, but having individualized goals, work plans, and reflection allowed students to build their self-efficacy by feeling accomplished in the skill they had chosen. As one student shared, "when we made work that we've chosen as our goals, then we got strength in those things, and now we can do our goals very easily."

<center>**Second Attitudinal Scales Results**</center>

The positive effects and reinforcement of ownership in learning of goal setting that I had seen through the students' notes and in classroom discussions were reinforced through the data collected in my second Attitudinal Scale survey. One of the most

exciting changes, as indicated in Table 4.1, was that the number of students who strongly agreed with the statement "I think I am a good student" doubled between October and February, the number of students who were not sure was cut in half, and by February 2016 no students disagreed with the statement. I believe that the students' ownership of their learning and their ability to see their understanding grow as they targeted areas they wanted to work on played an important part in the number of students who improved self-efficacy through their perception of themselves as a learner.

Table 4.1

	I think I am a good student.			
	I Disagree	*I'm Not Sure*	*I Agree*	*I Strongly Agree*
October 2015	1 student	4 students	9 students	6 students
February 2016	0 students	2 students	6 students	12 students

A second positive change in the Attitudinal Scale results was the number of students who felt that they knew if they were doing a good job or a bad job in school, shown in Table 4.2. Student comments indicated that the goal setting played a role in this improvement as well. For example, one student said, "Those goals helped me with my skills. Goals really helped me. They helped reading and typing become my strengths. Now I can learn better." Another student shared that, "I learned that goals help me get better at things that I am not good at." Again, the goal setting helped students take action to show they were engaged in meaningful learning in grade three.

Table 4.2

	I know if I am doing a good job or bad job in school.			
	I Disagree	*I'm Not Sure*	*I Agree*	*I Strongly Agree*
October 2015	1 student	7 students	5 students	7 students
February 2016	1 student	3 students	7 students	9 students

Students' independence in learning plays a large role in their self-efficacy, and the research from Chapter Two shows that goal setting helps students to gain independence. Table 4.3 shows changes in the data collected from students in response to the statement "I complete all of my assignments at school by myself". At the end of the study, 18 students agreed or strongly agreed with this statement, compared to 8 at the beginning of the study. Table 4.4 displays the results to the statement "I ask for help if I'm stuck on a difficult assignment." The number of students who agree or strongly agreed with this statement also rose. While these two statements might seem contradictory, in the classroom this year my teaching partner and I have emphasized that we are all responsible for our own learning, but that it is something we work together to do. We have tried to build learners who take initiative for their own learning by asking for help and utilizing the resources that are around them when they do not initially know the answer or what to do. While the results have supported the ethos we have taught the students--to be independent by taking ownership for your learning and by taking the initiative to seek help--the way the questions were worded do not fully express the way we teach. While I would change the language of the survey if I were to recreate my study,

the results of the survey support the idea that the students are working to gain

independence in their own learning.

Table 4.3

	I complete all of my assignments at school by myself.			
	I Disagree	*I'm Not Sure*	*I Agree*	*I Strongly Agree*
October 2015	2 students	10 students	5 students	3 students
February 2016	1 student	1 student	11 students	7 students

Table 4.4

	I ask for help if I'm stuck on a difficult assignment.			
	I Disagree	*I'm Not Sure*	*I Agree*	*I Strongly Agree*
October 2015	0 students	10 students	6 students	4 students
February 2016	1 student	7 students	7 students	5 students

The largest change in results from October 2015 to February 2016 came in

responses to the statement "When I complete a task, I can reflect on how to do it better

next time." The results of this change are displayed below in Table 4.5. The large growth

in the number of students who now agree or strongly agree with the statement was

supported by the comments students made about how goal setting had helped them. One

student shared:

> These goals helped me to improve as a learner by making my weaknesses into
>
> strengths so I would be a better learner. For example in the beginning of the
>
> project I was rushing when I was doing a story and now I am taking my time to do

them. What I learned about having a goal is that you have to be responsible to work on your goals to get better at them.

Another student added "I learned that when you have a goal it's always a good idea to have a paper to reflect, and then you can look at your old reflecting skills." A third student shared, "When you do your goals you might get better at reflecting and you might know what it's like to improve and not to improve." These statements, along with the data, show that the third graders are recognizing the importance of reflection and that the goal setting is helping them to build these skills.

Table 4.5

	When I complete a task, I can reflect on how to do it better next time.			
	I Disagree	*I'm Not Sure*	*I Agree*	*I Strongly Agree*
October 2015	2 students	9 students	5 students	4 students
February 2016	0 students	3 students	12 students	5 students

While most of the results of the second Attitudinal Scale were positive, there were a few surprises in the data analysis. The number of students indicated they strongly agreed with the statement "I always work the best I can" fell from 12 students in October to 8 students in February. The four students who changed their answers still said that they agreed with the statement, but I was surprised to see that they agreed less strongly than before. More information would be needed to know for sure the reason behind this change. Potentially, students working harder to complete their goals could mean that they realized they were not always working their best in their everyday work. It could also be students feeling less motivated later in the year than at the beginning. There was also a drop in the number of students who strongly agreed with the statement "When I make a

mistake, I use it as an opportunity to learn something new," from eleven students strongly agreeing in October to only seven students strongly agreeing in February. This is an area that I would like to explore further with my students to help them understand how mistakes can lead to improvements in work.

<div align="center">**Targeted Students**</div>

I have explained overall class changes in my Attitudinal Scales, but the student-led goal setting affected the students with low, medium, and high self-efficacy in different ways. After the initial Attitudinal Scales, I identified two students who had the most "I'm not sure" or "I disagree" responses to the positive self-efficacy behaviors, two students who mostly chose "I agree", and two students who mostly selected "I strongly agree" for the positive self-efficacy behaviors. The following sections will explain the observational notes, Goal Tracking Pages, and follow-up interviews for the six students I chose to monitor especially closely.

Students with Low Self-Efficacy

The first targeted student with low self-efficacy beliefs from her Attitudinal Scales in October 2015 had more positive answers on her February 2016 survey on 8 of the 14 survey questions, the same answers on two of the questions, and more negative answers on four of the questions ("I know if I'm doing a good job or a bad job at school," "I complete all of my assignments at school by myself," "when I have a difficult assignment, I keep trying until I have completed it the best I can," and "when I make a mistake, I use it as an opportunity to learn something new").

During her initial interview, this student indicated that the way she needed support from the teacher was through positive reinforcement and through giving her more

time to complete her work. She identified multiple strategies she used when she did not know the answer at school, such as asking a teacher or friend, giving herself extra time to think, and using a translation service such as Google Translate (this student has only been in an English language school for two years). In the February 2016 interview following the goal setting, she indicated that she needed to talk to her parents before she could know how she was doing in school. This is consistent with the findings in my literature review that parental and teacher comments play a large role in shaping self-efficacy.

While this student's results on her Attitudinal Scales and interview showed growth in her self-efficacy, the final reflection this student completed on her goal setting show the impact goal setting made on her. She wrote:

My goals are writing and reading. A really important thing I learned about having a goal is if you want to finish your goal you must work hard to be better at your goal. 10 weeks I worked at my goal. Now I am much better at my goal. I was dreaming to write neat and fast. Now I am as fast as I want to be. And now I am reading as fast as I want and I am in a level that I want to be. Maybe smaller for my grade but still I like my level I am reading.

The second student with low self-efficacy who I followed closely showed even more positive growth on his Attitudinal Scales. This student had eight questions move in a positive direction, five questions stay the same, and one ("When I make a mistake, I use it as an opportunity to learn something new.") moved from "I agree" to "I'm not sure." Most excitingly, this student moved from disagreeing with the statement "I like to learn new things" to strongly agreeing with it.

During the initial interview, this student said he was not such a good student at school because sometimes he made mistakes. He wrote that if he was not sure of something, like if he did not know a word, he would just write "I don't know". This student mentioned that sometimes his parents would shout at him if he made mistakes at home, which the research shows can be a contributing factor for low self-efficacy. In the follow up interview in February, this student was able to list more strategies he would use if he did not know a word, such as reading the sentence again, looking to see if there was a part of the word he already knew and could use to make a guess, or asking an adult for help. He mentioned that he would like more writing (and less spelling) time at school so he could continue to work on his writing. When asked if he thought goal setting had helped make him a better learner, he answered, "Yes. I think if we didn't do goals my writing would be weaker and weaker. We did goals so it's gonna be better I think." The Attitudinal Scale survey results, anecdotal notes, and interviews of these two students who had low self-efficacy help to show that goal setting can be an effective way to help students with low self-efficacy build their confidence.

Students with Medium Self-Efficacy

The first student with medium self-efficacy I targeted showed nearly the same results from the October 2015 survey to the February 2016 survey. The changes in his results were mainly limited to moving between "I agree" and "I strongly agree" for several of the statements, and he changed from not sure to agreeing with the statement "I know what I struggle with as a student." He also moved from not sure to strongly agreeing with the statement "When I make a mistake, I use it as an opportunity to learn something new."

On his goal setting pages, this student was able to identify some of the obstacles that were preventing him from reaching his goals, such as daydreaming in class, and said that he needed to concentrate more. When asked if it was difficult for him to answer the questions on the Attitudinal Scale survey, he responded no, because he knows a lot about himself. This student said that goal setting, "helped me try my best at things that I'm not so good at." While this student's results would still classify him as having an average level of self-efficacy, the evidence shows that this student does feel more in charge of his own learning after completing the goal setting.

The second student identified as having medium self-efficacy also answered in nearly the same way on her October and February Attitudinal Scale survey, mostly with "I agree" statements. However, she did move from "I'm not sure" to "I agree" on the statements "When I complete a task, I can reflect on how to do it better next time" and "When I make a mistake, I use it as an opportunity to learn something new." On her Goal Tracking Pages, she wrote about how she was adding more and more pages to her reading goal to make it more challenging. She was also excited about the specific computer skills she had wanted to know and mastered through her mentorship with a grade five student.

In her initial interview, this student talked about how she liked going to school and learning new things. She talked about the work she did at home with a tutor, and how she enjoyed getting to learn even more than she did at school. When asked in February why she chose to answer "I agree" to most of the questions instead of "I strongly agree," she said, "Because strongly is like I'm sure, I do it all the time, but like I didn't always, I was always doing a good job in school, but maybe sometimes I didn't know that." Like

with the first student, it appeared that goal setting helped this student slightly improve her self-efficacy, but for the most part her confidence in herself stayed the same.

Students with High Self-Efficacy

While the students with low and medium self-efficacy showed more positive thinking or stayed the same on their Attitudinal Scales survey from October 2015 to February 2016, the two identified students with high self-efficacy seemed to get less confident. The first student with high self-efficacy had six categories in which she moved from "I strongly agree" to "I agree", and she moved from being unsure for I ask for help if I'm stuck on a difficult assignment to disagreeing with the statement. Only on the final statement, "I like to learn new things," did she move from "I agree" to "I strongly agree." The rest of the answers stayed neutral at "I agree."

In her October follow-up interview, this student showed that she was a reflective learner who used multiple strategies to be successful in school. This student started at our school in first grade with very limited English, and she said that in grade two she realized she she was a good student because she was raising her hand and understanding things. She said that when she had trouble with something at school she would work on it at home, such as working on math with her grandma, a retired math teacher.

While her self-rating on the Attitudinal Scales survey was slightly lower in February 2016 than October 2015, this student still appeared to demonstrate confidence in her learning through her February 2016 interview. She stated, "I think my answers are different now because maybe for like I worked harder and like I got some new marks, better marks. I worked harder to get better at learning and to get better as a student and to work hard at school." Throughout her goal-setting tracking sheet, this student

demonstrated she had multiple ways to improve such as working on her summarizing skills by summarizing what she read to her father, and then summarizing in written form when he was out of town and she could not speak with him. While her survey results showed a slight decrease in her confidence in self-efficacy statements, it was clear that this student still believes in herself and her academic abilities.

The second student identified in October 2015 as having high self-efficacy showed similar results on the Attitudinal Scales survey as the first. She moved up from "I agree" to "I strongly agree" on one statement (I know what I do well as a student), moved down from "I strongly agree" to "I agree" on five of the statements, and remained the same on the other eight statements. One possible cause of this modesty, as revealed in her interview, was that this student said "I cannot say I'm a very good student because I don't like saying I'm very good and the best in the class, because it's not really appropriate." While her scores on the survey may have gone down slightly, it was clear from her Goal Tracking Page that she had confidence in her ability to reach her goals and in herself as a learner.

For her goal setting, this student was working on reading more and using the writing process actively in her fiction writing. She showed that she knew herself as a learner, writing midway through the goal setting period that she was giving herself a small break from writing that week because she was tired of writing, and then doing double writing the following week to make up for it. This student added what she wanted to improve on specifically in her goals, such as adding details, incorporating feedback from writing conferencing, or including fiction and nonfiction, each week in addition to

recording the amount of time she had devoted to each activity. When reflecting on her overall learning through goals, this student wrote:

> These goals help me improve as a learner and also in my skills. As a learner I slowed more to organize my time and be balanced by planning and learning. I needed to read and to improve my reading and I also needed to write to become a better writer. Goals helped me in skills because I read a lot and I got better at reading. And at writing to write more and more and get more specific. These are my goals that I worked on.

While the numbers on the Attitudinal Scales might not have showed all of the learning of this student, it is clear that she is focused and in control of her learning and remains a student with high self-efficacy. Goals helped her to articulate what she was doing well and zoom in to focus on how she could improve even further.

Conclusion

In this chapter I have explained and analyzed the data I collected in my study to answer the question: *How does student-led goal setting and self-monitoring of progress impact self-efficacy in a grade three classroom at an Eastern European international school?* I started by explaining how I administered my first Attitudinal Scales, and what the data from the original was. After gathering that data, my students set their goals for the study, and I explained their comments and behaviors throughout the goal setting process. Next, I explained the trends that I found in the students' Goal Tracking Pages, as well as in my anecdotal notes and their comments throughout the study. I analyzed trends in their responses, and connected those trends to the research on self-efficacy and goal setting that I presented in Chapter Two. The next section looked at the results of my

second Attitudinal Scales survey, and I compared the results from the October 2015 and February 2016 surveys, looking for class wide trends in responses. Finally, I examined the results of six students (two with low self-efficacy, two with medium self-efficacy, and two with high self-efficacy) throughout the study to see how goal setting had affected the students in different ways.

I have explained why the topic was relevant to me in Chapter One, reviewed and synthesized important literature on the topics of self-efficacy in Chapter Two, explained the methodology of my study in Chapter Three, and analyzed my data and results in Chapter Four. In the next chapter, Chapter Five, I will write about my final conclusions from this study. I will examine how this study has affected me as a researcher, student, and teacher, and what future implications this study will have on my teaching.

CHAPTER FIVE

Conclusion

Introduction and Preview

In Chapter Four I analyzed the results of my mixed method study to answer the question: *How does student-led goal setting and self-monitoring of progress impact self-efficacy in a grade three classroom at an Eastern European international school?* Through the data analysis, I found that my most of my students' self-efficacy had grown after completing their goal setting process.

Chapter Five provides a final reflection on my research and the findings of my study. In this chapter I will reflect specifically on the information found in Chapter Two, my literature review, and Chapter Four, the results of my study. I will start by revisiting the literature review and reflecting on which pieces were most important in my study, as well as how my data lines up against the literature review. I will then define what my most significant learning was as a teacher, student, and researcher. Next, I will write about the limitations of my study, and things I will change when I work on goal setting again with my students. Finally, I will write about the implications my study will have for my own instruction, as well as for possible changes for my school.

Comparison of my Results and Literature Review

The majority of my results supported the information I found in my literature review. Throughout the study, it was clear that the determinants of self-efficacy listed in the literature review, such as feedback from teachers and parents, high student involvement in the process of setting and monitoring their own goals, and performance accomplishments, had influenced the self-efficacy of my own students. Throughout my

interviews that followed up the Attitudinal Scales, I heard students reference these three things to explain why they had answered the Attitudinal Scales in the manner they had. The literature asserted that positive self-efficacy helps students reach higher academic achievement, and this was also supported in my research. The students who demonstrated higher self-efficacy through the Attitudinal Scales were similar to the students who have traditionally had higher academic achievements in the classroom. The students with higher self-efficacy were able to maintain the momentum in working towards their goals enthusiastically throughout the ten-week study, whereas the students with lower self-efficacy showed less consistency in their efforts throughout the ten-week study.

The research on the benefits of goal setting also complemented what I observed throughout my study. Through the Attitudinal Scales Survey and the follow-up interviews I saw how goal setting had helped raise my students' confidence in who they were as learners and motivated them to continue setting new goals for themselves. The group of students who participated in the study is especially competitive with each other, and goal setting allowed them to find success and be competitive with themselves rather than other students. The focus on performance rather than mastery goals appeared to allow all students to feel empowered through their efforts, even if they had not fully accomplished their goal at the end of the ten-week study. The research stated that goal setting allowed students to develop the skills of decision making, problem solving, and self-instruction (Chan, Graham-Day, Ressa, Peters, & Konrad, 2014), and the way students tracked their progress and made suggestions for how they could improve showed how they were growing in these skills. Including set measurement of progress, through the Goal

Attainment Skills, gave students the tools to assess their progress and effort in a more tangible way than just saying, "I'm trying my best" or "I'm working hard".

Not all assertions in the literature review supported what I saw in the classroom. While the research by Bandura states that self-efficacy levels affect the motivation a student has in reaching a desired outcome (Bandura, 1993), I saw that even students with low self-efficacy were enthusiastic about working towards the goals they had set for themselves. While their effort may not have been as consistent, they maintained their interest in accomplishing their goal.

My Takeaways from the Study

My biggest excitement from the study comes from how the parameters of the study helped the students to compete with themselves rather than compare themselves to other students. I believe this helped my students to develop skills and dispositions to build themselves up as learners, rather than making school time a race to see who can finish work in the quickest manner. Having goals gave students something meaningful to focus on during "down time" in school, when they had finished a given assignment and were waiting for the next task.

The effect goal setting had on my students with low self-efficacy also pleased me. Since our school is comprised of learners with a variety of learning needs, levels of English proficiency, and dispositions, it was heartening to see a learning engagement in which all students could feel successful while working on a task specifically appropriate to their own needs. Seeing the confidence the students with low self-efficacy gained, as well as the reflection and independence skills the goal setting fostered, showed me how

meaningful goal setting can be. An additional benefit was that goal setting allowed students to self differentiate to meet their own needs as learners.

While I started my study with the belief that many students came to school with low self-efficacy due to a lack of understanding of the effort they needed to put in to achieve a desired learning outcome, the results of my study have altered my thinking. Many of my frustrations came from a belief that the economically privileged environment the majority of my students came from, with lots of household help around to tend to the students' every need, developed students who had low self-efficacy. However, my study did not support this. I found the majority of the students in this category had medium to high belief in their own abilities to influence the situation. What were generally missing were the independent work skills to support their level of self-efficacy. Using goal setting helped the students develop the tools they needed to see the concrete relationship between their efforts and achieving the results they desired independently. Therefore, while my study led to the results I desired, increased independence and self-efficacy in my classroom, I found that the relationship between the majority of my students' privileged background and their level of self-efficacy was not what I initially expected.

The study also made me reexamine the instruction I had been providing to my students throughout my career in teaching. While I was frustrated with many of my students' lack of independence and low self-efficacy, seeing how well the goal setting worked made me realize I had not done enough to give my students the time and instruction to build these skills. As a teacher, my focus had been so directed at achieving academic outcomes that I had not focused enough on building the skills the students needed to achieve these outcomes. My study helped me realize that I need to put as much

effort into facilitating learning about how to learn, and therefore boosting self-efficacy, as I do into teaching the school's curriculum.

Limitations and Opportunities for Change

While the results of my study are exciting in terms of what I can apply to my teaching, it is also important to note the limitations of this study. Throughout my research and literature review, the majority of the findings cited came from American or North American sources. These researchers generally worked with North American subjects to come to their conclusions. While I have found that many of the findings were also true within the international context of my classroom, the research does not explain how cultural forces help to shape self-efficacy, and how goal setting could affect students who come from a variety of cultural backgrounds with different cultural values. An additional difference is that the students of different cultural backgrounds might receive different messages about learning, focusing on achievement rather than the effort needed to get there. While goal setting can still be advantageous to students even if it is only practiced at school, receiving consistent messages of praise from teachers and parents for work towards achieving a goal would be the most optimal situation for students.

Another limitation of my study was that by design I wanted students to be independent in their creation of goals and their self-monitoring of progress. While this independence did achieve the results I desired, I would be curious if having more teacher support at the beginning of the process would help students achieve even greater success in reaching their goals and building positive self-efficacy. Since goal setting is still a fairly new skill for third grade students, and they are still developing their reflecting skills, I think having more teacher support at the beginning of the year could be

advantageous in helping students define their goals and use their reflections to build on their progress. I would keep the teacher role as more of a facilitator throughout, so that the student still felt ownership in the process, but allow for more guidance and targeted questions from the teacher to help the students continue to build upon their skills and push themselves. I would anticipate that as the year progressed, students would need less and less teacher support and become even more independent in their goal setting and monitoring of progress.

A third limitation of the study was the relatively small sample size. Compounding the small number, the students in this year's grade three class have tested higher than typical third graders on standardized tests, and have entered grade three with greater thinking skills and reflection skills than students in past years. To ensure that the results of my study are valid across diverse populations, I would want to try the study again with a different population to see how the results compare across subgroups.

Finally, while I will use goal setting in my classroom again in the future, I would modify the logistics of the goal setting progress based on my own observations and comments from students. For example recording students' progress twice per week was too frequent, and for some students it made the task feel more overwhelming or more tedious. I would also allow for a specific "Goal Work" time during class, for approximately twenty minutes a week, to show the value I was placing on the goals in the classroom, and to give students who might still struggle to independently remember to work on their goal a jump start to remembering to work.

Implications for the Future

After seeing the success of goal setting, and the positive impacts it has had on my students as learners, I am inspired to continue this work. I am excited to implement the changes to the process that are listed above, and to see how these changes further support the students' growth. The study has given me new motivation to examine my own practice as a teacher to see what I am doing that is negatively impacting my students' self-efficacy, and to transform my instruction so that I am working on helping students simultaneously grow in their knowledge, as well as in their ability to obtain and utilize the knowledge they have. I also want to work to ensure that I am continuing to set expectations that are both high and realistic for all of my students, so that they all feel challenged in the classroom.

I will also have the opportunity to share the learning from my study with the primary school staff at my school. Our school has always encouraged goal setting in conjunction with our thrice yearly Parent-Teacher-Student conferences, but little guidance has been given in the process we should use, or in how these goals can be monitored. I am energized by the findings of my study, and want to share what was successful and where there was room for improvement with my colleagues, in the hope that we can work together to continue to build on the successes of the study, and to address the areas where there is room for improvement.

Summary

In this chapter, I have compared the results of my study to what I found in my literature review, looking for results that support my research as well as results that contradict the research. I have explained the biggest takeaways I learned as a result of my

study, and why they are meaningful to myself as an educator and researcher. I addressed limitations in my study, as well as ways I could change the goal setting process in the future to improve the process for the students. Finally, I laid out future implication for my work, in how this study would change my own instructional practices, and in how I hoped to use it to build goal setting at my school throughout the different grade levels.

Conclusion

At the beginning of this Capstone, I shared the C. S. Lewis quote that "the task of the modern educator is not to cut down jungles, but to irrigate deserts" (Lewis, 1944, p. 13). Before beginning my research, I often felt like the irrigator of deserts, trying to build learning in students who were not prepared to meet my effort and expectations with effort from themselves. However, as a result of completing my research, I have realized that I cannot bemoan not having the type of students I want to teach. As an educator, it is my challenge and opportunity to help students from all backgrounds, with all levels of self-efficacy and independence, to learn and grow, both in their content knowledge and in their skills as learners. Completing this Capstone has given me renewed energy and passion in building the self-efficacy and learning skills of the students I am so fortunate to have the opportunity to teach. I look forward to moving on with this year's class and future classes to ensure that all students I work with have the tools to feel the excitement and the power of taking responsibility for their own learning.

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APPENDIX A
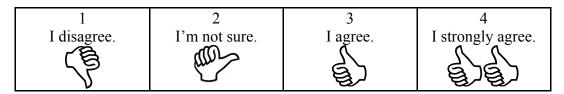
Attitudinal Scales on Self-Efficacy

Attitudinal Scales on Self-Efficacy

Student Name: _____ Date: _____

1. I think I am a good student.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

2. I always work the best I can.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

3. I know if I am doing a good job or a bad job in school.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

4. I complete all of my assignments at school by myself.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

5. When I have a difficult assignment, I keep trying until I have completed it the best I can.

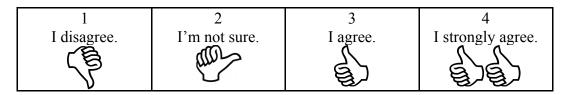| 1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

6. I ask for help if I'm stuck on a difficult assignment.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

7. When I have a difficult assignment, I get frustrated and stop working.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

8. I know what I do well as a student.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

9. I know what I struggle with as a student.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

10. When I complete a task, I can reflect on how to do it better next time.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

11. I always try my best at school.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

12. I know when I've learned something new.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

13. When I make a mistake, I use it as an opportunity to learn something new.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

14. I like to learn new things.

1 I disagree.	2 I'm not sure.	3 I agree.	4 I strongly agree.

Created by Jessica Stoll and Valeria Laitinen, April 2015

APPENDIX B

Interview Questions

Student Name: _____ Date: _____

Interview Follow Up Questions

1. Have you thought about these questions before? Were these questions hard or easy for you to answer? Why?

2. What do you think you could do to help do your best at school?

3. How do your teachers help you with doing your best at school in school? What else could they do to help?

4. Do your parents support you in doing your best in school? What else could they do to help?

5. What do you do when you don't know the answer or what to do in school?

Created by Jessica Stoll and Valeria Laitinen, May 2015

APPENDIX C

Goal Setting Page

Student Name:_____

Week Number: _____

Goal Tracking Page

My first goal is: _____

_____

+2 points means I am _____

_____

+1 point means I am _____

_____

+0 points means I am _____

_____

For Monday and Tuesday this week, I would give myself _____ points because _____

_____

_____

For Wednesday, Thursday, and Friday this week, I would give myself _____ points

because _____

_____

To continue improving next week, I will _____

_____

_____

My second goal is: _____

_____

+2 points means I am _____

_____

+1 point means I am _____

_____

+0 points means I am _____

_____

For Monday and Tuesday this week, I would give myself _____ points because _____

_____

_____

For Wednesday, Thursday, and Friday this week, I would give myself _____ points

because _____

_____

To continue improving next week, I will _____

_____

_____

Teacher Notes _____

_____

_____

Created by Jessica Stoll, May 2015

APPENDIX D

Parental Consent

September 21, 2015

Dear Parents,

I am the 3S Homeroom Teacher and a graduate student working on my master's degree in education at Hamline University. This University is located in the United States in St. Paul, Minnesota. The purpose of this letter is to ask your permission for your child to take part in a study that I am leading in the 3S and 3L classrooms from October 2015 - January 2016.

I want to study how goal setting impacts the students' self-efficacy. Self-efficacy is how people believe they can be successful in achieving a desired result. As a teacher, I have used student goal setting for several years, but I would now like to allow my students to take a larger role in creating their own learning goals.

Here is what will happen should you allow your child to participate in this study:

1. I will give your child a short survey.
2. I will follow up this survey with individual interviews of selected students.
3. In class, I will teach your child about the process of goal setting.
4. All students will then select two goals they would like to focus on for the two month study. Students will have time to assess their own progress is meeting their goals, and reflect upon what they can do to continue improving.
5. At the end of the two month study, I will re-administer the survey and and follow up interviews to see how student led goal setting has impacted the students' self-efficacy.

There is little to no risk for your child to participate. All results will be confidential and anonymous. I will not record information about individual students, such as their names, nor report identifying information or characteristics in the capstone. Participation is voluntary and you may decide at any time and without negative consequences that information about your child will not be included in my study. Your child's participation in this study is also voluntary.

I have received approval for my study from the School of Education at Hamline University and from the director of Pechersk School International, John Burns. The capstone will be catalogued in **Hamline's Bush Library Digital Commons**, a searchable electronic repository. My results might also be included in an article for publication in a professional journal or in a report at a professional conference. In all cases, your child's identity will always be anonymous (I will never use your child's name or other identifying information), and their participation in this study will be confidential.

If you agree that your child may participate in either the survey, the interview, or both, please fill out the duplicate agreement to participate on page two. Have your child return it to me no later than Wednesday, September 30th. I will make a short presentation on the process of my study and be available to answer any questions on Monday, September 28th from 3:15-3:45 in the 3S Classroom, P212. You are also welcome to e-mail me with any questions.

Sincerely,

Jessica Stoll
3S Homeroom Teacher
jessies@_____

Rachel Endo, Ph.D.
Primary Faculty Adviser, Hamline University
rendo01@hamline.edu

Informed Consent to Participate in Qualitative Interview

Return this portion to Jessica Stoll by Wednesday, September 30th

Parent Name: _____

Student Name: _____

Parental Consent

I have received your letter about the study you plan to conduct in which you will be observing students' behavior in groups. I understand there is little to no risk involved for my child, that his/her confidentiality will be protected, and that I may withdraw or my child may withdraw from the project at any time.

I give you permission to (check all that apply):
1. Give my child the survey.
2. To interview my child should you select her/him.

_____   _____
                Parent's Signature   Date

Student Consent

I have listened to Ms. Jessie explain her study to me. I understand that if I choose to participate, Ms. Jessie will not use my name or put any information about me in the study. I understand that I can decide not to be in the study at any time including now.

If I am not interested, I will not fill this form out.

Only if I am interested:

I give Ms. Jessie permission to (check all that apply):
1. Give me the survey.
2. To interview me.

_____   _____
                Student's Name   Date

APPENDIX E

Human Subjects Committee Approval Email

To: Jessica Stoll
From: Vivian Johnson
Date: 9-21-15
Re: HSC Approval

On behalf of the Human Subjects Committee, we are pleased to inform you that your application has been unconditionally approved and that you are now able to collect data related to your capstone.
Please accept our best wishes for the successful completion of your project.

Vivian Johnson, PhD
Chair, HSC Committee
School of Education
Hamline University
vjohnson@hamline.edu
(651) 523-2432