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## Using Written Self-Assessment to Improve Student Motivation in the Social Studies Classroom

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Using Written Self-Assessment to Improve Student Motivation in the Social Studies  
Classroom

by

Zachary E. Robbins

A capstone submitted in partial fulfillment of the  
Requirements for the degree of Master of Arts in Education

Hamline University

Saint Paul, Minnesota

August 2023

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## CHAPTER ONE

### Introduction

#### Capstone Overview

As a fifth year social studies teacher, I have spent a lot of time thinking about the purpose of education and my ultimate goals for students. In particular, I have kept returning to two conflicting goals that the political and educational philosopher Jean Jacques Rousseau argues are inherent in education - developing the person or developing the citizen (Petrovic & Rolstad, 2017). Teachers can develop the person by giving students the freedom to discover and develop their individual passions and the tools to think critically to make their own individual judgements. However, the freedom needed to develop the individual comes at the expense of developing citizens, who give up some of their individualism to better serve the needs of their community, country, and economy. As someone who believes living a good life requires following one's own interests, I am drawn towards developing the individual. For in order to follow one's interests, one first needs to discover and cultivate them.

Most schools in the United States also strive to cultivate the individual, as seen through the prevalence of electives in school (a foreign concept in many countries such as China) (Chu, 2017). Additionally, the names of policies like "No Child Left Behind" (2001) and "Every Child Succeeds Act" (2015) emphasize helping individuals succeed (Chu, 2017). Yet despite the rhetoric of teaching the individual, many schools structure themselves to develop citizens that are "taught to high academic standards that will prepare them to succeed in college and careers" so they can fill society's political and

economic needs (U.S. Department of Education, n.d., para. 10). For instance, when I was student teaching a sixth grade social studies class at an urban middle school in a low income neighborhood in the Twin Cities, I was told by my cooperating teacher to just focus on getting students to read the textbook and answer comprehension questions so the school could raise its reading test scores. Even after finding other texts that I thought would be more meaningful for students, my cooperating teacher still made me use the textbook that nearly all students found boring and irrelevant to their lives.

Even though schools focus on developing citizens, many students are still failing to master the skills they need to be economically and socially “successful” in life. For example, in the United States, the average high school graduation rate for Black and Hispanic students is 80% and 82%, respectively, compared to 89% for White students (National Center for Education Statistics, 2021a). Among all students in 12th grade, only 37% are at or above a proficient reading level (National Center for Education Statistics, 2020b) and only 25% are proficient or above in math (National Center for Education Statistics, 2020a). These low test results may indicate that the citizen-focused model of school discourages many - if not most - students from succeeding.

I further witnessed the shortcomings in developing the individual through the last five years teaching at an urban high school, where the majority of students are students of color from low-income backgrounds. When asked what they were interested in or liked learning about, many of my students just shrugged or said “I don’t know.” Additionally, while grades seemed to motivate some students to learn, the fear of falling behind and failing seemed to shut down many more students; the students that shut down seemed to

prefer not trying at all to trying and failing. This disengagement in school is not just happening in my classroom, it is occurring all across the country, where close to 40% of high school students report that they are disengaged at school (Usher & Kober, 2012).

My capstone research question arose out of a desire to find a way for me and other teachers to counter these dismal national trends and move classrooms more towards developing the individual, as measured by students' motivation to learn. Because I cannot make systematic change as an individual teacher, I am focusing on a written self-assessment intervention that any teacher could easily implement. Specifically, I am asking *How do written self-assessment reflections affect student motivation in a social studies classroom?* As I answer this question, I also answer the following sub-question related to my specific research setting: *Do written self-assessments have different impacts on the intrinsic motivation of recently arrived English Learners (RAEL), long-term ELs (LTEL), and non-ELs?*

## **Chapter Overview**

For the remainder of this chapter, I first recount my personal journey that led me to my research question. Next, I outline the learning goals I hope to achieve from answering my research question. Following that, I explain the professional significance of my study. Lastly, I summarize the chapter and outline the remainder of my capstone thesis.

## **Personal Journey**

As a kid, I was a straight-A student who loved school and was intrinsically motivated by my insatiable desire to learn. I also attended a private school, where nearly

all of my peers shared this motivation to learn, so the idea that anyone would choose not to do their classwork was unthinkable to me. However, reflecting back on my time as a high school student, I realize that I spent too much time stressing over making sure I got a good grade and not enough time focused on the learning itself. For me, getting an A in a class was all that mattered; anything less than perfection was not acceptable; I defined myself by my grades, not my interests and passions. It was not until I got to college and got my first A- in a class that I began to realize that grades really were not the most important thing in the world; the learning was. While I liked most of my classes, many of the most important lessons I learned during college came through informal discussions with friends and interesting speakers that came to campus.

After graduating, I worked briefly in a variety of fields including international agribusiness consulting, non-profit research and event planning, experiential education, and customer service. Despite their differences, my favorite part of each job was the opportunity to learn about new topics and teach myself and others new skills, without worrying about getting a grade. While I obviously had to complete my assigned duties, I was mostly driven by an intrinsic motivation to learn all I could.

By the time I decided to return to school in 2016 to get my social studies teaching license from Hamline University, I was surprised that I really did not care about the grades I got in my classes. Unlike my previous experiences with school, my primary concern was just to learn all I could in my classes so I could become a great teacher; the good grades I got just happened to be a consequence of my intrinsic motivation.



But what caused this change in my view towards grades and learning? Part of the reason was my several year break from a school environment, but the most significant cause was the way my first two education professors structured their classes - they de-emphasized grades and emphasized self-assessment. During those classes, I never worried about how many points I got on my work because the professors created opportunities for the class to constantly reflect on our learning and self-assess our understanding. Through these self-assessments, I found ways to connect what the professors taught to my own life and professional goals, which helped develop me as an individual; consequently, my intrinsic motivation also increased.

Before student teaching I had the opportunity to be a long-term Economics substitute for the entire fall 2017 semester at a private college preparatory school in Minnesota. As I planned out the semester, I intentionally included many of the self-assessment strategies from my first two classes at Hamline that I found the most beneficial for my learning. Specifically, I incorporated strategies such as a student self-assessment for class participation to help students take more ownership for participating in their learning; open-ended reading responses to give students opportunities to focus their learning on what they found most important; and self-assessments for unit projects to provide students with the opportunity to practice evaluating their own work.

While I ultimately still decided students' final grades, I found that after teaching them how to self-assess their learning (since students at this school were rarely given opportunities to evaluate their own work), most students were accurate judges of their

learning. I also noticed that many of my students who suffered from anxiety and pushed themselves too hard to get good grades found respite in my class. I do not have formal data on why they felt more at ease in my class than in others; but based on anecdotal conversations with students, I believe the reason largely lay in my decisions to adjust the class format and content based on the feedback students gave in their self-assessments. Ultimately, the self-assessment responses allowed me to tailor the class to students' interests and teach my students as individuals.

Now as I end my fifth year as a high school social studies teacher at Project Academy (pseudonym), an urban charter school in Minnesota made up largely of students of color from low-income backgrounds, I have noticed that many students seem focused on just doing what they need to pass each class, instead of focusing on themselves as individual learners. At first this tendency surprised me because Project Academy began as a mastery school that uses the Summit Learning self-directed learning (SDL) platform and bases grades largely on projects. I thought that project-based learning by definition taught the individual because of the opportunity to pursue individual interests. Instead, many students just focus on learning what they need to pass content assessments on Summit, while others spend much of their SDL time sleeping, playing video games, or watching entertaining videos. I think at least part of this disconnect between the individual learning vision for the school and the dearth of student motivation to take ownership of their learning lies in the disconnect students feel between their lives and what they are learning.

Since I started at Project Academy five years ago, the school has shifted away from an SDL model and moved closer to a traditional education model, where teachers give direct instruction at the beginning of class and then give students time to practice and get feedback during the rest of class. While the school learning model has changed, the lack of student motivation seems to have remained. Therefore, for my capstone thesis, I wanted to test how written self-assessment reflections can help connect students to their learning, as measured by their intrinsic motivation.

### **Learning Goals**

Given the urban context and large EL population at my research site, the ultimate goal of my capstone research was to find a versatile and relatively simple instructional strategy that I can use in any class I teach to motivate students to learn so they can develop as persons. Answering my main research question - *How do written self-assessment reflections affect student motivation in a social studies classroom?* - can determine if written self-assessment reflections are an effective strategy for improving students' intrinsic motivation. My sub-question - *Do written self-assessments have different impacts on the intrinsic motivation of recently arrived English Learners (RAEL), long-term ELs (LTEL), and non-ELs?* - helped me determine *how* self-assessments affect student motivation in a diverse school environment with many types of ELs.

### **Professional Significance**

During my first teacher training class at Hamline, my professor made a remark that has stuck with me ever since: people who become teachers tend to be good at school, but many of our students are not. Because I have always loved school, I am often baffled

when students disengage in class and decide not to learn. Answering my research questions helped me better understand both what motivates/disengages students and how self-assessment can improve motivation. Additionally, other teachers from all disciplines can learn from my experience using self-assessment in the classroom so that they can include the most beneficial elements in their teaching to help both high achieving students focus less on getting perfect grades and low achieving students focus less on the overwhelming fear of failing.

### **Chapter Summary**

Even though Rousseau argues teachers must choose between educating the person and the citizen, schools are attempting to educate both, but are more focused on developing citizens that conform to society's political and economic needs. As a consequence, much of education is standardized to help students check the boxes they need to get into a good college and get a good job, while also giving colleges and employers signals (e.g. grades) they can use to sort high and low quality students. Unfortunately, this standardization comes at the expense of developing the person in students, which de-motivates a large number of students to learn and develop their interests because they do not get good grades and feel like they fit in the standard model.

Out of this dilemma comes the motivation for this capstone question - how will students' motivation to learn in a high school history class be affected by de-emphasizing grades and allowing students to self-assess their work? Because all teachers try to increase students' motivation to help them become lifelong learners, the results of this research can apply to teachers of all disciplines and grade levels.

In Chapter Two I define student motivation and how to measure it, review the literature on the effects grades have on motivation, develop the link between self-assessment and motivation, and propose strategies for implementing self-assessment. In Chapter Three I detail my research methodology, define the variables of my analysis, and describe student sample characteristics. In Chapter Four I report the findings of my research. Lastly, in Chapter Five I discuss the significance of my results and suggest areas for future research.

## CHAPTER TWO

### Literature Review

#### Chapter Overview

In order to answer my research question about *How do written self-assessment reflections affect student motivation in a social studies classroom?*, I use this chapter to review the literature to create a framework to understand how self-assessment activities can affect student motivation. This chapter begins by reviewing the student motivation literature and the importance of intrinsic motivation by using the internal control model (Sullo, 2007). It then describes Keller's ARCS/V model to determine the characteristics that can increase intrinsic motivation in students (Harmes, 2015). The section concludes by showing the need for more research on intrinsic motivation in linguistically diverse classroom environments with both ELs and non-ELs.

The second section of this chapter then shows how self-assessment can increase student motivation. It begins by defining self-assessment and overviewing the benefits and problems of self-assessment; it then proposes solutions to these problems. The section concludes by describing the gaps in the self-assessment literature, particularly the need to study how self-assessment affects ELs in low socioeconomic environments such as Project Academy.

The final section evaluates the strengths and weaknesses of using different types of self-assessments in a linguistically diverse classroom and then justifies why Bernacki et al.'s (2016) general model for written self-assessment is a good fit for linguistically

diverse classrooms. The section concludes by reviewing best practices for successfully using self-assessments in the classroom.

### **Student Motivation**

Student motivation for academic success is an essential prerequisite for student learning, but unfortunately is often seen as lacking in classrooms (Usher & Kober, 2012). At Project Academy many students are consistently off task watching videos or texting friends, so I am constantly trying to keep students on task by motivating them to get their work done, but with little apparent success. Motivation has many definitions and meanings, so for the purpose of this research I will use Xie and Ke's (2011) definition of motivation as "the internal force that drives an individual to engage in a particular behavior" (p. 919). Teachers can only achieve the primary goals of education - helping students become lifelong learners of both topics that interest them (i.e. teaching the person) and key issues that affect them as citizens (i.e. teaching the citizen) - if students are motivated to learn. Therefore, it is important to develop a diverse repertoire of strategies that strengthen students' internal forces so they can engage in on-task behavior in the classroom. This section on student motivation begins with an overview of the problems of using extrinsic motivation with students. The second part explains the necessity of applying the internal control model of intrinsic motivation in the classroom. The third part establishes a working model of intrinsic motivation based on Glasser's (1990) five psychological needs of all people. The final part of this section concludes by applying Glasser's (1990) model of intrinsic motivation to the modified Keller's ARCS/V framework for increasing motivation developed by Harnes (2015). Keller's ARCS/V

framework is then used throughout my capstone to understand how written self-assessment reflections affect the intrinsic motivation of low income Latino and ELs. This part concludes by showing that student motivation is not well understood for ELs in high poverty schools.

### ***Extrinsic and Intrinsic Motivation***

Most educators know about the benefits of intrinsic motivation, such as increased engagement in class (Ryan & Deci, 2000; Xie & Ke, 2011) and increased persistence overcoming challenging tasks (Li et al., 2005); however, many teachers still rely on extrinsic motivation in the form of treats, prizes, and grades to encourage students to learn (Kohn, 1999). Extrinsic motivation is based on stimulus-response psychology, which argues that students behave based on external rewards and punishments - teachers can motivate students to learn by offering them rewards if they are on-task learning (e.g. by promising good grades and praise if they do their work) or by threatening to punish them if they are “off-task” (e.g. the threat of failing a class or getting punished) (Glasser 1990). However, as Kohn (1993) observed after reviewing the motivation literature, extrinsic motivation does not work: “Fact 1: Young children don’t need to be rewarded to learn. . . . Fact 2: At any age rewards are less effective than intrinsic motivation for promoting effective learning. . . . Fact 3: Rewards for learning undermine intrinsic motivation” (pp. 144, 148). While an external force influences what we choose to do, Glasser states that “the outside event does not cause our behavior. What we get, and all we ever get, from the outside is information; how we choose to act on that information is up to us” (p. 41). Ultimately, Kohn (1993) and Glasser both show that teachers can never



make students learn, since as Glasser reminds us, “the only person any [teacher] can consistently control is [themselves]” (p. 73).

### ***Internal Control Model***

Once a teacher recognizes that people are wired for internal motivation (Glasser, 1990; Kohn, 1993; Sullo, 2007), the question of how to motivate students gets flipped from figuring out how to *make* students do “X” to figuring out how to create a learning environment that makes students *want* to do “X”. The art of teaching then becomes figuring out how to convince students to work (Glasser, 1990). Internal control psychology provides a useful model for teachers to figure out how to persuade students to work. As Sullo explains, “Internal control psychology suggests that we are goal-driven and are most effective when we are clear about our goals and intentionally self-evaluate” (2007, p. 15). According to this model, the key to improving intrinsic motivation in students is helping them both develop clear goals about what they want to do and evaluate those goals in a productive manner.

### ***Intrinsic Motivation Model***

The goals that students set are ultimately based on how they can meet the four psychological needs Glasser (1990) argues all people have: belonging, power, freedom, and fun. *Belonging* includes the need to develop relationships and connections with peers and adults. *Power* includes the need to experience achievement and success. *Freedom* includes the need to choose what and how to learn. *Fun* includes the need to have a sense of discovery. Students are always motivated to meet these needs, but they are not inherently motivated to do school work - if they cannot meet their needs in a productive

way at school, they will find other ways to meet their immediate needs even at the expense of their long-term benefit (Glasser, 1990).

The importance of meeting these needs is best illustrated through Glasser's (1990) boss-teacher model of teaching. The boss-teacher relies on telling students what to do, instead of getting their input, which removes students' sense of power. When students have little say in what they do, they will find ways to exert some power, such as defying what a teacher tells them to do. Ultimately, the boss-teacher relies on using coercion to get students to comply with what they tell students to do, which can create an adversarial relationship between students and teacher. This adversarial relationship fractures the important student-teacher connection, which is needed to help students set and evaluate goals, and can cause students to spend class time making connections with friends instead of connecting with their teacher and school work (Sullo, 2007). Without meaningful connections with their work and teachers, struggling students feel like failures (Kohn, 1999) - they feel like their teachers are constantly judging them and finding them wanting. While most boss-teachers want to do what is best for their students, Holt (1970) argued that this judging environment fatally affects student learning:

It is not just that when we are being judged we think only of the judge and how to give him what he wants. It is not just that when we have been made enough afraid of failure we may think that the surest way to avoid failing is never to try. To do this much damage to children would be bad enough. But a child who has been made to think of himself as no good soon becomes unable to meet the world on any terms. His fear makes everything look fearful. (p. 28)

When everything looks fearful, students exercise their need for power by not even trying. Glasser (1990) explained how giving up on school makes sense from the perspective of a struggling student, “Since we all want to suffer as little as possible, many students who feel bad choose to stop working in school” (p. 46).

Ultimately, Glasser (1990) believed that if these four needs are not met, by late middle school or early high school, there is a state of almost total antagonism between the teachers and the non-working students...

When such high numbers are involved, this angry atmosphere takes too much energy to maintain. Both sides tend to slip into a kind of sullen, apathetic truce: 'I won't bother you if you don't bother me.' This truce is fragile. When it is broken, which happens frequently when either teachers or students get excessively frustrated, anger explodes from one or both sides. (pp. 50-51)

This scene described by Glasser is an almost daily occurrence at Project Academy - many students have been unable to meet their psychological needs productively through school, so they have stopped working and get frustrated when teachers try to encourage them to work.

### ***Increasing Intrinsic Motivation***

If student success is related to intrinsic motivation, and if intrinsic motivation is related to how well students can achieve their four psychological needs at school, then any solution to increase intrinsic motivation must do so by meeting students' needs for belonging, power, freedom, and fun. In practical terms, Harnes' (2015) modified Keller's ARCS/V framework is used in this capstone to show how self-assessment can increase

intrinsic motivation. The Keller's ARCS/V framework identifies five avenues through which intrinsic motivation is affected: attention, relevance, confidence, satisfaction, and volition.

- *Attention* involves making a learning activity interesting for students so that they pursue their own inquiry.
- *Relevance* requires making learning meaningful for students; both attention and relevance are similar to Glasser's need for fun.
- To increase *confidence*, students need opportunities to experience success at mastery, which is identical to Glasser's thought on students' need for power.
- *Satisfaction* requires that students anticipate and experience positive outcomes from learning and are given opportunities to cycle through receiving feedback and applying what they learned; this cycle of feedback and revision succeeds only when students feel a sense of belonging with the teacher and their peers.
- Lastly, *volition* gives students control over their actions and some freedom over what and how they learn.

Ultimately, a student's decision to become more intrinsically motivated to do school work only occurs when the person they want to be is different from the person they perceive themselves to be (Sullo, 2007). When students want to be successful and have a positive internal picture of themselves, teachers can help students bring this reality to life by showing them how to develop high and realistic standards for their internal pictures. One way to help students match their internal picture to reality is by teaching them how to accurately self-assess their work so they know what quality work looks like

(Sullo, 2007), a process consistent with the modified Keller's ARCS/V framework (Harmes, 2015).

### ***Need For Intrinsic Motivation Research in Linguistically Diverse Environments***

While there is extensive research on increasing student motivation in traditional classrooms, little research has been done on increasing student motivation in linguistically diverse learning environments (Harms, 2015). Additionally, there is existing research on how to increase motivation for adult ELs (Hussain et al., 2020), but I was not able to find any studies about increasing motivation for both ELs and non-ELs in linguistically diverse classrooms. In 2019 there were over 5.1 million ELs enrolled in U.S. public schools, up from nearly 3.8 million in 2000 (National Center for Education Statistics, 2021b). As the number of ELs continues to increase, there is an increasing need to find ways to improve student motivation in linguistically diverse learning environments. The next section provides a detailed description of self-assessment and the types of ELs. It also reviews the benefits and problems of self-assessment found in the literature.

### **Self-Assessment Framework**

Student self-assessments have been shown to positively impact student motivation, engagement, and learning (McMillan & Hearn, 2009), and could be an effective strategy for increasing intrinsic motivation for linguistically diverse classrooms. There are many forms of and names for self-assessment, so the section begins by defining self-assessment and linking self-assessment to Harmes' (2015) modified Keller's ARCS/V framework of motivation. In the second part I summarize the effects that

self-assessment can have on students. The third part describes how explicit instruction in self-assessment can address many of the problems of bias and unreliability that Kim et al. (2016) and Pinner (2016) have identified in student self-assessments. The final part overviews some of the gaps in the self-assessment literature, particularly the need to research the effect of self-assessment on different groups of students.

### ***Defining Self-assessment***

Self-assessment is a term used to describe a wide array of strategies designed to help students assess and give feedback on their own work and learning process. After analyzing 83 international studies on self-assessment, Brown and Harris (2013) identified three general types of self-assessment: self-rating, self-estimate of performance, and rubric-based assessment. When using *self-rating* strategies, students quickly decide whether or not they understand something. Examples of this type of self-assessment include giving a thumbs up or down to show understanding and a strategy called traffic lights, where students select green if they understand, yellow if they just have a few questions, or red if they have no idea what is going on. *Self-estimates of performance* provide students more time to reflect on their learning by answering prompts such as “What did you do well? How well do you understand this concept?” Lastly, in *rubric-based assessments*, students assess their work by comparing it to an exemplar model of what high quality work looks like.

Regardless of the type, Andrade (2010) identified seven actions teachers must take to effectively implement any self-assessment strategy:

- Provide a model/rubric students can use to assess their learning and work.

- Teach students how to use a model/rubric to assess their work.
- Give students feedback on how well they are self-assessing themselves.
- Support students as they use their self-assessment to improve their work.
- Give students opportunities to use their self-assessment feedback to revise and improve their work.
- Make some self-assessments private so students do not just write what they think the teacher wants to hear.
- Do not make self-assessments into self-evaluations that determine a student's grade.

As I test the impact of self-assessment on student motivation, I ensured that the written self-assessment treatment met these seven requirements.

So long as an instructional strategy satisfies Andrade's (2010) self-assessment requirements, the underlying philosophical goal of self-assessment remains the same - help students utilize ideas and make them their own (Kusnic & Finley, 1993). The qualities of self-assessment that Kusnic and Finley identified in undergraduate-level course self-evaluations are also instructional qualities that can help improve secondary student motivation within the Keller's ARCS/V model. Specifically, self-assessment can address the need for attention by creating an "attitude of inquiry" because students are actively constructing ideas in line with their interests (Kusnic & Finley, p. 10).

Self-assessment also improves relevance by giving students opportunities to reflect on their learning to create "meaning and relevance" that links their learning to the outside world (Kusnic & Finley, 1993, p. 10). Student confidence also increases because

self-assessment empowers students to voice their opinions and reflect on changes they can make to make themselves active agents in the world. Lastly, self-assessment gives students satisfaction and volition by pushing students to become self-directed - responsible for their own learning. Having outlined the philosophical benefits of self-assessment, the next part summarizes the empirical benefits of self-assessment in the literature.

### ***Benefits of Self-assessment***

Within the self-assessment literature, many studies claim that self-assessment positively affects outcomes such as student motivation (Bernacki et al., 2016; Johnson & Winterbottom, 2011; Sharma et al., 2016; Yoon & Lee, 2013), confidence (Weisi & Karimi, 2013; Yoon & Lee, 2013), learning (Liuolienė & Metiūnienė, 2014), and critical thinking (Sharma et al., 2016). However, in Brown and Harris' (2013) meta analysis of 83 international self-assessment studies, they found that the magnitude of these effects varies widely across studies. Of the 23 studies that tested self-assessment's impact on student learning, Brown and Harris determined that only 52% found a strong positive effect. To explain the variation, Brown and Harris concluded that in order for self-assessment to be effective at improving student learning, teachers must both give students explicit instruction in how to self-assess and incorporate a high level of academic rigor into the self-assessment. Brown and Harris (2013) also concluded that the current research does not make a convincing link between self-assessment and improved student self-regulation.



Although Brown and Harris (2013) did not explicitly examine motivation, there is strong evidence across a variety of academic disciplines that self-assessment and student motivation are linked. For example, in a quasi-experiment with 89 first-year medical students, Sharma et al. (2016) found that giving students opportunities to self-assess written exams improved not just their learning on a similar exam a week later, but also their motivation, critical analysis, and self-directed learning abilities. Additionally, Weisi and Karimi (2013) showed that self-assessment can improve students' positive outlook towards learning English in a controlled experiment of 100 Iranian English as a foreign language (EFL) students. Bernacki et al. (2016) found a similar increased interest in science topics among a group of middle school science students who wrote 10 minutes per week about their competence and interest in the week's science lesson. The fact that self-assessment is found to improve interest in subject matter in EFL and science classes suggests that self-assessment may also increase interest in social studies classes.

However, not all students are affected by self-assessment in equal ways. In an experiment of 184 sixth graders in Korea, Yoon and Lee (2013) determined that self-assessment had a positive effect on all students' English ability level, motivation and confidence and is positively correlated with lower anxiety in learning a new language; however, they also found that low- and intermediate-level learners experience the largest gains in these areas. This result is consistent with Brown and Harris's (2013) conclusion that low-performing students gain the most from self-assessment reflection.

### *Problems and Solutions of Self-assessment*

Many students at Project Academy are low performing, so they should experience large benefits from self-assessing their work. However, in order for self-assessment to be effective and viable in the classroom, it must be used properly. If self-assessment impacts a student's overall grade, a practice that Andrade (2010) advises against, then students who do not buy into the self-assessment philosophy may abuse the system. Pinner (2016) highlights this potential problem by using a narrative inquiry to describe an example of this type of abuse in his class. Pinner's (2016) example is indicative of the more general problem of accuracy and bias in self-assessment - students that give themselves higher or lower evaluations than the teacher thinks they should get (Kim et al., 2016). Kim et al. found that overestimating the quality of one's work mostly occurs among students with high levels of self-esteem (i.e. motivation) and becomes less likely as the perceived difficulty of the task becomes greater.

Brown and Harris (2013) also found a disconnect between teacher and student perceptions of self-assessment. They found that teachers tend to value self-assessment for its ability to help increase student learning, motivation, and critical thinking skills, while students value the social interaction of peer-assessment. Teachers also overestimate their students' self-assessment skills, while students are concerned that they do not have the skills they need to accurately assess their own work (Brown & Harris, 2013; MacGregor, 1993).

In order to solve these problems of bias, accuracy, and student confusion, Brown and Harris (2013) argued teachers need to take the following actions: (a) include

instruction in how to self-assess work; (b) ensure that there is rigor in the self-assessment; and (c) create what Brown and Harris describe as “a classroom philosophy that views mistakes as an opportunity for learning and that encourages honest reflection” (p. 110). Although self-assessments can take many forms, Brown and Harris (2013) found that among the 83 self-assessment studies they reviewed, the amount of self-assessment training students receive and the rigor of the self-assessments were the most important factors in determining the impact of self-assessment. The type of self-assessment (e.g. rubric vs. writing prompts) had no significant impact on outcomes. Fosterling and Morgenstern (2002) also found that students have more buy-in when self-assessing tasks they have a high ability in.

Besides the three most common problems identified above, MacGregor (1993) identified several additional challenges students face when self-assessing their work. Although MacGregor focuses on undergraduate students, many of the challenges still apply to secondary students. The most fundamental of these challenges is overcoming the prevalence of Freire’s (2000) “banking” view of education, in which the goal of education is to accumulate knowledge from teachers and experts. Students are not used to connecting their learning to themselves as learners and initially see the introspective - subjective - thinking involved in self-assessment as foreign. Many students are also focused on the grade they will “get”, not on the process of reflecting on and making meaning from the content they are learning. They also usually lack confidence in their own ideas and judgements, and instead prefer to get evaluated “correctly” by their teacher. If expectations are not clearly laid out, students may also get confused about who

the self-assessment is for - themselves or the teacher? - and what its purpose is. Lastly, many students are at least initially uncomfortable with admitting their academic weakness and so may be reluctant to honestly admit mistakes they made in their work and learning (MacGregor, 1993).

Many of MacGregor's (1993) challenges apply to the students at Project Academy. In order to minimize the impact of these challenges on the results of my written self-assessment treatment, I ensured that I provided sufficient time to address MacGregor's (1993) challenges with students. If these challenges were not addressed, then the impact of self-assessment on students' intrinsic motivation may be underestimated. Instead of measuring self-assessment, I may measure variables like student confidence in their own judgment or how clearly students understand the purpose of a self-assessment.

### ***Gaps in Self-assessment Literature***

Although there is much evidence about the positive effects of self-assessment on student achievement and motivation, there are still gaps in the literature. The gap most relevant to my research question - *How do written self-assessment reflections affect student motivation in a social studies classroom?* - is the need to research the different impacts written self-assessments have on different groups of students (MacGregor, 1993; Panadero et al., 2016). Project Academy is racially diverse, urban, and 95% low-income. It is also unique because 40% of its students receive EL services, which includes a mix of long-term English learners (LTEL) and recently arrived English learners (RAEL), defined as an EL that has been enrolled in a school in the U.S. for less than 12 months (Every

Student Succeeds Act, 2015). LTELs do not have a standard federal definition, but the 2015 Every Student Succeeds Act requires schools to report the number of students that continue to receive EL services after five years in the program; therefore, an LTEL is often defined as a student that receives EL services for more than five years (Every Student Succeeds Act, 2015).

Classrooms with a diversity of LTEL, RAEL, and non-ELs are not well represented in the literature. Therefore, my capstone also provides insight into how self-assessment affects intrinsic motivation in a linguistically diverse classroom environment on different types of ELs through my sub-question: *Do written self-assessments have different impacts on the intrinsic motivation of recently arrived English Learners (RAEL), long-term ELs (LTEL), and non-ELs?* The next section provides a detailed description of self-assessment and then reviews the benefits and problems of self-assessment found in the literature.

### **Effective Self-Assessment Strategies**

The literature has studied many different types of self-assessment, so this section reviews the strengths and weaknesses of the main typologies of self-assessment strategies to determine the self-assessment strategy that will be most effective at a school with a large and diverse EL population like Project Academy. The first part of this section assesses the appropriateness of of Brown and Harris' (2013) three types of self-assessments for use in a linguistically diverse classrooms, Following this analysis, it describes why Bernacki et al.'s (2016) general model for written self-assessment is the most fitting type of self-assessment for schools like Project Academy. The section

concludes by identifying the best practices that should be used when implementing self-assessment in a classroom of mixed EL and non-ELs.

### ***Types of Self-assessment Strategies***

Brown and Harris (2013) found that all types of self-assessment strategies have the potential to be both effective and ineffective; the key variables that affect effectiveness are how well students are taught to use the self-assessment strategy and the academic rigor of the self-assessment. All types of self-assessment strategies have the potential to be effective; therefore, for my capstone it is critical to select strategies that work well for EL and non-ELs. After assessing the three categories of self-assessment strategies Brown and Harris identified - self-rating, rubric-based assessments, and self-assessment of performance - I find that self-assessment of performance best fits the parameters of my capstone thesis.

**Self-rating.** Self-rating self-assessments are great for giving students opportunities to quickly check their understanding; however, it can be time consuming for teachers to get self-ratings from each student to help them determine what each individual student needs help understanding. While teachers could easily model and instruct the whole class on how to use self-ratings, the investment of time it would take to meet Andrade's (2010) conditions of giving students feedback on how well they are self-assessing and supporting students to use the feedback to improve would likely be prohibitive for many teachers.

**Rubric-based Assessments.** At Project Academy, students are already using rubrics and exemplars of quality work to self-assess their writing, so testing the

effectiveness of rubric-based assessments at the school would be difficult. At Project Academy, rubrics meet Andrade's (2010) effective self-assessment conditions: students are taught how to use rubrics using models of quality work; they self-assess their draft work using rubrics and are given feedback and time from teachers to revise their work according to the feedback; and their self-assessed rubric scores are not used to determine their final grades.

**Self-assessment of Performance.** Ultimately, self-assessments of performance are the most appropriate strategy to use in a diverse learning environment like Project Academy, which has a wide range of language and academic skill levels. Self-assessments of performance allow students to answer writing prompts so they can develop their metacognition skills and reflect on the learning experience itself. Bernacki et al.'s (2016) general model for written self-assessment is general enough for all students to use, regardless of where they are in their learning process. Bernacki et al.'s (2016) model also makes it easier for teachers to provide the timely feedback and support students need to benefit from self-assessment because it is a "content-general self-assessment activity based on motivational theory that could easily be applied to several academic domains and curricula, and can be administered by teachers with minor alterations" (p. 27).

In their study of 53 middle school science students, Bernacki et al. (2016) gave students questionnaires at the start and end of a term to see how the intervention of a 10 minute self-assessment writing prompt once or twice per week affected students' interest and endorsement of the class' mastery goals. They found that compared to a lesson

summary writing prompt, the self-assessment writing prompt caused both outcomes to increase among students. Since the goal of Bernacki et al.'s (2016) study is to create a general self-assessment of performance model, it is a relevant strategy to use in my capstone, where I can test its effect on student motivation in a diverse social studies classroom. Additionally, it allows me to test how self-assessments of performance may impact EL and non-ELs differently when they are taught in the same classroom.

Besides meeting Andrade's (2010) conditions of effective self-assessment, Bernacki et al.'s (2016) model also satisfies the needs of students Glasser (1990) identified. By answering self-assessment writing prompts, students give teachers more insight into their interests, which allow teachers to in turn incorporate those student interests into future lessons. This process ultimately allows students and teachers to develop non-coercive relationships with each other and to move away from the boss-teacher model (Glasser). Because the writing prompts are open-ended and based on student experiences, they also give students opportunities to experience success and freedom while writing. As Cohen et al. (2006) found, written self-affirming reflections about students' interests lower the psychological threat and stress of students of color, while also increasing their GPA. Lastly, the writing prompts also help students reflect on their interests so they can discover what they want to learn more about, satisfying students' need for fun (Glasser, 1990). For instance, one of Bernacki et al.'s (2016) prompts asks students to "name one recent topic from science class that you find interesting, but don't know a lot about. What's interesting about it? What do you want to learn about it?" (p. 45).



### ***Self-assessment Best Practices***

Because the effectiveness of self-assessment depends on its implementation, this final part describes the best practices that I used in my research to answer my research question - *How do written self-assessment reflections affect student motivation in a social studies classroom?* The four best practices that I implemented are as follows:

**Explicit Instruction.** Give students explicit step-by-step training and practice to teach them how to use the self-assessment writing prompts. In separate meta analyses of the self-assessment literature, Nielsen (2014) and Andrade (2010) both concluded that self-assessments are most effective when explicitly taught.

**Model Self-assessment.** Model quality self-assessment written responses for students and teach them what quality responses look like. Nielsen (2014) also reviewed several studies demonstrating the importance of using models to teach students how to self-assess their work. When I introduced the written self-assessments, I used sample student responses to demonstrate effective self-assessment.

**Positive Feedback.** Motivate students to complete the self-assessment writing prompts by showing how the prompts can connect to their lives and improve their learning. Even with students that had previous negative experiences with school work, the literature Nielsen (2014) reviewed showed that self-assessments that connect practice to achievement can increase students' self-efficacy and motivation. To help students see the connection, I used their self-assessment responses to guide what I needed to review in the following class.

**Global and Specific Tasks.** Nielsen (2014) found broad evidence that students need a mixture of both holistic (open-ended reflection questions) and specific writing prompts to help round out students' self-assessment skills. Holistic prompts help them evaluate the overall quality of their work and understanding, while specific prompts help students develop the discrete skills they need to become better writers and thinkers. The self-assessment prompts I used included a variety of holistic and specific prompts.

### **Chapter Summary**

I started this literature review describing how teachers can increase the intrinsic motivation in students by using internal control psychology (Sullo, 2007) and ensuring that student needs are being met in the classroom (Glasser, 1990). I then explained why intrinsic motivation is necessary for students to become lifelong learners that can lead meaningful lives. I concluded the first section by explaining how I will use Harnes' (2015) modified Keller's ARCS/V model to understand how written self-assessment reflections affect student intrinsic motivation.

With lower levels of intrinsic motivation among students in schools across the United States, it is imperative to develop strategies for increasing intrinsic motivation. The second section of this chapter proposed self-assessment as a way to meet student needs and develop intrinsic motivation, by helping students want to learn and be more successful; the magnitude of this effect is especially larger for low performing students that make up the majority of the school population at Project Academy (Brown & Harris, 2013). However, self-assessment has problems including self-assessment bias (Kim et al., 2016) and the challenge of shifting teachers' and students' educational paradigm away

from what Freire (2000) calls the “banking” view of education, where students are seen as passive depositories of knowledge (MacGregor, 1993). Instead, teachers and students need to become active participants in constructing their learning, so they can see the connection between the learner and learning (MacGregor, 1993). Many of these problems can be solved by giving students direct instruction in how to self-assess themselves (Brown & Harris). While the benefits of self-assessment have been widely studied, there is still a need to evaluate the different effects of self-assessment on EL and non-ELs learning in the same classroom (Panadero et al., 2016).

Lastly, the third section of this chapter analyzed different types of self-assessments to identify the most effective model to use in a linguistically diverse classroom. Because the effectiveness of self-assessments depends on implementation by teachers (Brown & Harris, 2013), I decided to use Bernacki et al.’s (2016) general model of written self-assessment because it can be easily applied in a wide array of classroom without fundamentally changing the way a teacher structures their class, while also meeting students’ needs (Glasser, 1990).

In the next chapter I outline the structure of the research design I used to answer my research question - *How do written self-assessment reflections affect student motivation in a social studies classroom?* Specifically, in this section I describe the pre-experimental design experiment I use and the data I plan to collect at Project Academy.

## CHAPTER THREE

### Methods

#### Chapter Outline

One of the primary responsibilities of teachers is to convince students of the importance of learning. Unless students believe what they are learning in the classroom is meaningful and fits with their idea of what they need to know to be successful in the world, they will not be motivated to learn (Glasser, 1990). As shown in Chapter One of my capstone, many students across the country lack this intrinsic motivation. While teachers and researchers have proposed countless solutions to solve this motivation gap (Glasser, 1990; Holt, 1970), most of these recommendations require a complete overhaul of the American public school system and are therefore not practical for most classroom teachers (Stigler & Hiebert, 1999). Because of my experience with students that seem to have low levels of intrinsic motivation in social studies, I am focusing my capstone on using a pragmatic worldview to research practical steps that any teacher could take to improve student motivation in their classroom. Specifically, my capstone focuses on the research question: *How do written self-assessment reflections affect student motivation in a social studies classroom?* Additionally, I answer a related sub-question that directly relates to my research setting: *Do written self-assessments have different impacts on the intrinsic motivation of recently arrived English Learners (RAEL), long-term ELs (LTEL), and non-ELs?*

The rest of this chapter outlines the research design I used to answer my research question and sub-question. First, I explain why I am using a pragmatic worldview for my

research paradigm. Second, I discuss the pre-experimental design experiment I used to conduct my research. Third, I describe the key characteristics of my research setting and participants. Fourth, I specify the research methods I used to assess the impact self-assessment has on student motivation, as well as my plan for analyzing my quantitative data. In this section I also describe the measures I took to reduce the impact of bias during my data collection. Fifth, I address potential ethical issues and detail the steps I took to ensure the safety and confidentiality of my participants. Lastly, I conclude with a summary of the chapter.

### **Research Paradigm**

Because of my struggle in motivating students to learn about history throughout my five years of teaching, my research question focuses on practical steps I can take to improve student motivation. Given this focus, my research closely aligns with the pragmatic worldview, which focuses on what works and uses “all approaches available to understand the problem” (Creswell, 2014, p. 10). Chapter Two describes the evidence that already shows student self-assessments can increase student motivation (for example McMillan & Hearn, 2009; Sharma et al., 2016). My capstone therefore attempts to determine if written self-assessment activities can also increase student motivation in my ethnically and linguistically diverse classrooms, which have both ELs and non-ELs.

### **Methods**

In keeping with my pragmatic worldview, my capstone uses a pre-experimental design experiment to answer my research questions (Creswell, 2014). A pre-experimental design experiment allows me to both validate past studies that find self-assessment

improves student motivation and test if identical written self-assessments have different impacts on motivation for ELs and non-ELs, as well as the different types of ELs.

### **Setting & Participants**

My research was done at a small, urban charter high school in the midwest that provides a supportive school experience for students that struggle in traditional, large public schools. The school has a four block schedule, in which students have the four 80-minute classes each day for a semester. The high school has 226 students (62% Hispanic, 26% Black or African American, 8% Native American, 3% White, and 2% two or more races), with 95% of students receiving free or reduced lunch. Of the students, 42% receive English Learner (EL) services and 30% receive special education services. Of the 27 teachers, 35% have a master's degree or higher, 86% have a license in their subject area, and 46% have three or more years of teaching experience.

I gave the students in my three World History classes the opportunity to participate in this study. I am the only ninth and tenth grade social studies teacher, but I also co-teach with an EL teacher in my two sections that have a large number of ELs. My third section is mostly composed of general education students. Because I am using a pre-experimental design, there is no control group, so all three sections received the same written self-assessment treatment. The treatment was similar to Bernacki et al.'s (2016) research design, which tested the effect of 10 minute self-assessment writing prompts on student interest in their middle school science class.

## **Methods & Research Tools**

In order to answer my research question - *How do written self-assessment reflections affect student motivation in a social studies classroom?* - I used a pre-experimental design method to validate Bernacki et al.'s (2016) weekly 10 minute self-assessment writing prompt and determine if it has different effects on EL and non-ELs. Before beginning the treatment, I gave all participants the Academic Motivation Scale (AMS) - High School version questionnaire to measure their baseline level of intrinsic motivation (Vallerand et al., 1992). For RAELs, the AMS questionnaire was in Spanish (see Appendix C for the AMS questionnaire). Then all participants received a five-week treatment of twice-weekly 10-minute self-assessment writing prompts based on the ones used by Bernacki et al. (2016) (see Appendix D for the list of written self-assessment prompts; prompts were in English and Spanish to ensure that language is not a barrier for participants that recently arrived in the United States to benefit from the self-assessment intervention). Each of these writing prompts was used once during the treatment period.

### ***Quantitative Data Analysis***

After the five-week treatment, all participants took the AMS questionnaire again to see how their intrinsic motivation has changed. I then began my analysis by calculating how much each participant's intrinsic motivation, extrinsic motivation, and amotivation changed before and after the written self-assessment treatment. This approach allowed me to test the validity of Bernacki et al.'s (2016) finding that written self-assessment improves student intrinsic motivation. If the difference between the two intrinsic

motivation scores was positive, then the results would support Bernacki et al.'s finding. Additionally, I compared each participant's final Quarter 3 (the control period) and Quarter 4 (the treatment period) grades as well as Quarter 3 and Quarter 4 work completion rates as another indicator to validate the effectiveness of written self-assessments. The final metric I analyzed was the difference in work completion rates on days when I used control exit tickets and on days when I used the treatment self-assessment prompts. These control exit tickets included multiple choice, short-answer, and ordering questions based on the content of each day's lesson. According to Bernacki et al.'s (2016) findings, average class grades and work completion rates should increase as students' intrinsic motivation increases.

Next, to answer my sub-question - *Do written self-assessments have different impacts on the intrinsic motivation of recently arrived English Learners (RAEL), long-term ELs (LTEL), and non-ELs?* - I used a single factor analysis of covariance (single factor ANOVA) to determine if written self-assessment has a different effect on each of these groups of participants. ANOVA allowed me to measure the average differences between these groups (Keselman et al., 1998).

I took several steps to reduce the likelihood of introducing bias into my classroom pre-experiment. First, I debriefed weekly with my EL co-teacher to help me reflect on any potential biases I may be introducing into my pre-experiment. I also kept a daily reflection journal to document what I did and said in each class so that I implemented the written self-assessment treatment consistently in all three of my classes.

## **Ethics**



To ensure that I uphold the ethical requirements of educational research, I received approval from Project Academy's principal and I got Internal Review Board (IRB) approval from Hamline University before conducting my capstone research in my classroom. After I got approval to start my research, I got written permission from the parents or guardians of my students, as well as the students themselves, to participate in my research (see Appendix A for the parent consent form and Appendix B for the consent form). Students that did not get permission to be part of the research still completed the 10 minute self-assessment or lesson summary writing prompts, but their results were not included in the final data collection and analysis.

I kept all student names confidential and informed all students ahead of time that they were participating in a research experiment, but I did not give them a detailed explanation of the specific written self-assessment strategies I used in order to avoid biasing the data.

### **Chapter Summary**

The purpose of this capstone is to better understand how 10 minute written self-assessment prompts affect the intrinsic motivation of different groups of students in a social studies classroom. While there are countless strategies for increasing intrinsic motivation levels, I selected a written self-assessment strategy because it is a strategy that other teachers could easily implement in their classrooms, particularly in linguistically diverse classrooms like at Project Academy. Additionally, little research has been done on how RAEL, LTEL, and non-ELs might respond to written self-assessment differently.

In Chapter Four I analyze the impact the self-assessment treatment has on student intrinsic motivation. Furthermore, I test to see if a student's English language ability affects the impact of the treatment.

## CHAPTER FOUR

### Results

#### Chapter Introduction

The purpose of this study was twofold: First, it attempted to evaluate how simple written self-assessment reflections impact student motivation in a high school social studies classroom. Second, it aimed to determine if written self-assessments have different impacts on students in a linguistically diverse classroom. Students completed written self-assessments at the end of class twice a week over a five-week period from May to June 2023. The end of the treatment period corresponded with the end of the school year, which disrupted class schedules and affected the attendance of students attending field trips for other classes. Because of these disruptions, I was only able to conduct a five-week treatment, instead of the six-week treatment I had planned. Additionally, only eight of my 68 students returned research consent forms, significantly limiting the sample size of the study. And of these eight participants, only three completed the pre- and post-Academic Motivation Scale (AMS) survey.

Despite these data limitations, this chapter analyzes the data collected to answer my research question: *How do written self-assessment reflections affect student motivation in a social studies classroom?* First, it discusses the data collection method and the characteristics of the eight participants. Next, it describes the metrics used to measure student motivation. Finally, the chapter concludes by analyzing the quantitative metrics to determine how completing written self-assessments affects students' motivation.

## Data Collection & Analysis

The primary data collected for this research project included survey responses and work completion data. Before and after the five-week self-assessment treatment, participants took a modified version of Vallerand et al.'s (1992) AMS to measure their intrinsic motivation, extrinsic motivation, and amotivation. Participants took this survey as a Google Form on their phone or laptop; after they finished, the results were transferred to a Google Sheets spreadsheet. In this spreadsheet, I used Vallerand et al.'s scoring guide to calculate each participant's intrinsic motivation, extrinsic motivation, and amotivation both before and after the treatment. I then calculated how much each type of motivation changed during the treatment period to create one metric for measuring the variable of student motivation. Unfortunately, because only eight participants returned consent forms, my sample size was much smaller than expected. Furthermore, of these eight participants, only three took the academic motivation survey both before and after due to an unexpected field trip that caused many students to miss class on the day the second survey was administered.

As another way to measure student motivation, I also compiled a Google Sheets spreadsheet of each participant's grades and work completion rates, under the premise that grades and work completion rates should increase as intrinsic motivation increases. For grades, I used each participant's final grades for Quarters 3 and 4. Since the written self-assessment treatment was conducted at the end of Quarter 4, I treated the Quarter 3 grades as a control and the Quarter 4 grades as the treatment. To create a proxy variable

to measure student motivation, I calculated the difference between the Quarter 3 and Quarter 4 final grades.

Additionally, I used a similar data collection method to calculate the difference in work completion rates between the days when I gave participants written self-assessment writing prompts and the quiz-like exit tickets participants had been completing at the end of each class prior to this research project. If motivation increased during the treatment, I would expect work completion rates to be higher for the self-assessment writing prompts. I also calculated changes in work completion rates between Quarter 3 and Quarter 4, under the presumption that if the self-assessments increased student motivation, then work completion rates should be higher in Quarter 4 (the treatment period).

Originally, I had planned to divide participants into three subgroups to answer my subquestion: *Do written self-assessments have different impacts on the intrinsic motivation of recently arrived English Learners (RAEL), long-term ELs (LTEL), and non-ELs.* Of the eight participants, four were RAELs and four were non-ELs, which means I was not able to evaluate the impact of written self-assessments on LTELs. Additionally, of the three participants that completed the AMS before and after the treatment period, two were LTELs and one was a non-EL. Since the AMS did not have enough participants for statistically significant analysis, I was only able to create linguistic groups with the work completion and grade data; however, since each group only had four participants, the reliability and generalizability of the results are limited. Despite these limitations, I finished my analysis by using a single factor ANOVA test on the three variables described earlier in this section to determine if the written

self-assessments had different impacts on RAELs and non-ELs. The three variables were change in work completion between Quarter 4 and Quarter 3, change in work completion rates between written self-assessment prompts and quiz-like exit tickets during the treatment, and change in final grades between Quarter 4 and Quarter 3.

## **Results**

In this section I investigate the data used to measure the effect of written self-assessments on student motivation. I begin by describing the AMS used to directly measure student motivation and explain why the results suggest self-assessments had no impact on my participants' intrinsic motivation. I then examine the proxy variables I also used to measure student motivation - work completion rates and final grades - and again explain why the results suggest self-assessments had no impact on motivation. Lastly, I conclude this results section by analyzing the differences between the RAELs and non-ELs and showing that the impact of the self-assessments was not affected by participants' language ability.

### ***Academic Motivation Survey (AMS)***

To measure participants' levels of intrinsic and extrinsic motivation, they took a modified version of Vallerand et al.'s (1992) Academic Motivation Survey before and after the treatment period. This survey asked 28 questions, such as "I go to school because I experience pleasure and satisfaction while learning new things." Participants then decided how much they agreed with each statement on a scale of one to seven, with one meaning they agreed 0% and seven meaning they agreed 100%. Each question corresponded to either intrinsic motivation, extrinsic motivation, or amotivation (having

no motivation). After participants took the survey, I used Vallerand et al.'s key to find each participant's average score for each type of motivation. I then calculated the mean of all the participants' average scores pre- and post-treatment.

When I compared these average scores in Table 1, I was surprised that the average post-treatment rates of extrinsic motivation (6.2) and intrinsic motivation (5.5) were notably higher than the average rate of amotivation (2.1). This evidence seems to refute my theory that the students at Project Academy had low levels of intrinsic and extrinsic motivation, suggesting that the lack of interest in learning I saw in my classroom may not stem from a lack of motivation. However, this result could be selection bias, since more motivated students were more likely to participate in this study, while less motivated students would opt-out. In the future, I could give students a small piece of candy as an incentive to get the less motivated students to participate in future research studies.

**Table 1***Academic Motivation Survey Results Before and After Self-assessment Intervention*

Variable	Group	N	Pre-Treatment Mean	Post-Treatment Mean	% Change (Pre- & Post-Treatment)	SD	95% Confidence Interval
Intrinsic Motivation	All	3	5.9	5.5	-6.5%	9.3%	[-17%, 4%]
	RAEL	2	5.4	5.3	-1.3%	3.7%	[-6%, 4%]
	Non-EL	1	6.9	5.8	-16.9%	#	#
Extrinsic Motivation	All	3	6.1	6.2	3.0%	7.2%	[-5%, 11%]
	RAEL	2	6.5	6.5	0.5%	8.2%	[-11%, 12%]
	Non-EL	1	5.3	5.7	7.9%	#	#
Amotivation	All	3	2.2	2.1	5.2%	78%	[-83%, 93%]
	RAEL	2	2.8	2.7	7.9%	110%	[-145%, 160%]
	Non-EL	1	1.0	1.0	0.0%	#	#

*Note.* The survey responses are on a 1 to 7 scale, with 7 indicating 100% agreement and 1 indicating 0% agreement with the type of motivation. RAEL indicates recently arrived English learners. Non-EL indicates participants that do not receive English language services.

#SD and confidence intervals for the Non-EL group are unavailable because the sample size was one.

After I calculated the change in motivation pre- and post-treatment, I determined that the results were inconclusive, so I was not able to replicate Bernacki et al.'s (2016) finding that written self-assessments improve student motivation. Specifically, the mean change in intrinsic motivation was -6.5%, indicating that intrinsic motivation decreased



by an average of 6.5% for the three participants that took the academic motivation survey before and after the treatment. However, as Table 1 Indicates, the 95% confidence interval (CI) indicates there is a 95% chance the actual change in intrinsic motivation was between -17% and 4%. Since the CI includes positive and negative values, it is likely that the self-assessment writing prompts had no impact on participant's intrinsic motivation. Similarly, the mean change in extrinsic motivation was 3.0%, with a 95% CI of between -5% and 11%, while the mean change in amotivation was 5.2% with a 95% CI of between -83% and 93%. These large confidence intervals were due to the small size of this study. Moreover, this small sample size prevented me from reliably determining if there was a significant difference between RAELs and non-ELs, which had two and one participant, respectively.

### ***Work Completion and Final Grades***

Looking at work completion and final grade data as proxies for student motivation also yielded surprising, yet inconclusive results. After comparing the eight participants' mean completion rates of the control exit tickets and self-assessments during the treatment period in Table 2, I found that on average the work completion rate for the self-assessments was 1.0% less than the completion rate for the control exit tickets. However, as with the AMS data, there was a large 95% CI between -3.6% and 1.6%, indicating that there is a 95% chance that the completion rate for the self-assessments was somewhere between 3.6% less or 1.6% more than the control. Since the CI includes positive and negative values, it is likely that the self-assessment writing prompts had no impact on work completion rates during the treatment period. The results are similar

when looking at changes in work completion between Quarter 3 and Quarter 4, which had a 95% CI of -1.4% to 1.0%, and changes in final grades between the control Quarter 3 and treatment Quarter 4, which had a 95% CI of -2.7% to 4.7%.

I had predicted that the written self-assessments would have higher completion rates because many students commented how easy they were compared to their normal exit tickets. These results suggest that short written self-assessments alone do not improve students' attention, relevance, confidence, satisfaction, and volition, which Harnes (2015) argues are needed to make students intrinsically motivated to learn.

**Table 2***Work Completion and Final Grade Results After Self-Assessment Intervention*

Variable	Group	N	Mean		% Change	SD	95% Confidence Interval	ANOVA p-value*
			Control	Treatment				
Work Completion	All	8	86%	87%	-1.0%	3.7%	[-3.6%, 1.6%]	0.28
	EL	4	98%	99%	0.5%	3.3%	[-2.7%, 3.7%]	
	Non-EL	4	75%	73%	-2.5%	4.0%	[-6.4%, 1.4%]	
				Quarter 3	Quarter 4			
	All	8	86%	85%	-0.2%	1.8%	[-1.4%, 1.0%]	0.30
	EL	4	97%	96%	-1.0%	1.9%	[-2.9%, 0.9%]	
Non-EL	4	75%	75%	0.5%	1.5%	[-1.0%, 2.0%]		
Final Grades	All	8	83%	84%	1.0%	5.3%	[-2.7%, 4.7%]	0.72
	EL	4	95%	97%	1.8%	4.3%	[-2.4%, 6.0%]	
	Non-EL	4	72%	72%	0.2%	6.8%	[-6.5%, 6.9%]	

\*ANOVA p-values test to see if there is a statistically significant difference between EL and non-EL participants.

***EL vs. Non-EL Participants***

Like the results described above, there was no statistically significant evidence that the written self-assessments had different impacts on RAELs compared to non-EL s. The two RAEL participants that took the academic motivation survey had lower mean intrinsic motivation levels after the intervention (5.3 post-treatment compared to 5.8 pre-treatment) and higher levels of extrinsic motivation (6.5 post-treatment compared to 5.7 pre-treatment). However, the four RAEL participants in the study had higher average work completion rates (96% in quarter 4, compared to 75% for non-ELs) and higher

average quarter 4 grades (97% compared to 72% for non-ELs). I expected RAELs to have more academic motivation because their families chose to come to the United States for a better life and likely push their children to work hard in school. The summary statistics in Table 1 are consistent with this idea, indicating that the RAELs' higher work completion rates and final grades are motivated more by external factors like family pressure to succeed than intrinsic factors.

Furthermore, according to the single-factor ANOVA test results in Table 2, there was no statistically significant difference in changes in work completion rates and quarter grades between RAELs and non-ELs, with p-values ranging from 0.28 to 0.72; these high p-values indicate that there is a high likelihood that the differences between these two groups are due to chance, not their linguistic designation. This result suggests that there is no difference in the impact of written self-assessments between ELs and non-ELs. There are several possible reasons for this result. First, because the RAELs already had high work completion rates and grades, the written self-assessments could only minimally impact these metrics. Second, because of the small sample size, the measured impact of the self-assessments on the non-ELs was unreliable with large confidence intervals, such as the -6.5% to 6.9% CI for changes in final grades. This large variance in the non-EL sample also makes any comparison with the RAEL sample unreliable.

Overall, the results of this study do not support Bernacki et al.'s (2016) findings that short written self-assessments improve student motivation. However, because the sample size is so small and there was likely a strong self-selection bias, the results of this study should be viewed with caution.

### **Teacher Intervention**

The purpose of this study was to discover if short written self-assessments given at the end of a lesson could improve students' motivation in a social studies classroom. At the start of this study, I had the whole class take the academic motivation survey on a Google Form, explaining that the purpose of the survey was to help them figure out why they come to school and determine if self-assessments would improve their motivation in the classroom. Then before giving the first self-assessment, I showed the class an example of a thoughtful self-assessment and explained the expectations for the self-assessment prompts (i.e. they are designed to help you figure out what you understand and what questions you still have, there are no right or wrong answers, and they would not negatively impact your grade). The self-assessment was given twice per week, while the control quiz-like exit tickets I had been giving at the end of the lessons before the study were given the other two days per week (the fifth day was reserved for completing missing assignments or doing extension work). Additionally, if a participant missed a class, they were excused from the self-assessment. Finally, the self-assessment prompts were written in English and Spanish, and I accepted answers in both languages to make the assessments accessible for the RAELs. I used my basic understanding of Spanish and Google Translate to read responses written in Spanish, as well as write feedback in Spanish.

During the treatment period, the eight participants seemed engaged in the self-assessment prompts, completing 87% of them, which is comparable to the 86% completion rate of control exit tickets. A few participants wrote one word answers to

prompts like “If you could learn more from an expert historian about anything you learned today, what would you choose? Why?” However, most participants wrote very thoughtful responses. Furthermore, several participants wrote longer responses with more details from class than they had in the control exit tickets. So even though AMS results, work completion rates, and quarter grades did not show that the self-assessments had a statistically significant effect on student motivation, my observations of participant work show that the self-assessments still gave participants a way to effectively demonstrate their learning from each lesson. These observations hold true for both RAELs and non-ELs. Furthermore, the self-assessments had an added benefit of being much easier and quicker to grade than the control exit tickets, giving me more time to prepare for ways to address the questions and knowledge gaps participants identified in their self-assessments.

### **Chapter Summary**

Written self-assessments were found to have no statistically significant effect on the three proxy variables used to measure student motivation, but they were completed at rates similar to the control exit tickets. However, despite not having a measurable impact on motivation, written self-assessments can still be a useful assessment tool in a linguistically diverse social studies classroom. Participant engagement in the self-assessments seemed similar to control exit tickets, although I did not collect reliable data on this observation.

In Chapter Five I describe this study’s conclusions and connect the findings back to the existing self-assessment literature. I also reflect on what I learned through this

research process and identify opportunities for future self-assessment research. Finally, I will conclude by explaining how I plan to apply my research in my school and classroom.

## CHAPTER FIVE

### Conclusion

The final chapter of my capstone begins by summarizing the answer to my research question - *How do written self-assessment reflections affect student motivation in a social studies classroom?* I then connect the results of my research back to the existing literature on student motivation and discuss the implications of my findings. Next I explore the lessons I learned through the capstone process. Finally, I conclude by recommending future areas of research to better understand the role of self-assessments in linguistically diverse social studies classrooms and by describing how I plan to share my capstone findings with the colleagues at my school.

### Connection to Self-assessment Literature

My research study did not find that written self-assessment reflections have any impact on student motivation in the social studies classroom, which is partly consistent with the existing student motivation literature. The results counter both Sharma et al.'s (2016) finding that written self-assessment improved the motivation of first year medical students and Bernacki et al.'s (2016) finding that written self-assessments increased student interest in middle school science. Simultaneously, these results are somewhat consistent with Brown and Harris' (2013) metaanalysis that found only 52% of self-assessment studies show a strong positive effect of self-assessments on students.

Additionally, my study is consistent with Glasser's (1990) assertion that students need a sense of belonging, power, freedom, and fun in school by late middle school or early high school or there will be antagonism between teachers and work-avoidant



students. My study had what could be classified as one work-avoidant participant who completed none of the self-assessment prompts and only 6% of their assignments in Quarter 4. The experience of this student suggests that simple written self-assessments alone are not enough to give students the belonging, power, freedom, and fun that Glassers found are necessary foundations for student motivation.

My results also demonstrate the importance of Brown and Harris' (2013) three steps to make self-assessment more successful in the classroom. While I held students accountable for rigor in their written self-assessments by asking participants to write more if they only wrote a few words, I need to improve my explicit instruction in how to self-assess work and establish a classroom culture that rewards academic risk taking and views mistakes as a chance to learn and grow. Participants received one short lesson on how to complete the self-assessment prompts, but it is probable that some participants did not fully understand the purpose or mechanics of self-assessment before I began the study. Furthermore, based on the self-assessments participants turned in and questions I received, it was clear that some participants were still trying to get the "right" answer and were afraid to take the risks needed to grow through self-assessment.

Looking forward, several lessons can be gleaned from this study. First, despite finding that self-assessments have no impact on student motivation, self-assessments can still be a valuable and easy to assess tool in social studies classrooms, especially for busy teachers. I was able to read and give participants feedback on their self-assessments in half the time it took me to grade my control exit tickets, without any measurable effect on academic achievement as measured by work completion and student grades. Second,

self-assessments can still be beneficial for participants. Most participants seemed less stressed and more eager to engage in the self-assessments compared to the control exit tickets; however, I have no hard data to substantiate this observation. Lastly, EL participants seemed as engaged in the self-assessments as non-EL participants, even though the small sample size precluded a more definitive result. Teachers with linguistically diverse classrooms may find written self-assessments an easy and effective way to informally assess their ELs.

### **Lessons Learned**

I have always been very academically-minded since high school, but this capstone thesis was the first time I was able to run my own research study to answer one of my own research questions. My capstone was difficult to finish, with a five year gap between when I started my capstone during my first year of teaching to when I decided to finish it; however, despite the challenges, it did improve my confidence in conducting my own research in my classroom to help me and my colleagues become better teachers. This five year capstone process also taught me the importance of balancing work and home life to avoid burnout. Had I tried to push through and finish this capstone during my first year of teaching, I am not sure I would still be in the teaching profession. Finally, this process forced me to rely on and seek feedback from my colleagues to improve my teaching craft. Before this capstone, I tended to avoid asking for feedback, preferring instead to perfect my work on my own to avoid criticism and rejection. Now I can relate better to my students who struggle with receiving feedback, having gone through the process myself.

### **Future Areas of Research**

Given my study's limited sample size, pre-experimental design, and end-of-year timing, larger experiments during the middle of the school year on the impact of self-assessment on student motivation are still needed to provide more definitive results. Specifically, a larger study would determine if simple written self-assessments are enough of an intervention to improve student motivation in the classroom. A larger study could also more definitively decide if self-assessments have different impacts on ELs compared to non-ELs. Additionally, more research on the impact of different types of written self-assessments would allow teachers to better tailor self-assessments to meet the needs of their specific students. For example, my self-assessment prompts asked students to reflect on a variety of topics, such as "What was challenging about the lesson?", "What questions do you have?", and "How would you teach this lesson to a friend?" These prompts require different skills and may have different impacts on motivation and learning. Furthermore, to validate my findings that self-assessments had no impact on academic performance compared to quiz-like exit tickets, it could be useful to measure the impact of self-assessments on academic achievement using more normalized measures, like standardized pre- and post-tests before and after the self-assessment intervention.

Personally, I plan to continue experimenting with self-assessments in my classroom by alternating self-assessments with quiz-like exit tickets at the end of classes. Alternating the format of my end of class assessments will allow me to collect more data on differences in work completion rates between these two types of assessments. I will

also be able to gauge changes in student engagement based on the quality of their self-assessment responses.

### **Sharing the Results**

I plan to share the results of my capstone thesis in two ways. First, my capstone will be shared on Hamline University's Digital Commons. Second, I will conduct a professional development (PD) session during a ninth and tenth grade grade level team meeting at my school during the 2023-24 school year. During this PD session, I also plan to share the self-assessment prompts that I used in this study and demonstrate how to adjust the prompts to a variety of subject areas. In addition, I will share some of the student responses to the self-assessments to help teachers practice how to give meaningful feedback that will help increase the student's motivation.

### **Chapter Summary**

Student motivation is a crucial aspect for academic success and engagement, especially given the low reading and math proficiency rates in American schools. Improving student motivation can enhance learners' willingness to invest effort, persist in challenging tasks, and take ownership of their learning. Written self-assessment may be an easy to implement intervention to improve student motivation by empowering linguistically diverse learners to reflect on their progress, strengths, and areas for growth. By taking an active role in assessing their own understanding, students gain a heightened sense of ownership and control in the classroom. Even if the written self-assessments prove to have no positive impact on motivation and academic achievement, at the very least they appear to have no negative impacts on students while reducing the workload

for teachers. Without addressing the motivation crisis prevalent in American schools, we will never be able to address the academic achievement that threatens to rob students of the reading and math skills they need to live meaningful and fulfilling lives.

## References

- Andrade, H. L. (2010). Students as the definitive source of formative assessment: Academic self-assessment and the self-regulation of learning. *NERA Conference Proceedings*. [https://opencommons.uconn.edu/nera\\_2010/25](https://opencommons.uconn.edu/nera_2010/25)
- Bernacki, M., Nokes-Malach, T., Richey, J. E., & Belenky, D. M. (2016). Science diaries: A brief writing intervention to improve motivation to learn science. *Educational Psychology, 36*(1), 26-46. doi:10.1080/01443410.2014.895293
- Brown, G. T. L., & Harris, L. R. (2013). Student self-assessment. In J. H. McMillan (Ed.), *SAGE handbook of research on classroom assessment* (pp. 367-393). SAGE.
- Chu, L. (2017). *Little soldiers: An American boy, a Chinese school, and the global race to achieve*. Harper.
- Cohen, G. L., Garcia, J., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science, 313*(5791), 1307-1310. doi:10.1126/science.1128317
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Every Student Succeeds Act, 20 U.S.C. § 6301 (2015). <https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>
- Freire, P. (2000). *Pedagogy of the oppressed*. (M. B. Ramos, Trans.) (30th anniversary ed.). New York: Continuum.
- Glasser, W. (1990). *The quality school: Managing students without coercion*. New York:

Perennial Library.

- Harmes, B. A. H. (2015). Intrinsic and extrinsic motivation: Mythic aspects in the tertiary sector. In M. K. Harmes, H. Huijser & P. A. Danaher (Eds.), *Myths in education, learning and teaching policies, practices and principles* (pp. 40-58). United Kingdom: Palgrave Macmillan.
- Holt, J. C. (1970). *What do I do Monday?*. United Kingdom: Dutton.
- Hussain, M.S., Salam, A. & Farid, A. (2020). Students' motivation in English language learning (ELL): An exploratory study of motivational factors for EFL and ESL adult learners. *International Journal of Applied Linguistics & English Literature*, 9(4), 15-28. doi.org/10.7575/aiac.ijalel.v.9n.4p.15
- Johnson, N. & Winterbottom, M. (2011). Supporting girls' motivation in science: A study of peer- and self-assessment in a girls-only class. *Educational Studies*, 37(4), 391-403. doi:10.1080/03055698.2010.508605
- Keselman, H. J., Huberty, C. J., Lix, L. M., Olejnik, S., Cribbie, R. A., Donahue, B., Kowalchuk, R. K., Lowman, L. L., Petoskey, M. D., Keselman, J. C., & Levin, J. R. (1998). Statistical practices of educational researchers: An analysis of their ANOVA, MANOVA, and ANCOVA analyses. *Review of Educational Research*, 68(3), 350-386. https://doi.org/10.3102/00346543068003350
- Kim, Y., Kwon, H., Lee, J., & Chiu, C. (2016). Why do people overestimate or underestimate their abilities? A cross-culturally valid model of cognitive and motivational processes in self-assessment biases. *Journal of Cross-Cultural Psychology*, 47(9), 1201-1216. doi:10.1177/0022022116661243

- Kohn, A. (1993). *Punished by rewards: The trouble with gold stars, incentive plans, a's, praise, and other bribes*. Boston: Houghton Mifflin.
- Kohn, A. (1999). From degrading to de-grading. *High School Magazine*.  
<https://www.alfiekohn.org/article/degrading-de-grading/>
- Kusnic, E., & Finley, M. L. Student self-evaluation: An introduction and rationale. In J. MacGregor (Ed.), *Student self-evaluation: Fostering reflective learning* (pp. 5-14). San Francisco: Jossey-Bass Publishers.
- MacGregor, J. (1993). Learning self-evaluation: Challenges for students. In J. MacGregor (Ed.), *Student self-evaluation: Fostering reflective learning* (pp. 35-46). San Francisco: Jossey-Bass Publishers.
- Li, W., Lee, A. M., & Solmon, M. A. (2005). Relationships among dispositional ability conceptions, intrinsic motivation, perceived competence, experience, and performance. *Journal of Teaching in Physical Education*, 24(1), 51-65.  
<https://doi.org/10.1123/jtpe.24.1.51>
- Liulienė, A. & Metiūnienė, R. (2014). Students' self-assessment in project-based work. *Coactivity: Philology*, 22(2), 105-111. doi:10.3846/cpe.2014.249
- Mcmillan, J., & Hearn, J. (2009). Student self-assessment. *The Education Digest*, 74(8), 39-44.
- National Center for Education Statistics. (2020a, May). *The condition of education: Mathematics performance*. U.S. Department of Education, National Center for Education Statistics. [https://nces.ed.gov/programs/coe/indicator\\_cnc.asp](https://nces.ed.gov/programs/coe/indicator_cnc.asp)
- National Center for Education Statistics. (2020b, May). *The condition of education:*



*Reading performance.* U.S. Department of Education, National Center for Education Statistics. [https://nces.ed.gov/programs/coe/indicator\\_cnb.asp](https://nces.ed.gov/programs/coe/indicator_cnb.asp)

National Center for Education Statistics. (2021a). *The condition of education:*

*Public high school graduation rates.* U.S. Department of Education, National Center for Education Statistics.

[https://nces.ed.gov/programs/coe/indicator\\_coi.asp#info](https://nces.ed.gov/programs/coe/indicator_coi.asp#info)

National Center for Education Statistics. (2021b). English learner (EL) students enrolled in public elementary and secondary schools, by state: Selected years, fall 2000 through fall 2019. U.S. Department of Education, National Center for Education Statistics.

[https://nces.ed.gov/programs/digest/d21/tables/dt21\\_204.20.asp?current=yes](https://nces.ed.gov/programs/digest/d21/tables/dt21_204.20.asp?current=yes)

Nielsen, K. (2014). Self-assessment methods in writing instruction: A conceptual framework, successful practices and essential strategies. *Journal of Research in Reading*, 37(1), 1-16. doi:10.1111/j.1467-9817.2012.01533.x

Panadero, E., Brown, G., & Strijbos, J. (2016). The future of student self-assessment: A review of known unknowns and potential directions. *Educational Psychology Review*, 28(4), 803-830. doi:10.1007/s10648-015-9350-2

Petrovic, J. E., & Rolstad, K. (2017). Educating for autonomy: Reading Rousseau and Freire toward a philosophy of unschooling. *Policy Futures in Education*, 15(7-8), 817-833. doi:10.1177/1478210316681204

Pinner, R. (2016). Trouble in paradise: Self-assessment and the Tao. *Language Teaching Research*, 20(2), 181-195. doi:10.1177/1362168814562015

- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67.
- Sharma, R., Jain, A., Gupta, N., Garg, S., Batta, M., & Dhir, S. (2016). Impact of self-assessment by students on their learning. *International Journal of Applied and Basic Medical Research*, 6(3), 226-229. doi:10.4103/2229-516X.186961
- Stigler, J. W., & Hiebert, J. (1999). *The teaching gap : Best ideas from the world's teachers for improving education in the classroom*. New York: Free Press.
- Sullo, R. A. (2007). *Activating the desire to learn*. Association for Supervision and Curriculum Development.
- U.S. Department of Education. (n.d.). Every student succeeds act (ESSA).  
<https://www.ed.gov/essa>
- Usher, A. & Kober, N. (2012). Student motivation: An overlooked piece of school reform. *Center on Education Policy*. <https://eric.ed.gov/?id=ED532666>
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52(4), 1003-1017. doi:10.1177/0013164492052004025
- Weisi, H. & Karimi, M. N. (2013). The effect of self-assessment among Iranian EFL learners. *Procedia - Social and Behavioral Sciences*, 70, 731-737.  
doi:10.1016/j.sbspro.2013.01.117
- Xie, K., & Ke, F. (2011). The role of students' motivation in peer-moderated

asynchronous online discussions. *British Journal of Educational Technology*,  
42(6), 916. doi:10.1111/j.1467-8535.2010.01140.x

Yoon, E., & Lee, H. (2013). Do effects of self-assessment differ by L2 language level? A  
case of Korean learners of English. *The Asia-Pacific Education Researcher*,  
22(4), 731-739. doi:10.1007/s40299-013-0111-z

## Appendix A

### Parent Consent Form

December 17, 2018

Dear Parents/Guardians of Venture Academy 9th and 10th graders,

I am in a graduate program through Hamline University in order to earn a Master's of Arts in Teaching. A key part of the program is an action research project. For my project, I am testing how self-assessing work can improve student motivation in school. There are many research studies showing that self-assessing work can improve motivation, interest in learning, and the quality of student work. I would be very thankful if you would grant your permission for your child to take part in my research.

For my research, students will write responses to writing prompts asking them to self-assess how well they learned the lesson during class. Students will do this activity twice a week for 6 weeks. I will also give students a short survey to measure their level of intrinsic motivation before and after the six week research period. I guarantee that I will keep all information about your child confidential and I promise that the name of the school will not be made public.

Participation is easy and will not involve any stress or risks. However, if you choose not to have your student participate, they will still receive the same instruction as other

students; I will just not include them in the data I collect. If you wish to be kept informed about the progress of my action research project I can keep you updated. I will be happy to present my work to parents if there is interest.

I would appreciate it if you would sign and return the permission slip below at your earliest convenience.

Sincerely,

Mr. Zack Robbins

9th/10th Social Studies Teacher

**Appendix B**

## Permission Slip

Student Name: \_\_\_\_\_

School and Teacher: Venture Academy, Zack Robbins

**I am the parent/legal guardian of the child named above. I have received and read your letter regarding a research study being conducted by my child's History Teacher, Zack Robbins, and I agree to the following:**

*(Please check the appropriate box below.)*

I **DO** give permission to include my child in a research study conducted at Venture Academy by Zack Robbins. By giving permission, I understand that

- Written materials, survey results, and interview records that my child may produce as part of classroom activities may be collected and included in the final version of this research.
- My child's name will not appear on any materials or the final version of this research.
- The final product of this research will be cataloged in Hamline's Bush Library Digital Commons, a searchable electronic repository and that may be published or used in other ways.
- I can remove my child from the research project at any point.

I **DO NOT** give permission to include my child in the research study. I understand that

- My child will receive the same instruction as students participating in the research study.
- My child's data will not be included in the final version of this research.

**Parent/Guardian Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Appendix C

### Academic Motivation Scale

#### **ACADEMIC MOTIVATION SCALE (AMS-HS 28)**

#### **HIGH SCHOOL VERSION**

**Adapted from AMS - College version**

***Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière,  
Caroline B. Senécal, Évelyne F. Vallières, 1992-1993***

***Educational and Psychological Measurement, vols. 52 and 53***

#### **WHY DO YOU GO TO SCHOOL ?**

***Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you go to school.***

<b>Does not correspond at all</b>	<b>Corresponds a little</b>		<b>Corresponds moderately</b>		<b>Corresponds a lot</b>		<b>Corresponds exactly</b>	
1	2	3	4	5	6	7		

#### **WHY DO YOU GO TO SCHOOL ?**

1. Because I need at least a high-school degree in order to find a high-paying job later on.	1	2	3	4	5	6	7
2. Because I experience pleasure and satisfaction while learning new things.	1	2	3	4	5	6	7
3. Because I think that a high-school education will help me better prepare for the career I have chosen.	1	2	3	4	5	6	7
4. Because I really like going to school.	1	2	3	4	5	6	7
5. Honestly, I don't know; I really feel that I am wasting my time in school.	1	2	3	4	5	6	7
6. For the pleasure I experience while surpassing myself in my studies.	1	2	3	4	5	6	7
7. To prove to myself that I am capable of completing my high-school degree.	1	2	3	4	5	6	7
8. In order to obtain a more prestigious job later on.	1	2	3	4	5	6	7
9. For the pleasure I experience when I discover new things never seen before.	1	2	3	4	5	6	7
10. Because eventually it will enable me to enter the job market in a field that I like.	1	2	3	4	5	6	7
11. Because for me, school is fun.	1	2	3	4	5	6	7

12. I once had good reasons for going to school; however, now I wonder whether I should continue.	1	2	3	4	5	6	7
13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.	1	2	3	4	5	6	7
14. Because of the fact that when I succeed in school I feel important.	1	2	3	4	5	6	7
15. Because I want to have "the good life" later on.	1	2	3	4	5	6	7
16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.	1	2	3	4	5	6	7
17. Because this will help me make a better choice regarding my career orientation.	1	2	3	4	5	6	7
18. For the pleasure that I experience when I am taken by discussions with interesting teachers.	1	2	3	4	5	6	7
19. I can't see why I go to school and frankly, I couldn't care less.	1	2	3	4	5	6	7
20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.	1	2	3	4	5	6	7
21. To show myself that I am an intelligent person.	1	2	3	4	5	6	7
22. In order to have a better salary later on.	1	2	3	4	5	6	7
23. Because my studies allow me to continue to learn about many things that interest me.	1	2	3	4	5	6	7
24. Because I believe that my high school education will improve my competence as a worker.	1	2	3	4	5	6	7
25. For the "high" feeling that I experience while reading about various interesting subjects.	1	2	3	4	5	6	7
26. I don't know; I can't understand what I am doing in school.	1	2	3	4	5	6	7
27. Because high school allows me to experience a personal satisfaction in my quest for excellence in my studies.	1	2	3	4	5	6	7
28. Because I want to show myself that I can succeed in my studies.	1	2	3	4	5	6	7

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**KEY FOR AMS HS-28**

- # 2, 9, 16, 23 Intrinsic motivation - to know
- # 6, 13, 20, 27 Intrinsic motivation - toward accomplishment
- # 4, 11, 18, 25 Intrinsic motivation - to experience stimulation
- # 3, 10, 17, 24 Extrinsic motivation - identified
- # 7, 14, 21, 28 Extrinsic motivation - introjected
- # 1, 8, 15, 22 Extrinsic motivation - external regulation
- # 5, 12, 19, 26 Amotivation



## Appendix D

### Written Self-Assessment Prompts

1. Name one thing that you understood well from today's lesson. How do you know that you understand it? How would you show someone you understand it?
2. If you could learn more from an expert historian about anything you learned today, what would you choose? Why?
3. Name one concept or topic that you had difficulty understanding in today's class. Why was it challenging? If you understood everything, what might someone else find difficult and why?
4. What is something that you've learned in history today that you know is important, but you didn't find interesting. What could have been done to make it more interesting?
5. What is something you have learned recently in history that will be helpful outside of class? How will it help?
6. If you had to explain today's lesson on resisting Imperialism to a friend, how well do you think you could explain it? What could you explain really well? What would you have trouble explaining?
7. Think of a concept you've covered in this history unit that you understand completely. Name it and explain it.
8. Think of a topic from Unit 6 that you feel like you kind of understand but haven't mastered. What do you feel like you definitely understand? What parts do you need to learn more about? How will you master these parts?
9. If you wanted to get someone interested in today's topic, how would you do it? Give an example or two.
10. What did you find difficult to understand from today's lesson? What about it was difficult?

Adapted from Bernacki et al., 2016.

*Zachary Robbins*