

INCREASING SIGNIFICANCE OF SOCIAL STUDIES: A MUTLI-  
DIMENSIONAL CONTEXTUAL ANALYSIS OF SOCIAL STUDIES  
ENGAGEMENT AND ACHIEVEMENT DURING HIGH SCHOOL

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## ABSTRACT

Increasing significance of social studies: A multi-dimensional contextual analysis of social studies engagement and achievement during high school

The social studies data of the 2010 National Assessment of Educational Progress (NAEP) highlighted some alarming results. These results highlight a trend in the learning of social studies related content within today's secondary schools. Students are mastering and retaining less social studies knowledge while other content areas are slowly improving. Prior research within the field of school engagement postulates that low levels of student academic engagement negatively influence academic student achievement. This study explored the relationship between social studies engagement and social studies academic achievement throughout the semester within the context of a social studies classroom. In particular, measures of students' levels of engagement included behavioral, cognitive, and emotional aspects. The study utilized quantitative data from a 27-question longitudinal semester survey of 75 students from a central Pennsylvania high school. The study included demographic information ranging from prior social studies achievement, overall school academic achievement, to gender and age. The assumptions were that the distinct components of engagement are bi-directionally related and share reciprocal relationships. Additionally, the type of class and the students' year of schooling were investigated to amplify these relationships. The results indicated that engagement has only a weak relationship to academic achievement in the social studies classrooms used for the research. As might be expected, the strongest predictor of grades was the student's cumulative GPA, including past grades in social studies. The implications for this finding

in terms of engagement theory and educational practices were discussed. Once researchers can ascertain the intensity and directional relationship between social studies engagement and social studies achievement, teachers will be able to focus on the component(s) of engagement that fosters social studies academic achievement.

*Keywords:* engagement, achievement, social studies, and secondary school

To my family who means the world to me, because without you my life would be without happiness, fun, and love. Thank you Kristel, Oliver, Laurel, and Cole for your patience and support while writing this essay.

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## CHAPTER 1

### INTRODUCTION TO THE PROBLEM

#### **The Urgency within Social Studies**

One of the civic concerns in the United States is our low voter participation in elections. Presidential elections have the highest voter turnout while the off year elections are significantly lower. Of the 314 million Americans who could register to vote in 2012, only 53.6% actually did so (Desilver, 2015). Even more saddening is that only 84% of those who are registered actually voted in 2012 (Desilver, 2015; Giersch & Dong, In Press).

Sadly, the public at large possesses a negative perception of serving on a jury. After serving on a jury, most Americans state they enjoyed the experience and remember the events of the trial long after it has concluded (Gastil, Deess, & Weiser, 2010, p. 4). Each year almost 30 million Americans receive a summons to report for jury duty (Ferguson, 2013). According to Gastil et al., roughly 17 million Americans have served on a jury (civil or criminal) in the past five years and over one-third of Americans will serve on a jury during their lifetime. Even with the negative perception of serving on a jury and the jury system, television shows, such as Law and Order SVU, are celebrating their 17<sup>th</sup> season (1999-2016), which highlights the criminal justice system. Yet, many summoned Americans try to legally avoid jury duty; there are numerous websites and news articles providing information and strategies on how to avoid jury service. Increasing students' understanding and interest in our jury and legal system may assist in altering the negative perception of jury duty.

Another civic concern is the lack of basic historical knowledge that many Americans, especially high school graduates and college students, possess of the United States and world history (American Council of Trustees and Alumni, 2012; Fine, 1951; Naseem, 2015). A basic Internet search of “college students’ knowledge of US history or politics” will generate several videos of American college students not knowing the answers to basic US history and government questions. These questions make many wonder if fourth graders know more than most adults (e.g. “Who did the United States gain its independence from and who fought in the US Civil War?”). What many find alarming is that many of these videos of college students responding to the historical and political questions include popular culture questions and, sadly, the latter questions are the ones the students consistently answer correctly (American Council of Trustees and Alumni, 2012; Naseem, 2015). Many sociological studies illustrate a positive relationship between an individual’s education and civic participation; as one attains more education the more likely one is to participate civically. Yet, these recordings of college students and a recent study of education attainment and civic participation by Horowitz (2015) show that this is not always the case.

### **The Problem**

The belief held by many in the field of education is that a student’s level of school engagement is one of the primary predictors of his or her academic success at the secondary level. Since academic achievement is one of the principal goals of today’s educational institutions, it is important to understand the influence of school engagement in attaining that objective. It would seem that the relationship between school

engagement and academic achievement is quite clear, yet achievement can occur without engagement or vice versa. As the academic achievement gap between students in the United States and other countries from around the globe increases, civic leaders, parents, teachers, and community members wonder what the American educational system is doing incorrectly (Desilver, 2017). There is greater scrutiny on how schools educate and prepare children for the next step in their lives; nevertheless, one of the greatest indicators of success is academic achievement. Presently, there is a great deal of research and findings that provide a clear representation of engagement and academic achievement at the school level (Chase, Hilliard, Geldhof, Warren, & Lerner, 2013; Dotterer & Lowe, 2011; Fredricks, Blumenfeld, & Paris 2004). These studies point out the tripartite construct of engagement, the potential relationship each construct shares with each other, and their individual and amalgamated association with academic achievement.

The tripartite construct of engagement according to Fredricks, Blumenfeld, and Paris (2004) consists of behavioral, cognitive, and emotional components. Behavioral engagement includes students' academic actions within the classroom and behavioral disengagement is student inaction and non-academic actions. Cognitively engaged students possess a psychological interest in learning and comprehending the academic content of the class (Bundick et al., 2014; Fredricks et al., 2004; Greene, 2015; Rotgans & Schmidt, 2010). Emotional engagement refers to the feelings students possess about their relationships with others at school and their sense of school belonging (Bundick et al., 2014; Dotterer & Lowe, 2011; Fredricks et al., 2004; Lynch, Lerner, & Leventhal, 2012).

Many of the findings of previous research conclude there is a relationship between school engagement and academic achievement at the overall school and classroom level, but there is no consensus about which component of engagement has the greatest influence (Fredricks et al., 2004). To clarify, school level includes all facets of the school (i.e., all subject areas including lunch, extracurricular activities, teachers, administrators, etc.) while the classroom level focuses on one specific subject area-teacher and classmates. For instance, the findings of a few studies on emotional engagement and academic achievement illustrate the lack of research consensus. Studies conducted by Shernoff and Schmidt (2007) and Park, Holloway, Arendtsz, Bempechat, and Li (2012) reported findings that high achieving students report lower emotional school engagement while low achieving students report higher emotional engagement. To the contrary, Reyes, Brackett, Rivers, White, and Salovey (2012) and Sagayadevan and Jeyaraj (2012) found that a better emotional classroom climate increases emotional engagement and academic achievement. Still, much research needs to happen to better understand the factors that affect student engagement and the relationship between each of the dimensions of engagement and academic achievement at the classroom level.

The belief held by educational researchers is that school engagement is the antecedent to academic achievement and that once engagement is increased more students will accomplish higher academic achievement (Johnson et al., 2001; Sciarra & Seirup, 2008). Even with all the research on engagement and achievement, researchers and educators still have not found which component of engagement equates the strongest with overall academic success. In addition, previous research has shown that a student's ethnicity and gender affect each component of engagement, but overall which construct

of engagement equates to academic achievement is unknown (Shernoff & Schmidt, 2007). Earlier studies established the tripartite structure of engagement, their reciprocal nature, and bidirectional relationships, yet which form of engagement correlates the strongest with academic achievement is inconsistent (Chase et al., 2013).

Researchers understand and acknowledge that individuals engage in various activities in and out of school. These activities can be academic or non-academic; however, researchers want to understand what type(s) of engagement equate to learning and ultimately academic success. In order to clarify the impact of school engagement it is important to understand the components that comprise the construct. If there is no emotional engagement then students will not care about the content or those around them. If there is no cognitive engagement, the students will not create any learning or question any previous learning. Lastly, if there is no behavioral engagement students will interact without the new knowledge or completion of any products to model or highlight their learning. Each facet of engagement is important and without one, the others will suffer.

In the attempt to understand the link between student engagement and academic achievement, scholars have recently begun to view this relationship at the classroom level especially in the domains of reading and mathematics. Research, however, has largely neglected social studies (Grant & Salinas, 2008; Kelly & Zhang, 2016; Plenty & Huebeck, 2013). However, in most school districts in the United States completing several social studies classes is a graduation requirement. In 2004, 23 states mandated standardized social studies exams for their students, but only ten required students to pass the state standardized exam (Grant & Salinas, 2008). Fourteen states have already adopted the United States Naturalization citizenship examination as a graduation



requirement and another 22 states are considering adopting graduation requirements (Lindstrom, 2016).

Even with this renewed interest in increasing accountability within the domain of social studies, longitudinal research illustrates that students in the early 21<sup>st</sup> century know no more or less about social studies than students in 1930's (Grant & Salinas, 2008, p 223). Even though the No Child Left Behind Act of 2001 does not place as high an importance on social studies curriculum (e.g. history, civics, geography, sociology, and psychology) as math, science, and reading, appreciating the role that student engagement may play with student academic achievement still has value to educators. Moreover, gaining insights into the relationship between engagement and achievement within the domain of social studies may assist teachers in developing interventions or pedagogy that may foster greater student learning and social studies comprehension.

Since engagement within a classroom is associated with learning and academic achievement (Dotterer & Lowe, 2011), understanding the intensity of this relationship will provide potential insights into increasing learning. Many students find social studies classrooms less interesting and engaging than other secondary classes (Gehlbach, 2006), leading teachers to wonder what influence engagement has on social studies academic achievement. Previous research by Chase et al. (2013) demonstrates the complex multi-dimensional nature of engagement and the relationship these dimensions and achievement share at the larger school level, but not at the classroom level especially within a social studies classroom. Nevertheless, little research focuses on how the different dimensions of engagement affect academic achievement at the classroom level especially in social studies. Reducing this gap in the research on social studies student

engagement at the high school level could assist in developing a greater appreciation into why students, when they reach adulthood, become politically disengaged. There is a pressing need to understand the association of engagement and academic achievement of students in the social studies classroom. Acquiring a better understanding of this engagement/achievement relationship may assist future research in developing an understanding of the possible connection between student social studies classroom engagement and low voter turnout, disinterest in jury duty, and the self-induced political and historical ignorance that plagues many adult Americans.

It may be interesting to witness the findings of a semester long multi-classroom, multi-course, multi-level study on engagement and achievement following individuals of a selected school utilizing student surveys and demographics of participants' secondary social studies education. Comparing school engagement (behavioral, cognitive, and emotional) along with overall social studies academic achievement over the course of a semester may provide insights into understanding the relationship between engagement and achievement for social studies.

### **Purpose of the Study**

The intention of this study was to assess the link between student engagement and academic achievement within a social studies classroom, controlling for student and classroom demographics for students within social studies classrooms in a rural south-central Pennsylvania secondary school. The independent variable of student classroom engagement consists of three aspects: behavioral, cognitive, and emotional. The dependent variable is the students' final social studies course grade. The final course

grade includes the students' first quarter and second quarter grades, final examination grade and final project grades. This study considered the utilization of the final course grade that includes final examination, mid-term examination, homework, quizzes, performance tasks, and daily assignment grades as the most appropriate for measuring academic achievement. The control variables included the students' demographic information (e.g., age, grade level, gender, socio-economic status, overall GPA, previous social studies course grades, and type of course).

Student engagement encapsulated how students behave, think, and feel while interacting in the high school social studies environment. It is important to understand the magnitude of each of these types of engagement to identify correlations between any or all of the types of engagement and academic achievement. The study utilized two self-report surveys (early and late in the semester) to collect data on the components of student engagement. Additionally the study measured student academic achievement by the participants' final course grade.

### **Major Research Question**

1. Do the different facets of classroom engagement (behavioral, cognitive, & emotional) singly and mutually correlate with social studies academic achievement?

### **Ancillary Research Questions**

1. Does the relationship among the different facets of classroom engagement change during the course of a semester?

2. Does student demographics predict academic achievement within a social studies classroom, while controlling for student engagement?
3. Does engagement mediate the relationship between Social-Economic Status (SES) and student social studies academic achievement?
4. Does engagement mediate the relationship between the previous social studies grade and student social studies academic achievement?
5. Are there differences in student engagement and student achievement as a function of whether the student is taking the course as a requirement or as an elective?
6. Which student demographics correlate with total student social studies engagement?
7. Does student social studies engagement change from the beginning to the end of the course? If so, does a student's gender affect this change?

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Theoretical Perspective**

##### **Motivation theory**

The field of engagement research utilizes a wide assortment of motivational theories ranging from expectancy-value theory, self-regulated learning, achievement goal theory, self-determination theory, flow theory, stage-fit theory, and intrinsic motivation (Fredricks et al., 2004; Martin & Liem, 2009; Ryan & Patrick, 2001; Shernoff, 2013; Wang & Eccles, 2012). Theoretically, once students become motivated to complete an educational task while at school, they will become engaged in completing the task. A student's persistence and intensity of engagement while completing a task depends on many internal and external variables (Furlong et al., 2003; Lynch, Lerner, & Leventhal, 2013; Shernoff & Schmidt, 2008).

It is important to view student engagement as a meta-construct with antecedents and corollaries that deserve consideration. Research acknowledges the relationship between motivation and engagement with the expectancy-value theory of motivation as the most utilized theory to clarify possible antecedents to engagement (Bundick, Quaglia, Corso, & Haywood, 2014). The expectancy-value theory of motivation builds on self-efficacy theory in that individuals base their level of engagement on their expectation of succeeding in the completion of the present task (Wigfield & Eccles, 2000). For individuals to become motivated to engage in the task they must also place value in completing or engaging in the task (Wigfield & Eccles, 2000).

To better understand how thought becomes action it is important to consider another motivational theory. The theory of self-regulation, when applied to engagement, can explain how motivation effectively becomes action (Wigfield, Eccles, Fredricks, Simpkins, Roesler, & Schiefele, 2015). When self-regulated students actively participate in their learning, they will utilize metacognitive strategies that guide and foster their own learning (Zimmerman & Pons, 1986). Self-regulated learners understand which strategies assist them in linking new knowledge to prior knowledge and utilize activities enabling productive learning (Shernoff, 2013). The development of metacognitive strategies and the use of these skills assist individuals in developing the understanding that learning is important and has value.

Another possible explanation for an individual's motivation is the internal or external value placed on the desired activity. Intrinsic motivation is the internal value a person may place on completing or participating in a particular task (Shernoff, 2013). This internal value focuses on completing the task for its own sake or for the pleasure or enjoyment of completing the task (Ryan & Deci, 2000). The external value a person places on a task focuses on completing or participating in the task because of a peripheral outcome, external reward, or withholding of punishment (Shernoff, 2013).

The recent application of achievement goal theory and self-determination theory to the relationship between engagement and academic achievement by researchers has expanded the use of motivational theories in engagement research (Martin & Elliot, 2015; Streb, Keis, Lau, Hille, Spitzer, & Sosic-Vasic, 2015). Achievement goal theory provides insight into how the student characterizes the educational activities and tasks at school and whether the driver for task completion is internal or external (Dweck, 1986). If

students are performance goal driven, they believe they need to correctly complete the task in order to look better than other students do or to look competent at completing the task (i.e. external factors) (Shernoff, 2013). They will focus their energy on completing the task for accuracy and not for long-term learning. When they want to attain the knowledge or experience for long-term learning, they will adopt an approach of mastery goal understanding (i.e. internal factors) (Dweck, 1986). Along with completing a task for mastery is the value they place in the task of learning. When they value what they are learning, they will adopt a mastery goal of learning versus a performance goal.

Self-determination theory states that when individuals have the freedom to select their learning activities based on their own interests and yearnings they become more motivated to complete or engage in the activities, because of their internal desire to participate (Ryan & Deci, 2000). When students have choice in the selection of educational activities and the approach to completing the task, they will have increased levels of motivation, interest, and task engagement (Shernoff, 2013). When students are not allowed the choice in guiding or directing their learning by task selection or learning strategy the level of student motivation will decrease as well as their engagement.

Applying Csikszentmihalyi's theory of flow to student engagement can reveal how an individual's enjoyment and interest in a particular task can override distractions and boredom (Shernoff, 2013). The theory of flow focuses on the unique emotional, cognitive, and behavioral situation when individuals become fully engrossed in an activity and devote all their energy to completing a task (Csikszentmihalyi, 1990). In a flow state, individuals lose track of time, gain a sense of control and, in a sense, become one with the activity (Csikszentmihalyi, 1990). When individuals are participating in an

activity that elicits high levels of flow, their levels of engagement should be higher in order to sustain the high level of activity involvement.

### **Motivation and the classroom**

The dynamics within the classroom between the teacher and the students, students and the curriculum, and students and peers all have an influencing effect on motivation and engagement. The classroom will develop a dynamic relationship that can elicit or inhibit student motivation and engagement depending on the classroom characteristics and the way these characteristics meet the students' psychological needs (Shernoff, 2013). The Stage-fit theory implies the academic and social environment of the classroom can be an additional proponent of increasing motivation as long as the characteristics of the environment fit the characteristics of the individual (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & Mac Iver, 1993). The students as well as the teacher and curriculum can foster an environment that enhances their motivation due to the students feeling safe psychologically, physically, and academically.

A student's motivation may cause the student to initiate his/her potential participation in an activity, but engagement is the action he/she takes to complete the presented task. As Fredricks et al. (2004) and Bundick et al. (2014) point out, the field of engagement research contains a great deal of research, but is in need of clarification of terminology, definitions, and expansion of research on the theoretical antecedents of engagement (Wigfield et al., 2015). Hospel, Galand, and Janosz (2016) found that behavioral engagement correlated positively with self-efficacy, task value, and achievement leading to the speculation that the antecedents of student engagement



involve many motivational theories. All research on student engagement has a theoretical framework that includes a motivational theory, yet the use of theory is just as various as the contexts and researchers.

### **Types of engagement**

Engagement research is a relatively new field of inquiry tracking its roots back to the mid-1980's with the research works of Fisher and Berliner (1985), Mosher and McGowen (1985) and Finn (1989) (Reschly & Christenson, 2012). These early works especially the work by Finn focused on understanding the reasons for student dropout and how to increase student retention (Reschly & Christenson, 2012). As engagement theory and intervention exploration expanded within the field of dropout prevention through the 1990's, researchers in the early 2000's started to investigate and develop an understanding of student achievement and engagement for all students (Fredricks et al., 2004). As engagement research matured the researchers within the field developed three distinct schools of thought on student engagement: the first developed from the research conducted in school dropout and prevention. The second developed from the perspective of general overall school reform and the third taking a motivational perspective of student engagement (Reschly & Christenson, 2012). This research project is rooted in the second school of thought, yet it pulls insights from the third and has the potential with its findings to add to the literature of the first school of thought.

Another potential hindrance or at least an issue worthy of discussion is the lack of consensus within the field on the number of types or constructs that make up student engagement (Reschly & Christenson, 2012). Previous literature reviews and historical

commentaries on student engagement research point out many the various types and constructs of engagement within the field, these range for one-, two-, three-, and four-types with others including sub-types (Fredricks et al., 2004; Reschly & Christenson, 2012; Stefansson, Gestsdottir, Geldhof, Skulason, and Lerner, 2016; Wang, Willett, & Eccles, 2011). The tripartite model of student engagement is the most prevalent construct utilized in the available research yet, there is no clear standard definition for each type of engagement. This research project utilizes and adheres to the tripartite model of student engagement proposed by Fredricks, Blumenfeld, and Paris (2004), because of the availability and accessibility of the tripartite model of engagement.

The literature review conducted by Fredricks, Blumenfeld, and Paris in 2004 was the first to establish the meta-construct model of engagement. Recent research conducted by Wang, Willett, and Eccles (2011) acknowledges the three facets of engagement: behavioral, cognitive, and emotional, with the new engagement sub-component developments such as a six first-order factor structure and a second order factor structure. Wang and Peck (2015) developed and tested five prototype student profiles of engagement expanding the classification of engagement levels within students. Additional recent research is trying to establish a fourth aspect of student classroom engagement called agentic engagement (Reeve & Tseng, 2011). Research conducted as recently as 2016 presents findings that point to the accuracy and fit of bi-factor model for measuring student engagement instead of the traditional one-dimensional or the tripartite dimensional measure of engagement (Stefansson et al., 2016). These examples of recent research illustrate that the field of school engagement is still evolving and growing in scope and in depth. It is not that earlier studies neglected to recognize the meta-construct

of engagement; they just generally studied the three facets of engagement separately. Fredricks et al. (2004) continue in their review of literature that by studying these facets collectively, researchers can establish their dynamic relationships.

Before Fredricks et al. (2004) combined the different facets of engagement into a meta-construct researchers viewed and measured them separately. During their review of student engagement research Fredricks et al. (2004) developed the theoretical notion that these engagement constructs share a relationship; therefore, researchers should examine the constructs together and not individually. The interplay among these components of the meta-construct is complex and important for understanding their relationship with academic achievement, but it is essential to understand each type of engagement before going any further. The meta-construct of student engagement includes behavioral, cognitive, and emotional engagement. The review of school engagement literature will start discussing behavioral and then progress on to the other constructs.

According to researchers, behavioral engagement is the active, constructive, and persistent interactions (e.g. effort) of a student within the academic context (Bundick et al., 2014; Fredricks et al., 2004; Gonzalez & Paolini, 2014). In a study on the correlational relationships among behavioral, cognitive, and emotional engagement in mathematics classes, Hospel et al. (2016) divided the construct of behavioral engagement until five separate, but related dimensions. These five dimensions of engagement participation, following instruction, withdrawal, disruptive behavior, and absenteeism all happen in varying strengths between passive and active behavior (Hospel et al., 2016). Behavioral engagement is measurable by surveys, interviews, researcher and teacher observations, and artifact collection, which allows for more potential data collection

opportunities than the other facets of engagement (Gonzalez & Paolini, 2014). Even though behavioral engagement is observable and possibly easier to measure than the other types of engagement, studies focusing on only behavioral engagement and achievement are rare today.

Cognitive engagement, unlike behavioral engagement, is not easily observable and requires different data collection methods. Cognitive engagement researchers generally agree that cognitive engagement occurs when students possess a psychological interest in truly learning and comprehending the academic content of the class as well as an aspiration for an educational challenge and the utilization of metacognitive strategies for learning (Bundick et al., 2014; Fredricks et al., 2004; Greene, 2015; Rotgans & Schmidt, 2010). Cognitive engagement involves student planning, monitoring, and evaluating their knowledge as it pertains to understanding the academic material (Bundick et al., 2014). Measuring cognitive engagement relies on self-surveys, interviews, and artifact collection; however, most research utilizes the former instead of the latter measures. Measuring cognitive engagement and academic achievement can occur in the overall school context (Greene, 2015; Walker & Greene, 2009) and occur within the classroom (Martin & Elliot, 2015; Martin & Liem, 2009). Studies have even focused on cognitive engagement within specific assignments such as problem based learning projects (Rotgans & Schmidt, 2010). The findings of these studies link cognitive engagement with academic achievement, but with varying intensities.

The context of school has an influencing effect on both behavioral and cognitive engagement, but not to the degree that it exerts on emotional engagement (Reyes et al., 2012; Roorda, Koomen, Spilt, & Oort, 2011; Sagayadevan & Jeyaraj, 2012; Streb et al.,

2015). The consensus among researchers is that emotional engagement refers to the feelings students possess about their relationships with peers, teachers, administrators, and the general sense of belonging in the general school environment (Bundick et al., 2014; Dotterer & Lowe, 2011; Fredricks et al., 2004; Lynch, Lerner, & Leventhal, 2012). In addition, students' connection with the academic content, the teaching pedagogy, and their sense of their academic ability all exert influence on their emotional engagement (Bundick et al., 2014). The amount of research on emotional engagement and academic achievement far exceeds the amount for the prior two constructs. The malleable nature of school, classroom, and peer climate can assist in accounting for that difference. Each of these facets of engagement is complex and ever changing as a student advances through different educational experiences.

Measured individually or collectively the constructs of student engagement in previous research occur at the school level and to lesser extent at the classroom level but seldom in a specific curriculum. The content areas that received the most amount of attention with engagement and achievement research are the areas of mathematics, science, and reading while at the time of this study there was no available research on the relationship of engagement to academic achievement in the field of social studies (Kelly & Zhang, 2016; Sciarra & Seirup, 2008). Most engagement research utilizes participant surveys with some observations especially the studies focusing on behavioral engagement (Hospel, Galand, & Janosz, 2016; Reyes et al., 2012). When researchers focus on the constructs collectively, they are generally utilizing large participant surveys (e.g. 4-H study of Positive Youth Development, Maryland Adolescent Development in Context Study, & NICHD Study of Early Child Care and Youth Development).

These substantial surveys can provide generalizability to overall school engagement; nevertheless, they neglect the individual content classroom. The engagement constructs do not occur in isolation and without influence on each other (Chase et al., 2013; Dotterer & Lowe, 2011; Li & Lerner, 2013; Wang & Holcombe, 2010; Wang & Peck, 2015). These studies along with other studies conclude that these constructs longitudinally influence each other both directionally and reciprocally. There are overlaps within the studies' analyses and transferability and generalizability of some study findings.

Due to the quick progression of growth in engagement research, the constructs of engagement moved to the forefront of educational research. Nevertheless, with this increased scrutiny and research conducted in the field of engagement the same issues of the past still plague engagement research today (Fredricks et al., 2004). First, there is no standard measurement of engagement and there was no standard definition of engagement until the early 2000's. In 2011, Fredricks et al. surveyed the field of engagement research and found 156 different instruments utilized by researchers to measure student engagement in various educational domains. Fredricks et al. (2011) developed seven criteria in order to reduce the number of engagement instruments to 21 for further analysis. To make matters worse, for the field of engagement research, some scholars use motivation and engagement as interchangeable terminology (Fredricks et al., 2004). The field of engagement research is still in a state of growth and change, albeit slow, which has a standardizing effect on engagement research.

The relationship among each construct of engagement can be bi-directional and reciprocal in nature; nevertheless, it is still unclear whether there is a relationship with

academic achievement (Li & Lerner, 2012; Chase et al., 2013). Li and Lerner (2012) reported that behavioral and emotional engagement bi-directionally influenced each other (e.g. lower behavioral engagement influenced lower emotional engagement). Additionally, Li and Lerner (2012) found that behavioral engagement influenced cognitive engagement, but cognitive engagement did not influence behavioral engagement. A student may exhibit a high intensity of one construct of engagement while displaying low intensity in the other two constructs during a classroom activity or throughout the school year (Li & Lerner, 2012; Reyes et al., 2012). To understand the reciprocal relationships among the constructs of engagement it may be helpful to refer to Chase et al. (2013). In their statistical analysis of the 4-H study of positive youth development longitudinal results, they found reciprocal relationships among the engagement constructs over time (e.g. 10<sup>th</sup> grade behavioral engagement influences 11<sup>th</sup> grade behavioral engagement).

### **Academic achievement**

If motivation is an antecedent of engagement, its corollary is academic achievement (summative and formative achievement). When comparing the definable nature of student engagement to academic achievement it would seem that the latter is relatively clearer than the former, but that may not be the case. Academic achievement can take many forms from the adequate completion of formative and summative assessment to the attainment of desired skills. The selection of formative or summative achievement depends on the nature of the study's context (e.g. school, classroom, or performance task) (Summers & Dickinson, 2012). Wang and Holcombe (2010) found

that all levels of student engagement are significant to academic achievement. Still, numerous other studies confirm there is a relationship between engagement and achievement, but the intensity and frequency are not consistent because of the varying contexts and the ages of the samples (Park, Holloway, Arendtsz, Bempechat, & Li, 2012; Shernoff & Schmidt, 2008).

The belief among the field of engagement researchers is that there exists a relationship between engagement and academic achievement (Chase et al., 2013; Fredricks et al., 2004). Measuring academic achievement occurs in many different forms from pretest and posttest, project grade, state standardized test scores, final course grades, and cumulative grade point average (Winne & Nesbit, 2010). Varying the modes of periodical evaluations of student engagement with current course grades may provide a clearer illustration of the relationship between academic achievement and engagement (Greene, 2015). Gauging student engagement and viewing academic achievement periodically throughout the semester within a specific context may provide additional support for the belief that engagement is an antecedent of academic achievement.

The epistemological stance of the author(s) as well as the methodology will dictate which measure of achievement is appropriate. Even though researchers assume engagement mediates academic achievement, Fredricks et. al. (2004) questioned whether the literature has tested this underlying assumption. Recent research is testing this assumption and is finding mixed results of this mediated link (Chase et al., 2013; Dotterer & Lowe, 2011; Shernoff & Schmidt, 2008). Winne and Nesbit (2010) raise many concerns about how researchers measure academic achievement. Whether they utilize the “snapshot” or “book end” method of data collection, they state that the researcher



needs to collect more data points in order to conceptualize achievement trajectories. At the participating high school, a student's final course grade contains several quarter grades as well as final assessment grades; furthermore, included within these grades are the student's scores on both formative and summative assessments.

To better understand the shared link between engagement and academic achievement it is important to understand how the researcher views student engagement. There are two potential viewpoints of student engagement: the first is that engagement is a process and the second is that student engagement is an outcome. Viewing engagement as a process puts forth the notion that student engagement is a mediating link among academic achievement, student motivation, and educational context. Another consideration to selecting the viewpoint of the role of engagement is the length of time of the observation or measuring, however; the longer the range of measuring and observation the more intertwined these viewpoints can become (Reschly & Christenson, 2012).

The discussion of the mediating link between motivation, student engagement and academic achievement is prevalent in present engagement research (Martin, 2012). As stated above researchers acknowledge this link, however; it is a link that difficult to measure and observe since there many variables both measureable and immeasurable that influence this mediating link. Nevertheless, researchers do posit that there is a mediating link at least in varying degrees and a potential loop or reciprocal interaction between motivation and student engagement and academic achievement (Chase et al., 2013; Dotterer & Lowe, 2011; Fredricks et. al, 2004; Martin, 2012; Reschly & Christenson, 2012; Shernoff & Schmidt, 2008). This research project ascribed to the premise that

student engagement shares a mediating link with academic achievement and attempted to clarify this link within the project's research questions.

The majority of studies focusing on school engagement and academic achievement utilize surveys to measure engagement and overall GPA to measure academic achievement (Chase et al., 2013; Dotterer & Lowe, 2010; Li & Lerner, 2012; Lynch, Lerner, & Leventhal, 2012; Wang & Holcombe, 2010). Since the previous research focuses on student engagement at the school level, overall GPA reported by the student is an appropriate measure of academic achievement. For studies that focus on engagement at the classroom level, especially within a particular curriculum domain and not at the school level, the utilization of overall GPA would not be appropriate for measuring academic achievement (Fredricks et al., 2004). The utilization of the final course grade that includes final examination, mid-term examination, homework, quizzes, performance tasks, and daily assignment grades would be most appropriate for measuring academic achievement.

### **Contexts of Engagement**

To better appreciate classroom engagement it is important to understand how the differing contexts within a school influence a student's levels of engagement. In addition, to appreciate the influence of the differing contexts of engagement, it is important to be aware of its presence in the day-to-day activities at school and within a classroom. Events, feelings, and thoughts that occur outside of the classroom can carry over into a student's classroom engagement and behaviors. Student educational engagement occurs within the varying contexts of schools from the macro-level of the school-wide to the

micro-level of the individual student. Efforts by engagement researchers traditionally focus on one of the four main contexts of school engagement including: individual student, school environment, classroom, and peers (Furlong, Whipple, St. Jean, Simental, Soliz, & Punthuna, 2003). Engagement researchers acknowledge that these are not the only contexts that affect a student's engagement, yet the availability of research on the role of parents, family, and the community on engagement is sparse (Fredricks, 2011; Shernoff & Schmidt, 2007). These main contexts are not mutually exclusive; instead, occurrences, perceptions, and interactions within one context may influence a student's perceptions, emotions, and behaviors within another context (Furlong et al., 2003).

This research study focused on the peer and classroom context of a social studies classroom as a component of emotional engagement. However, it is still relevant to discuss the other contexts since students do not forget about the outside world when they enter a classroom. The present study occurred within the context of a social studies classroom; however, the engagement survey still acknowledged or at least attempted to acknowledge the influence the other school contexts have on social studies engagement. Since schools are closed environments where students interact with the same individuals on a daily or even yearly basis, it is important to be cognizant and consider the influence of these contexts on students' behavioral, cognitive, and especially emotional classroom engagement.

Students' positive or negative identification with their school is a byproduct of their perception of the school-wide context. The school's physical, supervisory, and school-wide peer environments affect the dynamic development of a student's perception of school in both intensity and enthusiasm in meeting their psychological needs (Lynch,

Lerner, & Leventhal, 2012; Wang & Eccles, 2013). This school perception and affiliation generates a school climate that affects a student's behavioral engagement in academic and extra-curricular activities, e.g., attendance rates (Furlong et al., 2003). As illustrated by Furlong et al. (2003), school-wide factors and behavioral engagement share an associated relationship while research provides less evidence linking cognitive and emotional engagement with the school-wide context (Fredricks et al. 2004). However, the findings of the study conducted by Shernoff and Schmidt (2007) show that just being present at school for some students correlates to an increase in emotional engagement. The classroom, peer, and student contexts can attenuate or amplify the influence the school-wide context has on an individual's engagement.

Research on the classroom context is varied and extensive, yet it is possible to classify the research into two broad categories: teacher-student relationship and classroom structure. The teacher in the classroom determines and affects these categories as well as the students to a lesser degree, yet because of the teacher's authority role within the classroom, it is difficult to isolate his/her influence. The research on the teacher-student relationship is the most expansive and is greatest in depth, comparable to classroom structure. The teacher-student relationship includes student and teacher interaction, mutual respect, teacher support, student classroom comfort, the regulatory function of a teacher, and teacher pedagogy (Davis, 2003; Ryan & Patrick, 2001; Furlong et al., 2003; Fredricks et al. 2004). Meta-analyses conducted on these findings generated data that suggest teachers who operate as social agents can affect the development of students' self and social identity and can instill educational values that foster motivation and engagement (Davis, 2003). Caring teacher support correlates with numerous

components of behavioral engagement, including lower dropout rates and lower disruptive or off-task behavior (Fredricks et al., 2004).

The structure of the classroom is additionally important to understand the role of the classroom context on student engagement. The pedagogical devices the teacher implements in the classroom such as cooperative learning opportunities, differentiated instruction, teacher educational and behavioral expectations, and autonomy, all support and influence student engagement and learning (Fan, 2014; Fredricks et al., 2004). The clarity and fairness of the teacher's academic and behavioral expectations, as well as the application of consequences for not meeting those expectations, can promote increased student behavior engagement (Fredricks et al., 2004). The tasks the teacher requests the students complete should correlate with the ability level of the student and not be disrespectful to his or her ability or aptitude. When tasks are appropriate to the student's development level, his or her engagement will increase accordingly (Brophy, 2008). Opportunities for cooperative learning within the classroom positively influence the classroom dynamics increasing overall student engagement (Ryan & Patrick, 2001). Allowing for student autonomy by implementing differentiated instruction, while reducing external controls, promoting sharing of decision making, and fostering student choice increase student engagement (Bundick et al., 2014). Secondary level students have many distractions and interests competing for their time, energy, and effort. Therefore, the relevance of course content to the students' present and future is an antecedent of their motivation, and ultimately their school engagement (Brophy, 2008).

The peer interactions affect both the school-wide climate and the classroom environment. Peer culture is fluid, dynamic, and pervasive within any school. Peers can

include both individuals students know and those they do not know (Lynch, Lerner, & Leventhal, 2012). Research examining the mediating influence of the peer interactions on school engagement concludes that the association is indirect (Furlong et al., 2003). Peer acceptance is associated with both emotional and behavioral engagement in school, satisfaction in school for the former and socially accepted school behavior for the latter (Fredricks et al., 2004). Peer interactions within the classroom, especially those built on mutual respect, can create an educational environment that encourages students to actively debate points of view, critique others work, and discuss ideas cognitively so engagement is enhanced (Fredricks et al., 2004). The classroom environment encompasses all of the above as well as the course content whether it is math, science, or social studies.

### **Domain of social studies**

The government mandated emphasis on domains of mathematics, science, and English language arts in public education, because of No Child Left Behind (NCLB), has prompted research in these domains, while social studies is neglected. Since most states consider social studies a subordinate educational domain, they rarely assess social studies (American History, world history, civics, geography, economics, psychology, sociology, and anthropology) at the elementary or secondary level. Regardless, social studies curriculum is expansive and can include up to eight different disciplines (Byrnes, 2008, p.336). In social studies education, one of the primary objectives is civic competence, to create young individuals who can use the past and present to make well-structured and

utilitarian decisions for themselves, as a citizen of a diverse community within an interdependent world (National Council for the Social Studies, 1994).

To better understand what social studies education encompasses it is important to understand the differing perspectives on social studies curriculum. The first perspective is to view social studies education as social science while the latter perspective envisions social studies education as social education (Thornton, 2008). It is important to note that the social science perspective considers each discipline of social studies as an entity unto itself where cross-disciplinary teaching seldom occurs. To view social studies education as social science means that state education departments, school districts, or the individual teacher must select what content is relevant and important for the students to learn and provide a justification for selecting specific content while negating other content. The social science perspective allows political, social, and ethnic agendas to potentially dictate what subject content the teacher presents in class.

The social education perspective, on the other hand, focuses on the societal difficulties of living in a community (e.g. local, state, national and international) and then places the importance and relevance of content to those societal demands (Thornton, 2008, p. 20). The inclusion or exclusion of social studies content in both perspectives is the result of the educational purpose. When students are able to look past the social science perspective to a social education viewpoint of social studies content, they notice the importance of understanding, analyzing, interpreting, and applying the concepts learned in social studies (Thornton, 2008). In other words, the social education fosters cross discipline teaching and learning around social and political issues.

According to the 2012 National Assessment of Educational Progress, only 36 percent of tested students were basic or below basic in mathematics, while results for social studies curriculum illustrated a more disheartening view of content mastery (United States Department of Education, 2016). In 2010, NAEP results for social studies curriculum found the following results in terms of students testing below basic in various disciplines: American history of 55 percent, geography of 30 percent, civics of 36 percent and economics of 18 percent (United States Department of Education, 2016). From these results, it is apparent that students are performing more poorly in two of the four tested social studies disciplines compared to at least mathematics. When viewed longitudinally the progress of social studies mastery is relatively stagnant.

When we only view the percentages of students who were proficient or advanced in each of these social studies domains over the history (1994-2010) of the NAEP assessments the dilemma that faces social studies teachers is crystalized. More tested students score proficient or advanced on the economics assessment (42 percent); however, that statistic has not changed between 2006 and 2012 (United States Department of Education, 2016). Of the other three tested social studies domains American history results have improved, but only slightly with 11 percent proficient or above in 1994, the same in 2001, and 12 percent in 2012 (United States Department of Education, 2016). Since 1998, the percentage of tested students being proficient or above in civics has slowly decreased from 27 percent in 2006 to 24 percent in 2010 (United States Department of Education, 2016). The social studies discipline of geography has suffered the greatest setbacks with 27 percent proficient or above in 1994, 24 percent in 2001, and only 20 percent in 2010 (United States Department of Education,



2016). The NAEP results may provide evidence for the argument that if students do not find a topic engaging, interesting, motivating, or relevant their learning will suffer because of decreased student content appreciation. The cause of why students perform poorly on these assessments may be due to a wide range of factors, but by increasing our understanding of the role engagement plays in achievement, especially in the areas of social studies, it may make it possible to foster greater levels of engagement. Yet, even though many states do not test social studies within the battery of standardized testing for NCLB, students still continue to receive some social studies education at least at the secondary level.

An alarming concern for the advocates for social studies education is the reduction of minutes spent at the elementary level and the condensing of social studies curriculum at the secondary level (Fitchett, Heafner, & Lambert, 2014). At the elementary level social studies is following the path of the arts and recess because of the pressures of high stakes testing in mathematics and reading. This reduction and more emphasize placed on math, reading, and science leads students to believe that the social sciences are less important and less relevant to becoming a productive individual. By the time students reach the secondary level, especially ninth grade, they already perceive social studies classes as extraneous courses that they only need to fulfill a graduation requirement (Gehlbach et al., 2007).

The effect the content domain has on the classroom environment is important to consider as an antecedent to student motivation and engagement (Ryan & Patrick, 2001; Wang & Holcombe, 2010). As Brophy (2008) stated, the perceived relevance of the classroom content will enhance or negate classroom student engagement. Students

typically place more importance on certain disciplines such as math and science (Plenty & Heubeck, 2013). Even though students' rating of importance for mathematics decreased each year from 1<sup>st</sup> to 12<sup>th</sup> grade, mathematics rates higher than social studies (Plenty & Heubeck, 2013). Additionally, a science classroom is objective in nature and its perceived applicability, as well as hands-on approach, provides students with an interactive learning setting not available in other disciplines (Bundick et al., 2014; Kelly & Zhang, 2016). Student engagement and interest wane in social studies because, generally, social studies classes lack the interactive learning that would assist students in learning and working with the content (Gehlbach et al., 2007).

Research by Ryan and Patrick (2001) found that mathematics classes where the course content is objective in nature and includes a correct problem solving process foster higher student engagement unlike social studies classes that are subjective with several possible processes and answers. The multi-disciplinary content of the social sciences allows the social studies teacher the curricular latitude to integrate the skills, content, and methods of other disciplines (Summers & Dickinson, 2012); however, standardized testing and pressure from NCLB has forced teachers and administrators to reduce their coverage of curriculum to a speedy superficial level (Gehlbach et al., 2007). The superficial coverage of the social science content generates a classroom where students develop little appreciation for very few presented issues and perceive most content as personally irrelevant (Gehlbach et al., 2007). Even with the massive breadth of available social studies content for study, students find these classes disinteresting and non-engaging (Brophy, 2008). Social studies classrooms are unique in their ability to

incorporate current events for discussion, analysis, and integration with curricular content.

Brophy (2008) presents several example opportunities of how social studies teachers can increase student perceived relevance of geography and history, and lays out a more developed suggestion for government content. Students view social studies through a social science lens and consider their social studies course content necessary to learn; however, its presentation is not in a fashion that makes it applicable to their lives (Thornton, 2008). Recent research on the utilization of social perspective taking, simulations, and authentic projects within social studies classrooms found an increased student motivation and engagement (Gehlbach, 2011; Swan & Hofer, 2013; Wright-Maley, 2015). These non-traditional instructional practices require additional teacher planning and preparation as well as scaffolding throughout the implementation of the project to foster student engagement (Swan & Hofer, 2013). Providing students with opportunities to interact and personalize their experience with the content generates a connection between the learning of and application of new knowledge (Saritepeci & Cakir, 2015). Creating these opportunities for students requires the teacher to relinquish some control of the learning within the classroom to the students, which is not always the easiest for teachers (Wright-Maley, 2015).

Reading, writing, mathematics, and science all come together within the context of a social studies classroom whether it is American history, geography, or civics. Here is where students can notice the benefits and consequences of their education or the lack thereof. Yet, this does not seem to be the case when we consider the lack of interest students express towards social studies and the mediocre NAEP results. Gaining an

appreciation of student engagement within the social studies classroom may assist in providing insights into why students find this aggregate curriculum uninteresting and irrelevant comparable to its parts.

## **CHAPTER 3**

### **METHODOLOGY**

#### **Research Design**

This study is a quantitative longitudinal study that utilized multiple implementations of a student survey to gather data on the relationship between school engagement and academic achievement within a social studies classroom. The study collected participant survey data twice over the length of a school semester (90 school days). In the spring of 2017, implementation of the survey occurred twice throughout the spring semester in social studies classrooms at the participating high school. The first implementation occurred two weeks after the start of the semester and the second happened two weeks before the end of the semester. Additionally, this study is quantitative since it contains statistical analysis and interpretation following the data collection with the utilization of instrument based survey questions (Creswell, 2014).

#### **Sample**

The sampling design of the study utilizes convenience sampling (Creswell, 2014). I attained permission from the participating school district located in south central Pennsylvania to conduct the social studies engagement survey in February and May 2017. The school district Superintendent allowed the participating social studies teachers in the high school to make the survey part of the social studies curriculum for the semester in the spring of 2017. By doing so, this expanded the potential number of participants and altered the parental permission process. The students and guardians had the option to opt out of the survey if they did not want to participate and the option to

drop out of the research at any time. However, the Institutional Review Board (IRB) deemed this unacceptable since the survey was not a part of curriculum in 2016 and might not be a component of the curriculum in 2018. The IRB required both a signed parental consent form and participant assent form for the student to be able to participate. Once I received the signed parental consent and the participant signed assent forms, the names of the participating individuals became available for the school district's Head of Technology to start mining performance and demographic data.

At the time of the data collection, the participating school was 89.5% white, 4% Hispanic, 2.5% Asian, 1.3% Black, and 2.7% other (Pennsylvania Department of Education, 2016). Only 22.65% were economically disadvantaged and 13.57% received special education services (Pennsylvania Department of Education, 2016). Since this is the only school in the study, the sample was not demographically diverse in nature, a limitation that will be mentioned later. This study utilized the following: age, gender, ethnicity, grade level, economic disadvantaged status, overall GPA, previous social studies course grades, and type of course as student demographics.

These demographics provided a glimpse of the factors that influence the survey participants' abilities to become or stay engaged in a social studies classroom. One of the analyses that were critical for the major research question was to ascertain if the demographic variables, in combination with engagement, singly and mutually correlate with achievement in social studies.

The participating senior high school has roughly 1,000 students and has decreased slightly over the past 12 years. The senior high school is not really a senior high school since the high school building contains the grades 9 through 12, yet the name remains.

The ethnic backgrounds of the students at the participating high school mirror those of the community except for the Amish and Mennonites who elect to have their children taught at private non-secular schools. The geographic size of the school district is only 51 square miles and the school district contains one high school (Pennsylvania Department of Education, 2016).

The participating high school is not a Title I school and is representative of suburban south-central Pennsylvania high schools. According to the Commonwealth of Pennsylvania's School Performance Profile, the participating high school achieved a rating of 90.3 for the 2012-2013 school year and increased to 93 for the 2014-2015 academic school year (Pennsylvania Department of Education, 2016). In the 2012-2013 school year, the school district allocated a little over 40 million dollars for instructional services equating to roughly \$13,400 spent per pupil (Pennsylvania Department of Education, 2016). The allocation of financial resources restricts the course offerings of the secondary school and especially in social studies. The social studies curriculum includes three required courses (i.e. American History in 9<sup>th</sup> grade, World Cultures in 10<sup>th</sup> grade and Civics & Government in 11<sup>th</sup> grade) and six elective courses including advance placement (AP) American history, AP European history, Sociology, Psychology, Current Events, and Military History

The external factors of poverty, crime, pollution, and economic instability exist in the school community, but to a lower degree than surrounding communities. The household median income within the school district is \$66,000, which is only 24% higher than the Pennsylvania median household income (United States Census Bureau, 2014) and comparable to other school districts in the south central Pennsylvania region.

Studying social studies engagement in a well performing typical suburban secondary school in the northeastern United States may provide transferable insights into the relationship between engagement and achievement to similar schools across the United States.

The available extra-curricular opportunities for the students are no different from other central Pennsylvania schools. The opportunities are as follows: five fall sports, five winter sports, six spring sports, full-year band, chorus, and orchestra. Where the senior high school differs from other high schools is in its civic, religious, and community clubs. Here the students have an ability to select from ten different clubs. These clubs provide the students with the chance to contribute not just to the school community, but the entire community at large.

At the participating high school there were only 12 classrooms participating in the study. The dataset consists of an aggregate of the 12 separate groups. The number of participating students in each classroom ranged from 1-15 students, the overall sample size varied between 50-100 participants depending on the survey administration. The social studies classes include the following courses: psychology, sociology, American studies, world studies, civics and government, military history, and current events. At the participating high school teachers must follow several requirements for developing a student's final grade. The first quarter grade and the second quarter grade account for 40 percent each of the student's final course grade while the other 20 percent is split evenly between the final examination and final project. At the participating high school, students taking the same course regardless of teacher will take common assessments (e.g. unit



examinations, unit projects with common rubrics, final projects with standardized rubrics, and final examinations).

The original plan for this study was for the survey to become part of the social studies curriculum, but the IRB required both student assent and parental consent for students to participate. This additional step in the study greatly reduced the amount of student participants. In addition, the student grouping in social studies classrooms is heterogeneous so there were various levels of ability levels, gender, ethnicities, and socioeconomics in the sample.

### **Instrument**

The instrument came about through the results of a pilot study conducted in April 2016. The pilot instrument utilized and modified scales developed by the National Center for School Engagement from their Student School Engagement Survey (SSES) (Finlay, 2006). The rationale for utilizing this instrument as a foundation for the pilot study is available in the Appendix A (Pilot Study). The results of the pilot study abetted the generation of the Carter Social Studies Engagement Survey (CSSES) for use in this study (refer to Appendix A for pilot study results and discussion). The CSSES contained 27 Likert-scale survey questions from the Social Studies Engagement Pilot Survey (SSEPS). The selection of these survey categories or variables and questions occurred after the completion of the SSEPS analyses. The questions contained in the CSSES appear in Appendix I. The instrument contains five categories of survey questions that center on the tripartite of school engagement within the content domain of social studies with two variables representing cognitive engagement, two categories representing behavioral

engagement, and one representing emotional engagement. These categories or variables vary in the number of survey questions from nine to three.

The first category of questions is the only category to focus on emotional engagement and contained the most questions when compared to the other categories. The CSSES assessed emotional engagement with the following survey questions: “I enjoy the work I do in my social studies class.” and “I feel excited by the work in my social studies class.” These questions along with seven others assisted in developing an understanding of the students’ levels of emotional engagement within a social studies classroom. These survey questions assessed the students’ perception of several important components of emotional engagement such as: classroom support, perception of classroom enjoyment, content interest, classroom belonging, sense of teacher concern, and curriculum challenge (Eccles & Wang, 2012; Hospel, Galand, & Janosz, 2016; Ryan & Patrick, 2001; Shernoff & Schmidt 2007; Walker & Greene 2009).

The second variable or category of school engagement identified by way of the pilot study results focused on a specific component of behavioral engagement of accepting authority. This variable contained the following questions: “I try to follow the classroom rules in my social studies classes.” and “I follow my social studies teachers directions.” as well as three other questions focused on the student’s willingness to accept authority within the social studies classroom. These behavioral engagement survey questions assessed the students’ perception of how they follow classroom rules, teacher instructions, and their desire to participate in class (Eccles & Wang, 2012; Hospel et al., 2016). These survey questions abetted in developing a partial view of the students’ levels of behavioral engagement within the social studies classroom. In order to refine the

understanding of the students' levels of behavioral engagement I associated the results from these survey questions with the question results of the last survey category.

The third and fourth factors focused on the students' levels of cognitive engagement with the latter centered specifically on the priority students place on learning within a social studies classroom. The third category contained the following survey questions: "When I read for my social studies classes, I ask myself questions to make sure I understand what it is about." and "I check my social studies schoolwork for mistakes." These questions focused on the use of metacognitive strategies (e.g. self-regulatory strategies and persistence) within the social studies context (Greene, 2015; Greene et al., 2004; Walker & Greene 2009; Zimmerman & Pons, 1986). Unlike the questions in the fourth category, these questions assessed levels of cognitive engagement within social studies in a broad sense.

The fourth factor contains questions that assisted in understanding the significance students place on social studies learning and content (e.g. "How important do you think the things you are learning in social studies are going to be to you later in life?" and "I am getting a good social studies education at my school."). These cognitive engagement survey questions assessed the students' intrinsic value placed on social studies and learning within a social studies classroom, and content relevance, as well as their focus on pursuing mastery educational goals (Brophy, 2008; Eccles & Wang, 2012; Greene, 2015).

The fifth factor as mentioned above assessed a component of behavioral engagement, specifically a student's work ethic within a social studies classroom. These survey questions assessed the students' perception of their own classroom

withdrawnness, participation in class, and passive classroom interactions (Hospel et al., 2016). This is the smallest category with only three questions, yet they centered clearly on the student's thoughts and actions on completing social studies coursework (e.g. "I have never thought of dropping out of a social studies class." "When I am in social studies class, I do as little work as possible." and "When I am in a social studies class, I just pretend I am working.").

### **Variables in the Study**

Behavioral, cognitive and emotional engagements within the social studies classroom are the study's independent variables. The application of two survey implementations built on the recommendations of other previous studies and generated a clearer image of the relationship between student engagement and academic achievement within the social studies classroom over the course of a semester. The study utilized bi-semester, self-report surveys to collect data on the study's independent variables: behavioral, cognitive, and emotional engagement. The instruments utilized to measure the magnitude of the tripartite engagement in the participants assisted in establishing the intensity of school engagement. The dependent variable of social studies academic achievement in this study is the participants' present final social studies course grade.

The study's control variables include: age, gender, grade level, ethnicity, economic disadvantaged status, overall GPA, previous social studies course grade, and present course types (required/elective). All play a role in how students participate in their daily school activities and their influence will be analyzed as covariates. Their use will acknowledge that these variables are important for understanding the background of

the sample and to recognize their influence on the participants, the findings, and conclusions of the study.

### **Data Collection and Procedures**

This study was an attempt to elaborate on and clarify the association between the tripartite model of behavioral, cognitive, and emotional school engagement and student academic achievement in the social studies classroom controlling for gender, socioeconomics, and ethnicity for high school students from one south-central Pennsylvania high school. The school district Head of Technology provided the needed assistance in the collecting of the demographic and personally sensitive data on the students. The student data set did not include their names; however, it included the school district identification number until the collection of all the survey data was complete. The storage of the collected data happened on the school district servers under the protection of the school district's firewall and encryption data protocols. After the completion of the collection, the school district's Head of Technology removed the student school identification numbers before transferring the data to me for data analyses.

The collection of the survey data occurred via a Google survey on their school district provided computer. The students who had both assented and received parental/custodial consent received an invitation to access a Google survey on a preselected day(s) (e.g. 16 February 2017 & 31 May 2017). The students had time at the end of the school day to complete the survey during the high school flexible "focus" time. The school district Head of Technology used the student's school identification number to attach their survey responses to their demographic information. The school district

Head of Technology supplied me with a Microsoft excel spreadsheet that contained only the data from the two completed administrations of the Carter Social Studies Engagement Survey and the demographic data excluding any identifiable student data (student name or school district identification number). I transferred the excel spreadsheet into a SPSS dataset for the data analyses.

The study's administrations occurred online since the participating school district is a 1to1 school district with computers (each student has a computer available to use throughout the school day). Every participating high school student had a computer and internet access available to them while they are at school. Similar to the pilot study the Carter Social Studies Engagement Survey occurred via Googleforms and each student logged into the Google survey in order to take the survey. The survey responses were only available to the school district's Head of Technology and not to the researcher. Both survey responses were only available after the end of the semester and the Head of Technology removed any student identifiers.

### **Data Analysis Procedures**

The first step in the data analysis process was to report the number of completed surveys and the amount of incomplete surveys. The first set of data analyses included the means, standard deviations, and ranges for each of the variables. The descriptive statistics of the participating individuals' demographics (e.g. grade level, age, gender, ethnicity, free & reduced lunch status, and the type of course) were computed. Additionally, the Cronbach's alpha on each of the measures of the modified NCSE SSES and the Carter Social Studies Engagement Survey were computed to provide the evidence of the scale's

internal consistency. Within the study, student engagement is both a mediating and dependent variable depending on the research question.

In order to allow for a comparison of NCSE variables and the CSSES variables the analyses for the major research question and several of the ancillary questions I provided statistical analysis using both the variables of engagement of both the modified NCSE SSES and the CSSES. The study's major research question is: What impact does each facet singly and mutually (behavioral, cognitive, & emotional) of classroom engagement have on social studies academic achievement? The first statistical analysis I conducted was a Pearson correlation among the variables of both survey implementations (NCSE SSES and CSSES) and the students' final social studies grade.

The study's first ancillary research question is: How does the relationship among the different facets of classroom engagement change during the course of a semester? The statistical analyses for this research question were different from the previous research question. At each measurement of the instrument (e.g. start of the semester and end of the semester), I conducted Pearson correlations to gain insight to the strength of the relationship each facet (variable) of engagement shares with the others with both NCSE SSES and the CSSES.

The second ancillary research question is: Does student demographics predict academic achievement within a social studies classroom, while controlling for student engagement? This research question as well as the third and fourth ancillary research questions is different from the previous research questions in that it is examining the mediating effect of student engagement on academic achievement. To uncover the answer to this research question it would be necessary to complete a mediator analysis

utilizing a linear multiple regression with the various student demographics as the independent variable(s), student engagement as a mediating variable, and academic achievement as a dependent variable. Before conducting the mediator analyses, I conducted a Pearson correlation between the demographic variables and the participants' final course grade. After I found the demographics variables that share a significant relationship with the participant's final course grade, I conducted the linear multiple regression analyses.

The third ancillary research question is only dissimilar to the fourth ancillary research question in that the independent variable is not student socio-economic status, but previous social studies academic performance. In addition to the abovementioned statistical analyses, I conducted a linear multiple regression of all student demographics, student engagement, and previous student social studies academic performance to predict academic achievement. This assisted in understanding the relationship among these variables and academic achievement for the fifth, sixth, and seventh ancillary research questions.



## CHAPTER 4

### STUDY RESULTS

#### **Introduction**

The purpose of this chapter is to present the study's findings from the analyses including the sample descriptive statistics, internal reliability, major research questions and ancillary research questions. Before the report of the analytical findings, the chapter will contain a brief overview of the purpose of the study, the participating school as well as the collecting and handling of the sample data. The report of findings will contain only the analyses for the major and ancillary research questions while the next chapter will include a summary of the results and a comparison of the study's findings with extant research.

As educators strive to increase the academic achievement of their students, there is added interest in the field of student engagement as a potential key in unlocking a student's academic achievement. The assumption is that engagement and achievement share a positive relationship in that as the former increases the latter will increase as well. Few studies view student engagement through the context of the classroom while most engagement research focuses on the overall context of school. Yet, even with this said, there are a few research studies that have focused on student engagement through the context of the classroom. This research, however, has mostly been conducted in math, sciences or reading classrooms. This study explored the relationship between student social studies engagement and social studies academic achievement throughout the semester within the context of a social studies classroom.

The participating high school was located in south-central Pennsylvania and had a population around 1000 students. The participating sample consisted of students from seven social studies teachers and roughly 21 individual classrooms. The median household income is around \$66,000 (United States Census Bureau, 2014) and is comparable to other school districts within the residing county. In the 2012-2013 school year, the school district allocated a little over 40 million dollars for instructional services equating to roughly \$13,400 spent per pupil (Pennsylvania Department of Education, 2016). According to the Commonwealth of Pennsylvania's School Performance Profile, the participating high school achieved a rating of 90.3 for the 2012-2013 school year and increased to 93 for the 2014-2015 academic school year (Pennsylvania Department of Education, 2016).

The data collection occurred through the utilization of an online survey and through the participating school's data management system. Once collected, the school district's Head of Technology compiled the data into a Microsoft Excel spreadsheet and I conducted the appropriate analyses using IBM's Statistics Program for the Social Sciences (SPSS). The study did not utilize the participants that had missing data in the data analyses and as for those with incomplete data, SPSS utilized the incomplete data when applicable and possible. When there was missing data in a student's survey responses or in their demographics, the data entry was intentionally blank as to negate any possible influence on the analyses with additional zeros.

## Sample

The study included two implementations of the social studies engagement survey; the first survey occurred on 20 February 2017, and second on 31 May 2017. After extending the deadline for receiving consent and assent forms, the participating classroom teachers handed in 108 completed pairs of forms. Presented in Table 4.1 is the total number of participants per survey, overall number of participants in the study, and the number of participants who participated in both the February and May survey administrations. The study had 101 total participants out of the 108 who returned the consent and assent forms, but only 66 participated in both administrations. The second administration had 93 participants while the first implementation had only 74.

Table 4.1	
<i>Descriptive Statistics of Survey Implementations for Participants of the CSSES</i>	
Sample	N
Completed Consent & Assent Forms	108
Participated in at Least one Survey Administration	101
Participated in the February Survey	74
Participated in the May Survey	93
Participated in both Surveys	66

Note: N= number of participants. Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

The participating students represented each grade level and ages at the high school as illustrated in Table 4.2 and Table 4.3. Tenth and eleventh grade have the highest levels of representation while twelfth and ninth grade have the least number of participants. Similar to the grade level representation 16 and 17 years of age exceeded the number of participants aged 14, 15, and 18 years old. This inequality among the amount of participants per grade level and age level was not expected. In addition, the participants' ages reflect their age at the second survey administration since the school

district's Head of Technology pulled the demographic data at the end of the academic school year.

Grade	Participants in February		Participants in May		Participated in Both	
	N	%	N	%	N	%
9	8	10.8	8	8.6	8	12.1
10	43	58.1	47	50.5	41	62.1
11	11	14.9	20	21.5	7	10.6
12	12	16.2	18	19.4	10	15.2

Note: Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

Age	Participants in February		Participants in May		Participated in Both	
	N	%	N	%	N	%
14	2	2.2	2	2.7	2	3.0
15	13	14.0	14	18.9	13	19.7
16	43	46.2	33	44.6	31	47.0
17	20	21.5	13	17.6	11	16.7
18	15	16.1	12	16.2	6	13.6

Note: Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

The gender breakdown of the participating students includes 46 males and 55 females as shown in Table 4.4. The ethnic breakdown for the participants appears in Table 4.5 and the number of students receiving free and reduced lunch appears in Table 4.6. It is important to note the school district's data grade management system provided all the demographic and grade data and participants provided only the survey responses. Even though the sample size is relatively small it does, however, mirror the overall school population in ethnicity and SES.

Gender	Participants in February		Participants in May		Participated in Both	
	N	%	N	%	N	%
Male	42	45.2	34	2.7	30	45.5
Female	51	54.8	40	18.9	36	54.5

Note: Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

Ethnicity	Participants in February		Participants in May		Participated in Both	
	N	%	N	%	N	%
White	79	84.9	67	90.5	60	90.9
Hispanic	6	6.5	4	5.4	3	4.5
Black	2	2.2	0	0.0	0	0.0
Asian	4	4.3	2	2.7	2	3.0
Mexican	2	2.2	1	1.4	1	1.5

Note: Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

Free and Reduce Lunch Status	Participants in February		Participants in May		Participated in Both	
	N	%	N	%	N	%
	No Free Lunch	74	79.6	60	81.1	56
Free Lunch	19	20.4	14	18.9	10	15.2

Note: Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

For this study, the student participation in the Commonwealth's Free and Reduced Lunch Program provided a glimpse into the individuals who may be coming from households who are living at or below the poverty level. According to the school district's data management system, 23 students of the 101 students receive free and reduced lunch. The study utilized the participation in the Free and Reduced Lunch Program as a proxy for social economic status (SES) and as a component of the participant's non-academic demographics.

Grade	Type Of Course	
	Required N	Elective N
9	8	0
10	43	6
11	14	10
12	2	18
Total	67	34

Note: CSSES= Carter Social Studies Engagement Survey  
Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

The amount of participants taking a required courses and elective courses was 67 and 34 respectively as shown in Table 4.7. Few participants in 9<sup>th</sup> and 10<sup>th</sup> grade took an

elective course in the 2017 spring semester while few twelfth grade participants took a required course. Among the eleventh grade participants, more took a required course than an elective course in the spring semester. At the participating school ninth grade students do not have the option to take any social studies elective courses; these courses are only open to the upperclassmen.

### **Statistical Analyses**

At this point, it is important to indicate that I conducted analyses on the first two research questions through the lens of the National Council on School Engagement's Student School Engagement Survey (SSES) scale groupings as well as the scale variables generated from the factor analyses of the Carter Social Studies Engagement Survey (CSSES) pilot study conducted in April 2016 on 100 participants. The SSES scales assessed student behavioral, cognitive and emotional engagement while the CSSES scales included emotional engagement, cognitive engagement, social studies priority (cognitive engagement), accepting authority (behavioral engagement), and social studies work ethic (another variant of Behavioral Engagement). A description of the factor analysis from the pilot study is located in Appendix A. The survey scales are almost identical, with CSSES containing one additional scale, yet the grouping of the scales is different for the SSES and CSSES thus potentially influencing the analyses. It is essential for these analyses to include the original SSES variables to support the selection of these survey scales over other available surveys. Providing the parallel results from the CSSES variables will, hopefully, provide the necessary evidence for the new variable arrangements.

In the next section, I will provide the Cronbach Alphas for both the NCSE's SSES variables and CSSES variables. Then I will proceed to the research questions. I will present the analyses conducted with the NCSE's SSES variables alongside the CSSES variables for the first two research questions so a clear comparison between the variables is possible. Then I will precede to the last three research questions and ancillary research questions only utilizing the variables of the CSSES.

### Internal reliability

The first set of statistical analyses centered on verifying the internal reliability of scales utilized in the research. I conducted Cronbach Alphas on both survey administrations utilizing the NCSE variables and then the CSSES variables. I suspected that the survey administrations would continue the promising reliability statistics that the pilot study generated. Table 4.8 presents the Cronbach's Alpha results of the NCSE variables for both administrations. The table includes the Cronbach Alphas for each engagement variable as well as the total survey.

Table 4.8			
<i>Cronbach's Alphas and Number of Items for the Modified NCSE Engagement Instrument (SSES) for Social Studies</i>			
NCSE Engagement Variable	February Administration	May Administration	Number of Items
1. Behavioral Engagement	.848	.856	8
2. Cognitive Engagement	.787	.835	11
3. Emotional Engagement	.766	.781	7
NCSE Social Studies Engagement Survey	.895	.906	26

Note: NCSE= National Center for School Engagement SSES= Student School Engagement Survey.  
Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of Participants: 74 and 31 May 2017. Number of Participants: 93

The Cronbach Alphas presented in Table 4.8 provide a picture of the reliability of the scale grouping used by the NCSE's SSES. The Alphas for behavioral engagement were consistently above .800 while the alphas for emotional engagement for both implementation were above .750. Only cognitive engagement saw a substantial increase

in internal reliability increasing from .787 in February to .835 in May. In addition, the overall Alpha for the NCSE Social Studies Engagement Survey saw an increase between administrations; however, the change was not as large as the change in cognitive engagement.

The CSSES variables consist of the same scales as the NCSE's SSES variables, but in different orientations and included one additional scale as shown in Table 4.9. The different combinations of the scales provided different Alpha values and the addition of the extra scale altered the overall Alpha of the survey administration. These reliability analyses will allow for further consideration for future use of the scales utilized by the CSSES and SSES.

CSSES Engagement Variable	February Administration	May Administration	Number of Items
1. Emotional Engagement	.882	.903	9
2. Accepting Authority (B.E.)	.826	.845	5
3. Cognitive Engagement	.768	.781	6
4. Social Studies Priority (C.E.)	.551	.691	4
5. Social Studies Work Ethic (B.E.)	.768	.787	3
Social Studies Engagement Survey	.879	.912	27

Note: B.E.= behavioral engagement; C.E.= cognitive engagement  
Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017. Number of Participants: 74 and 31 May 2017. Number of Participants: 93

The Cronbach Alphas presented in Table 4.9 show that each variable demonstrated an increase in internal reliability with social studies priority having the largest increase between implementations and cognitive engagement with the smallest increase. The only variable with an Alpha below the acceptable range of .700 for both implementations is Social Studies Priority. Emotional Engagement scales possess the strongest Alphas in both implementations of .882 and .903 respectively. In addition, the overall Alpha for the Carter Social Studies Engagement Survey saw a modest increase between implementation.



## Analyses for the Major Research Question

### **Research Question # 1: Do the different facets of classroom engagement (behavioral, cognitive, & emotional) singly and mutually correlate with social studies academic achievement?**

As stated earlier, only the first three research questions of the present study require two sets of analyses including the NCSE SSES and the CSSES variables. The following analyses for the major research question and the ancillary research questions one and two will focus on the results developed by utilizing the NCSE SSES and CSSES variables. At this point, it is important to understand what singly and mutually correlated means within the confines of this study. Singly correlated is utilizing a Pearson correlation of each individual factor with academic achievement. Mutually correlated is utilizing a multiple regression of total engagement survey including all factors. I computed Pearson correlations with each of the NCSE SSES scales at both implementations as well as total engagement for each administration. The Pearson Correlation analyses of student engagement and the students' final course grade provide the results presented in Table 4.10.

Table 4.10	
<i>Pearson Correlations for the Modified NCSE Engagement Instrument (SSES) for Social Studies</i>	
NCSE Engagement Variables	Pearson Correlations
Emotional Engagement (February)	.135
Emotional Engagement (May)	.226*
Cognitive Engagement (February)	-.001
Cognitive Engagement (May)	.263*
Behavioral Engagement (February)	.109
Behavioral Engagement (May)	.201
Total NCSE Engagement (February)	.082
Total NCSE Engagement (May)	.284**

Note: NCSE= National Center for School Engagement SSES= Student School Engagement Survey.  
Adapted from Social Studies Engagement Survey Implementations results, conducted by J. Carter 20 February 2017. Number of Participants: 74 and 31 May 2017. Number of Participants: 93  
\*\* P< 0.01, two-tailed. \* p< 0.05, one-tailed.

The Pearson Correlations between the student final course grade and the NCSE SSES scales and NCSE SSES variables for each survey administration highlighted the lack of correlations between the results of the first survey administration and the participants' final course grade. The Pearson Correlations in Table 4.10 illustrated that the SSES variables in the second administration share significant but weak relationships with participants' final course grade. May Cognitive Engagement yielded the highest correlation of .263\* and May Emotional Engagement demonstrated a .226\* correlation with the participant final course grade.

For the NCSE SSES analyses I conducted the Pearson Correlations with the survey scales and mean centered variables of both survey administration as well as the mean centered for total student engagement for both implementations and overall total engagement with the final social studies course grade. The process was identical to the process used for the NCSE SSES correlations. The results of these Pearson Correlations appear in Table 4.11 below.

Table 4.11	
<i>Pearson Correlations for the CSSES implementations</i>	
<u>CSSES Engagement Variables</u>	<u>Pearson Correlations</u>
Emotional Engagement (February)	.129
Emotional Engagement (May)	.254*
Accepting Authority (February)	.086
Accepting Authority (May)	.231*
Cognitive Engagement (February)	-.071
Cognitive Engagement (May)	.187
Social Studies Priority (February)	-.070
Social Studies Priority (May)	.243*
Social Studies Work Ethic (February)	.081
Social Studies Work Ethic (May)	.127
Total CSSES Engagement (February)	.082
Total CSSES Engagement (May)	.286**

Note: CSSES= Carter Social Studies Engagement Survey  
Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of Participants: 74 and 31 May 2017. Number of Participants: 93  
\* p < .05, two-tailed. \*\* p < .01, two-tailed.

The results of the Pearson Correlation of the CSSES scales and the participant's final course grade produced the same results as discussed earlier. These new correlations provided three significant coefficients for student engagement in the May survey administration of .254\*, .243\*, .231\* respectively. As with the previously discussed results with the NCSE SSES these findings are significant, yet the strength of the correlations is weak. As currently used in social science research, a correlation of .339 or larger corresponds to what Cohen terms a large effect size (Cohen, 1988, p. 25). As such, none of the correlations presented above attain that level.

### **Ancillary Analyses**

The collected demographic and survey data allowed for several ancillary analyses. These analyses considered the relationship among student social studies engagement, social studies achievement and the type of course. Other ancillary analyses investigated the relationship between student demographics with total student engagement and participant final course grades. In addition, the final ancillary analysis determined which demographic variable accounts for the highest amount of variance in the participants' final social studies grade.

### **Ancillary Question #1: Does the relationship among the different facets of classroom engagement change during the course of a semester?**

The first ancillary research question explores the relationship among the different facets of engagement throughout the semester. This research question involved two sets of Pearson Correlations with the first set being the correlations between the NCSE SSES

variables at the two administration dates of 20 February 2017 and 31 May 2017 (Table 4.12). The second analysis involved the correlations across time (Table 4.13). In order to attain these variables, scales for each variable were mean centered and were added together to create a score for each individual variable. I then conducted the Pearson Correlations with the appropriate variables to generate the following tables.

Table 4.12		
<i>Pearson Correlations for the Modified NCSE Engagement Instrument (SSES) Variables for Social Studies</i>		
<u>NCSE Engagement Variables</u>	<u>Correlations in February</u>	<u>Correlations in May</u>
Emotional with Cognitive	.556**	.684**
Emotional with Behavioral	.467**	.355**
Behavioral with Cognitive	.598**	.500**

Note: NCSE= National Center for School Engagement SSES= Student School Engagement Survey.  
Adapted from February 2017 Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017. Number of Participants: 74  
\*\* p< 0.01, two-tailed.

The Pearson Correlations of the NCSE SSES variables in Tables 4.12 are all statistically significant and are moderate to large in terms of effect sizes ranging between .467\*\* and .598\*\*. All of the variables moderately correlate with each other and share a strong level of significance within each implementation, but that was not always the case when I conducted the Pearson Correlations between the NCSE SSES variables of both implementations.

Table 4.13			
<i>Pearson Correlations for the Modified NCSE Engagement Instrument (SSES) Variables for Social Studies</i>			
<u>NCSE Engagement Variables</u>	<u>May Emotional Engagement</u>	<u>May Cognitive Engagement</u>	<u>May Behavioral Engagement</u>
February Emotional Engagement	.595**	.434**	.156
February Cognitive Engagement	.400**	.693**	.393**
February Behavioral Engagement	.310*	.549**	.494**

Note: NCSE= National Center for School Engagement SSES= Student School Engagement Survey.  
Adapted from Social Studies Engagement Survey Implementations results, conducted by J. Carter 20 February 2017. Number of Participants: 74 and 31 May 2017. Number of Participants: 93  
\* p < .05, two-tailed. \*\* p < .01, two-tailed.

In Table 4.13, the diagonal correlations are test-retest correlations. As such, these should be larger than any of the off-diagonal correlations, which they are. All of the off-

diagonal correlations are significant with the exception of the February to May Behavioral correlation. Of the correlations of the unlike variables between survey implementations, February behavioral engagement and May cognitive engagement share the highest significant correlation of .549\*\*.

Similar to the analyses conducted for the NCSE SSES analyses for the second research question, I conducted two sets of Pearson Correlations with the mean centered variables of the CSSES. The first of these analyses as shown in Table 4.14 examined the relationships between the variables in the first and second survey administration in February 2017 and May 2017 while the second analysis as shown in Table 4.15 measured the relationships between the scale variables of the February implementation with the survey variables of the May implementation.

Table 4.14		
<i>Pearson Correlations for the CSSES for Social Studies</i>		
<u>CSSES Engagement Variables</u>	<u>Correlations in February</u>	<u>Correlations in May</u>
Emotional Engagement with Accepting Authority	.407**	.323**
Emotional Engagement with Cognitive Engagement	.355**	.538**
Emotional Engagement with Social Studies Priority	.563**	.733**
Emotional Engagement with Social Studies Work Ethic	.398**	.315**
Accepting Authority with Cognitive Engagement	.484**	.447**
Accepting Authority with Social Studies Priority	.499**	.296**
Accepting Authority with Social Studies Work Ethic	.357**	.363**
Cognitive Engagement with Social Studies Priority	.439**	.458**
Cognitive Engagement with Social Studies Work Ethic	.334**	.356**
Social Studies Priority with Social Studies Work Ethic	.417**	.251**

Note: CSSES= Carter Social Studies Engagement Survey.  
Adapted from Social Studies Engagement Survey Implementations results, conducted by J. Carter 20 February 2017. Number of Participants: 74 and 31 May 2017. Number of Participants: 93  
\*\* P< 0.01, two-tailed. \* p< 0.05, one-tailed.

The results illustrated in Table 4.14 show that all the CSSES variables positively correlated with each other at a significance level of .01. The social studies priority variable and the emotional engagement variable share the strongest correlation of .563\*\* while social studies work ethic and accepting authority share the weakest correlation of .334\*\*. It is interesting that all of the correlations between social studies priority and the

other variables were above .400\*\* while all the other variables had at least one correlation below that coefficient.

	<u>May</u> <u>Emotional</u> <u>Engagement</u>	<u>May</u> <u>Accepting</u> <u>Authority</u>	<u>May</u> <u>Cognitive</u> <u>Engagement</u>	<u>May Social</u> <u>Studies Priority</u>	<u>May Social</u> <u>Studies Work</u> <u>Ethic</u>
February Emotional Engagement	.593**	.238	.279*	.530**	.029
February Accepting Authority	.239	.724**	.377**	.432**	.274*
February Cognitive Engagement	.182	.281*	.607**	.334**	.264*
February Social Studies Priority	.560**	.401**	.488**	.731**	.107
February Social Studies Work Ethic	.278*	.267*	.386**	.433**	.306*

Note CSSES= Carter Social Studies Engagement Survey.  
Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 and 31 May 2017 Number of Participants: 66.  
\* p < .05, two-tailed. \*\* p < .01, two-tailed.

The results illustrated in Table 4.15 of the correlations between the February CSSES variables and the May CSSES variables are the first correlations between the scale variables that are non-significant. The May social studies work ethic variable shares two non-significant correlations with the other variables while its remaining correlations are only significant at a .05 level. The strongest correlations contained in the table are the correlations between the same variable at the different implementations (which, again, are test-retest correlations). The strongest correlation outside of the same variable correlations is the .560\*\* correlation between February Social Studies Priority and May Emotional Engagement. It is interesting to note that February Emotional Engagement and May Social Studies Priority demonstrated a correlation of .530\*\*.

**Ancillary Question # 2: Does student demographic(s) predict academic achievement within a social studies classroom, while controlling for student engagement?**

For the second ancillary research question of the study, I first needed to complete Pearson Correlations with the final course grade and the available demographic

information provided by the school district data management system. The demographic variables available for analysis were gender, grade level, age, ethnicity, and Free and Reduced Lunch. Since age and grade level are essentially the same, I removed age from the analysis. In addition, since the sample was overwhelmingly white, I also removed ethnicity from the correlational analysis; these deletions would leave only free and reduced lunch and gender. Furthermore, the data set contains the students' cumulative GPA and the previous grade(s) in Social Studies. I first correlated these academic variables with the Social Studies grade. They were then entered into two separate multiple regressions: the first using the NCSE scales and the second using the CCSES scale. The Pearson correlations using the demographic variables are contained in Table 4.16.

Table 4.16	
<i>Pearson Correlations of Student Academic &amp; Non-Academic Demographics and Final S.S. Grades</i>	
<u>Student Demographic</u>	<u>Pearson Correlation</u>
Previous S.S. Course Grade	.687**
Grade Point Average	.698**
Gender <sup>a</sup>	.143
Free & Reduced Lunch <sup>b</sup>	-.313**
Grade Level	.259**

S.S.= social studies; <sup>a</sup> Males =1; Female =2, <sup>b</sup> No Free and Reduced Lunch =1; Free and Reduced Lunch =2.  
 Note: Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of Participants: 74 and 31 May 2017 Number of Participants: 93. Total participants 101.  
 \* p < .05, two-tailed. \*\* p < .01, two-tailed.

The correlations in Table 4.16 indicate that students with higher Social Studies grades have higher cumulative GPAs, higher previous Social Studies grades, are in higher grades (i.e., grades 11 and 12), and do not receive free or reduced lunch. The first multiple regression used the NCSE scales (May administration) in addition to the variables listed in Table 4.15. A check for multicollinearity found that grade point average and previous Social Studies grade had a VIF greater than 3. As such, I eliminated the previous grade and repeated the regression using a simple ordinary least squares

(OLS) regression model. The only variable that entered the equation was cumulative GPA. A hierarchical regression was then run with the demographic variables entered first, followed by the three NCSE Engagement Scores. As before, only the GPA was significant in the model.

The second multiple regression analysis used the five scales from the CCSES, along with the demographic variables as the predictors. Similar to the NCSE engagement scores, the participants' GPA was the only variable that was significant in both the OLS and the hierarchical regression with an  $r$  squared value of .587.

**Ancillary Question #3: Does engagement mediate the relationship between Social-Economic Status (SES) and student social studies academic achievement?**

This ancillary research question sprung from the study's third research question and came to fruition during the data analysis process. I first needed to complete Pearson Correlations with the final course grade and the available demographic information provided by the school district data management system (Table 4.15). After completing the correlations, I conducted a series of regression analyses to find if there were mediating effects of total engagement on the relationship between the social-economic status variable of free and reduced lunch and social studies academic achievement. Free and reduced lunch has a negative weak significant correlation with the participants' final social studies grade.

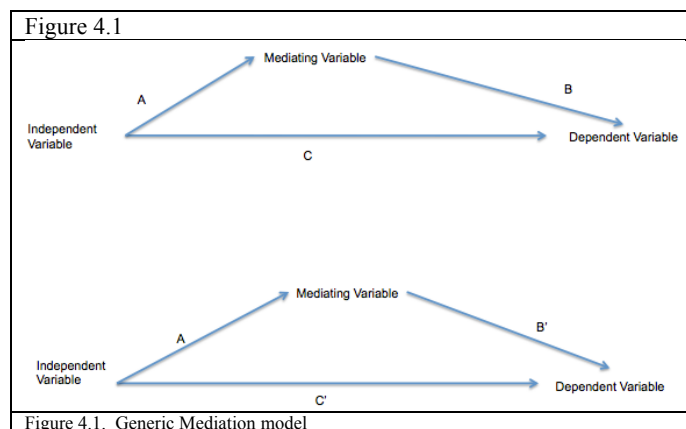
After completing the correlations, I conducted a series of regression analyses to find the mediating effects of total student engagement on the relationship between these demographic variables and social studies academic achievement. For student engagement, I used the cumulative total engagement of both administrations since the



dependent variable is a cumulative record of the participants' social studies grade and I utilized the participants' Free and Reduced Lunch status as an indicator for SES.

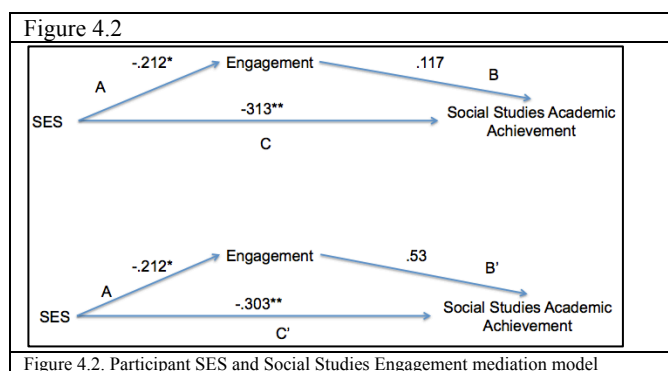
I followed a simplistic model that stated the individual demographic as the independent variable, student social studies academic achievement as the dependent variable and student total engagement as the mediating variable. The model utilized five paths, the first path is the pathway between the independent variable and the dependent variable labeled "path c". I utilized a bivariate regression to find the information listed in the tables below. The next path is the pathway between the independent variable and mediating variable known as "path a". In order to understand the relationship between these two variables I again conducted a bivariate regression with the independent variable and the mediating variable as the dependent variable. The next pathway is the path between the mediating variable and the dependent variable labeled "path b". I conducted another bivariate regression with the mediating variable as the independent variable and dependent variable.

The next pathway is the path between the mediating variable and the dependent variable labeled "path b". I conducted a multiple regression with both the SES and total engagement as independent variables. By conducting the multiple regression I was able to understand the relationship between the mediating variable and the dependent while holding the independent variable constant. Conversely, this analysis allowed me to understand the relationship between the students' demographic while holding the mediating variable constant equating to "path c' ". Graphically, the path diagrams for this research question and the fourth research question are as follows:



In order to test the mediation relationship I needed to make sure the analyses followed a five-step process and the findings of each step could not violate any of the following: 1. The independent variable (SES) must correlate with dependent variable (Social Studies Academic Achievement). 2. The independent variable must correlate with mediating variable. 3. The mediating variable (Student Engagement) must correlate with the dependent variable. 4. When dependent variable is partial out of the correlation between mediating variable and the dependent variable, the correlation must remain significant. 5. When the mediating variable is partial out of the correlation between independent variable and dependent variable, the correlation must be insignificant. Table 4.17 contains the statistical findings of these analyses while figure 2 contains a visual representation of the beta coefficients.

Table 4.17					
<i>Coefficients for Mediating Effects of Total Engagement on the Relationship Between Free/Reduced Lunch &amp; Final S.S. Course Grade</i>					
Testing Paths	B	SE (B)	95% CI	B	sr <sup>2</sup>
PATH C: DV = FINAL S.S. COURSE GRADE					
$r^2 = .098$ F (1, 99) = 10.761, p=. 001**					
IV = Free & Reduced Lunch	-2.242	.684	-3.599 – -.886	-.313**	9.7%
PATH A: DV TOTAL ENGAGEMENT					
$r^2 = .045$ F (1, 99) = 4.681, p= .033*					
IV = Free & Reduced Lunch	-28.740	13.283	-55.096 – -2.384	-.212*	4.5%
PATH B: DV = FINAL S.S. COURSE GRADE					
$r^2 = .014$ F (1, 89) = 1.382, p= .243					
IV= Total Engagement	.006	.005	-0.04 – 0.17	.117	1.3%
PATH B AND C': DV FINAL S.S. COURSE GRADE					
$r^2 = .101$ F (2, 98) = 5.489, p=.005**					
IV = Free & Reduced Lunch (c')	-2.162	.702	-3.555 – -.768	-.303**	28%
IV = Total Engagement (b)	.003	.005	-.007 -- .013	.053	2.7%
Total (a)*(b)	-.0810	.1573	-.5255 -- .1522	.0016	
Note: S.S.= Social Studies; B= unstandardized beta coefficient; SE= standard error; CI= confidence interval; $\beta$ = standardized beta coefficient; sr <sup>2</sup> = squared semi-partial correlation. Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of Participants: 74 and 31 May 2017 Number of Participants: 93. Total participants: 101. p < .05, two-tailed. ** p < .01, two-tailed.					



The results in Table 4.17 illustrate the outcomes of the mediation analysis of the total student engagement on the relationship between a student economic status and academic achievement. The variables within each path shared significant relationships. The analysis shows that the path C (free & reduced lunch and final course grade) has a beta coefficient of -.313 while path B (total engagement and final course grade) has a beta coefficient of .055\*\*. When the regression analysis considers the effect of total engagement on path C the beta coefficient became -.297\*\*. The analysis utilized a 95% confidence interval (CI). When viewing the confidence intervals of each path it is

important to note that path B had a range that included zero with a range of  $-.007 - .013$  and path AB had a range that included zero as well of  $-.5255 - .1522$ . In the regression analyses that placed the students final grades as the dependent variable and free and reduced lunch or total engagement and independent variable the  $r^2$  values totaled  $.067$  and  $.041$  respectively. The model meets step 1 and 2, but the model fails step 3, and therefore steps 4 and 5 are not necessary, however; I present them above.

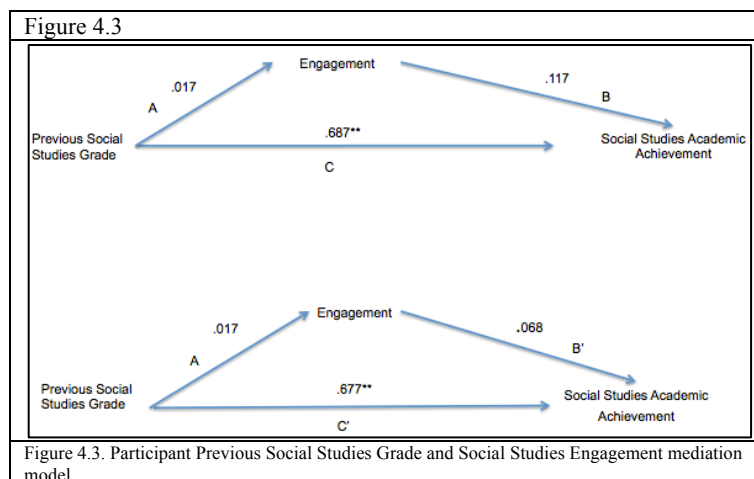
**Ancillary Question #4: Does engagement mediate the relationship between the previous social studies grade and student social studies academic achievement?**

I conducted the same analyses and utilized the same model as for the third ancillary research question except I used previous social grade as the independent variable instead of student social-economic status. As with the third research question I provide both a table with results of the appropriate analyses and the mediation model.

Table 4.17 below illustrates the results of this analysis.

Table 4.18					
<i>Coefficients for Mediating Effects of Total Engagement on the Relationship Between Previous Course Grade &amp; Final S.S. Course Grade</i>					
Testing Paths	B	SE (B)	95% CI	$\beta$	$sr^2$
PATH C: DV = FINAL S.S. COURSE GRADE					
$r^2 = .471$ F (1, 89) = 79.3, $p < .005^{**}$					
IV = Previous Course Grade	.695	.078	.540 -- .850	.687	47%
PATH A: DV TOTAL ENGAGEMENT					
$r^2 = .000$ F (1, 89) = .024, $p = .876$					
IV = Previous Course Grade	.331	2.119	-3.879 – 4.542	.017	2.8%
PATH B: DV = FINAL S.S. COURSE GRADE					
$r^2 = .014$ F (1, 89) = 1.382, $p = .243$					
IV = Total Engagement	.006	.005	-0.04 – 0.17	.117	1.3%
PATH B' AND C': DV FINAL S.S. COURSE GRADE					
$r^2 = .483$ F (2, 88) = 41.178, $p < .005^{**}$					
IV = Previous Course Grade (c')	.693	.078	.539 -- .847	.677	46.9%
IV = Total Engagement (b')	.006	.004	-.002 -- .013	.068	1.2%
Total (a)*(b)	.0018	.0142	-.0215 -- .0417	.0093	
Note: S.S.= social studies; B= unstandardized beta coefficient; SE= standard error; CI= confidence interval; $\beta$ = standardized beta coefficient; $sr^2$ = squared semi-partial correlation. Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of					

Participants: 74 and 31 May 2017 Number of Participants: 93. Total participants: 101.  
 •  $p < .05$ , two-tailed. \*\*  $p < .01$ , two-tailed.



The results in Table 4.18 illustrate the mediation analysis of the total student engagement on the relationship between a previous social studies course grade and Social Studies academic achievement. The variables within each path shared significant relationships except for path A. The analysis shows that path C (previous course grade and final course grade) has a beta coefficient of .687 while path B (total engagement and final course grade) has a beta coefficient of .068. When the regression analysis considers the effect of total engagement on path C the beta coefficient became .677. The analysis utilized a 95% confidence interval (CI) when viewing the confidence intervals of each path it is important to note that path B had a range that included zero with a range of  $-.002 - .013$ , path AB had a range that included zero as well of  $-.0215 - .0417$ , and path A included a range of  $-3.879 - 4.542$ . The model meets step 1, but the model fails step 2, and therefore steps 3, 4, and 5 are not necessary, however; I present them within the model.

**Ancillary Research Question # 5: Are there differences in student engagement and student achievement as a function of whether the student is taking the course as a requirement or as an elective?**

To answer this question I conducted a two-group MANOVA using required/elective as the independent variable and course grade and the five scales from the CCSES as the dependent variables. The omnibus Wilks' Lambda was marginally significant (Wilks' Lambda = .816,  $p = .028$ , partial eta squared = .184). Two of the univariate analyses were significant: Emotional Engagement- Required = 34.04, Elective = 40.93; and Social Studies Priority- Required = 11.81; Elective = 13.17. While the grade in the course was not significant ( $p = .070$ ), the probability level was close enough to warrant further exploration. The distribution of grades in the two types of courses appears in Table 4.19.

Table 4.19												
<i>Frequencies of Student Grades and Type of Course</i>												
Final Social Studies Course Grade & Type of Course												
	Final Grade											
	F	D	C-	C	C+	B-	B	B+	A-	A	A+	Total
Required	2	3	6	6	5	7	9	3	4	19	3	67
Elective	0	2	2	0	2	0	4	0	10	11	3	34
Total	2	5	8	6	7	7	13	3	14	30	6	101

Note: Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of Participants: 74 and 31 May 2017 Number of Participants: 93. Total participants 101.

The data provided in Table 4.19 illustrate that 24 out of 34 students taking an elective course earned an A- or better which is the equivalent of 70% of these participants. For students taking the course as a requirement, only 38.8% obtained a grade of A- or better. It is apparent from Table 4.19 that almost 50% of the participants surveyed earned an A- or better.

**Ancillary Research Question # 6: Which student demographics correlate with total student social studies engagement?**

The next analysis consisted of Pearson Correlations between total student engagement and the available student demographics. These analyses illustrate the strength of the relationships between the students' total engagement and academic and non-academic demographics.

Table 4.20	
<i>Pearson Correlations of Student Total Engagement with Student Demographics</i>	
<u>Student Demographic</u>	<u>Total Engagement</u>
Student Class	-.247*
Student Age	.130
Free & Reduced Lunch	-.212*
Gender	-.12
GPA	-.47
Type of Course	.277**
Final Social Course Grade	.117

GPA= Grade Point Average; Sig.= significance; N= number of participants.  
 Note: Adapted from February 2017 Implementation results, conducted by J. Carter 20 February 2017 Number of Participants: 74 and 31 May 2017 Number of Participants: 93. Total participants 101.  
<sup>a</sup> Student class included grades 9-12; Student age included ages 14-18; GPA included 0-4.0; Gender= male 1, female 2; Type of course included elective and required.  
 \* p < .05, two-tailed. \*\* p < .01, two-tailed.

The strongest significant correlation was the correlation between total engagement and type of course (e.g. elective or required course) of .277\*\*. The student's grade level additionally demonstrated a significant correlation with total engagement ( $r = -.247^*$ ); however, the strength of this correlation is weaker than the previous correlation. The only other demographic factor that shares a weak correlation with total engagement is the participant's Free and Reduced Lunch status (-.212\*).

**Ancillary Research Question # 7: Does student social studies engagement change from the beginning to the end of the course? If so, does a student's gender affect this change?**

To answer this research question, I computed a two-factor repeated measures ANOVA using Total Engagement in February and May as the repeated factor, and gender

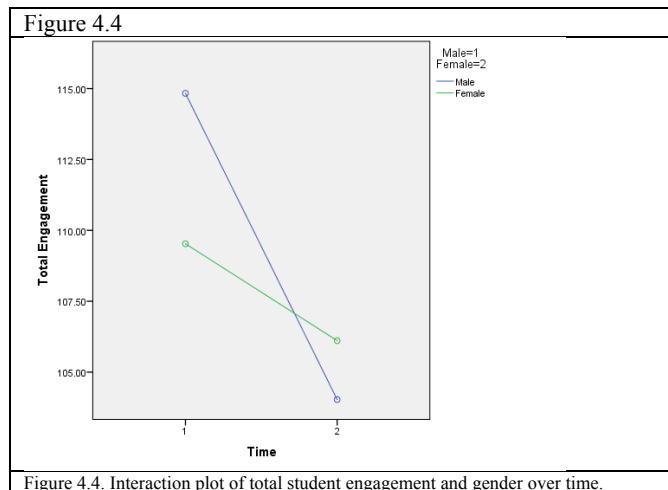
as the between subject's factor. The means and standard deviations appear in Table 4.21, the ANOVA results in Table 4.22, and a plot of the interaction in Figure 4.4.

Administration	Gender	Mean	Std. Deviation	Number
February	Male	114.8333	13.59027	30
	Female	109.5278	16.37504	36
	Total	111.9394	15.29291	66
May	Male	104.0333	17.83349	30
	Female	106.1111	17.02901	36
	Total	105.1667	17.29525	66

Note: N= number of participants. Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.

Source	df	Mean Squared	F	Significance	Partial Eta Squared
Time	1	1653.657	20.087	.000	.239
Gender	1	85.243	.189	.665	.003
Time X Gender	1	446.020	5.418	.023	.078

Note: CSSES=  
Adapted from Social Studies Engagement Survey Implementation results, conducted by J. Carter 20 February 2017 & 31 May 2017.



As shown above, there is a significant main effect and significant interaction for Time on student engagement. As shown in Figure 4.4, both males and females decrease in engagement from February to May, with males starting out at a higher point and ending up at a lower point.



## **CHAPTER 5**

### **DISCUSSION**

The purpose of the present chapter is to present the study's findings from the analyses and compare those findings to the previous literature. I will present only the important significant findings for each research question as it applies to the previous engagement and motivation theory research including consistencies and inconsistencies as well as novel findings. After presenting and comparing the study's findings with the extant research, I will speculate on the meanings of the results that lie outside of the research. In addition to the discussion of the study's results, I will present the unanticipated limitations of the study and how these limitations may affect the study's generalizability to other secondary populations. The last component of this chapter will discuss the implications of the study's results in the field of social studies education and lay out recommendations for future social studies engagement research.

#### **Summary of Sample Population**

The descriptive statistics of the sample provided insight into the makeup of the participating students. The sample is predominately 16 years old, white, in the tenth grade, taking a required course and does not qualify to receive free and reduced lunch. There are slightly more females than males with more participants in the second survey administration. While there are slight differences among the samples at the two data collections points, the basic pattern is the same. I do not consider these findings out of line with the general trends within the school's student population. I find the high amount

of tenth grade students as a possible area of concern that I will return to later in my discussion of the study's limitations.

While checking the internal reliability of the survey, I utilized the modified NCSE SSES variables of Behavioral, Cognitive, and Emotional Engagement and the variables of the Carter Social Studies Engagement Survey including Emotional Engagement, Accepting Authority, Cognitive Engagement, Social Studies Priority, and Social Studies Work Ethic. I will discuss the NCSE SSES internal reliability results first and proceed to the CSSSES. The NCSE SSES variables illustrated good to excellent internal consistency values while the CSSSES illustrated internal consistency values from poor to excellent depending on the variable and administration.

The results of the Cronbach Alpha analyses of the NCSE SSES variables produced results similar to the pilot study. The pilot yielded higher internal consistency results for Cognitive and Emotional Engagement than both of the present study's administrations, but not for Behavioral Engagement. All the internal reliability results show that the NCSE SSES variables when adapted for social studies still have a high level of consistency. The strength of the Cronbach Alphas of the variables in both the pilot study and the present study provides support that the grouping of the scales in the modified NCSE instrument is appropriate.

The results of the Cronbach Alpha analyses of the CSSSES variables in the study administrations produced lower internal consistency results than the pilot study. Emotional Engagement yielded the highest results, but was still lower in both administrations than in the pilot study. Social Studies Work Ethic and Cognitive Engagement produced acceptable reliability values, and Emotional Engagement and

Accepting Authority produced good to excellent reliability values. The internal consistency analysis for Social Studies Priority, however, generates the largest area of concern in that in both administrations the values did not exceed .700, leaving me to question the clustering of these four items in the same variable. The variable of Social Studies Priority is an important variable to gauge correctly in that the items in this variable seek to understand how a student perceives the relevance and importance of the content discussed and taught within the social studies course.

### **Summary of the Analyses for the Major Research Questions**

**Research Question # 1: Do the different facets of classroom engagement (behavioral, cognitive, & emotional) singly and mutually correlate with social studies academic achievement?**

The results from the Pearson Correlations for the first research question for both the NCSE SSES variables and the CSSSES variables and social studies achievement illustrate weak correlational relationships. Several variables from both the survey variables share significant relationships with social studies academic achievement, but none of the significant correlations are above the necessary .339 in Cohen terms for a large effect size. The strongest significant correlation was with the May survey administration aggregate engagement scores and social studies achievement. Since the correlations are weak between these engagement variables and social studies academic achievement of the sample it is clear that the answer to the first research question is no.

## **Summary of the Analyses for the Ancillary Research Questions**

### **Ancillary Research Question #1: Does the relationship among the different facets of classroom engagement change during the course of a semester?**

The first sets of Pearson Correlations of the NCSE SSES variables reveal that all the engagement variables within the two administrations are statistically significant with effect sizes ranging from medium to large. Even when the analyses involved the correlations between the variables of the different administrations, the correlations were significant with the exception of the correlation between February Emotional Engagement and May Behavioral Engagement. In general, the connection shared between unlike variables within one administration is stronger than the relationships over time. Moreover, the relationships between unlike variables are stronger in the February administration than in May.

The second sets of Pearson Correlations for this research question focused on the engagement variables of the CSSSES. Again as stated with the NCSE variables, the engagement variables within the two administrations shared significant relationships and except for the relationship between Social Studies Priority and Social Studies Work Ethic in the May administration shared effect sizes above 10 percent. Similar to the results of the NCSE the CSSSES variables between administrations generally shared smaller effect sizes and several correlations between variables shared non-significant relationships. The relationship between Emotional Engagement and Social Studies Priority shared the highest effect sizes. As with the NCSE variables the correlations of the variables within the same administration shared a stronger relationship while some variables shared no relationship between the two administrations. Even with the different sets of engagement

variables similar results become apparent in that the relationship between unlike variables becomes weaker over time to the point that they no longer share a relationship, yet like variables still share a significant association over time regardless of the make up the engagement variable.

**Ancillary Research Question # 2: Does student demographic(s) predict academic achievement within a social studies classroom, while controlling for student engagement?**

The first component of the analyses for this research question was the Pearson Correlations between the available demographic variables and social studies academic achievement. The results from these correlations revealed that students with higher GPAs, higher previous social studies grades, did not receive free and reduced lunch, and are upperclassmen attain higher levels of social studies academic achievement. The second and third set of analyses involved multiple regression analyses using the same set of predictors. Although several variables were significant predictors at the univariate level, only GPA was significant in the multiple regression equation accounting for 59% of the variance. The conclusion for this question, therefore, is that only previous academic success is necessary to predict future success. This is not surprising, but is somewhat disappointing in the context of this study (Chase et al., 2013; Wang & Holcombe, 2010). These results indicate that engagement does not contribute to the prediction of academic success over and above the power of cumulative GPA (Chase et al., 2013; Lynch, Lerner & Leventhal, 2012; Wang & Holcombe, 2010). In other words, academically successful students do well in all courses, including social studies.

**Ancillary Research Question #3: Does engagement mediate the relationship between Social-Economic Status (SES) and student social studies academic achievement?**

The multiple regression analyses conducted for this research question provided results that needed to follow an established five step process in order to show that engagement mediates the relationship between a student's social-economic status and social studies academic achievement. These analyses show that students who do not receive free and reduced lunch achieve higher level of success in a social studies class and these students have higher levels of student engagement, but student engagement does not have an effect on social studies achievement. It does appear that there is a very small mediating effect of student engagement on the relationship between SES and student achievement, but it is clearly very small and not significant. The answer to this research question is that student engagement does not mediate the relationship between SES and social studies achievement.

**Ancillary Research Question #4: Does engagement mediate the relationship between the previous social studies grade and student social studies academic achievement?**

The multiple regression analyses for this research question needed to pass the same five-step process as the previous research question in order to show that engagement mediates the relationship between a student's previous social studies grade and academic achievement. The regression analyses show that there exists a significant

strong relationship between prior social studies achievement and present social studies achievement, but there is only a minimal relationship between previous social studies achievement and social studies engagement. Again, similar to the previous research question, the mediating effect of engagement on the relationship between previous social studies achievement and present social studies achievement is minimal and not significant. The answer to this research question is that student engagement does not mediate the relationship between previous social studies success and social studies achievement.

**Ancillary Research Question # 5: Are there differences in student engagement and student achievement as a function of whether the student is taking the course as a requirement or as an elective?**

The univariate analysis for this research question provided significant findings for two CSSSES variables and student achievement in relation to whether the student was taking a required or elective course. These variables are Emotional Engagement and Social Studies Priority. The significant findings for the relationships between these two variables and student achievement were higher for students taking an elective course. For the other three variables, the relationship with academic achievement was not significant enough to investigate further. Using the relationship between these two variables and social studies achievement for both types of courses, it becomes apparent that students taking social studies as an elective have higher levels of emotional engagement and view understanding and learning social studies as a priority.

**Ancillary Research Question # 6: Which student demographics correlate with total student social studies engagement?**

The Pearson Correlations between total student engagement and student demographics generate a list of correlations that illustrate the weak relationship that student engagement shares with the students' demographics. Total student engagement shares a significant relationship with the type of course, but the effect size of this relationship is slightly below ten percent. The SES (free and reduced lunch) demographic as well as the student class level demographic each shares a significant relationship with total student engagement, but their effect sizes are small. Considering that these are the only significant relationships shared with total student engagement it becomes apparent that engagement is a variable that exists outside the influence of many demographic variables including the final social studies course grade (e.g. social studies academic achievement).

**Ancillary Research Question # 7: Does student social studies engagement change from the beginning to the end of the course? If so, does a student's gender affect this change?**

The results for this question indicated that total engagement significantly decreased between February and May for both male and females students, but declined at a far steeper rate for males. In fact, male students were significantly more engaged than females in February but significantly less engaged in May. The main effect for time was not only significant, the effect was large in Cohen's terms. This change in engagement is important, as it demonstrates the students' level of involvement in the social studies



course significantly declines across the school year. This finding is difficult to compare or contrast with other engagement research studies in that most longitudinal and content specific engagement studies surveyed students once per year (Bundick et al., 2014; Chase, Hilliard, Geldhof, Warren, & Lerner, 2013; Dotterer & Lowe, 2011; Fredricks et al., 2004; Lynch, Lerner, & Leventhal, 2012). Moreover, the fact that this change is more pronounced for male students is a result that needs further exploration.

## **Conclusions**

The results of the analysis for the first research question provide inconsistent findings with other studies on the relationship between the forms of student engagement and academic achievement (Dotterer & Lowe, 2011; Fredrick et al., 2004; Lynch, Lerner, & Leventhal, 2012; Shernoff & Schmidt, 2008). Nevertheless, the results from Pearson Correlations for the first research question provide support for other studies (Chase et al., 2013; Sagayadevan & Jeyaraj, 2012). Previous studies illustrate links between the different types of student engagement and academic achievement; however, it is important to note that this study illustrated significant correlations with low effect sizes between the engagement variables and academic achievement. In addition, unlike the other studies conducted on student engagement and academic achievement, this study centered on social studies classes and utilized the final course grade instead of the student's GPA.

Since the findings of these analyses indicate that engagement only minimally correlates with academic achievement there may be some methodological issues with the study. The other possibility, of course, is that engagement does not share a strong

relationship with academic achievement. I speculate either that the instrument may not have accurately measured student engagement or the final course grade does not accurately assess student learning; or, that engagement at least at the participating high school has little to do with academic achievement especially in a social studies classroom. The latter may be due to the makeup and lack of classroom diversity of the sample. Additionally, it is important to note that even though several studies show a relationship between student engagement and academic achievement the strength of the correlations are moderate to weak (Dotterer & Lowe, 2011; Fredrick et al., 2004; Lynch, Lerner, & Leventhal, 2012; Shernoff & Schmidt, 2008). The sample for this study consisted of students at the secondary level. It would be interesting to change the age of the sample to gain a better understanding of how student engagement changes from elementary to secondary education

Illustrating the relationships and influence between the different forms of engagement is clearly the premise behind the first ancillary research question and here is where this study's findings provide support for several other studies that focused on the relationships the types of engagement share. The strong correlations between the like engagement variable across the two administrations is supportive of the findings presented in Chase et al. (2013) even though the 2013 study viewed student engagement across several years. In addition, the study's findings between emotional engagement and behavioral engagement between administrations sharing a weak relationship are not supportive of the findings presented in Skinner, Furrer, Marchand, and Kinderman (2008). Yet, the study's findings that behavioral and cognitive engagement share a relatively strong relationship over time as well as emotional and cognitive engagement

supports the conclusions presented in Li and Lerner's 2012 study on the interrelations of the types school engagement. Understanding how these engagement variables influence each other may provide important insights to the multi-faceted nature of student engagement, but this was not the focus of this study and is worthy of future research.

Of the available demographic data for this study, the student's GPA provided the greatest insight into how a student will perform in a social studies class. This study is unique in that it focuses on the curriculum area of social studies and because of this, it is difficult to find similar studies that focus on one content area and not the entire school. Nevertheless, many of the studies utilize the students' GPA as an indicator of academic achievement (Chase et al., 2013; Lynch, Lerner & Leventhal, 2012; Reyes et al., 2012; Shernoff & Schmidt, 2007; Wang & Holcombe, 2010). The present study's finding that previous academic achievement predicts present academic achievement is not uncommon with the findings of others studies and provides support for the belief that individuals who have discovered how to be successful at school continue to be successful at school (Chase et al., 2013; Lynch, Lerner & Leventhal, 2012; Wang & Holcombe, 2010).

During the course of the separate analyses for this study, it became apparent that student engagement shared only a minimal relationship with social studies academic achievement. With that understood, it is possible to state that engagement does not have a mediating effect on any of the relationships that academic achievement shares with any of the demographic variables. Unlike several of the other studies included in the literature review, student engagement in this study demonstrated very little relationship with academic achievement (Chase et al., 2013, Dotterer & Lowe, 2011; Fredricks, Blumenfeld, & Paris, 2004; Johnson et al., 2001; Sciarra & Seirup, 2008; Shernoff &

Schmidt, 2007). This study's findings on the lack of a meaningful relationship between student engagement and academic success runs counter to the other studies within the field of engagement research. Nevertheless, it is important to point out that many of these studies found the strength of this relationship to range from moderate to weak (Chase et al., 2013, Dotterer & Lowe, 2011; Shernoff & Schmidt, 2007).

The type of course selection provided some interesting findings about student engagement and academic achievement. Total student engagement was significantly higher in students taking social studies as an elective as compared to those taking it as a requirement. Course grades were also higher for students taking the course as an elective. These findings were not part of the statistical analyses of the major research questions, but I discovered these finding through the analyses of the ancillary questions. It is apparent that students who select their course based on their interests in social studies have the potential at least within this study's sample to earn a higher grade than those individuals who take a required course do. The last finding that provides insights into student social studies engagement is the analyses that demonstrated that students' engagement decreased during the course of the semester. Interestingly, student engagement decreased over time for all students, but decreased more for male students than female students. What cannot be known from the data in this study is whether this is a general phenomenon or whether it is specific to social studies. It is, however, one of the more interesting and more troubling findings of this research.

### **Limitations**

There are several limitations to the study that range from the sample to the length of the survey administrations. The participants of the study are not demographically

representative of the general secondary school student population of the United States. This made making the findings difficult to generalize to other secondary students outside of south-central, rural-suburban Pennsylvania. Another limitation of the study is that self-reported surveys may not provide accurate responses and some students may not complete the surveys. This made it difficult to adequately measure the participant's behavioral, emotional and cognitive engagement.

In the development and proposal stage of this study, I received permission by the participating school district head administrator to consider and include the study's instrument as a component of the 9-12 social studies curriculum at the participating high school. However, while receiving institutional review board approval I was required to attain both student (participant) assent and parental consent and this additional step in the process severely reduced the participant population and additionally created a sample of individuals who were really willing to participate. The study's sample now consisted of individuals who were highly motivated to participate in the study since they needed to return a signed student assent form and a signed parental consent form by the first implementation date in order to participate.

Even though the study followed the participants through the semester, a concern was about the length of the study of only one semester. The timing of the survey during the second semester of the school year may have had an effect on the student survey results since it was close to the end of the school year. The behaviors and attitudes about school that are established in middle school are the foundation for school engagement in the high school years, and not measuring the development of these constructs in early adolescence may have prohibited the study from understanding the root causes of

secondary school social studies engagement. Several limitations generated concerns about the generalizability of the findings of the study. The first limitation is the small amount of students who took the survey at both administrations. This limited amount of participants (66 students) reduces the statistical power of the analyses conducted to uncover the answers to the study's several research questions. Another limitation is the large portion of the 66 participants who were in the tenth grade and potentially were enrolled in only one teacher's classes. If this is the case and the 41 tenth graders out of the 66 participants came from one teacher's classes than this may hinder the generalizability greatly. A similar limitation is the lack of age diversity within the sample that participated in both administrations. This high reliance on 16-year-old students generates a picture of engagement for second semester sophomore students and may not adequately represent older or younger students.

Another limitation to the study was the amount of students taking a required course verses an elective course. The elective vs. required difference is in part due to the nature of the school social studies curriculum and the large sampling of tenth grade students who are generally in a required course. The non-forecasted nature of these limitations is in part due to the assent and consent form process as well as the motivation level of the participating teachers. The teachers had the ability to not participate in the study, but elected to do so with varying levels of commitment to the study. All of these limitations generate potential hurdles to the overall generalizability of the study's findings.

## **Ethical Issues**

Several ethical issues should be mentioned from the circumstances that the participating secondary school is my place of employment and content area of social studies is the discipline that I currently teach. I addressed these concern by not being present at the school during the semester of administration of the CSSES. In addition, I was absent from the high school during the spring semester of 2016. These absences of both spring 2016 and 2017 allowed me to distance myself from the survey participants so as to not bias their responses for both administrations of the pilot survey and the CSSES. I instructed the participating teachers on how to introduce the survey and the opt. out forms to the students. I provided the teachers with a script so that the students would receive the same information on the survey, the parental forms, and process during the administration of the surveys.

The Head of Technology and the process of randomly assigning numbers to the students in order to link demographics and survey responses ensured confidentiality. Before receiving the dataset, the Head of Technology removed all student identifiers to protect confidentiality. Even though I generated both surveys, the Head of Technology removed my permissions on the survey so that I would not have access to the individuals and their responses. After I have received the dataset, the Head of Technology deleted the surveys, survey responses dataset, demographics dataset, and any other documents that contained any student identifiers. During the course of the data collection, the incomplete datasets resided on the school district's encrypted servers and password protected computers.

## **Implications**

One of the major conclusions of this study is that student engagement, at least as measured by the modified NCSE SSES or the CSSSES, illustrates little or only a minimal relationship to social studies academic achievement. Another is that both a student's SES and prior social studies achievement each correlate significantly with the grade in the course. This is especially true for the prior social studies grade (as well as the student's grade point average which is highly correlated the social studies grade). In many ways this is not surprising since this correlation simply replicates the common finding that past behavior is the best predictor of future behavior (Ouellette & Wood, 1988). From the perspective of this research, however, it is somewhat disappointing that engagement had such a minimal effect. Additionally, several of the ancillary analyses provide valuable findings for both the participating high school and other high school social studies departments. Even with the limitations to the generalizability of the study's findings due to the demographics of the sample, there are a few recommendations for social studies educators.

It is apparent at least according to the findings of this study that when the students have the choice in their social studies course they are both more engaged and have the potential of attaining a higher course grade. A recommendation for curriculum designers and for the staff of the participating high school is to offer students the opportunity to select their courses and their curriculum path of their social studies courses in order to generate higher levels of engagement and achievement. It may be necessary for the social studies curriculum developers of the participating high school to re-evaluate the tenth



grade course. I base this last recommendation on the sample and their low engagement levels in the tenth grade course.

### **Recommendations**

One of the surprising findings of the study was the minimal relationship between student engagement and social studies academic achievement. There are several reasons why this occurred in this sample, one of which could be the age of the students. I would recommend measuring social studies classroom engagement at an earlier age, potentially as early as late elementary or early middle school. I make this suggestion because the variable that shares the strongest relationship with social studies academic achievement is student GPA and previous social studies achievement. The strength of this relationship provides evidence to the following statement: “Students who find academic success early in school find it often in the later years of schooling”. Once students learn how to be successful, they hone those skills and, according to this study, can achieve academic success while being relatively unengaged.

Another reason for the lack of an identified link between engagement and achievement could be the lack of sample diversity. One way to offset this lack of diversity would be to use several classrooms and/or schools. It would also be preferable to achieve buy-in by the participating teachers and actively seek contact with parents and students. Additionally, to increase student participation rates, the researcher may consider providing the students with a potential incentive to participate in the study.

The last reason for the lack of connection between engagement and academic achievement might lie in the instrument itself. Even though the instrument has internal

consistency, the scales may not actually gauge student engagement validly. The NCSE SSES may measure engagement, but the modified SSES for social studies may not because of the supplement and removal of words that alter the ability of the instrument to measure student engagement. Reverting to the original format of the NCSE SSES may provide a better measure of engagement.

It may be possible to better understand the relationship between social studies engagement and social studies achievement if the participants had the opportunity to speak about their social studies courses and content with the researcher. Having this qualitative data may assist in better understanding why the hypothesized connection did not occur. For future studies, the mixing of both quantitative and qualitative methods of inquiry may provide answers to this study's research questions as well as insights into why the participants selected their responses. It may also be of interest to conduct a longitudinal study of student social studies engagement to notice how both course content and participant age influence social studies engagement over time.

The intention of this study is still an important endeavor to pursue and will require changes in strategy and study design. Student engagement encompasses several components with emotional engagement and cognitive engagement showing the greatest levels of promise since they produced the significant correlations with academic achievement. As such, they are worthy of additional investigation. Understanding the relationship student engagement and academic achievement shares within the context of social studies has just started to be explored and may still provide insights into how educators may increase both interest and achievement in social studies.

## REFERENCES CITED

- Brophy, J. (2008). Developing students' appreciation for what is taught in school. *Educational Psychologist, 43*(3), 132-141. doi:10.1080/00461520701756511
- Bundick, M. J., Quaglia, R. J., Corso, M. J., & Haywood, D. E. (2014). Promoting student engagement in the classroom. *Teachers College Record, 116*(4).
- Byrnes, J. P. (2008). *Cognitive development and learning in instructional contexts* (3rd ed.). Boston: Pearson/Allyn and Bacon.
- Chase, P. A., Hilliard, L. J., Geldhof, G. J., Warren, D. J.A., & Lerner, R. M. (2014). Academic achievement in the high school years: The changing role of school engagement. *Journal of Youth and Adolescence, 43*, 884-896. doi:10.1007/s10964-013-0085-4
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Creswell, J. W. (2013). *Research Design* (4th ed.). Thousand Oaks, CA: SAGE.
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York, USA: Harper Perennial.
- Davis, H. A. (2003). Conceptualizing the role and influence of student-teacher relationships on children's social and cognitive development. *Educational Psychologist, 38*(4), 207-234. doi:10.1207/S15326985EP3804\_2
- Desilver, D. (2015, May 6). U.S. voter turnout trails most developed countries. Retrieved March 21, 2016, from Pew Research Center website: <http://www.pewresearch.org/fact-tank/2015/05/06/u-s-voter-turnout-trails-most-developed-countries/>
- Desilver, D. (2017, February 15). U.S. students' academic achievement still lags that of their peers in many other countries. Retrieved October 11, 2017, from Pew Research Center website: <http://www.pewresearch.org/fact-tank/2017/02/15/u-s-students-internationally-math-science/>
- Dotterer, A. M., & Lowe, K. (2011). Classroom context, school engagement, and academic achievement in early adolescence. *Journal of Youth and Adolescence, 40*, 1649-1660. doi:10.1016/j.learninstruc.2013.04.002

- Dweck, C. (1986). Motivational processes affect learning. *American Psychologist*, *41*(10), 1040-1048.
- Fan, F. A. (2012). Teacher: students' interpersonal relationships and students' academic achievements in social studies. *Teachers and Teaching*, *18*(4), 483-490. /10.1080/13540602.2012.696048
- Ferguson, A. G. (2013, May 3). The joy of jury duty. Retrieved August 25, 2016, from The Atlantic website: <http://www.theatlantic.com/national/archive/2013/05/the-joy-of-jury-duty/275444/>
- Fine, B. (1951, June 11). U.S. college students 'flunk' in knowledge of geography. *New York Times*, p. 1.
- Finlay, K. A. (2013, December). *Quantifying School Engagement: Research Report*. Retrieved March 22, 2016, from National Center for School Engagement website: <http://schoolengagement.org/wp-content/uploads/2013/12/QuantifyingSchoolEngagementResearchReport-2.pdf>
- Fitchett, P. G., Heafner, T. L., & Lambert, R. (2014). Assessment, autonomy, and elementary social studies time. *Teachers College Record*, *116*(10), 1-34.
- Fredricks, J., McColskey, W., Meli, J., Montrosse, B., Mordica, J., & Mooney, K. (2011, January). Measuring student engagement in upper elementary through high school: A description of 21 instruments. Retrieved March 22, 2016, from Institute of Educational Sciences website: <http://ies.ed.gov/ncee/edlabs/projects/project.asp?projectID=268>
- Fredricks, J. A. (2011). Engagement in school and out-of-school contexts: A multidimensional view of engagement. *Theory Into Practice*, *50*, 327-335. doi:10.1080/00405841.2011.607401
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(1), 59-109. Retrieved from <http://www.jstor.org/stable/3516061>
- Furlong, M. J., Whipple, A. D., St. Jean, G., Simental, J., Soliz, A., & Punthuna, S. (2003). Multiple contexts of school engagement: Moving toward a unifying framework for educational research and practice. *The California School Psychologist*, *8*, 99-113. Retrieved from EBSCO Host database. (Accession No. 13048643)
- Gastil, J., Deess, E. P., & Weiser, P. J. (2010). *The jury and democracy: How jury deliberation promotes civic engagement and political participation*. New York: Oxford University Press.

- Gehlbach, H. (2006). How changes in student goal orientations relate to outcomes in social studies. *The Journal of Education Research*, 99, 358-370. doi:10.3200/JOER.99.6.358-370
- Gehlbach, H. (2006). How changes in student goal orientations relate to outcomes in social studies. *The Journal of Education Research*, 99(6), 358-370. doi:10.3200/JOER.99.6.358-370
- Gehlbach, H. (2011). Social perspective taking: A facilitating aptitude for conflict resolution, historical empathy, and social studies achievement. *Theory Into Practice*, 50(4), 311-318. doi:10.1080/00405841.2011.607394
- Gehlbach, H., Brown, S. W., Ioannou, A., Boyer, M. A., Hudson, N., Niv-Solomon, A., . . . Janik, L. (2008). Increasing interest in social studies: Social perspective taking and self-efficacy in stimulating simulations. *Contemporary Educational Psychology*, 33(4), 894-914. doi:10.1016/j.cedpsych.2007.11.002.
- Giersch, J., & Dong, C. (2017). Required civics courses, civics exams, and voter turnout. *The Social Science Journal, In Press*, 1-11.
- Gonzalez, A., & Paoloni, P. V. (2014). Self-determination, behavioral engagement, disaffection, and academic performance: A meditational analysis. *Spanish Journal of Psychology*, 17(e82), 1-10. doi:10.1017/sjp.2014.82
- Grant, S. G., & Salinas, C. (2008). Assessment and accountability in social studies. In L. S. Levstik & C. A. Tyson (Eds.), *Handbook of research in social studies education* (pp. 219-236). New York, NY: Routledge.
- Greene, B. A. (2015). Measuring cognitive engagement with self-report scales: Reflections from over 20 years of research. *Educational Psychologist*, 50(1), 14-30. doi:10.1080/00461520.2014.989230
- Hair, J. F., Tatham, R. L., Anderson, R., & Black, W. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, N.J.: Prentice Hall.
- Horowitz, J. (2015). Doing less with more: Cohorts, education, and civic participation in America. *Social Forces*, 94(1), 747-774. doi:10.1093/sf/sov065
- Hospel, V., Galand, B., & Janosz, M. (2016). Multidimensionality of behavioural engagement: Empirical support and implications. *International Journal of Educational Research*, 77, 37-49. doi:10.1016/j.ijer.2016.02.007
- Johnson, M. K., Crosnoe, R., & Elder, G. H. (2001). Students' attachment and academic engagement: The role of race and ethnicity. *Sociology of Education*, 74(4), 318-340.

- Kelly, S., & Zhang, Y. (2016). Teacher support and engagement in math and science: Evidence from the high school longitudinal study. *The High School Journal*, *99*(2), 141-165. doi:10.1353/hsj.2016.0005
- Li, Y., & Lerner, R. M. (2013). Interrelations of behavioral, emotional, and cognitive school engagement in high school students. *Journal of Youth Adolescence*, *42*, 20-32. doi:10.1007/s10964-012-9857-5
- Lindstrom, N. (2016, September 26). Students could face citizenship test in Pennsylvania. *Pittsburgh Tribute*. Retrieved from <http://triblive.com/news/allegeny/11207022-74/test-education-bill>
- Lynch, A. D., Lerner, R. M., & Leventhal, T. (2013). Adolescent academic achievement and school engagement: An examination of the role of school-wide peer culture. *Journal of Youth and Adolescence*, *42*, 6-19. doi:10.1007/s10964-012-9833-0
- Martin, A. (2012). Part II commentary: Motivation and engagement: Conceptual, operational, and empirical clarity. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 303-311). Springer. doi:10.1007/978-1-4614-2018-7
- Martin, A. J., & Elliot, A. J. (2015). The role of personal best (PB) and dichotomous achievement goals in students' academic motivation and engagement: a longitudinal investigation. *Educational Psychology*. doi:10.1080/01443410.2015.1093606
- Martin, A. J., & Liem, G. A. D. (2010). Academic personal bests (PBs), engagement, and achievement: A cross-lagged panel analysis. *Learning and Individual Differences*, *20*, 265-270. doi:10.1016/j.lindif.2010.01.001
- Naseem, S. (2015, May 28). How much U.S. history do Americans actually know? Less than you think. Retrieved August 25, 2016, from Smithsonian.com website: <http://www.smithsonianmag.com/history/how-much-us-history-do-americans-actually-know-less-you-think-180955431/?no-ist>
- National Council for the Social Studies. (1994). National curriculum standards for social studies: Introduction. Retrieved August 25, 2016, from NCSS website: <http://www.socialstudies.org/standards/introduction>
- Ouellette, J., & Wood, W. (1988). Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin*, *124*(1), 54-74. doi:10.1037/0033-2909.124.1.54
- Park, S., Holloway, S. D., Arendtsz, A., Bempechat, J., & Li, J. (2012). What makes students engaged in learning? A time-use study of within- and between-individual

- predictors of emotional engagement in low-performing high schools. *Journal of Youth Adolescence*, 41, 390-401.
- Pennsylvania Department of Education. (2016). Pennsylvania school performance profile. Retrieved March 29, 2016, from Pennsylvania Department of Education website: <http://paschoolperformance.org/Profile/5295>
- Pintrich, P. R., & Blumenfeld, P. C. (1985). Classroom experience and children's self-perceptions of ability, effort, and conduct. *Journal of Educational Psychology*, 77, 646-657. doi:10.1037/0022-0663.77.6.646
- Plenty, S., & Heubeck, B. G. (2013). A multidimensional analysis of changes in mathematics motivation and engagement during high school. *Educational Psychology*, 33(1), 14-30. doi:10.1080/01443410.2012.740199
- Reeve, J., & Tseng, C.-M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, 36(4), 257-267. doi:10.1016/j.cedpsych.2011.05.002
- Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 3-19). Springer. doi:10.1007/978-1-4614-2018-7
- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, 104, 700-712. doi:10.1037/a0027268
- Roorda, D. L., Koomen, H. M., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81, 493-529. doi:10.3102/0034654311421793
- Rotgans, J. I., & Schmidt, H. G. (2011). Cognitive engagement in the problem-based learning classroom. *Advances in Health Sciences Education*, 16, 465-479. doi:10.1007/s10459-011-9272-9
- Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437-460. Retrieved from <http://www.jstor.org/stable/3202465>
- Sagayadevan, V., & Jeyaraj, S. (2012). The role of emotional engagement in lecturer-student interaction and the impact on academic outcomes of student achievement and learning. *Journal of the Scholarship of Teaching and Learning*, 12(3), 1-30.

- Saritepeci, M., & Cakir, H. (2015). The effect of blended learning environments on student motivation and student engagement: A study on social studies course. *Education and Science, 40*(177), 203-216. doi:10.15390/EB.2015.2592
- Sciarra, D. T., & Seirup, H. J. (2008). The multidimensionality of school engagement and math achievement among racial groups. *ASCA Professional School Counseling, 11*(4), 218-228.
- Shernoff, D. J. (2013). *Optimal learning environments to promote student engagement*. New York, USA: Springer. doi:10.1007/978-1-4614-7089-2
- Shernoff, D. J., & Schmidt, J. A. (2008). Further evidence of an engagement-achievement paradox among U.S. high school students. *Journal of Youth Adolescence, 37*, 564-580. doi:10.1007/s10964-007-9241-z
- Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*, 765-781. doi:10.1037/a0012840
- Stefansson, K. K., Gestsdottir, S., Geldhof, G. J., Skulason, S., & Lerner, R. M. (2016). A bifactor model of school engagement: Assessing general and specific aspects of behavioral, emotional and cognitive engagement among adolescents. *International Journal of Behavioral Development, 40*(5), 471-480. doi:10.1177/0165025415604056
- Streb, J., Keis, O., Lau, M., Hille, K., Spitzer, M., & Sosic-Vasic, Z. (2015). Emotional engagement in kindergarten and school children: A self-determination theory perspective. *Trends in Neuroscience and Education, 4*, 102-107. doi:10.1016/j.tine.2015.11.001
- Summers, E. J., & Dickinson, G. (2012). A longitudinal investigation of project-based instruction and student achievement in high school social studies. *Interdisciplinary Journal of Problem-based Learning, 6*(6), 82-103. doi:10.7771/1541-5015.1313
- Swan, K., & Hofer, M. (2013). Examining student-created documentaries as a mechanism for engaging students in authentic intellectual work. *Theory & Research in Social Education, 41*(1), 133-175. doi:10.1080/00933104.2013.758018
- Thornton, S. J. (2008). Continuity and change in social studies curriculum. In L. S. Levstik & C. A. Tyson (Authors), *Handbook of research in social studies education* (pp. 15-32). New York: Routledge.
- United States Census Bureau. (2014). Community facts: Income in the past 12 months. Retrieved August 25, 2016, from American Fact Finder



website: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

- United States Department of Education. (n.d.). NAEP data explorer. Retrieved April 7, 2016, from National Center for Education Statistics website: <http://nces.ed.gov/nationsreportcard/naepdata/dataset.aspx>
- Walker, C. O., & Greene, B. A. (2009). The relations between student motivational beliefs and cognitive engagement in high school. *The Journal of Educational Research, 102*, 463-472. doi:10.3200/JOER.102.6.463-472
- Wang, M.-T., & Eccles, J. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction, 28*, 12-23. doi:10.1016/j.learninstruc.2013.04.002
- Wang, M.-T., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Education Research Journal, 47*, 633-662. doi:10.3102/0002831209361209
- Wang, M.-T., & Peck, S. (2012). Adolescent educational success and mental health vary across school engagement profiles. *Developmental Psychology, 49*, 1266-1276. doi:10.1037/a0030028
- Wang, M.-T., Willett, J. B., & Eccles, J. S. (2011). The assessment of school engagement: Examining dimensionality and measurement invariance by gender and race/ethnicity. *Journal of School Psychology, 49*, 465-480. doi:10.1016/j.jsp.2011.04.001
- Wigfield, A., & Eccles, J. (2000). Expectancy-value theory of achievement motivation. *Contemporary Educational Psychology, 25*(1), 68-81. doi:10.1006/ceps.1999.1015
- Wigfield, A., Eccles, J. S., Fredricks, J. A., Simpkins, S., Roeser, R. W., & Schieffele, U. (2015). Development of achievement motivation and engagement. In R. M. Lerner (Ed.), *Handbook of child psychology and development science* (7th ed., pp. 1-44). John Wiley & Sons.
- Winne, P. H., & Nesbit, J. C. (2010). The psychology of academic achievement. *Annual Review of Psychology, 61*, 653-678. doi:10.1146/annurev.psych.093008.100348
- Wright-Maley, C. (2015). On “stepping back and letting go”: The role of control in the success or failure of social studies simulations, *Theory & Research in Social Education, 43*(2), 206-243. doi:10.1080/00933104.2015.1034394

Zimmerman, B. J., & Pons, M. M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal*, 23(4), 614-628.

## APPENDIX A

### PILOT STUDY

In the field of engagement research there are many different instruments utilized by researchers to measure the level of student engagement. According to a review of instruments conducted in 2011, by the Southeast Regional Educational Laboratory (REL) there are at least 21 instruments developed to measure engagement (Fredricks, McColskey, Meli, Montrosse, Mordica, & Mooney, 2011). The REL reviewed the characteristics of the 21 instruments including the following instruments: 4-H Study for Positive Youth Development: School Engagement Scale (4-H), High School Survey of Student Engagement (HSSSE), School Success Profile (SSP), Student Engagement Instrument (SEI), Maryland Adolescent Development in Context Study (MADCS), and Student School Engagement Survey (SSES) (Fredricks et. al, 2011). The REL review provides the Cronbach alphas for most of the 21 instruments, the developers of the instruments, availability of the instrument, and factsheets on the instruments. I selected to modify the SSES instrument for my study because of its manageable size, availability, ease of administration, and secondary education focus.

In 2005, the National Center for School Engagement generated the SSES based on eight different engagement instruments. The NCSE reduced the size of the scales, altered wording to fit their students, added questions pertinent for their study (e.g. truancy, dropout, and suspension) and reduced the amount of questions (Finlay, 2006). Table A.1, shows the number of participants and the Cronbach alphas for the implementation of the NCSE engagement instrument. The instrument included 7 survey questions in the behavioral engagement category, 22 survey questions for the cognitive

engagement category, and 16 survey questions for the emotional engagement category (Finlay, 2006). Even though the SSES did not have the highest Cronbach's alphas of the instruments reviewed by Fredricks et. al, the study will provide a solid starting point for the pilot instrument to be used in my study.

	Houston		Jacksonville		Seattle	
	n	$\alpha$	n	$\alpha$	n	$\alpha$
Behavioral Engagement	72	.797	46	.489	47	.793
Cognitive Engagement	66	.904	41	.922	43	.867
Emotional Engagement	57	.884	39	.895	39	.902

Note. Adapted from "Quantifying School Engagement: Research Report," by K. Finlay, 2006 from National Center for School Engagement website: <http://schoolengagement.org/wp-content/uploads/2013/12/QuantifyingSchoolEngagementResearchReport-2.pdf>

The pilot instrument for the present study, modeled after the SSES, consists of 15 emotional questions, 17 cognitive engagement questions, and 11 behavioral engagement questions. The majority of the questions only required the altering of the questions' educational context from school to social studies classroom (e.g., I feel excited by the work in "social studies class"). I removed four SSES emotional survey questions and replaced them with three similar questions. The rationale for the removal of these questions is the scope of these questions focus on issues of truancy, dropout, and suspension; these lack relevance to the scope of this study. Additionally, I removed seven cognitive questions and modified one question to reduce the amount of inverse scaling. I deleted two of the behavioral engagement questions and modified the wording of three questions again to reduce the amount of inverse code scaling.

Of the behavioral engagement questions the last three questions require inverse code scaling of the student responses. Additionally, two of the emotional engagement questions are categorical survey questions and will require special treatment during data analysis. The entire survey consists of 41 Likert-scale statement and 2 categorical questions. The questions contained in the survey appear in Appendix B.

The survey questions on social studies behavioral engagement range in assessing students' ability or desire to participate in class, following classroom instructions, disruptive behaviors, absenteeism from class, and classroom withdrawal (Eccles & Wang, 2012; Hospel, Galand, & Janosz, 2016; Walker & Greene 2009). Presented below are examples of the behavioral Likert scale statements, "When I am in social studies class, I just pretend I am working." or "When I am in a group project I try to get others to do the required work." As with the Student School Engagement Survey, the present pilot instrument has less behavioral engagement measures than the other two constructs.

The survey questions on social studies cognitive engagement range in assessing students' preference for, perception of, or usage of self-regulatory strategies, mastery goal versus performance goal, persistence, autonomy support, intrinsic value, and self-efficacy in social studies class (Eccles & Wang, 2012; Greene et. al, 2004; Greene, 2015; Walker & Greene 2009). The following statements appear on the pilot instrument and request the students to agree or disagree with the statement (e.g. "If I don't understand what I read in social studies, I go back and read it over." "During my social studies class I have academic freedom to chart my own course for learning." "I get good grades in social studies.")

The survey questions on social studies emotional engagement range in assessing students' preference for, or perception of enjoyment, interest, boredom, curriculum challenge, classroom support, and classroom belonging (Eccles & Wang, 2012; Hospel, Galand, & Janosz, 2016; Shernoff & Schmidt 2007; Walker & Greene 2009). The following statements appear on the pilot instrument and request the students to agree or disagree with the statement (e.g. "I am interested in the work I get to do in my social studies classes." "I am happy to be in my social studies classroom." "My social studies teacher treat students fairly.").

A pilot test for the preliminary instrument illustrated in Appendix B occurred on 26 April 2016, at the participating high school. The pilot test occurred during the school day and included a sample size of over 100 high school seniors. The pilot study included only seniors as to not bias or influence potential future participants in the spring of 2017 school year. After the completion of the pilot test, I conducted Cronbach alphas, Factor Analyses, and Pearson Correlations on the instrument data to ensure the validity of the instrument. Depending on the results of the analyses a reduction in the size of the survey will occur. The findings and conclusions of the pilot test appear below.

### **Pilot Study Results**

The results of the modified NCSE engagement instrument conducted on 26 April 2016 produced favorable results. The first set of analyses I conducted consisted of Cronbach's alphas for the overall instrument and each subcomponent focusing on the three types of classroom engagement. The social studies engagement instrument produced the Cronbach's alpha results presented in Table A.2. The pilot implementation

produced Cronbach's alpha above the 2006 NCSE engagement results; however, the behavioral engagement scales still produced only acceptable results at best. The 2006 NCSE publication did not provide an overall Cronbach's alpha for the NCSE 2006 SSES implementations; nonetheless, the social studies pilot implementation produced a strong total Cronbach's alpha.

Label	Cronbach's Alpha	Number Items
Behavioral Engagement	.792	11
Cognitive Engagement	.920	17
Emotional Engagement	.926	15
Carter Pilot Engagement Survey	.953	43

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.

The second set of analyses focus on reducing the amount of scales by first identifying, which scales measure similar forms of engagement. In order to accomplish this, I conducted a factor analysis on the pilot results. I utilized the Principal Component Analysis extraction method to reduce the correlation of factors and the Varimax rotation method to simplify the interpretation of factors within each variable to produce the following results. The analysis generated five significant factors consisting of at least three scales with factor loadings of .55 or higher for 102 participants (Hair et al. 1998 p.112) refer to Appendix C for factor analysis results. These factors include the three facets of engagement as well as subcomponents of two of the facets.

The factor analysis generated an emotional engagement variable including nine questions with no subcomponent factors. The analysis produced an overall cognitive engagement variable consisting of six scales with a subcomponent variable identifying social studies priority within cognitive engagement of four scales. The results of the

factor analysis divided behavioral engagement into two subcomponent variables of accepting authority and social studies work ethic each with 5 and 3 scales respectively.

After the factor analysis, I completed Cronbach's alpha analyses on each of the new variables and the overall new instrument. These variables singly and collectively produced Cronbach's alphas ranging from .750 to .933. The variables produced by the factor analysis of the social studies engagement pilot instrument generated the Cronbach's alpha results presented in Table A.3.

Factor & Label	Cronbach's Alpha	Number of Items
1. Emotional Engagement	.924	9
2. Accepting Authority (B.E.)	.870	5
3. Cognitive Engagement	.872	6
4. Social Studies Priority (C.E.)	.750	4
5. Social Studies Work Ethic (B.E.)	.787	3
Carter Engagement Survey	.933	27

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.

The next step in the data analysis of the pilot implementation data was to correlate each questions of the five variables independently. The findings of the factor analysis variable correlations provide the necessary support for the utilization of these scales. All of the correlations are significant at 0.01 level, of the 70 correlation pairs 55 had correlation coefficients of .499\*\* or higher. Of the 15 correlations with correlation coefficients below .499\*\* only, three are between .399\*\* and .314\*\*. These correlations appear in their entirety in Appendices D-H.

### **Pilot Study Results Discussion**

The first analysis on the data collected from the social studies engagement pilot study revealed similar Cronbach's alpha results to the findings of the NCSE 2006 SSES.



The SSES contained 7 survey questions for behavior engagement, 22 cognitive engagement questions, and 16 emotional engagement questions making a total 45 questions (Finlay, 2006). The social studies engagement pilot contained 11 behavioral questions, 17 cognitive questions, and 15 emotional engagement questions with a total of 43 questions. The amount of questions and the variation of the SSES questions did not affect the Cronbach's alpha significantly. Since the focus of the SSES is an individuals' overall school engagement and the social studies engagement pilot focuses solely on social studies curriculum, classrooms, and teachers the surveys do not share any questions. Since the SSES is the foundation for the social studies engagement pilot, it is understandable that the Cronbach's alpha(s) would be similar.

The amount of participants in the pilot study was greater than the studies conducted by the NCSE. The pilot study included the results from 102 participants while the SSES included samples ranging from 39 to 72. The larger participant pool may have some impact on the Cronbach's alphas; however, the size difference is not meaningful. These Cronbach's alpha results confirm that the components of the Carter Social Studies Engagement Instrument measure the identified engagement construct.

The second statistical analysis focused on uncovering whether the engagement component survey questions measured the same subcomponent (e.g. behavioral engagement questions all measuring behavioral engagement). A factor analysis of the survey questions accomplishes this task; however, the results were slightly different than expected. The factor analysis utilized the Principal Components Analysis (PCA) method for variable extraction of factors, because I wanted the first variable to explain the most amount of variance with each sequential variable explaining less variance. In

addition, PCA ensures that each factor is completely uncorrelated with the other variables. These features of PCA are important because I wanted to establish the question grouping of the social studies engagement survey pilot and to winnow the questions that did not focus on a component of engagement.

Even though the social studies engagement survey divided the facets of school engagement into three elements, the factor analysis actually revealed five. The results of the factor analysis provided five variables ranging in items from 9 to 3, I decided to discontinue acknowledging variables that contained less than three factors, which meant that I precluded an additional four variables. My intention is to include largest variables because they contain the most factors and explain the most amount of variance.

The first variable labeled as Emotional Engagement consisted of seven questions identified as emotional engagement questions and two questions identified as cognitive engagement. One of the cognitive question centered on student interest in social studies, which could also be interpreted as their feelings towards the course content (Bundick et al., 2014; Dotterer & Lowe, 2011; Fredricks et al., 2004; Lynch, Lerner, & Leventhal, 2012). Additionally, it is understandable how the other cognitive engagement question focuses on the pedagogical structure of the class and the students' perception of how these pedagogical means assist and enhance their learning could align with other emotional engagement questions. The use of student centered pedagogical strategies and well-structured courses may lead a student to perceive their teacher as a teacher who wants them to learn and develop educationally.

The second factor consists of five survey questions with four of the five identified as behavioral questions and one cognitive. The five behavioral questions focus on teacher

classroom management and the willingness of the students in complying with the teachers' behavioral expectations. The included cognitive question centers on the students trying their best in class. This question fits with the other behavioral questions since "trying" can equate to actively doing academic or non-academic activities to succeed (Bundick et al., 2014; Fredricks et al., 2004; Gonzalez & Paolini, 2014). These questions tap into a specific subcomponent of behavioral engagement: accepting authority.

The third factor consists of six survey questions identified as cognitive engagement questions. These questions center on the students thinking about the course content inside and outside of the classroom, reviewing course content, and interacting with social studies content. I have identified this variable as: cognitive engagement since these questions vary in cognitive engagement focus.

The fourth factor additionally consists of cognitive engagement questions with a total of four questions, three being cognitive and one emotional question. Yet, unlike the garden-variety cognitive questions that made up the third factor, the fourth factor contains questions that focus solely on the students' perception of the importance of social studies content in their lives. The emotional engagement question focusing on the students' perceived perception of the class (When I walk into a social studies classroom I think, "Today will be... day"). When taken in the context of the other three cognitive questions (cognitive question 1,3, and 4) this question fits since students who value their social studies education, believe it will be of value in their future, feel they are getting a good social studies education at their school, and generally believe that they will have a

good day in class. Even though these questions are cognitive in nature, I have labeled this variable as: social studies priority.

The final factor contains three behavioral engagement questions and unlike the second factor, this grouping of behavioral questions focuses on the student's overall classroom work ethic. These questions encompassed the students' perceptions on doing as little work as possible, pretending to complete work or paying attention, and thinking about dropping the course, but surprisingly did not include the question on daydreaming in class. These questions clustered as expected and identified a subcomponent of behavioral engagement: social studies work ethic.

The next analysis I conducted was to check the Cronbach's alphas on the identified factors singly and jointly. The Cronbach's alphas of the new variables singly and jointly all fell within acceptable levels with an overall joint Cronbach's alpha at a slightly lower level than the social studies engagement pilot survey (SSEPS) alpha. The SSEPS contained 43 questions while the new instrument will include 27 greatly reducing the size of the survey without reducing its scope.

Comparing the Cronbach's alphas of the factor analysis variables to the SSEPS survey divisions illustrates the influence of more questions on the strength of the Cronbach's alpha results. The only situation where this was not the case is with the first factor analysis variable. In this case, the new variable contains fewer questions and almost has the same Cronbach's alpha (SSEPS .926 and new instrument .924). Yet, when I combined the two variables that focus on behavior engagement (variables 2 & 5) and ran a reliability analysis the Cronbach's alpha is higher (.810) with less items (7) than the behavioral section of the SSEPS (Cronbach's alpha .792 and 11 items). These two

situations present the evidence for the argument that the new instrument with these fewer items has the same reliability as the SSEPS in measuring behavioral and emotional engagement.

The last statistical analysis I conducted on the social studies engagement pilot results was Pearson correlations of the factors within each of the identified questions of the factor analysis. Because of the extraction method used in the factor analysis, all of the factor correlations within the variables were significant at .01 levels. The individual correlations varied in strength from .315\*\* to .745\*\*, providing evidence that the relationships among the questions within each variable range from moderate to strong. This correlations support the grouping of the survey questions within their particular factor. Since each of the factors at least shared a moderate in relationship with their particular grouping of the factors all the selected survey questions will remain in the Carter Social Studies Engagement Survey.

## APPENDIX B

## NCSE MODIFIED SSES FOR SOCIAL STUDIES

Table B.1 NCSE Modified SSES for Social Studies		
Emotional Engagement Questions & the Response Scale		
	Emotional Engagement Survey Questions	Response Scale
1.	When I walk into a social studies classroom I think, "Today will be... day"	Likert 1- Very Bad, 2-Bad, 3-Good, 4-Very Good
2.	I am happy to be in a social studies classroom.	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
3.	The social studies teachers at my school treat students fairly.	
4.	I like most of my social studies teachers at school.	
5.	The discipline in my social studies classroom is fair.	
6.	My social studies teachers care about how I'm doing.	
7.	Most social studies teachers know the subject matter well.	
8.	I respect most of my social studies teachers.	
9.	My social studies teachers understand me.	
10.	I feel excited by the work in my social studies class.	
11.	Social studies classroom is a fun place to be.	
12.	I enjoy the work I do in my social studies class.	
13.	I feel I can go to my social studies teachers with the things that I need to talk about.	
14.	Who makes your social studies classroom more enjoyable?	
15.	What are your future educational aspirations?	1- Dropout, 2-High School Diploma, 3-Some College, 4-Undergraduate Degree, & 5-Advanced Degree

Cognitive Engagement Questions & the Response Scale		
	Cognitive Engagement Survey Questions	Response Scale
1.	How important do you think a social studies education is?	Likert 1-Not Important, 2-Somewhat Important, & 3-Very Important
2.	How important do you think it is to get good grades in social studies?	
3.	How important do you think the things you are learning in social studies are going to be to you later in life?	
4.	I am getting a good social studies education at my school.	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
5.	My social studies classes are interesting.	
6.	I learn a lot from my social studies classes.	
7.	I am interested in the work I get to do in my social studies classes.	
8.	When I read for my social studies classes, I ask myself questions to make sure I understand what it is about.	
9.	I study for social studies at home even when I don't have a test.	
10.	I talk with people outside of school about what I am learning in social studies class.	
11.	I check my social studies schoolwork for mistakes.	
12.	If I don't know what a word means when I am reading in social studies, I do something to figure it out.	
13.	If I don't understand what I read in social studies, I go back and read it over again.	
14.	I try my best in my social studies class.	
15.	I get good grades in social studies.	
16.	The structure (e.g. lectures, discussions, and group work) of my social studies class assists me in learning.	
17.	During my social studies class, I had academic freedom to chart my own course for learning.	

Behavioral Engagement Questions & the Response Scale		
	Behavioral Engagement Survey Questions	Response Scale
1.	I have never fallen a sleep in social studies class.	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
2.	I try to follow the classroom rules in my social studies classes.	
3.	I do not get into trouble during my social studies classes.	
4.	I try not to miss my social studies classes during school.	
5.	I do not daydream in social studies class.	
6.	I follow my social studies teacher's directions.	
7.	During my social studies class, there are many opportunities for me to participate in class.	
8.	When I am in social studies class, I do as little work as possible.	Reversed Likert Scale: 1-Strongly Agree, 2-Agree, 3-Slightly Agree, 4-Slightly Disagree, 5-Disagree, & 6-Strongly Disagree
9.	I have never thought of dropping out of a social studies class.	
10.	When I am in a social studies class, I just pretend I am working.	
11.	When in a group project in my social studies classes I try to get others to do the required work.	

**APPENDIX C**

**FACTOR ANALYSIS OF THE CARTER SOCIAL STUDIES ENGAGEMENT**

**SURVEY PILOT**

	Component								
	1	2	3	4	5	6	7	8	9
(E13)	.807								
(E9)	.790								
(E11)	.731								
(E10)	.712								
(E6)	.649								
(E12)	.629								
(C5)	.608								
(E4)	.598								
(C16)	.564								
(B6)		.853							
(B2)		.742							
(B3)		.717							
(B4)		.662							
(C14)		.643							
(C15)									
(C13)			.817						
(C9)			.747						
(C8)			.725						
(C11)			.718						
(C10)			.663						
(C12)			.651						
(C3)				.703					
(C1)				.686					
(C4)				.557					
(E1)				.554					
(B9)					.818				
(B10)					.717				
(B8)					.703				
(E14)						.821			
(E8)						.590			
(B1)							.767		
(B5)							.610		
(E15)								.755	
(B11)									.719

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.  
 Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 11 iterations.  
 b. Factor Loading Cut-off .55 (Hair et al. 1998) for 102 participants

## APPENDIX D

## VARIABLE ONE EMOTIONAL ENGAGEMENT CORRELATIONS

	(E13)	(E9)	(E11)	(E10)	(E6)	(E12)	(C5)	(E4)	(C16)
(E13) Pearson Correlation	1	.720**	.617**	.584**	.576**	.577**	.577**	.537**	.519**
Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000
N	102	102	102	102	102	102	102	102	100
(E9) Pearson Correlation		1	.628**	.557**	.638**	.463**	.571**	.651**	.448**
Sig. (2-tailed)			.000	.000	.000	.000	.000	.000	.000
N		102	102	102	102	102	102	102	100
(E11) Pearson Correlation			1	.754**	.495**	.620**	.745**	.617**	.518**
Sig. (2-tailed)				.000	.000	.000	.000	.000	.000
N			102	102	102	102	102	102	100
(E10) Pearson Correlation				1	.406**	.696**	.696**	.509**	.576**
Sig. (2-tailed)					.000	.000	.000	.000	.000
N				102	102	102	102	102	100
(E6) Pearson Correlation					1	.469**	.451**	.558**	.416**
Sig. (2-tailed)						.000	.000	.000	.000
N					102	102	102	102	100
(E12) Pearson Correlation						1	.714**	.541**	.512**
Sig. (2-tailed)							.000	.000	.000
N						102	102	102	100
(C5) Pearson Correlation							1	.611**	.594**
Sig. (2-tailed)								.000	.000
N							102	102	100
(E4) Pearson Correlation								1	.514**
Sig. (2-tailed)									.000
N								102	100
(C16) Pearson Correlation									1
Sig. (2-tailed)									
N									100

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).



## APPENDIX E

## VARIABLE TWO ACCEPTING AUTHORITY (B.E.) CORRELATIONS

		(B6)	(B2)	(B3)	(B4)	(C14)
(B6)	Pearson Correlation	1	.655**	.555**	.477**	.607**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	102	102	102	102	102
(B2)	Pearson Correlation		1	.657**	.606**	.606**
	Sig. (2-tailed)			.000	.000	.000
	N		102	102	102	102
(B3)	Pearson Correlation			1	.609**	.468**
	Sig. (2-tailed)				.000	.000
	N			102	102	102
(B4)	Pearson Correlation				1	.568**
	Sig. (2-tailed)					.000
	N				102	102
(C14)	Pearson Correlation					1
	Sig. (2-tailed)					
	N					102

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

## APPENDIX F

## VARIABLE THREE COGNITIVE ENGAGEMENT CORRELATIONS

	(C13)	(C9)	(C8)	(C11)	(C10)	(C12)
(C13) Pearson Correlation	1	.527**	.563**	.550**	.507**	.655**
Sig. (2-tailed)		.000	.000	.000	.000	.000
N	102	102	102	102	102	102
(C9) Pearson Correlation		1	.596**	.517**	.541**	.315**
Sig. (2-tailed)			.000	.000	.000	.001
N		102	102	102	102	102
(C8) Pearson Correlation			1	.598**	.629**	.413**
Sig. (2-tailed)				.000	.000	.000
N			102	102	102	102
(C11) Pearson Correlation				1	.592**	.553**
Sig. (2-tailed)					.000	.000
N				102	102	102
(C10) Pearson Correlation					1	.497**
Sig. (2-tailed)						.000
N					102	102
(C12) Pearson Correlation						1
Sig. (2-tailed)						
N						102

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

## APPENDIX G

## VARIABLE FOUR SOCIAL STUDIES PRIORITY (C.E.) CORRELATIONS

		(C3)	(C1)	(C4)	(E1)
(C3)	Pearson Correlation	1	.576**	.519**	.367**
	Sig. (2-tailed)		.000	.000	.000
	N	102	102	102	102
(C1)	Pearson Correlation		1	.615**	.384**
	Sig. (2-tailed)			.000	.000
	N		102	102	102
(C4)	Pearson Correlation			1	.401**
	Sig. (2-tailed)				.000
	N			102	102
(E1)	Pearson Correlation				1
	Sig. (2-tailed)				
	N				102

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

## APPENDIX H

## VARIABLE FIVE SOCIAL STUDIES WORK ETHIC (B.E.) CORRELATIONS

Table H.1 <i>Variable Five Social Studies Work Ethic (B.E.) Correlations</i>				
		(B9)	(B10)	(B8)
(B9)	Pearson Correlation	1	.606**	.532**
	Sig. (2-tailed)		.000	.000
	N	102	102	102
(B10)	Pearson Correlation		1	.527**
	Sig. (2-tailed)			.000
	N		102	102
(B8)	Pearson Correlation			1
	Sig. (2-tailed)			
	N			102

Note: Adapted from Social Studies Pilot Implementation results, conducted by J. Carter 26 April 2016.  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

## APPENDIX I

## CARTER SOCIAL STUDIES ENGAGEMENT SURVEY

Table I.1 Carter Social Studies Engagement Survey		
Variable 1: Emotional Engagement Questions & the Response Scale		
	Survey Questions	Response Scale
E4	I like most of my social studies teachers at school.	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
E6	My social studies teachers care about how I'm doing.	
E9	My social studies teachers understand me.	
E10	I feel excited by the work in my social studies class.	
E11	Social studies classroom is a fun place to be.	
E12	I enjoy the work I do in my social studies class.	
E13	I feel I can go to my social studies teachers with the things that I need to talk about.	
C5	My social studies classes are interesting.	

Variable 2: Accepting Authority (Behavioral Engagement) Questions & the Response Scale		
	Survey Questions	Response Scale
B2	I try to follow the classroom rules in my social studies classes.	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
B3	I do not get into trouble during my social studies classes.	
B4	I try not to miss my social studies classes during school.	
B6	I follow my social studies teacher's directions.	
C14	I try my best in my social studies class.	

Variable 3: Cognitive Engagement Questions & the Response Scale		
	Survey Questions	Response Scale
C13	If I don't understand what I read in social studies, I go back and read it over again.	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
C9	I study for social studies at home even when I don't have a test.	
C8	When I read for my social studies classes, I ask myself questions to make sure I understand what it is about.	
C11	I check my social studies schoolwork for mistakes.	
C10	I talk with people outside of school about what I am learning in social studies class.	
C12	If I don't know what a word means when I am reading in social studies, I do something to figure it out.	

Variable 4: Social Studies Priority (Cognitive Engagement) Questions & the Response Scale		
	Survey Questions	Response Scale
C3	How important do you think the things you are learning in social studies are going to be to you later in life?	Likert 1-Strongly Disagree, 2-Disagree, 3-Slightly Disagree, 4-Slightly Agree, 5-Agree, & 6-Strongly Agree
C4	I am getting a good social studies education at my school.	
C1	How important do you think a social studies education is?	Likert 1-Not Important, 2-Somewhat 3-Important, & 4-Very Important
E1	When I walk into a social studies classroom I think, "Today will be... day"	Likert 1-Very Bad, 2-Bad, 3-Good, 4-Very Good

Variable 5: Social Studies Work Ethic (Behavioral Engagement) Questions & the Response Scale		
	Survey Questions	Response Scale
B9	I have never thought of dropping out of a social studies class.	Reversed Likert: 1-Strongly Agree, 2-Agree, 3-Slightly Agree, 4-Slightly Disagree, 5-Disagree, & 6-Strongly Disagree
B8	When I am in social studies class, I do as little work as possible.	
B10	When I am in a social studies class, I just pretend I am working.	