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History Spacebook: A Constructive Use of Wikis in Social Studies

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I am submitting herewith a dissertation written by Lance Heath McConkey entitled "History Spacebook: A Constructive Use of Wikis in Social Studies." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Blanche W. O’Bannon, Major Professor

We have read this dissertation and recommend its acceptance:

Dorothy A. Hendricks, Jennifer A. Morrow, Kevin S. Waters Jr.

Accepted for the Council:

Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
History Spacebook: A Constructive Use of Wikis in Social Studies

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Lance Heath McConkey
May 2018
Dedication

I would like to dedicate this dissertation to three very important people in my life: my parents, the late Pud and Carine McConkey, and my wife, Angie McConkey. I thank my parents for their love, support, and inspiration, which always guided me to succeed in life. Because of her love of education, my mother, who only completed the third grade, pushed me to always strive to gain more education. My dad, who was there with me after losing mom, continued to push me to further my education. My dad saw the importance of increasing knowledge and helped support me financially through it all. I thank you both for always being there for me. Without your love and support I would have never achieved what I have in life.

Finally, I would like to dedicate this dissertation to my wife, Angie. Countless hours were spent in class, working on assignments, and working on this dissertation that took away from our family life. Thank you for your love, support, and encouragement. Without it I would never have made it to this point.
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Abstract

This study examines student engagement and short-term and long-term achievement when a wiki was used constructively in place of traditional lecture to learn about the Civil Rights Movement. The study was conducted with students enrolled in two rural high school contemporary issues classes in the southeastern United States. The results indicated that participants in the experimental and control groups were engaged and enjoyed the topic that was studied. The participants in the experimental group showed significant increases in engagement while synthesizing information from numerous resources to develop wiki pages and while working collaboratively with other participants. There was no significant increase in short-term or long-term student achievement. Students in both groups enjoyed learning about the Civil Rights Movement, but several became emotional, voicing concerns. Comments included, “I hate the thought [of] that happening to people, and I couldn’t imagine going through that or watching others go through it. It was cruel and wrong and I don’t understand how people can hate someone on the basis of their skin.” Another added, “it [Civil Rights Movement] is still a touchy subject,” and yet another said, “the Civil Rights Movement was a beautiful display of courage, support, and righteousness.”
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CHAPTER I

Introduction and General Information

Today’s students live in a world without boundaries or limits as far as technology is concerned. These students not only talk on their phones but use those same phones to send text messages and keep up with their friends on popular social media platforms including Facebook, Instagram, Snapchat, or Twitter (Lenhart, 2015). In addition, they have access to the Internet and can discover facts in mere seconds on almost any topic. These students do so while multitasking or performing a myriad of other tasks. Multitasking is not just something used occasionally by these students; it has made up a large portion of their life (Tapscott, 2009).

Rideout, Foehr, and Roberts (2010) found that children aged 8 to 18 years old spent 29% of their media time multitasking. This new generation of students is known as Generation Z or Gen I, and they have never known a time when they did not have the use of the Internet and mobile technologies (Igel & Urquhart, 2012). Generation Z students were born between the mid-1990s and mid-2010s, and they have distinctly different traits than millennials (Loveland, 2017; Tysiac, 2017). Students from Generation Z thrive on the use of technology and teachers, especially those in the social studies field. Their teachers need to find ways to incorporate the use of technology to help increase both student engagement and learning (Igel & Urquhart, 2012; Loveland, 2017; Tysiac, 2017).

Statement of the Problem

As Generation Z students move their way through the educational system, researchers are looking at how to best use technology in social studies classrooms. Martorella (1997) pointed out that technology use in social studies was like a sleeping giant and that although the giant
Two decades later, technology use in social studies classrooms has increased; the *giant* remains in his slumber given the manner in which social studies teachers use technology. Social studies teachers continue to use technology primarily to prepare for class and present material to their students using direct instruction (Beck & Eno, 2012; Bolick, Berson, Coutts, & Heinecke, 2003; Cuban, Kirkpatrick, & Peck, 2001; Petko 2012; Whiteworth & Berson, 2003).

Whiteworth and Berson (2003) conducted an extensive review of literature looking at the use of technology in social studies classrooms. A total of 325 articles were examined from leading journals in the field of social studies including the three main journals from the National Council for the Social Studies. The researchers discovered a lack of empirical studies conducted on using technology in social studies classrooms. They concluded that more than a third of the articles reviewed offered Internet resources used by teachers to assist in direct instruction. The remainder of the articles varied from software reviews and lessons to articles discussing the use of telecollaborations in social studies classrooms. Since this study was completed, the Internet and its use have grown at phenomenal rates.

Whiteworth and Berson (2003) were concerned that social studies teachers were using technology in the same direct instruction manner as had been done in the past. This concern was echoed almost a decade later by Beck and Eno (2012). These researchers examined more than 100 articles that focused on using technology in social studies classrooms. They concluded that the concerns noted by Whiteworth and Berson (2003) had been realized. Direct instruction continued to be the signature pedagogy used by social studies teachers (Beck & Eno, 2012). Although only 9 years passed between the literature reviews conducted by Whiteworth and Berson (2003) and Beck and Eno (2012), those years seem far longer when looking at the
changes and growth in the technology industry compared to the use of technology in social studies classrooms.

Social studies teachers typically reverted to the way they were taught social studies, which was by direct instruction manner (Misco & Patterson, 2009). Friedman (2006) discovered that social studies teachers felt pressured to use direct instruction to assist in preparing their students for high-stakes standardized tests. The teachers in Friedman’s study indicated that more standards could be covered using teacher-centered instruction (Friedman, 2006).

Several researchers noted concerns regarding the integration and implementation of technology in the social studies classroom (Beck & Eno, 2012; Friedman, 2006; Petko, 2012; Whiteworth & Berson, 2003). The first concern, noted in Whiteworth and Berson (2003), was that technology use was challenging. This challenge has been evident since the inception of personal computer use in education. Another concern was that technology is constantly changing and growing beyond the majority of teachers’ ability to stay proficient in its use (Beck & Eno, 2012; Petko, 2012). A third concern discovered by the researchers was that social studies teachers felt technology was growing and changing so fast that it was getting harder to use, when in fact, teachers did not realize that the technology was not as difficult to use as it once was and it actually made teaching simpler (Petko, 2012). Yet another concern revealed by several researchers (Beck & Eno, 2012; Whiteworth & Berson, 2003) was the lack of quantitative and qualitative research studies that examine integrating technology into social studies. Adam Friedman (2006) reported another issue, when he pointed out that social studies teachers were taught using direct instruction, and it was the method used in their own classrooms. The final concern regarding integrating technology is time; teachers reported that
they have little time to use other methods of instruction because they must get their students prepared for high-stakes end-of-course exams (Friedman, 2006; Misco & Patterson, 2009).

Typically, technology seemed to be used as a gimmick by teachers who were trying to use technology for the sake of using it. Also, teachers used ineffective teaching methods, computerized them, and presented them to their students in the hopes of increasing their level of engagement and achievement. Teachers struggled with using technology in their classes to increase student engagement and achievement (Beck & Eno, 2012; Friedman, 2006; Misco & Patterson, 2009).

The researcher developed an activity that was called “The History Spacebook” to help engage his students and assist in their overall achievement after he struggled with the same issues as discovered by other researchers. History Spacebook was developed to help increase student engagement and achievement in social studies classrooms. History Spacebook involved students researching historical characters and sharing about and interacting with their research in a student-centered, constructivist manner. A Web 2.0 tool, known as a wiki, is used by students to create social networking pages for historical characters. Hopefully other teachers would find that the technology used in this activity was not challenging, as the researcher provides a template that could be copied and pasted to the teachers’ wiki site. Although technology was always growing and changing, the History Spacebook activity was designed to allow teachers to stay proficient due to its use of the universal “what you see is what you get” (WYSIWYG) type of data input. Finally, History Spacebook was designed to make teaching and learning about historical characters simpler by using a technology platform that was simple to use by both the teacher and student. This dissertation was, in effect, an attempt to assess the effectiveness of the History Spacebook.
Purpose of the Study

The purpose of this pilot study was to determine if engagement and short- and long-term student achievement were increased by having students create wiki pages about historical characters in their social studies classes. To achieve this purpose the researcher designed a wiki titled History Spacebook as an online space for students to create pages. Specifically, the purpose of this study was to determine the impact upon student engagement and student achievement in using this wiki activity in a constructivist manner. Three questions guided the research:

1. How does the constructivist use of a wiki affect student engagement in a social studies classroom?
2. How does the constructivist use of a wiki affect short-term student achievement in a social studies classroom?
3. How does the constructivist use of a wiki affect increase in long-term student achievement in a social studies classroom?

Significance of the Study

A review of literature reveals a lack of empirical evidence on the integration of technology in social studies in order to increase achievement and engage students in the social studies classroom. This study contributes to the body of research in social studies education that is critical to helping social studies teachers use technology to increase achievement and engage students in the social studies classroom. The data collected and presented in this study are beneficial to schools and teachers who wish to integrate technology into teaching and learning. Results from this study help to provide social studies teachers with information about how to increase achievement in social studies curriculum.
Definition of Terms

The following are definitions of terms that are either used with particular meaning in this study or may not be familiar to all readers.

Blog

A website where a student or teacher can create a set of entries that is read by others, similar to a journal (Solomon & Schrum, 2007).

Higher Order Thinking Skills

Higher order thinking skills, often associated with Bloom’s Taxonomy, is dissimilar from other forms of thinking because students are involved in activities that require more cognitive thought such as taking information and analyzing and synthesizing information into a coherent argument (Bloom, 1956).

Long-term Student Achievement

Using the definition of Cunningham (2012) described above, long-term student achievement for this study is defined as students’ academic performance on the posttest several months after completion of the unit.

Short-term Student Achievement

According to Cunningham (2012), student achievement refers to the academic performance of students measured by a test. Short-term student achievement for this study is defined as students’ academic performance on the posttest immediately after the unit of study.

Social Constructivism

Social constructivism is a learning theory in education connected with the work of Soviet psychologist Lev Vygotsky. Social constructivism suggests that learning is created by students interacting socially with others. “Social interaction occurs between students and their peers,
teachers, parents, and other community members. It influences the various ways and types of knowledge that is built through social interaction” (Phillips, 2000, p. 11).

**Student-Centered Instruction**

The teacher acts as a coach by facilitating student thinking and helping students to process information that was presented to them. The student is an active participant of knowledge by processing the information and designing their own activities (Anderson, 2002).

**Student Engagement**

Student engagement is the involvement and interest shown by students as they are actively involved or interested in their learning and their classes (Axelson & Flick, 2011; Beck, Buehl, & Barber, 2015).

**Teacher-Centered Instruction**

The teacher communicates all information as the student sits passively and receives the information. Teachers control student work by assigning activities such as worksheets and other teacher-directed work (Anderson, 2002).

**Wiki**

A collaborative website designed to allow the users access to create and edit the website using What You See is What You Get (WYSIWYG) editing (Solomon & Schrum, 2007).

**Zone of Proximal Development**

The zone of proximal development is “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving, or in collaboration with more capable peers” (Vygotsky, 1978, p. 86).
Assumptions

This study was based on the following assumptions:

1. Today’s students are comfortable with the use of the Internet and various web-based software.
2. Technology is and will remain of growing importance in schools.
3. Students answered honestly on attitudinal review and tests for achievement.

Limitations

This study was limited in the stability of the class. There are three high schools in the area and students switch schools often. There are also programs for students who are seniors and labeled at risk to finish classes required for graduation online. These limitations were realized as two students were dropped from the study, one by switching schools and the other by graduating early from the online program. The findings of the study could have been affected by the loss of students either by transferring or by early graduation.

Delimitations

This study was delimited in several manners. First it was delimited to an experimental group of only 20 students. It was also delimited by time as the intervention lasted for only 2 weeks. The content used in the intervention was delimited to the dates of 1954 to 1970 and people and events of the Civil Rights Movement. Finally, the study was delimited because the researcher was also the instructor teaching the class.

Organization of the Study

The remainder of this study is organized into four chapters. Chapter II presents a review of the literature related to using technology in social studies as well as the theoretical orientation of the study. Chapter III describes the research methodology and includes the research design,
target population, participants, instruments, research questions, and details of the analysis.

Chapter IV presents the results of the data and details of the data analysis. In Chapter V the researcher explains his conclusions and future recommendations.
CHAPTER II

Literature Review

This chapter provides a critical review of the research literature related to the use of technology in education, the use of technology in the social studies classroom, and the use of wikis in education. Student engagement and technology are examined in the final section of the literature review.

Several steps were taken in the process of searching for the literature. First, the researcher determined the main terms he would need in his study. The keywords to be searched were technology in education, social studies and technology, web 2.0, and wikis in education. The online Ebsco database provided through the university’s library was used to search for these key terms. Each article’s abstract was reviewed for relevance to this study and then downloaded and printed for further evaluation. If the article had relevance to this study, notes were taken on the front page, and the section of the literature review to be used was marked. The researcher also used the reference section of some of the articles to find other articles that were related to his study.

Student Engagement

Defining Engagement

There are a multitude of terms that are used in both K-12 and higher education settings but none is used more or in as many ways as the term engagement. According to Axelson and Flick (2011), student engagement “has come to refer to how involved or interested” (p. 38) students are with learning and how interested they are in their classes. Beck, Buehl, and Barber’s (2015) definition added that engagement includes “active involvement during a task” (p. 2). Reeve, Jang, Carrell, Jeon, and Barch (2004) defined engagement as “the behavioral
intensity and emotional quality of a person’s active involvement during a task” (p. 147).

Because of the variety of descriptions used, it can be difficult to pinpoint a definition of engagement; however, the level that engagement is conceptualized, which ranges from a microlevel (how engaged a student is on a learning activity) to macrolevel (the engagement of a group or class) (Sinatra, Heddy, & Lombardi, 2015) is clear.

Student engagement has several benefits. The primary benefit is that engagement leads to increased achievement and, therefore, according to the findings of Marks (2000), to students’ social and cognitive development (Marks, 2000). Taylor and Parsons (2011) echoed Marks (2000) when they said there are three main areas of focus of student engagement—increasing achievements, increasing positive behaviors, and fostering a feeling of fitting in. Because of these benefits, student engagement is publicized as one of the keys to fixing many of the problems seen in education today (Sinatra, Heddy, & Lombardi, 2015).

**Technology and Engagement**

Marks (2000) studied the patterns of engagement in all grade levels and discovered that 40% to 60% of all high school students struggle with being engaged. Taylor and Parsons (2011) stated that there is an increase in the concern shown for a lack of engagement with high school-age students. Cole (2009) believed that a decrease in student engagement was seen when teacher-centered instruction was used such as lectures and bookwork. Taylor and Parsons (2011) continued by stating that we “fail to meet the needs of students who have grown up in a digital world” (p. 7) and that if we are to engage learners we must seek “new educational curriculum” (p. 7). In a study of how the use of a wiki affected student engagement, Neumann and Hood (2009) discovered that collaborative learning helps students to score higher, be better motivated, and have more positive attitudes toward the class. In this study, students used wikis
collaboratively to write practice reports versus students who wrote their reports individually. The students who used the wiki to complete their report ranked their feelings of engagement higher than those who wrote the report alone (Neumann & Hood, 2009). Cole (2009) felt that the use of wikis would increase student engagement but that teachers had to have some type of scaffolding and guidance on how to use a wiki.

Laird and Kuh (2005) analyzed data from the National Survey of Student Engagement to determine if there was a relationship between the use of technology and student engagement. They discovered that the use of technology had a positive effect on engagement, that technology may be a driving force to increasing engagement, and that technology use is related to other “effective educational practices and outcomes” (Laird & Kuh, 2005, p. 230). Vaughan (2010) studied the connection between the use of Web 2.0 tools, such as a wiki, to determine if there was an increase in student engagement. In this study, teachers redesigned their courses to integrate Web 2.0 tools, and students took portions of the National Survey of Student Engagement to determine if the changes made a difference in engagement. Vaughan (2010) reported that redesigning courses and using Web 2.0 tools, especially for collaboration, did in fact increase student engagement.

**Technology Use in Education**

Since the inception of the handheld calculator, teachers have used the newest and latest technologies consistently to attempt to improve student achievement and engagement in the classroom (Hew & Bush, 2007). The use of technology in education has many benefits, challenges, and methods.
Benefits of Technology in Classroom Instruction

Teachers have reported numerous benefits of the incorporation of technology into their classrooms. Early research revealed that the use of technology has been associated with increased interactive and engaging instruction (Rose & Fernlund, 1997) and increased student organization and access to primary sources (Whitworth, Swan, & Berson, 2002). Kingsley and Brinkerhoff (2011) reported that the use of technology in social studies classes can enhance creativity, collaboration, and information sharing while helping students acquire and apply reasoning skills, critical thinking, and research. These authors point out that students must intertwine the themes and strands discovered in social studies classes, demonstrating a level of mastery that goes beyond mere recall. Diem (2000) stated that the benefit of technology is more than state-of-the-art advances; it has possibilities that are limited only by the imagination of the teacher. Lee (2002) reported that some teachers found that technology has the ability to provide easy-to-find resources and new teaching ideas. A plethora of resources and teaching strategies were found to be readily available to teachers through the Internet (Keiper, Harwood, & Larson, 2000; Lee, 2002; Whitworth et al., 2002). Teachers viewed technology as being both appropriate and exciting in the social studies classroom (Keiper et al., 2000). Becker (1999) conducted a nationwide survey and found that 90% of teachers rated Internet access as being an essential tool to the educational process.

Whiteworth et al. (2002) found additional benefits of using technology in social studies classrooms, such as easier methods to communicate with parents and easier ways to create assessments. Kingsley and Brinkerhoff (2011) echoed the early findings of Whiteworth et al. (2002) in their research 9 years later. Students can now use technology to view interactive timelines or keep up with current events by searching an online news source. Teachers can use
the latest technology to have students create digital stories, online quizzes and surveys, or even
use wiki technology to create online portfolios (Kingsley & Brinkerhoff, 2011). In addition,
Waters, Kenna, and Bruce (2016) suggested that several new apps, including Explain
Everything, Stickpick, Socrative, and Aurasma, can support Common Core instruction in social
studies classrooms.

Researchers have discovered that the use of technology in the classroom can have
significant effects on student achievement. Hwang, Chiu, and Chen (2015) found that the use of
a digital, subject-specific, role-playing game enhanced student achievement, learning,
motivation, and satisfaction, with increased benefits for students who claim to have an active
learning style. The researchers reported that students liked to use computer games and that they
realized how important it was to connect real-world scenarios with learning social studies
content. In a related study, Iyamu, Aduwa-Ogiegbaen, and Iseguan (2010) discovered that using
Internet-supported instruction significantly increased the achievement of students in a high-
ability group. This type of instruction also improved the achievement of students in the low-to-
moderate-ability groups but not as significantly as the high-ability group.

Better outcomes can be achieved when Internet-supported instruction is provided, such as
students playing games and using technology to create nontraditional ways to report research like
digital stories. In a 2014 study, Alexander examined the effects of a storyboarding activity on
middle school history students. Storyboarding is a classroom method in which students use
digital images to tell historical stories based on classroom topics. Alexander found that the use
of this method had positive effects on student engagement and on the sustainability of that
engagement. According to Alexander, students reported enjoying the activity and stated that
storyboarding was “cool” and “fun.”
Maguth, List, and Wunderle (2015) discovered technological methods also allow students to apply ideas, theories, and historical topics and to bring social studies concepts to life. They reported that teachers could use video games such as Age of Empires to help students learn problem-solving skills by requiring them to “inquire, adapt, and reflect on how their decisions impact the mission and goal” (p. 36). Because of an increase in technology skills required to succeed in college and careers, students must have as much access to classroom technology as possible (Alexander, 2014). Furthermore, Wilson, Wright, Inman, and Matherson (2011) posit that the use of technology in the classroom can help students construct their own social studies knowledge surrounding classroom learning.

The benefits of using technology in the classroom are widely reported (Keiper et al., 2000; Lee, 2002; Whitworth et al., 2002). Though no single instructional method can solve all the problems associated with a diverse classroom of students, technological teaching holds great promise for the improvement of education on a number of fronts. Still, some researchers advocate using caution in the adoption of technology into the classroom due to the challenges associated with it (Kingsley & Brinkerhoff, 2011).

**Challenges Related to the Use of Technology**

Although the benefits of technology in the classroom are widely reported, challenges are also discussed in the literature. Early on, multiple authors (Ertmer, Addison, Lane, Ross, & Woods, 1999; Whitworth et al., 2002) reported that the lack of funding and access to hardware are critical inhibitors to using technology. In addition, the need to train teachers in using various technological methods can also prevent its adoption in the classroom (Langran & Alibrandi, 2008; Whitworth et al., 2002). Lee (2002) warned teachers to exercise caution when adopting
the use of technology, as some Internet-based content can violate the values of the school community.

In 2014, Alexander conducted a study with sixth graders who created digital media projects using historical images. This qualitative study was designed to discover student engagement during classroom activities using technology. He discovered that some students reacted negatively to the use of technology in the classroom. In fact, some students reported that using technology was boring. In addition, they believed that homework expectations increased when technological methods were employed. Other students reported missing the personal interaction with the teacher that occurred before the incorporation of technology. During the study, Alexander classified students into four categories. The first two categories consisted of students who had a high use of technology and high time on task, and the last two categories consisted of students who had low use of technology and low time on task. Several of the students in the bottom two categories stated that they missed interacting with the teacher.

In a 2015 study that used the inquiry method with computer-based games to determine whether students’ learning performance was improved, Hwang et al. found that the use of technology in the classroom did not increase the achievement of students with the reflective learning style. Students who learned using the reflective learning style did so in a passive manner such as through lecture and individual work. Students who learned using the active learning style benefited from this activity because of their use of exploring and interacting with resources to produce a product. Similarly, Iyuma et al. (2010) found variation in the achievement of students of different ability levels when technology was used for classroom instruction.
Though some research indicated that negative repercussions can result from using technology in the classroom, the possible benefits greatly outweigh these risks. As with all teaching methods, teachers should take great care in using technology to teach their students.

**Teaching with Technology: Ways and Means**

Teachers use various methods to instruct their students using technology. Most of the literature focusing on the use of technology in social studies discusses the methods teachers use (Beck & Eno, 2012; Whiteworth & Berson, 2003). Researchers report the creation of interactive timelines and cartoons (Kingsley & Brinkerhoff, 2011); the creation and development of blogs to increase student collaboration (Wilson et al., 2011); and using a flipped classroom approach (Snyder, Paska, & Besozzi, 2014). In the flipped classroom approach used in this study, students watched screencasts outside of class followed by completing assignments during class with the teacher present. The screencasts allowed students to view videos at their choice of time and place and allowed the teacher to increase the differentiation of methods in order to reach a wide range of learners.

Waters et al. (2016) explored the use of certain apps that could be used in a social studies classroom to help support Common Core State Standards instruction. The authors examined several apps and presented them to teachers during a professional development workshop. The teachers took the ideas back to their classrooms. After six weeks the teachers were brought back together to discuss their use of the apps. While the overall feedback of the group was very positive, some teachers voiced concerns about some of the apps.

Shriner, Clark, Nail, Schlee, and Libler (2010) conducted a study in which teachers were trained on how to create and use virtual field trips to enhance student learning. The use of virtual field trips is common among social studies educators. Such virtual trips involve students logging
into websites like the Louvre and Lascaux Caves where they interact with digital video and audio found at museums and historical sites. Teachers can create virtual field trips with minimal training, which effectively enhances student learning (Shriner et al., 2010). The researchers discovered that teachers’ level of confidence increased during the study.

Additional methods encouraged by social studies educators include the use of news websites for contemporary issues, the use of digital learning games, the use of wikis, and the use of educational iPad applications (Berson, Berson, & Manfra, 2012; Kingsley & Brinkerhoff, 2011; Maguth et al., 2015; Wilson et al., 2011). Further, the use of digital interactive maps allows students to make connections needed to meet curriculum standards (Kingsley & Brinkerhoff, 2011). Similarly, Internet-based collections of historical images have proven useful for many social studies teachers (Shriner et al., 2010). For teachers who seek innovative, novel ways to reach their students, technology shows great promise. The possibilities for new methods are only limited by the imaginations of the teachers.

**Student Factors That Inhibit the Incorporation of Technology**

The use of technology in the classroom involves hard work by students and teachers. Several factors exist that can inhibit the adoption of technology into the classroom. Some of these factors apply mostly to students, whereas others involve the competencies of teachers.

In a 2008 study of middle school social studies instruction, Langran and Alibrandi found several problems with students adopting the use of technology in the classroom. According to these researchers, some students in the study were not willing to devote the time and effort required to learn to properly use the technology. This reluctance resulted in students struggling with both the new content and the new technology at the same time. The problem could be
overcome, however, by extensive scaffolding provided by the teacher at the expense of time devoted to other students and classroom pursuits.

Other researchers have found that some students dislike the use of technology, whereas others lack the skills needed to become proficient with the hardware (Alexander, 2014; Helms, 2011). Still, other students lack access to the equipment they need due to economic reasons (Langran & Alibrandi, 2008). These students require vast amounts of extra instructional time and resources in order to overcome their barriers (Alexander, 2014; Dalton, 2014). According to Dalton (2014), not all students are digital natives and some actually struggle with using the technology and require more individual assistance from the teacher.

**Teacher Factors That Inhibit the Incorporation of Technology**

Teachers are also subject to a number of factors that can inhibit the use of technology in the classroom. Some of these issues are increased time to plan and a lack of experience with technology, and some were simply teachers being more comfortable using teacher-centered direct instruction (Doolittle & Hicks, 2003; Hammond & Meghan, 2009). Helms (2011) found that learning to use and teach with technology involved much more planning on the part of the teacher and often required the use of outside trainers and experts. Some teachers naturally prefer traditional, teacher-centered strategies and are reluctant to adopt more student-centered, technology-based instruction (Lucey, Shifflet, & Weibacher, 2014). Further, teachers often report a lack of confidence in using technology in meaningful ways in the classroom (Shriner et al., 2010). This feeling of insecurity could be due to the fact that many teachers lack the necessary technological knowledge and skills (Ertmer, Leftwich, Sadik, & Sendurur, 2012).

Teachers reported that the biggest barrier to their adoption of technological teaching methods are their mindsets and misconceptions concerning teaching and technology (Ertmer et
al., 2012). Shriner et al. (2010) discovered that teachers often advocate for critical thinking in the classroom, though their methods were more conducive to teaching basic skills. This inconsistency with stated belief and practice is likely responsible for inhibiting the adoption of more student-centered technological methods. Judson (2006) found that although teachers felt student-centered instruction was important, they tended to revert to the manner in which they were taught, which was teacher-centered direct instruction.

In 2011, Sheffield conducted a study of middle school social studies teachers’ use of digital technology in the classroom. Qualitative and quantitative data revealed important discrepancies between teachers’ beliefs and their practices. Teachers reported that the integration of technology into the classroom was important for their students’ success; however, the participants continued to rely on traditional, teacher-centered methods to deliver instruction. When teachers did use technology, it was primarily for information gathering and presentation, rather than for student-centered instruction. The use of technology to deliver instruction in a collaborative, student-centered manner was rare.

Barriers associated with student and teacher adoption of technology play major roles in the incorporation of technology into the classroom. Both students and teachers require access to hardware and additional training in order to maximize the potential of this medium. Likewise, both of these groups bring their own perspectives to bear on the introduction of technology. But with dedication, the potential for the improvement of classroom education is boundless.

Technology and Social Studies

Technology plays an important role in social studies education. According to the technology position statement of the National Council for Social Studies (2013), social studies educators are challenged to “prepare digital citizens within a global setting.” Students live in a
world steeped in technology and are interacting, both socially and politically, with others across the globe by using social networking sites. Although students are engaged in these democratic experiences, social studies teachers have difficulty determining how to incorporate technology into learning (NCSS, 2013). Kathy Swan (2010), the lead writer for NCSS C3 Framework for Social Studies State Standards, stated that students in middle and high schools should be able to communicate and critically research conclusions in a variety of ways. The difficulty stated in the technology position statement is realized when reviewing the literature as it relates to the use of technology in social studies. The majority of literature discovered were articles about the practice of using technology in social studies education and not the research and theory behind the use of technology in social studies instruction.

**How Teachers Use Technology in Social Studies**

Whiteworth and Berson (2003) reviewed 325 articles looking at the use of technology in social studies classrooms. These articles were primarily from the three journals produced by the National Council for the Social Studies, starting with the spring of 1996 and ending in the fall of 2001. Eight themes were discovered during the review with a third of the articles being Internet resources used by teachers to assist in direct instruction. The remainder of the articles varied from software reviews and lessons to articles discussing the use of telecollaborations in social studies classrooms. Research on student-centered use of technology reported only on WebQuests, which are inquiry-based activities using the Internet, and only 10 articles were found.

The literature shows that teachers have greater access to written and visual primary sources by using the Internet (Whiteworth & Berson, 2003). Beck and Eno (2012) echoed these
findings 9 years later as they proposed that one of the primary uses of technology was for teachers to prepare for their classes, especially in finding written and visual primary sources.

Whiteworth and Berson (2003) appeared concerned that social studies teachers used technology in the same direct-instruction manner as teachers who chose not to use technology. Beck and Eno (2012) discovered in their review of the literature that the concerns noted by Whiteworth and Berson (2003) had been realized. Direct instruction was the signature pedagogy used by social studies teachers when integrating technology into their classrooms (Beck & Eno, 2012). Judson (2006) noted that even though teachers’ philosophical beliefs leaned toward student-centered methods, their practice showed that direct teacher-centered instruction was used the majority of the time.

The use of standardized testing in public schools has increased dramatically since the early 2000s. This state-level mandated testing has also entered many social studies classes (Savage, 2003). Friedman (2006) found that social studies teachers felt pressured by the increase in standardized testing. As a result of this increased pressure, teachers felt the need to use direct instruction and other teacher-centered activities so students would perform better during the tests (Friedman, 2006; Heafner & Friedman, 2008). Van Hover, Berson, Bolick, and Swan (2004) stated that by using technology, students can have more efficient access to multiple primary sources. The researchers also found that for the full potential of the use of technology to be realized in the social studies classroom, teachers must use less traditional teacher-centered instruction (Van Hover et al., 2004). This finding is supported by Petko (2012), who discovered that teachers tended to use technology in a traditional teacher-centered manner.
**Student-Centered Use of Technology in Social Studies Classrooms**

The literature reveals that for the majority of the time, teachers use technology in direct instruction. However, technology provides teachers exciting ways to use it in a student-centered constructivist manner (Friedman & Hicks, 2006). Doolittle and Hicks (2003) felt that social studies could become an active subject and that teachers could use it to engage students in inquiry-based student-centered lessons. This sentiment was echoed by Swan and Hicks (2007), who discovered that the Internet could be used to access multiple primary source documents and use them to conduct historical inquiry. Students could actually perform the role of a historian and not just sit in a classroom and listen to the teacher lecturing. Okolo (2005) stated that there are many student-centered activities, such as technology-based games, virtual field trips, and project-based learning available for teachers to use. Debele and Plevyak (2012) discovered that no matter which type of technology is used, teachers must have specific knowledge of the technology tools, and they also must use those tools in a “pedagogical sound way” (p. 286). Hofer and Swan (2005) found that teachers and students alike typically agreed that there is a need to move from teacher-centered instruction to a more student-centered approach, which is shown to call for “active student engagement” (p. 103).

In a 2008 study, Hefner and Friedman randomly assigned secondary social studies students to either a control or experimental group. The control group was taught using a teacher-centered direct-instruction format, whereas the experimental group was taught using technology in a student-centered format. In the student-centered approach, students researched and created web pages for historical events they were studying in a wiki. When tested on an end-of-unit exam, the students in the control group slightly outscored the experimental group. However, when retested 8 months later, the experimental group outscored the control group by
several percentage points, indicating that the wiki activity increased long-term student knowledge.

**The Use of Wikis in Education**

**What Is a Wiki?**

A wiki is a Web 2.0 tool that was developed in the mid-1990s to encourage people to publish their work. The term wiki originates in the Hawaiian term “wiki-wiki,” and it simply means “quick quick.” A wiki is a website that anyone can edit at any time and any place without any special coding or training (Kimmerle, Moskaliuk, & Cress, 2011; Richardson, 2005). Cole (2009) defined a wiki as “an editable website that is created incrementally by visitors working collaboratively” (p. 142). The giant online encyclopedia, Wikipedia, is the most famous example of the use of the wiki platform. The wiki platform allows users to move from passively receiving information to becoming an active participant by adding information and collaborating with other users who could be located nearby or thousands of miles away (Hazari, North, & Moreland, 2009). Wikis allow students to collaborate on their work by combining their research, analyzing it, and synthesizing it into a document that will be published for the public or only for the teacher and other students in the class (Matthew, Felvegi, & Callaway, 2009).

**Benefits of Wikis in Education**

According to Swan and Hicks (2007), real learning occurs when students act as true historians and synthesize multiple sources into a new product. Larusson and Alterman (2009) stated that wikis are the ideal platform for collaborative learning activities such as historical inquiry. Wikis are easy to edit by multiple people or by a small group of people such as those found in a classroom using student-centered groups. It is also easy for teachers to monitor activity on the wiki because each page is equipped with a history that shows all activity for that
page (Hazari et al., 2009; Richardson, 2005). Hazari et al. (2009) pointed out that wikis are used easily for student collaboration on inquiry-based activities. According to Holcomb and Beal (2010), Web 2.0 tools like wikis are typically no cost, easy to use, and the students can produce and publish their own work.

Reich, Murnane, and Willett (2012) proposed that while there are multiple benefits to using wikis in the K-12 classroom for student-centered collaboration, they are not being used regularly. These researchers looked at 1,800 public viewable wikis related to education and hosted at PBworks during a 3-year period. Many (40%) of the wikis reviewed were either never used or used by educators, while 34% of the wikis were used in teacher-centered instruction. Although the ability to collaborate and create products was one of the greatest benefits of using wikis, Reich et al. discovered that of the 1,800 wikis they reviewed, only 1% were used for student collaboration and in a student-centered manner. Further, in 2012, O’Bannon and Britt conducted a study with 103 preservice teachers that examined the effectiveness of creating/developing/using a wiki to increase knowledge of Web 2.0 tools and their perceptions of the use of a wiki to increase knowledge of Web 2.0 tools. Findings revealed that there was a significant gain in achievement. The preservice teachers reported that the wiki was effective for increasing their knowledge of Web 2.0 tools, and more than 75% reported using the wiki as an information source during and after the activity.

Wikis are shown to be beneficial for use in the educational setting due to their ease of use and ability for students to collaborate on inquiry type assignments (Hazari et al., 2009; Larusson & Alterman, 2009; Reich et al., 2012). These benefits make wikis the perfect tool to use in what Swan and Hicks (2007) called real learning, the synthesizing of multiple sources into a new
product. The ease of use and the collaboration benefits of the wiki are also what make it the perfect platform for this research study.

**Theoretical Base for the Study**

Substantive and methodological theory was used in the development of this study. Substantive theory refers to the way students obtain knowledge in the classroom. While the methodological theory reflects methods used by the researcher to obtain, evaluate and report the findings of the study.

**Substantive Theory**

The theoretical framework for this study was social constructivism. Social constructivism is a student-centered model that was developed by Lev Vygotsky. Vygotsky (1978) claimed that all learning is built upon a student’s prior knowledge of the subject. Social studies teachers benefit by moving away from the behaviorist model found in teacher-centered classrooms to a more student-centered model, based on Vygotsky’s (1978) theory of social constructivism, which directly applied to Net Generation students (Oblinger & Oblinger, 2005).

**Social Constructivist Theory**

Vygotsky (1978) posited “any learning a child encounters in school always has a previous history” (p. 84). His statement lead to a basic understanding of constructivism, which, in its simplest form, viewed the learning process as self-constructed by the learner with new experiences constructed from past learning experiences. Doolittle and Hicks (2003) described social constructivism as a moderate form of constructivism that falls between radical and cognitive constructivism. Social constructivism is similar in its view of reality to other forms of constructivism, with the major difference being the importance that social constructivists view social interaction as the source of learning versus “individual active cognizing” (Doolittle &
Hicks, 2003, p. 6). Another aspect of social constructivism is the zone of proximal development (ZPD), which Vygotsky (1978) described as “the distance between the actual developmental level. . . and the level of potential development under adult guidance or in collaboration with more capable peers” (p. 86).

Constructivist teachers do not rely on a solitary teaching method as a solution for all classroom issues. A constructivist teacher will try a wide variety of teaching approaches to reach their students. My goal, in this study, was to add to the existing knowledge base in educational research by examining the constructivist use of a wiki as an additional device in a classroom teachers’ toolbox. If teachers use technology tools and strategies effectively, student knowledge can be improved as well as the development of teachers. Hatch (2002) believed that constructivists spent much of their time in the environment of the people they are studying. They do this in the hopes of recreating the situation being studied from the point of view of the participants. I attempted to describe the execution of a constructivist teaching method that uses a wiki in great detail, as well as its consequences for the students and the teacher.

Typically, students are social animals and learn best in groups. These groups build new knowledge from knowledge students have garnered previously. Technology is a key part of these students’ lives, being on the upper end of their zone of proximal development (ZPD). The use of History Spacebook attempts to move students to a place where they were using previous knowledge in creative ways to learn about historical characters. Therefore, this study followed the substantive theoretical framework of social constructivism. The History Spacebook activity followed the social constructivist paradigm by allowing students to access their prior knowledge of technology and the subject material through working in small social groups to develop their pages, and by taking the material presented to them and constructing their own meaning. The
History Spacebook activity allowed students to use their previous experiences with social media, including Facebook and Twitter, to learn history content. Further, History Spacebook provided a schema for the students to organize their newfound knowledge.

**Engagement Theory**

According to Miliszewska and Horwood (2004), engagement theory is a substantive theory that is based on the three principles of relate, create, and donate. Engagement theory requires students to relate by working in collaborative teams, which places emphasis on communication and social skills in a team-like environment. These teams consider learning to be a creative and meaningful activity, which can be placed in a broader community and is meaningful for others outside the class (Kearsley & Shneiderman, 1998; Miliszewska & Horwood, 2004). Kearsley and Shneiderman (1998) noted that their engagement theory had many similarities with the constructivist approach to learning.

**Relationship of Theoretical Paradigm and Methodology**

This study was based on the tenets of the positivist paradigm. The basic belief of positivism is that reality exists and that it needs to be systematically studied to gain a greater understanding. For the purposes of this study, the researcher believes that there is an order to using technology in the classroom and that order can be discovered in an objective manner. The researcher used surveys and statistical analysis of data collected from students’ pretests and posttests to discover that reality and make determinations about the success or failure of using technology in social studies classrooms. The methodology used for this study falls under the positivist paradigm in that all data were empirically collected through the use of surveys and pre and posttests.
Auguste Comte, in *The Positivist Philosophy* (1858), linked the scientific method used in natural sciences to social sciences and stressed the need to search for empirical facts. This study searched for these empirical facts and tried to discover whether using technology in a constructivist manner will increase student engagement and student test scores. Another seminal figure in implementing positivism in the social sciences, Durkheim (1895) stated that the object of all social sciences is to “define and explain the normal state” (p. 74). The defining of the normal state was developed by using empirical data methodology that fell in the positivist paradigm. Providing empirical evidence of the success or failure of the strategy that was developed and implemented strengthened the results of this study and allowed for greater generalization and prediction for using the strategy on a larger level.

**Rationale for Quantitative Methods**

The researcher used quantitative methods to conduct this study, believing that such methods were well-suited for his research goals to fit in the positivist paradigm. Such methods were useful in examining the use of technology in a constructivist manner and determining whether that use would increase student involvement and comprehension of the content.

**Summary**

This review of literature has shown that the use of technology in social studies classes has many possible benefits for students. Teachers use technology in a variety of ways and while some are student-centered methods, most occur in a teacher-centered manner. The primary use of technology by teachers was to research subjects and resources to use in their classrooms. The review discussed how although teachers felt student-centered activities were beneficial, they tended to revert back to the manner in which they were taught, which was direct instruction.
Research reviewed also showed that the use of technology in a student-centered classroom helped increase student retention of material and also student engagement.

Further, this review reveals that the use of wikis can be beneficial for student-centered activities due to the ease of use and the possibility of collaboration with other students. In this review wikis were defined and several benefits to using wikis in the educational setting were discussed. Teachers used wikis in student-centered methods, which not only helped improve student engagement, but also increased the long-term retention of presented materials.

This review of literature has provided the reader with some background on the research concerned with the general use of technology in education, the benefits and difficulties of using technology, how technology is used in social studies, and defined wikis and their benefits in the educational setting. Chapter III continues with the methods used for the current study.
CHAPTER III

Methodology

The purpose of this study is to determine if using History Spacebook, a wiki activity that requires student research and production, will increase student engagement and achievement in social studies in a secondary Contemporary Issues classroom. The researcher initially designed History Spacebook to be used by social studies students to learn about the roles of key historical characters associated with the Civil Rights Movement. The topic aligns with high school US History Standards (2014): 90: Examine the roles of civil rights advocates including Martin Luther King Jr., Malcolm X, Thurgood Marshall, Rosa Parks, and Stokely Carmicheal among others, and 91: Examine the roles of civil rights opponents including Bull Connor, among others.

This chapter provides an overview of the research design and a description of the students who participated in the study. The overview is followed by a description of the data sources and procedures used. Finally, information about the data analysis is discussed. The research methods used supported the purpose of the study, which was to determine if using History Spacebook, a wiki activity involving student research and production, will increase student achievement and engagement in a social studies classroom.

Approval for this study was secured from the principal of Southwick High School (pseudonym) on October 19, 2013 (see Appendix A). The director of Mustafar County Schools (pseudonym) also gave written permission for this research project on November 19, 2013 (see Appendix B). Institutional Review Board documentation was developed for this study and was approved by the University of Tennessee on November 26, 2013 (see Appendix C). A description of the research design, context, participants, procedures, and methodology follows.
Research Design

The researcher used a quantitative, quasi-experimental research design to compare student engagement and achievement between a class taught in a traditional teacher-centered manner to one taught in a student-centered manner using the wiki activity. Quasi-experimental designs are used often in social science research studies to attempt to control selection bias (Stuart & Rubin, 2008). True randomization of individual subjects is not always possible in social science research, but quasi-experimental research design aims to ensure that no large differences exist between experimental and control groups (Stuart & Rubin, 2008). The students assigned to the control and treatment groups could not be randomized, but the group that was assigned as control and the one that received the treatment were randomly assigned.

A survey approach was used, guided by the recommendations of Creswell (2013), to investigate participants’ perceptions of their engagement during their study of the Civil Rights Movement. Survey research is a desired method of data collection because of its economy, quick turnaround, and standardization of the data (Babbie, 2012).

Context

Southwick (pseudonym) High School serves grades nine-12 in rural Mustafar (pseudonym) County. Mustafar County is a large county in southeast Tennessee with a population of approximately 45,000. Student enrollment was 956 students with 55 full-time teachers. Of the students enrolled at the school, 90% are Caucasian, 2% are African American, and 8% are Hispanic. In comparison to the state of Tennessee, a 2014 report stated that 94% of the population of Tennessee is Caucasian, 2% is African American, and 4% is Hispanic (State and County Quickfacts, 2014). Approximately 60% of the student population of Southwick School meets federal requirements for the economically disadvantaged.
Participants

The participants in this study consisted of students enrolled in the researcher’s two contemporary issues classes, which were composed of a mix of grade levels, including sophomore-, junior-, and senior-level classes.

After the classes were chosen, a coin was flipped to determine which class would serve as the control group and receive teacher-centered instruction and which would serve as the experimental group and receive student-centered instruction. The coin toss determined that the researcher’s fifth period class ($N = 30$) would serve as the control group and his third period class ($N = 20$) would serve as the experimental group. Each class met five days a week for 45 minutes. The only difference between the groups was that the control group met in a regular classroom and the experimental group met in the computer lab.

All participants in each of the groups were White. The control group consisted of 30 participants, of which 20 (67%) were female and 10 (33%) were male. There were 14 seniors (10 female; four male), six juniors (four female; two male), and 10 sophomores (six female; four male). The experimental group consisted of 20 participants, of which 11 (55%) were female and nine (45%) were male. There were 14 seniors (eight female; six male), one junior (female), and five sophomores (two female; three male). The classes were typical rural high school classes, with more socioeconomic diversity than racial diversity. In addition, other than the differences in gender and total number of students in each class, the participants were roughly identical in ability levels, attendance, and work ethic.

Teacher-Centered Instruction Used for Control Group

Traditional teacher-centered methods were used for the class that served as the control group. These methods included lecture, book work from a textbook chapter, and using primary
sources to answer questions. Instruction began by using a KWL chart displayed on the whiteboard, where they described things they already knew about the Civil Rights Movement and things they wanted to know about the Civil Rights Movement. Once the students’ prior knowledge of the subject and what they wanted to learn about it was determined, three presentations were used to help students learn about the different participants and events of the Civil Rights Movement. The presentations included slideshows that included text, images, and videos of civil rights figures and events. Important information for students to note was highlighted in red.

The information was divided into three presentations. The first, *Initial Freedom to Brown v. Board*, provided information covering the span of time from the passing of the 13th Amendment to the U.S. Constitution in 1865, through the primary civil rights case of the Warren Court, Brown vs. Board of Education, in 1954. Students noted 12 specific pieces of information from this presentation (see Appendix D). The second presentation, *People of the Civil Rights Movement*, provided information about the six main figures addressed in the State of Tennessee U.S. History Curriculum Standards, which included Martin Luther King Jr., Rosa Parks, Bull Connor, Malcolm X, Thurgood Marshall, and Stokely Carmicheal. Students noted 20 specific items of information from this presentation (see Appendix E). The third presentation, *Events of the Civil Rights Movement*, provided information on the integration of Clinton High School, the Little Rock Nine, Montgomery Bus Boycott, Nashville Lunch Counter Sit Ins, and the Bombing of the 16th St. Baptist Church in Birmingham. Students noted seven specific items of information from this presentation (see Appendix F).

Students were assigned two tasks from the textbook, *The Americans: Reconstruction to the 21st Century*. Initially, students were given guided reading handouts from the teacher
resource pack in the textbook. The guided reading handouts assisted students in reading the chapter by highlighting the main ideas from the three presentations. Students completed questions (28) at the end of the sections. In addition, they completed the chapter review test at the end of the chapter. These questions varied in degree of difficulty from simple definitions to questions that required students to synthesize material to develop an answer.

Students were also given two primary sources: Martin Luther King Jr.’s *Letter from the Birmingham Jail* and excerpts from the *Black Power Movement* and the *Student Non-Violent Coordinating Committee*. Each of these sources came with a set of six questions that the students were required to answer. The questions varied in level of difficulty from simple recall to higher order thinking (see Appendix G).

**Student-Centered Instruction Used for the Experimental Group**

Students in the experimental group completed a research and development activity in a wiki named History Spacebook that was created by the researcher. As explained earlier, the students were assigned six historical figures (Martin Luther King Jr., Rosa Parks, Bull Connor, Malcolm X, Thurgood Marshall, and Stokely Carmicheal) from the Civil Rights Movement to research. They designed and developed pages in the wiki with specific information. Each page contained a template for the research/development activity, which consisted of a table with two columns and six rows, or 12 cells/sections (see Appendix H). Students inserted a photograph of the person in the first section. The second section contained basic facts about the person, including his or her name, date of birth, hometown, relationship (marital status), as well as additional information that students would develop after synthesizing multiple sources. In the third section, students created “a status” (similar to a Facebook status) for the person and a top news story for the fourth section. In the fifth section, students created faux conversations
between the figure and their friends by using information they synthesized from their research. A short biographical description of the character was included in sixth section.

In the seventh section of the table, students determined the friends of the characters. In this section students were required to choose three people with whom the historical person might be friends from their time period, along with three additional friends from any period of time or even fictional characters from pop culture. Determining the characters’ friends could be simple recall if they discovered people that the character was acquainted with during their life. However, requiring them to choose someone from a different period of time compelled the students to think deeper about the historical character. The students created contact and personal information in the eighth section. They included a faux phone number and email address, as well as personal information that included the characters’ activities, interests, favorite music, books, quotes, and videos. Sections nine through 12 were smaller sections that included (9) groups the character might belong to, (10) education/work experience, (11) relatives, and (12) causes the character may join.

**Development of the Instruments**

**Student Engagement Survey**

The first step in developing the survey involved reviewing the literature to locate existing studies that measured student engagement. A SERVE (Southeast Educational Regional Laboratory) report (Fredricks et. al, 2011) described 21 instruments for measuring student engagement for elementary through high school. After reviewing these instruments, 20 surveys were excluded because of relevance to the study. The remaining survey, the High School Survey of Student Engagement, was examined and excluded because it did not examine student engagement at the classroom level. However, during the process, the researcher found reference
to the National Study of Student Engagement (NSSE, 2000). When reviewing the NSSE, the researcher discovered The Student Engagement Survey (SE), which was developed by Ahlfeldt, Mehta, and Sellnow (2005) using 14 questions from the National Survey of Student Engagement (NSSE, 2000), although the data collected varied from the data collected by the NSSE. The Alpha reliability of the NSSE was 0.824. The questions were chosen “based on measurability of student engagement at the classroom level” (Ahlfeldt et al., 2005, p. 10). Alpha reliability for the 14-item Student Engagement Survey was 0.84.

The 14-item survey developed by the researcher and used in this study to determine student engagement was guided by the Student Engagement Survey (Ahlfeldt et al., 2005), yet none of the same questions were used. The survey contained 14 Likert-scaled questions using a 5-point scale (SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, and SA = Strongly Agree).

Eight questions were created to measure engagement and the six remaining questions were created to determine the students’ enjoyment of the class during the Civil Rights unit of study. In addition, three open-ended questions were added to determine the students’ perceptions of the class and how the participants felt during the study.

**Pretest/Posttest**

The study used a pretest, posttest, and a delayed posttest to determine changes in achievement by the control group and the experimental group. The researcher developed the 20-item multiple choice test (see Appendix I), which included questions on varying levels of Bloom’s Taxonomy. After completion of the instrument, the researcher requested that four experts (veteran high school social studies teachers with a minimum of 8 years of experience) check the questions for historical validity and general understanding. The only change suggested
by the experts was to make one question more readable. After the change was made, a pilot test was administered to 14 students who represented the same general makeup of the study participants. These students were randomly selected from a math class and were asked to participate in the pilot test. All agreed. Two weeks after the test was administered, items were reordered, and the same students took it again. The data were analyzed for any outliers, descriptive statistics, and the two pilot tests were compared using Pearson Correlation. A Pearson product-moment correlation coefficient was computed to assess the relationship between the two pilot tests. There was a positive correlation between the two pilot tests, \( r = 0.843 \) and \( p = 0.000155 \).

**Procedures**

The study was scheduled to take place during a 2-week period (10 school days) during the spring semester of 2014. Direct instruction techniques were used with the control group. These participants were not assigned any form of group work during the study. Participants received three lectures, which consisted of information about civil rights advocates and opponents as well as photos and videos including The Little Rock Nine, The Clinton 12, and The Nashville Lunch Counter Sit-ins and others (see Appendices D, E, and F). In addition, participants were required to complete textbook readings, define terms, identify people and events, as well as answer questions that checked understanding of the chapter. Finally, participants were given two primary sources to read: Dr. Martin Luther King Jr.’s *Letter from the Birmingham Jail* and excerpts from the *Black Power Movement* and the *Student Non-Violent Coordinating Committee*. Once these documents were read, students answered six questions about each of the two documents that varied from simple recall to higher order thinking (see Appendix G).
Prior to beginning the project, the researcher created the wiki, History Spacebook. In addition, he created individual pages to hold information to be gathered on the six advocates and one opponent of the Civil Rights Movement. Folders holding the template for the activity were added to the wiki. The experimental group \((N = 20)\) was divided into teams of two. Participants were instructed to use the Internet to access resources, including websites and videos, to assist in research. Students were encouraged to take notes during the research process to help guide their creation of the Spacebook page.

Prior to beginning the study, the participants in both groups were administered the pretest online. After completion, the data were entered into the SPSS, and descriptive statistics were calculated to determine differences between groups. The day-to-day events that happened within each group are discussed in greater detail below.

**Day 1**

*Control Group:* The instructor began by assessing prior knowledge about the Civil Rights Movement. This was done by completing a K-W-L chart (What I Know and What I Want to Know). Students named several famous civil rights advocates like Martin Luther King Jr., and Rosa Parks but were unable to name others or explain what they wanted to know.

*Experimental Group:* The students in the experimental group reported to the computer lab and registered for accounts in PBworks, the wiki software used in the study. Little else occurred because email confirmation of the accounts took much more time than expected. The students were given a print-based copy of the template that provided the information to locate during their research (Appendix H).
Day 2

*Control Group:* The first lecture and presentation, *Initial Freedom to Brown v. Board,* provided information covering the span of time from the passing of the 13th Amendment to the U.S. Constitution in 1865, through the primary civil rights case, Warren Court, Brown vs. Board of Education, in 1954. During the presentation four videos were shown. One of the videos presented the *Plessy v. Ferguson* court case and the other three talked about Thurgood Marshall and the Brown vs. Board case.

*Experimental Group:* Participants arrived at the computer lab and logged into the wiki. They began research on Martin Luther King and Rosa Parks using requirements listed on the template. They located photos, which served as profile pictures, to upload. This process happened a little slowly as students had trouble with the software. The instructor reminded them how to upload photos to the wiki and insert them in a page. The work started to flow at a brisker pace after students became more comfortable with the process. The teacher/researcher spent the remainder of the class assisting with formatting issues using the wiki software.

Day 3

*Control Group:* The second presentation, *People of the Civil Rights Movement,* provided information about the six main figures addressed in the State of Tennessee U.S. History Curriculum Standards, which included Martin Luther King Jr., Rosa Parks, Bull Connor, Malcolm X, Thurgood Marshall, and Stokely Carmicheal. This lecture included many photos of the Civil Rights Movement. Bull O’Connor, an opponent of the Civil Rights Movement, was discussed during this presentation. A video about George Wallace blocking the door at the University of Alabama was included. Finally, Diane Nash and the role she played with the
Nashville Lunch Counter Sit Ins and Betty Friedan, the founder of the National Organization of Women, were discussed. The lecture had to be continued the next day.

**Experimental Group:** The students logged into the wiki and began work. A few students asked to clarify the meaning of *personal information* and *contact information* and what types of information would be acceptable to enter into some of the areas. Students spent the remainder of the class researching basic facts about the civil rights advocates or opponents they had chosen to study. The teacher/researcher spent the remainder of class going from team to team looking at the student’s sources and assisting with them with formatting issues in the wiki.

**Day 4**

**Control Group:** The lecture *People of the Civil Rights Movement* was continued and the remaining civil rights advocates were discussed. When discussing Martin Luther King Jr., several photos were shared of Dr. King that showed various locations that were important in his life. Malcolm X was then discussed and a video of an interview he gave was shared. The lecture concluded with Stokely Carmicheal and Rosa Parks, using more photos of each of these civil rights advocates.

**Experimental Group:** Students logged into the wiki and began to research their figures. Students completed factual information, such as birthplace, relationships (spouse and children), and hometown, to more complex information, such as creating the top news story, which required synthesizing multiple resources and reporting a significant event in the advocate’s life. For instance, a top news story for Martin Luther King might be his “I Have a Dream” speech. The teacher/researcher observed the students as they completed research and moved about the teams, making sure there were no technical issues. Students did not have as many questions about technology or formatting but did ask questions about the resources they found.
Day 5

Control Group: The third lecture and presentation, *Events of the Civil Rights Movement*, was given and provided information on the integration of Clinton High School, The Little Rock Nine, Montgomery Bus Boycott, Nashville Lunch Counter Sit Ins, and the Bombing of 16th St. Baptist Church in Birmingham. This presentation included no photos but discussed the events and then shared 10-minute videos about each of the events mentioned above.

Experimental Group: Progress was checked, and several of the teams had completed two of their Spacebook pages. Many had started working on the third civil rights advocate or opponent and were working diligently. The ease of checking a student’s work was one of the advantages of using the wiki. The teacher/researcher reviewed Spacebook pages and made comments to the students regarding formatting through the wiki. Some of the students asked questions about the friends’ section and about how many posts were needed on the wall. Students were reminded each advocate or opponent must have three friends from the same time period and three friends who come from a different period of time or from pop culture.

Day 6

Control Group: Students were given an assignment out of the U.S. History textbook and had to work on the first two sections of the civil rights chapter in the textbook. In these sections students had to define multiple terms, which included important people, events, and terms related to the Civil Rights Movement. Then students worked on three questions that assessed their reading comprehension and one that asked them to evaluate or synthesize the reading.

Experimental Group: The participants continued work from the previous class or began research/development on third and fourth civil rights advocates or opponents. When the teacher/researcher talked to the participants about their progress, several remarked that the
second and third figures were easier to create because they had practice and knew how to format and insert items into the wiki. Students did not ask as many questions and worked again on researching the new civil rights advocates and opponents they had just started. For the remainder of the class the teacher/researcher went from team to team checking their work and offering suggestions.

Day 7

Control Group: Students continued to work on the first two sections of the civil rights chapter in the textbook and the third section was added. Again, the students had to define people, events, and key terms of the Civil Rights Movement, as well as complete three questions that assessed reading comprehension and higher order thinking.

Experimental Group: The participants entered the computer lab and continued to work on their Spacebook pages. Some had almost finished the fourth page for their advocate or opponent. A few students continued to work on their first two pages. The teacher/researcher observed students working and offered them suggestions on formatting issues and ideas on other sites to research. Students were reminded that they should watch interviews and speeches given by the civil rights advocates and opponents.

Day 8

School was cancelled the next day due to extremely cold weather and the chance for snow, which caused the study to last three weeks instead of two. The following day a substitute teacher taught the class.

Control Group: The students were given several pages out of the workbook that accompanied the textbook they were using. The workbook pages went along with the textbook
chapter and included matching and multiple choice type questions about the reading. The substitute said the class was disruptive and did not work well on the assignment.

*Experimental Group:* The students reported to the computer lab and worked on the Spacebook project. The substitute reported that the treatment group was in the computer lab and working on their assignment when she arrived, and they all appeared to be on task for most of the period.

*Day 9*

School was released early because it started snowing before either group met and was cancelled the next three days because of snow. Data collection was continued on the first day school was in session after the snow.

*Control Group:* Students were given two primary sources, Dr. King’s letter from the Birmingham Jail and a leaflet from the Chicago Student Non-Violent Coordinating Committee, to read and answer questions. Six questions were asked about Dr. King’s letter, which varied in levels from factual recall to higher order questions. Six questions asked about the Chicago Student Non-Violet Committee; again, these questions varied in level from factual recall to higher order questions.

*Experimental Group:* Several students had completed work on five of the six civil rights advocates and opponents. Some of the students asked questions about people who would be friends of Bull Connor or Malcolm X. The teacher/researcher spent time answering the questions about who would be friends of some of the lesser known members of the Civil Rights Movement.
Day 10

*Control Group:* Students completed work on the two primary sources. Once they were finished, a discussion was held about the documents and what students gained from reading them. After discussing the primary source documents, the L portion of the KWL chart (what we learned) was discussed.

*Experimental Group:* Without warning, the computer lab was being used for a state-mandated writing assessment. Thus, the group had to be moved to a small computer lab in the corner office of the library to work on their Spacebook pages. The teacher/researcher was not told about the use of the computer lab, so it took almost half of the class to get the other lab secured and the students moved. This lab only had eight computers; therefore, students doubled up to complete their work. They worked hard and had very few questions. Most students finished their sixth character and only had some minor items to complete.

Day 11

After losing most of the previous day due to snow and missing a day because of a substitute teacher, the teacher/researcher continued the work into day 11 and gave both groups time to finish their assignments.

*Control Group:* Students were given time to complete all the assignments in the class. They were asked if they had questions about any of the information that was covered. All of the work, including their notes, was submitted at the end of the class period, and students were told to prepare for the posttest the next day.

*Experimental Group:* The treatment group met in the larger computer lab. The students made some final edits to the Spacebook pages. Some of the students had not finished all six characters and were told to try to finish at least the one they were working on at the time. The
teacher/researcher went from team to team, checking their work and offering last-minute advice about formatting, pictures, and friends list. Students were told to prepare for the posttest the next day.

Day 12

The control group and the treatment group were taken to the computer lab to take the Student Engagement Survey and the posttest.

Three months later

The control group and the treatment group were taken to the computer lab, and the delayed posttest was administered.

Data Analysis

Research Question 1

The first research question asked how the constructivist use of a wiki affects student engagement in a social studies classroom. A 14-question student engagement survey using a 5-point Likert scale (SD = 1; SA = 5) was administered to both groups. The results of the survey were placed into SPSS and descriptive statistics were run. An Independent t-test was administered on each of the 14 questions to compare the level of engagement between the control and experimental group. The survey also had three open-ended questions. The open-ended questions were analyzed thematically according to methods suggested by Brogden and Biklen (2007). The researcher examined responses, looking for common themes. Recurring phrases and ideas were coded and organized into categories about key ideas from participants’ responses for each of the three questions.
Research Question 2

The second research question asked how the constructivist use of a wiki affected short-term student achievement in a social studies classroom. Students in each of the groups took a pretest the first day of the study. The results were placed into SPSS and descriptive statistics were run. An Independent $t$-test was administered to compare the mean scores of the group to determine if there were differences prior to the study. When the intervention was complete, the students took a posttest and the data were placed into SPSS where descriptive statistics and a mixed ANOVA were run to determine the effect of using the wiki, History Spacebook, on short-term achievement.

Research Question 3

The third research question asked how the constructivist use of a wiki affected long-term student achievement in a social studies classroom. Approximately 3 months after the beginning of the study students took a delayed posttest. The results were placed into SPSS and descriptive statistics and a mixed ANOVA were run to determine the effect of using a wiki, History Spacebook, on long-term student achievement.

Summary

This chapter provided an overview of the research design, a description of the participants, and specific information about the procedures and data analysis used in this study. The setting of the study was a rural high school, and the participants’ grade levels included sophomore to senior, with the control class having 30 participants and the experimental group having 20 participants that included students of varying grade levels from sophomore to seniors. The topic of this study was the Civil Rights Movement. The control group received traditional teacher-centered instruction such as lecture, work from a textbook, and answering questions
about primary sources. The experimental class completed a research and development activity in the wiki named History Spacebook.

The chapter continued by discussing the development of the pre and posttest that was used to determine student retention of the material presented. Also, a student engagement survey was modified from the National Survey of Student Engagement (2000). Finally, the research procedures were discussed in detail with a description of events that occurred in each of the classes on a daily basis.
CHAPTER IV

Results and Discussion

Chapter four presents the results of the data analysis for the three research questions in the study. The chapter begins with a description of the participant demographics. Next, the chapter is divided into the three research questions as well as the results from statistical analysis.

Participant Demographics

Participants attended a rural high school in the southeastern United States and were selected from social studies classes within the school that were taught by the researcher. Two social studies (contemporary issues) classes provided the participants for the study and were designated as either the control group or the experimental group. Of the 30 consent forms submitted by students in the control group, 28 students (93%) completed the survey. Of the 20 consent forms submitted by students in the experimental group, all (100%) completed the survey.

The control group consisted of 28 participants, of which 20 (71%) were female and eight (29%) were male. There were 12 (43%) seniors (10 females; two males), six (21%) juniors (four females; two males), and 10 (36%) sophomores (six females; four males). The experimental group consisted of 20 participants, of which 11 (55%) were female and nine (45%) were male. There were 14 (70%) seniors (eight females; six males), one (5.0%) junior (female), and five (25%) sophomores (two females; three males) (see Table 1).

Research Question 1: How does the constructivist use of a wiki affect student engagement in a social studies classroom?

Engagement was measured by analyzing the results of the Student Engagement Survey that examined participants’ perceptions of their engagement during their study of the Civil Rights Movement. This 14-item survey used a 5-point scale (1 = strongly disagree; 5 =
Table 1.

Demographics

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>28 (100%)</td>
<td>20 (100%)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>20 (71%)</td>
<td>11 (55%)</td>
</tr>
<tr>
<td>Male</td>
<td>8 (29%)</td>
<td>9 (45%)</td>
</tr>
<tr>
<td><strong>Grade Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10 (36%)</td>
<td>5 (25%)</td>
</tr>
<tr>
<td>11</td>
<td>6 (21%)</td>
<td>1 (5%)</td>
</tr>
<tr>
<td>12</td>
<td>12 (43%)</td>
<td>14 (70%)</td>
</tr>
</tbody>
</table>

Results are seen in Table 2. In addition, participants were asked to respond to three open-ended questions at the conclusion of the survey.

The mean and standard deviation for each question were determined. Independent Samples $t$-tests were run to determine if there was a significant difference between the control and experimental groups on each of the 14 questions. A significance was found for two of the 14 survey responses. The experimental group reported significance ($t = 2.425$, $df = 46$, $p = 0.019$, $d = .709$) when asked if they had to synthesize new ideas and information into new, more complicated interpretations. Higher means were reported by the experimental group ($t = 2.301$, $df = 46$, $p = 0.026$, $d = .674$) when asked if they worked more with other students during the unit.
Table 2.

*Student Engagement Survey Control and Experimental Means and Standard Deviations*

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy Social Studies Classes.</td>
<td>Cont.</td>
<td>28</td>
<td>2</td>
<td>5</td>
<td>4.11</td>
<td>.698</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.95</td>
<td>.999</td>
</tr>
<tr>
<td>I enjoyed learning about Civil Rights Movement.</td>
<td>Cont.</td>
<td>28</td>
<td>2</td>
<td>5</td>
<td>3.75</td>
<td>.799</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>3.60</td>
<td>.940</td>
</tr>
<tr>
<td>I enjoyed the way in which this unit was taught.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>4.00</td>
<td>.816</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>3.90</td>
<td>.852</td>
</tr>
<tr>
<td>I found myself looking forward to coming to class more during this unit.</td>
<td>Cont.</td>
<td>28</td>
<td>2</td>
<td>5</td>
<td>3.67</td>
<td>.920</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>3.75</td>
<td>.851</td>
</tr>
<tr>
<td>I enjoyed this unit more than other units we have discussed.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>3.00</td>
<td>.943</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>3.35</td>
<td>.813</td>
</tr>
<tr>
<td>I often found my mind wandering during class.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>2.96</td>
<td>1.170</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.45</td>
<td>1.099</td>
</tr>
<tr>
<td>I found myself thinking about what I was learning in class even when I was not in class.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>3.21</td>
<td>1.166</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.10</td>
<td>1.021</td>
</tr>
<tr>
<td>I found myself discussing what I was learning during this unit with others.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>4</td>
<td>2.89</td>
<td>1.031</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.20</td>
<td>1.056</td>
</tr>
<tr>
<td>During this unit, I memorized facts.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>3.46</td>
<td>.999</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.35</td>
<td>.988</td>
</tr>
</tbody>
</table>
Table 2. (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Group</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had to analyze basic parts of an idea.</td>
<td>Cont.</td>
<td>28</td>
<td>2</td>
<td>5</td>
<td>3.36</td>
<td>.678</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>3.75</td>
<td>.716</td>
</tr>
<tr>
<td>I had to synthesize ideas and information into new more complicated interpretations.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>3.00</td>
<td>.903</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>3.65</td>
<td>.933</td>
</tr>
<tr>
<td>I worked more with other students during this unit.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>5</td>
<td>3.07</td>
<td>.858</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>5</td>
<td>3.70</td>
<td>1.031</td>
</tr>
<tr>
<td>I worked with students outside of class.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>4</td>
<td>2.21</td>
<td>.876</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>4</td>
<td>2.60</td>
<td>.883</td>
</tr>
<tr>
<td>I tutored or taught class materials to other students in the class during this unit.</td>
<td>Cont.</td>
<td>28</td>
<td>1</td>
<td>4</td>
<td>2.21</td>
<td>.833</td>
</tr>
<tr>
<td></td>
<td>Exp.</td>
<td>20</td>
<td>1</td>
<td>4</td>
<td>2.30</td>
<td>1.031</td>
</tr>
</tbody>
</table>

It should be noted that survey question six asked participants if they often found their minds wandering during class. When analyzing the results for survey question six, a higher mean score signifies a decreased level of engagement instead of an increase like the other questions. Results are seen in Table 3.

**Open-Ended Questions**

*Question 1.* Participants in the control and experimental groups were asked, *What were your perceptions of class during our study of the Civil Rights Movement?* This question was analyzed according to Brogden and Bicklen (2007) as described in Chapter III.
Table 3.

*Independent Samples t-Tests for Engagement*

<table>
<thead>
<tr>
<th>Item</th>
<th>Levene’s Test for Quality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>Sig</td>
</tr>
<tr>
<td>I enjoy Social Studies Classes.</td>
<td>1.413</td>
<td>.241</td>
</tr>
<tr>
<td>I enjoyed learning about Civil Rights Movement.</td>
<td>1.178</td>
<td>.283</td>
</tr>
<tr>
<td>I enjoyed the way in which this unit was taught.</td>
<td>1.299</td>
<td>.260</td>
</tr>
<tr>
<td>I found myself looking forward to coming to class more during this unit.</td>
<td>1.09</td>
<td>.743</td>
</tr>
<tr>
<td>I enjoyed this unit more than other units we have discussed.</td>
<td>1.384</td>
<td>.538</td>
</tr>
<tr>
<td>I often found my mind wandering during class.</td>
<td>.002</td>
<td>.962</td>
</tr>
<tr>
<td>I found myself thinking about what I was learning in class even when I was not in class.</td>
<td>1.154</td>
<td>.288</td>
</tr>
<tr>
<td>I found myself discussing what I was learning during this unit with others.</td>
<td>.003</td>
<td>.954</td>
</tr>
</tbody>
</table>
Table 3. (Continued)

<table>
<thead>
<tr>
<th>Item</th>
<th>Levene’s Test</th>
<th>t-test for Equality of Means for Quality of Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig</td>
</tr>
<tr>
<td>During this unit, I memorized facts.</td>
<td>.005</td>
<td>.941</td>
</tr>
<tr>
<td>During this unit, I had to analyze basic parts of an idea.</td>
<td>.399</td>
<td>.531</td>
</tr>
<tr>
<td>During this unit, I had to synthesize ideas and information into new more complicated interpretations.</td>
<td>.433</td>
<td>.514</td>
</tr>
<tr>
<td>I worked more with other students during this unit.</td>
<td>.630</td>
<td>.432</td>
</tr>
<tr>
<td>I worked with students outside of class during this unit.</td>
<td>.015</td>
<td>.905</td>
</tr>
<tr>
<td>I tutored or taught class materials to other students in the class during this unit.</td>
<td>1.951</td>
<td>.169</td>
</tr>
</tbody>
</table>

*p < .05
**Control group perceptions.** Participants in the control group enjoyed the class and topic. More than half (63%) of the participants responded with very short statements to answer the first question. Typical statements were “I liked class,” “It was interesting,” and “It was fun.” Other perceptions were more detailed, and some participants voiced concerns with the sensitive nature of the topic. One participant stated, “I loved learning about the Civil Rights Movement,” while another said, “The information was well thought [out] although the topic was infuriating.” Another participant stated she/he enjoyed learning about the Civil Rights Movement even though she/he said it “is a very touchy subject because people are still racist.” The participant went on to add that this [Civil Rights Movement] is a subject that needed to be covered, saying, “It’s a good topic to cover to end racism,” and another said, “I learned a lot about what African Americans had to go through.”

**Experimental group perceptions.** Three themes surfaced from comments in the experimental group. The first revealed that participants enjoyed the constructivist use of technology. One participant stated, “I had a great time this week learning about civil rights leaders by using technology. It not only brings a form of new way of learning . . . but also brings some fun and imagination which causes us to use our brains and actually think.” Another student echoed this by saying, “It was a creative way to teach [us] about history without boring [us] to death.” Another student added, “I really thought that this was a great way of teaching us about the Civil Rights Movement by using something familiar . . . it is an interesting challenge seeing as how we have to interpret the little things of the civil rights activists’ lives into things like who they would have as friends of [in] a different time.”

The second theme was collaboration. Participants enjoyed working with a partner. One participant stated, “I liked doing Spacebooks, especially with a partner,” while another said, “I
would rather work with a partner on a project than to hear a lecture. I learn better doing things like this.” Another student stated that “This was a good way to interpret [integrate] social media into a classroom environment.”

The final theme involved a negative view of the assignment. Four (20%) of the participants in the experimental group voiced negative perceptions of the History Spacebook activity. One stated, “I wish we could’ve learned more than just what we were looking up. A deeper concept of the Civil Rights Movement like having speakers and documentary videos with people that went through the movement along with the leaders [would have been better].” Another student added, “I don’t and never have worked well with technology,” while another said that he was “confused” during class but did not explain why.

Although both groups indicated enjoyment of the unit of study, the control group primarily used short responses when discussing their perceptions, whereas the experimental group used richer descriptions and talked about how they enjoyed the constructivist use of the technology and working with groups. However, not all students in the experimental group enjoyed the use of technology as some students felt they did not learn well by using the wiki.

Question 2. Students in the control group and the experimental group were asked, How did you feel during the study of the Civil Rights Movement? This question was analyzed according to Brogden and Bicklen (2007) as described in Chapter III.

Control Group. Two themes surfaced from analysis of the comments by the control group. The first was that participants had an emotional connection with the subject—they felt anger and sadness for African Americans during the Civil Rights Movement. One participant said, “I think racism is a horrible concept,” while other participants offered simpler statements, such as, “I felt mad for this situation,” “It was horrible,” and “I felt bad for how they [African
Americans] were treated.” One participant offered a richer description of his/her feelings when he/she said, “I hate the thought [of] that happening to people, and I couldn’t imagine going through that or watching others go through it. It was cruel and wrong and I don’t understand how people can hate someone on the basis of their skin.”

The second theme that emerged in the control group was that civil rights activists displayed incredible courage during this time period. One participant said, “I feel like the Civil Rights Movement was a great display of courage; however, it should have never been necessary. Equality should be a birth right, not something that must be fought for,” and another participant echoed that statement with “I think racism is a horrible concept, but the Civil Rights Movement was a beautiful display of courage, support, and righteousness.”

**Experimental Group.** Participants in the experimental group provided richer, fuller responses to the questions. Three general themes emerged. The first theme involved the technology used. Three (15%) participants stated that they found the software program difficult to use. One of the participants stated, “I feel [felt] confused and aggravated[.] This is difficult and I don’t [didn’t] learn from it,” and another participant said, “Technology to me is very confusing; however, it is not too horrible to do.” The third participant stated that he/she felt “challenged, as a computer is not exactly a farm boy’s strong point.”

Other participants liked using technology in a constructivist manner and felt that it was a good thing. One participant commented, “I felt happy about the way we implemented technology into the process of learning about history.” The participant continued expressing support for the activity by saying that “It’s a new way [to learn] which I think is a very effective one.” Another participant remarked, “This should be the way that a majority of classes should
be taught,” and another added, “This technique of teaching to me [is] very relatable. Every single teenager is already computer competent so it only makes sense to teach using technology.”

Finally, the activity took participants in the experimental group to a higher level of learning by making them synthesize material and create a product from multiple sources. One participant pointed out, “I do feel more educated about the Civil Rights Movement now because we actually had to think and apply our own thoughts into this project.”

In summary, the results of question two related differences in the responses between the control and experimental groups. The control group discussed having an emotional connection with the content being taught and how they viewed the civil rights leaders as being extremely courageous, while the experimental group spent their time discussing the difficulty with the technology by some and the enjoyment of using the technology by others. In addition, the experimental group differed from the control group by discussing the need to use higher order thinking skills to work within the wiki.

**Question 3.** Students in the control group and the experimental group were asked, *What did you do in class?* This question was analyzed according to Brogden and Bicklen (2007) as described in Chapter III.

**Control group.** The control group’s responses were short and lacked depth with only one theme arising from the analysis: the “notes.” Seventy-five percent (15) of the participants made comments about taking notes, with remarks including, “took notes,” “We listened to lecture and took notes,” and “We took notes and discussed.”

**Experimental group.** Participants in the experimental group used richer descriptions to answer this question. Two themes emerged from their remarks. The first was that participants perceived the creation of a wiki page for historical characters to be similar to that of a Facebook
page. One participant stated, “We essentially created Facebook-like pages for the civil rights activists,” while another participant said, “Research important historical facts to basically create a social networking page for important historical figures.” Several of the participants referred to the pages as creating Spacebook pages, with one stating, “We have made Spacebooks profiles for Rosa Parks and Martin Luther King Jr.,” and another stating, “Made Spacebook for Rosa Parks and learned about her background and facts I didn’t really know before.”

The second theme echoed previous perceptions that participants had to use higher order thinking skills to create their pages. “We made fake Facebook accounts for Rosa Parks and Martin Luther King Jr. We had to think deep about who they may communicate with if they had a Facebook back then,” while another participant added, “[we] learned about her background and facts I didn’t really know before.” The second and third research questions are answered by using both descriptive and inferential statistics to determine differences in achievement.

The control group used short responses, while the experimental group elaborated what they did during the study. The control group responded by saying they took notes, while not mentioning any of the work completed during class. The experimental group responded by discussing how they enjoyed the similarity of History Spacebook to Facebook and other social media pages. They also mentioned the need to think more critically about sources when creating the Facebook-like wiki pages.

**Research Question 2: How does the constructivist use of a wiki, History Spacebook, affect short-term student achievement?**

The scores from the pre/post exams were used to answer the second and third research questions. The pre/post exams covered pertinent content regarding the Civil Rights Movement and consisted of 20 multiple-choice questions that were developed by the researcher. The pretest
and posttest exams (see Appendix H) were administered prior to and after the instruction using an online assessment tool.

Participants’ pretests were graded and their scores were recorded. The data were input into SPSS software and descriptive statistics were run. Results revealed that mean scores for the control group \((N = 28)\) were \(M = 58.57, SD = 18\), and mean scores for the experimental group \((N = 20)\) were \(M = 57.00, SD = 20\). To determine whether the pretests differed between the two groups, an Independent Samples \(t\)-test was used. The results of the \(t\)-test are \(t = .281, df = 46, p = .780, d = .08\). The \(p\)-value is greater than .05; therefore, it is reasonable to conclude that there is no significant difference in the mean pretest scores between the groups.

Students were given a posttest at the end of the unit, and students’ scores were analyzed using descriptive and inferential statistical methods to determine whether there was an increase in short-term student achievement. A descriptive statistical analysis of the posttest scores was conducted and is shown in Table 4.
Table 4.

Descriptive Statistics Pre/Posttest/Delayed

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Pre</td>
<td>28</td>
<td>20</td>
<td>95</td>
<td>58.57</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>28</td>
<td>5</td>
<td>100</td>
<td>61.61</td>
</tr>
<tr>
<td></td>
<td>Delayed</td>
<td>28</td>
<td>15</td>
<td>95</td>
<td>63.39</td>
</tr>
<tr>
<td></td>
<td>Valid N</td>
<td>28</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>Pre</td>
<td>20</td>
<td>15</td>
<td>85</td>
<td>57.00</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>20</td>
<td>30</td>
<td>100</td>
<td>73.25</td>
</tr>
<tr>
<td></td>
<td>Delayed</td>
<td>20</td>
<td>20</td>
<td>100</td>
<td>78.00</td>
</tr>
<tr>
<td></td>
<td>Valid N</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A two-way mixed ANOVA was run to determine the effect of using the History Spacebook activity on short-term student achievement as compared to teaching a class in a direct instruction manner. There is one within subject (time: pretest, posttest) and one between subjects time (group). A within subject factor is one that is repeated within a subject. A between subject factor is usually a type of grouping factor (control and experimental) and the subject can only belong to one group.

The results of the mixed ANOVA revealed that an interaction between Time and Group was not significant with $F(1,46) = 2.333, p = .133, d = .048$. There was no difference in achievement between the control group and experimental group; they both increased similarly. However, the analysis of within subjects at all students’ testing ($n = 48$) revealed a significant
main effect of time, \( F(1,46) = 4.970, p = .031, \ d = .098 \). This finding showed that both the control and experimental test scores increased significantly between the pretest and the posttest.

**Research Question 3: How does the constructivist use of a wiki, History Spacebook, affect long-term student achievement in social studies?**

Students were given a delayed posttest 11 weeks after the pretest, and students’ scores were analyzed using descriptive and inferential statistical methods. A 2X2 mixed ANOVA was used to determine whether there were differences between pretest and delayed posttest and whether this difference was the same between the control and experimental groups. A descriptive statistical analysis of the delayed posttest scores was conducted and the results are shown in Table 4. A two-way mixed ANOVA was calculated to determine the effect of using the History Spacebook activity on long-term student achievement as compared to teaching a class in a direct instruction manner. The results of the mixed ANOVA reveal that the interaction between Time and Group was not statistically significant, \( F(1,46) = 4.030, p = .051, \ d = .048 \).

The \( p \)-value of .051 is approaching significance but does not meet the level of significance of .05 that was set. However, there appears to be a difference in how the two groups performed, with the experimental group increasing the mean score by 21.00 points and the control group increasing by only 4.82 between pretest and delayed posttest (see Figure 1). The main effect of time is significant, \( F(1,46) = 10.266, p = .002, \ d = .182 \). This finding indicates that both groups increased test scores between the pretest and delayed posttest. The main effect of Group Between Subjects was not significant, \( F(1,46) = 2.100, p = .154, \ d = .044 \).
Figure 1.

*Mean Comparison of Pretest, Posttest, Delayed Posttest Between Groups*

**Summary**

This chapter presented the analysis of the data collected to answer the three research questions that guided the study. Student engagement was examined using traditional teaching methods and constructivist methods using a wiki. While there were no significant differences discovered between the two groups on the *Student Engagement Survey*, there were some interesting perceptions that emerged from the open-ended questions. Participants in both groups really enjoyed the content being presented, and several in each group expressed an emotional connection to the people being discussed. The participants in the experimental group enjoyed how they were using Facebook-like technology to learn about historical characters and how they had to think more critically about the subject when they were creating the pages.

Students’ short- and long-term achievement was examined by using both descriptive and inferential statistics. There was no significant difference found between the groups when
comparing pretest and posttest scores. However, the experimental group increased their mean test score by 16 points compared to only a 3-point increase by the control group.

The scores on the pretest and a posttest given approximately 3 months later were compared, and the experimental group was approaching a significant difference in the test scores; however, the results were not significant. The mean scores for the experimental class increased 21 points, whereas the control class increased only 5 points. While not statistically significant, classroom teachers would consider that large of an increase in scores to be very valuable.

Chapter V presents how this study contributes to current literature, impacts social science education, and offers conclusions and recommendations for further research on the constructive use of wikis.
CHAPTER V

Conclusions and Recommendations

Chapter V provides conclusions based on the findings in this research study. Additionally, the impact of the study on social studies education and recommendations for further research on the constructive use of wikis are offered. The conclusions are based on the findings presented in Chapter IV—results of a student engagement survey with open-ended questions (Appendix J) and pretest, posttest, and delayed posttest (see Appendix I) scores.

Conclusions

The findings of this study reveal benefits from the use of the wiki, History Spacebook. Synthesizing ideas and information into new, more complicated sources and working with other students were the significant findings revealed from the Student Engagement Survey. Students in both groups enjoyed the unit of study. While the participants in the control group conveyed a greater emotional connection to the horrific nature of the situations associated with the Civil Rights Movement, participants in the experimental group spoke favorably of the collaborative nature of the wiki, whereas some reported displeasure with using the technology. Achievement between pretest/posttest scores was analyzed statistically and revealed no significant differences in short-term or long-term achievement. Conclusions are organized by each research question.

Question 1

Question one asked how the constructivist use of a wiki affected student engagement. Engagement was measured by examining the results of the Student Engagement Survey, including three open-ended questions (see Appendix J). Two of the 14 questions revealed a significant difference between groups. In contrast to the control group, students in the experimental group reported they were required to think critically as they synthesized ideas and
information to develop new, more complicated sources. This conclusion is in line with the findings of Taylor and Parsons (2011), who stated that students must be “collaborative critical thinkers” (p. 7). Kingsley and Brinkerhoff (2011) echoed the thought that technology in social studies would lead to greater reasoning skills and critical thinking.

This difference is possible because students in the control group were given only two primary source documents to read and to complete short-answer questions. The experimental group was provided with multiple resources. Having access to a variety of sources, especially primary sources, was one of the benefits discovered by Van Hover et al. (2004) when using technology in social studies. Having these sources available could explain why the experimental group reported a significantly higher score on the survey question compared to the control group.

A second significant difference between groups was discovered when analyzing students’ responses to questions regarding working with other students during the unit. A wiki, by its very nature, allows for greater student collaboration. Vaughan (2010) and Neumann and Hood (2009) both found that students reported a greater level of engagement because of the collaborative essence of the Web 2.0 tools, most notably the wiki. Kingsley and Brinkerhoff (2011) stated that the use of technology in social studies classes could enhance a student’s creativity and collaboration. The ease of communication among students and the teacher within the wiki could be a leading factor regarding why there was a difference in the experimental and control groups when looking at this question. Another possible cause for the difference is that the control group was being taught using a teacher-centered method and did not have the opportunity for collaboration when completing the assignments in that class. The students in the experimental group responded to the open-ended questions by discussing the collaborative nature of their assignment. The experimental group’s sentiment of working more closely with other students is
in line with the findings of other researchers and their discussion of wikis and their use to collaborate on projects (Kingsley & Brinkerhoff, 2011; Neumann & Hood, 2009; Vaughan, 2010).

The literature reports that the use of technology, especially wikis, promotes engagement in the groups using technology (Cole, 2009; Laird & Kuh, 2005; Neumann & Hood, 2009; Vaughan, 2010). This finding was in contrast to the findings of the Student Engagement Survey in this study. One possible cause could be the emotional nature of the topic being studied, the Civil Rights Movement. Participants in the control group found the topic to very emotional and some even expressed anger in their responses to the open-ended questions. The emotional state of the students in the control group could lead them to report higher levels of engagement even though they were taught in a teacher-centered manner.

Another finding disclosed in the open-ended questions was that some participants in the experimental group did not like using the technology. One student stated they had never “worked well with technology,” and another said that learning in a more traditional way would have been better. These findings were similar to those of Alexander (2014), who conducted a study with sixth graders who created multimedia projects using historical images. Perhaps the participants who did not like the technology would have benefited from some smaller projects before this study to familiarize them with the wiki platform. These exercises would allow participants to develop comfort with the technology and build technology skills prior to the project. Langran and Alibrandi (2008) discussed a similar problem in using technology and suggested that it could be overcome with extensive scaffolding by the teacher.

After reviewing the findings of the Student Engagement Survey and open-ended questions, I suggest that teachers scaffold the use of the technology before implementing.
Students should be given smaller and simpler tasks to complete to acquaint them with the wiki software. Creating the student accounts and ensuring they are in working order before starting the assignment is a key step in the process. In addition, the students should create a single page and insert an image and a textbox with a short description about themselves. Finally, the scaffolding should continue as students insert a small table and add text and images to simulate what they will be doing during the activity.

**Question Two**

Question two asked how the constructivist use of a wiki, History Spacebook, affected short-term student achievement. Short-term achievement was measured by participants’ taking a posttest immediately after the unit was completed. Although there was an increase in mean scores of both groups, no statistical difference between groups was found. The mean score of the experimental group was 13.21 points higher than that of the control group. These findings differed from the findings of Heafner and Friedman’s 2008 study in which students used a wiki to create pages regarding World War II. In that study, participants in the teacher-centered group outscored the participants in the experimental group on their posttest by 6.7 percentage points (Friedman & Heafner, 2007).

One possible reason for the greater mean scores of the experimental group is that the product created in History Spacebook was similar to a Facebook page, and Facebook is familiar to most students. Students in the experimental group described creating “Facebook like pages” or creating “a social networking page” when responding to the open-ended questions. The use of technology that is familiar to the students could be what led to the increase in mean scores by the group that used technology in this study compared to the higher mean scores by the group that was taught in a teacher-centered class, as Friedman and Heafner (2007) also found.
Although there was no significant difference between the groups when the two-way mixed ANOVA was administered, the mean of both groups increased between pretest and posttest. The mean for the control group grew by 3.04 points, whereas the mean for the experimental group grew by 16.25 points. Even though there was no statistical significance revealed, the researcher’s opinion is that most teachers would prefer to use an activity that improved student scores by 13 points.

Although no significant difference was found when comparing the control and experimental groups, when analyzing the within subjects or all the participants (n = 48), a significant difference was found. This finding showed that both the control and the experimental test scores increased between pretest and posttest. This increase in both groups could be attributed to the topic covered. The Civil Rights Movement is an emotional topic that is still relevant today, and participants in both groups mentioned how much they enjoyed the topic, even though some students in the control group expressed anger.

Question Three

Question three asked if the use of History Spacebook increased long-term student achievement. Long-term achievement was measured by participants taking a delayed posttest 3 months after the unit was completed. Although there was no statistical difference between the two groups, the mean scores for both groups did increase. The mean score of the experimental group was 14.31 points higher than that of the control group. These findings were similar to those of Heafner and Friedman (2008), who had students use a wiki to create web pages for World War II. The students in the class that used the wiki outscores the students on their posttest by 22 percentage points (Friedman & Heafner, 2007).
One possible difference in the higher mean scores by the experimental group was that the participants had to synthesize ideas and information into a new, more complicated product. This sentiment is echoed by Doolittle and Hicks (2003), who discovered how technology could be used to engage students in inquiry-based learning. Participants in the experimental group even discussed the challenging nature of the assignment when responding to the open-ended questions by expressing having to “think and apply” their own ideas or discussing how they had to “interpret the little things…into things like who they would have as friends.” This synthesizing of ideas and creating other products is one of the main reasons the experimental group had a much higher mean score and that the two-way mixed ANOVA was approaching significance.

Similar to the increase in mean scores with short-term achievement, the increase in long-term achievement mean scores would be well received by many educators. Teachers must prepare students for high-stakes, end-of-course tests that do not occur at the end of a two-week unit but rather several months after the unit has been taught. Increasing the mean score of students between the beginning of the unit and several months later would encourage teachers to use this activity.

Again, when comparing scores between the control and experimental groups, no significant difference was found, but when analyzing the within subjects, all students, a significant difference was discovered. This finding shows that both the control and the experimental test scores increased between pretest and delayed posttest. This increase in both groups could be attributed to the topic covered. The Civil Rights Movement is an emotional topic that is still relevant today and participants in both groups mentioned how much they enjoyed the topic, even though some students in the control group expressed anger.
Impact of Study on Social Studies Education

The data gathered during this study hold implications for social studies education. Below, I propose three major implications that are a result of this study. There may be other implications presented by the data, but I consider these three most important for social studies education and teachers.

First, the History Spacebook activity can impact social studies education by helping teachers increase the higher order thinking skills of their students. Social studies education by its nature is researching and reporting findings in a separate form. This includes taking multiple sources, especially primary sources, and synthesizing them into a new product (Van Hover et al., 2004). The students who worked on the History Spacebook activity self reported, by survey results and open-ended questions, that they had to use multiple sources and create a new product out of those sources.

Second, the History Spacebook activity can impact social studies education by helping teachers increase student scores on chapter and unit tests. According to Friedman (2006), social studies teachers are facing increased pressure for their students to perform well on standardized tests. Although there was no significant difference in the scores between the control and experimental groups, the mean test score for the group that used the History Spacebook wiki was higher than the control group. The mean scores were not only higher but a medium effect size was found. This has a large implication for social studies teachers because increased test scores are a major part of a student’s success in class.

Finally, the History Spacebook activity can help teachers increase student scores on final or end-of-course exams months after the unit has been taught. Heafner and Friedman (2008) discussed the hesitancy of a high school social studies teacher in using anything but teacher-
centered instruction due to the demands of end-of-course exams. Friedman (2006) stated that social studies teachers were feeling pressure by the increase in standardized testing. Long-term student achievement is important to all teachers but especially to the ones who are scrutinized based on how well their students perform on an end-of-course standardized test. The History Spacebook activity did not show a statistical significance, although it was closely approaching the significant level, but the mean score of the Spacebook group increased 21 points. This data along with the 22-point increase found in the study conducted by Heafner and Friedman (2008) show the potential for a great impact on social studies education by using the History Spacebook wiki activity.

**Recommendations for Future Research**

In this pilot study, I found the use of the History Spacebook activity led to a statistical significance as participants used multiple sources to create a new product, and participants worked collaboratively. A statistical significance was not found in short-term student achievement, but there was a larger increase in the mean test scores due to the History Spacebook activity. Student long-term achievement was shown to be approaching statistical significance when using the History Spacebook activity. Even though it was not significant, the mean score of the pre/posttests increased 21 points from the pretest to the delayed posttest. These findings led me to make several suggestions for future research regarding the History Spacebook activity. Below are four of these recommendations, followed by a thorough explanation of each.

This study should be repeated in different settings with a greater number of students. The study was limited to the number of participants in each of the classes and also to the teacher being the researcher. For a greater impact and to determine whether the results could be
replicated, the teacher does not need to also serve as the researcher, and the number of participants in the control and experimental groups should be increased. In this pilot study the researcher was also the teacher for both the control and experimental groups. Several problems potentially exist that could affect the study with this research design. First, the students in the study could have an increased fear that the teacher would punish them if they did not answer how they felt the teacher wanted. This fear is always present even when the students do not know the researcher, but a greater fear exists when the researcher is also the participants’ teacher. Students were told that this research would not affect their grade, but the fear of retaliation by the teacher lingers even stronger when the teacher also acts as the researcher. Another potential problem exists if the teacher has a good relationship with the students, as the students could choose to answer questions untruthfully to try to help the teacher/researcher obtain the results they desired. Finally, the opposite could also occur if the students did not like the teacher/researcher. They could answer questions dishonestly to try and sabotage the results of the research. This could be done by conducting the study at a larger school or at multiple schools in the same district.

Second, this study should be repeated by replacing the wiki with a paper form of the History Spacebook activity. Although the majority of school systems in America have access to the Internet, some still do not have large numbers of computers available for students to participate in an activity like History Spacebook. In addition to using the Internet, students also need to download and print out pictures and images. One way to address this barrier is for students to use their mobile devices to perform the basic research and then spend one day in the computer lab printing the images they would use. In addition to determining the differences in using a wiki versus paper, studying the effect on collaboration would be interesting as well.
Third, different topics should be examined to determine whether the results can be replicated. This study was conducted using a highly emotional topic, the Civil Rights Movement. Participants in both groups expressed emotion in their answers to the open-ended questions. Some participants in the control group reported anger at how African Americans were treated during the movement. This emotionally charged topic could affect the scores for both groups, as the testing for all subjects ($n = 48$) showed statistically significant gains in both short- and long-term achievement. This finding could be due to the emotional impact of the study; thus, further research on different topics should be performed.

Finally, the study should be replicated in a class that has an end-of-course exam. High stakes, end-of-course testing puts pressure on both teachers and students to perform well, and the amount of this type of required testing seems to increase every year (Friedman, 2006). Examining the effects of the History Spacebook activity on student end-of-course test scores, specifically determining whether scores increased, is another possibility for future research. If it can be shown that this type of activity helped increase student performance on end-of-course tests, more schools would implement changes to include activities such as this one into their daily curriculum.

**Summary**

This chapter presented the conclusions and recommendations for the study, the impact of the study on social studies education, and recommendations for further research on the constructive use of wikis in social studies. Conclusions from three research questions were examined and discussed. The impact this study has on social studies education as a whole was examined, and, finally, recommendations for further research were discussed.
The results from each of the three research questions were analyzed, and the following conclusions were made. First, students in the experimental group had a significant difference on the survey question asking if they used multiple sources to create a new product and on another question asking if they worked with a partner during the unit. After taking the survey, students answered three open-ended questions, and one of the key findings from those questions was that the control group felt very emotionally attached to the topic. Another finding was that several students in the experimental group discussed working with multiple sources and also mentioned working with a partner.

There was no statistically significant difference between the two groups on the pretest and posttest. However, the mean score was greater for the experimental group, and more research was recommended to determine whether the topic may have influenced this score. Finally, long-term achievement was examined, and the results showed that the experimental group had a larger mean score between the pretest and delayed posttest, but they were just approaching significance. They did not reach true statistical significance. The recommendation was to repeat the study with different groups and topics to determine whether the results would be different. It was also recommended that teachers should implement this activity due to the increase in mean scores of the experimental group.

The impact of this study on social studies education was then discussed. One impact was that it improved students’ higher order thinking skills and their research abilities by taking multiple sources and making a new product. Another impact was that using the History Spacebook activity could help students increase scores on chapter and unit tests. The final impact discussed was that using the History Spacebook activity could help students perform better on high-stakes end-of-course exams. Finally, several recommendations for future research
were discussed. One recommendation for future research is that the study needs to be replicated with a larger number of students and with a different, unemotional topic. Another recommendation is that the study be replicated by removing the wiki aspect and using a paper form of the History Spacebook template. Finally, it was recommended that the study be replicated in a class that has an end-of-course exam and with a topic that is covered on that exam.
REFERENCES


APPENDICES
Appendix A

Approval to Research: High School Principal

Sequoyah High School
3128 Highway 411 North
Madisonville, Tennessee 37354-6352
(423) 442-9230
Fax (423) 442-5520

Gary Cole
Principal

Sheryl Deity
Assistant Principal

11-19-2013

To Whom It May Concern:

I give Lance McConkey permission to conduct research with teachers and students at Sequoyah High School for his dissertation during the 2013-2014 academic year.

Sincerely,

William Gary Cole, Principal
Sequoyah High School
Appendix B

Approval to Research: Director of Schools

November 19, 2013

To Whom It May Concern:

I give Lance McConkey permission to conduct research with teachers and students at Sequoyah High School for his dissertation during the 2013-2014 academic year.

Michael Lowry, Director of Schools

Mr. Mike Lowry, Director of Schools

Mr. Mike Wiggins, Supervisor of Secondary Education
Appendix C

Institutional Review Board (IRB) Approval

November 26, 2013

IRB#: 9331 B

TITLE: Constructivist Use of Wikis in Social Studies: The History Spacebook Project

McConkey, Lance  
Theory & Practice in Teacher Education  
PO Box 933  
Englewood, TN 37329

Turner, Thomas  
Theory & Practice in Teacher Education  
A222 Bailey Education Complex  
Campus - 3442

Your project listed above has been reviewed and granted IRB approval under expedited review.

This approval is for a period ending one year from the date of this letter. Please make timely submission of renewal or prompt notification of project termination (see item #3 below).

Responsibilities of the investigator during the conduct of this project include the following:

1. To obtain prior approval from the Committee before instituting any changes in the project.

2. If signed consent forms are being obtained from subjects, they must be stored for at least three years following completion of the project.

3. To submit a Form D to report changes in the project or to report termination at 12-month or less intervals.

The Committee wishes you every success in your research endeavor. This office will send you a renewal notice (Form R) on the anniversary of your approval date.

Sincerely,

Brenda Lawson  
Compliance Officer

Enclosure
Appendix C 1

Informed Consent Form

INFORMED CONSENT STATEMENT
History SpeerBook Project

INTRODUCTION

I am your Contemporary Issues teacher and am currently a doctoral student at the University of Tennessee. I am working on a PhD in Teacher Education and am preparing to conduct research for my dissertation. The topic for my dissertation involved finding out if using a new technology to teach will increase student’s achievement and engagement. The study will be conducted this fall in my two Contemporary Issues classes. One class will be taught using technology, while the other class will be taught in a traditional lecture format.

INFORMATION ABOUT PARTICIPANTS’ INVOLVEMENT IN THE STUDY

A pre test will be administered to the students prior to the unit being studied. One class will then be taught the material by lecturing and the other class will use technology to create a History SpeerBook page for the main leaders of the civil rights movement. After the unit is taught students will then take a post test and participate in a short survey about the students’ level of engagement during the teaching of the unit. Approximately 8 weeks after the post test is given students will take another post test to see how well they retained the information.

This study will be conducted under the guidelines of the Institutional Review Board of the University of Tennessee and is approved by Monroe County Schools. The risk to your child is minimal. Participation in this study is completely voluntary and your child may discontinue his/her participation at any time by notifying me. There will be no questions asked or consequences for withdrawing from the study.

At the conclusion of the study, I will write the results as a part of my dissertation. It is possible that the study could be published in another form or presented at a professional conference. All information gathered for this study from you will be anonymous. No information will be used that could lead to your identification or location.

This study is in no way connected with any grade your child may receive at school. You are more than welcome to contact me if you have any questions about this study. I would be happy to meet with you if you would like to talk in person about the project.

Participant’s initials

UTK EXPEDITED Approved
NOV 6 2013 - NOV 2 & 2014
BENEFITS

You may not derive any direct benefit from participating in this study, although I do hope you will enjoy the subject being taught.

CONFIDENTIALITY

The information in the study records will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless participants specifically give permission in writing to do otherwise. No reference will be made in oral or written reports that could link participants to the study.

COMPENSATION

There will be no compensation available to students for participating in this study.

CONTACT INFORMATION

If you have questions at any time about the study or the procedures, you may contact the researcher, Lance McConkey, at lmcconke@utk.edu, and 423 442 9230. If you have questions about your rights as a participant, contact the The University of Tennessee Office of Research Compliance Officer at (865) 974-3466.

PARTICIPATION

Your participation in this study is voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at anytime without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed you data will be returned to you or destroyed.

CONSENT

I have read the above information. I have received a copy of this form. I agree to participate in this study.

Participant's signature ___________________________ Date ____________

Investigator's signature ___________________________ Date ____________

UTK EXPEDITED Approval:

KOV 2.6 2013 - KOV 2.6 2014
Appendix C 2

Parental Consent Form

PARENT/GUARDIAN CONSENT STATEMENT
History Spacebook Research Study

Dear Guardian,

I am your child’s Contemporary Issues teacher at Sequoyah who is also currently a doctoral student at The University of Tennessee. I am working on a PhD in Teacher Education and am preparing to conduct research for my dissertation. The topic for my dissertation involves finding out if using a new technology to teach with will increase student achievement and engagement. The study will be conducted in my two Contemporary Issues classes. One of the classes will be taught using technology, while the other class will be taught in a traditional lecture format.

Your child will have the opportunity to participate in this study due to their enrollment in Contemporary Issues. This study will not affect your student’s grade in the class and all information will be anonymous. If you and your child agree, your child’s participation in this study will involve the following:

PROCEDURE

A pre test will be administered to the students prior to the unit being studied. One class will then be taught the material by lecture and the other class will use technology to create a History Spacebook page for the main leaders of the civil rights movement. After the unit is taught, students will then take a post test and participate in a short survey about how engaged they were during the teaching of the unit. Approximately 8 weeks after the post test is given, students will take another post test to see how well they retained the information.

This study will be conducted under the guidelines of the Institutional Review Board of the University of Tennessee and is approved by Monroe County Schools. The risk to your child is minimal. Participation in this study is completely voluntary and your child may discontinue his/her participation at any time by notifying me. There will be no questions asked or consequences for withdrawing from the study.

At the conclusion of the study, I will write the results as a part of my dissertation. It is possible that the study could be published in another form or presented at a professional conference. All information gathered for this study from your child will be anonymous. No information will be used that could lead to identifying or locating your child.

This study is in no way connected with any grade your child may receive at school. You are more than welcome to contact me if you have any questions about this study. I would be happy to meet with you if you would like to talk in person about the project.

_________ Participant’s initials

UTK EXPEDITED Approval:
NOV 26 2013 - NOV 26 2014
BENEFITS

Your child may not derive any direct benefit from participating in this study, although I do hope your child will enjoy the subject being taught.

CONFIDENTIALITY

The information in the study records will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless participants specifically give permission in writing to do otherwise. No reference will be made in oral or written reports that could link participants to the study.

COMPENSATION

There will be no compensation available to students for participating in this study.

CONTACT INFORMATION

If you have questions at any time about the study or the procedures, you may contact the researcher, Lance McConkey, at lmconke@utk.edu, and 423 442 9230. If you have questions about your rights as a participant, contact the The University of Tennessee Office of Research Compliance Officer at (865) 974-3466.

PARTICIPATION

Your child’s participation in this study is voluntary; your child may decline to participate without penalty. If your child decides to participate, he/she may withdraw from the study at anytime without penalty and without loss of benefits to which he/she are otherwise entitled. If your child withdraws from the study before data collection is completed the data will be returned to you or destroyed.

CONSENT

I have read the information in the consent form and I give permission for my child to participate in this project.

Student’s Name ____________________________

Parent/Guardian Signature ____________________________ Date ______

Investigator’s Signature ____________________________ Date ______

UTK EXPEDITED Approval:

NOV 26 2013 - NOV 26 2014
Appendix C 3

Student Assent Form

STUDENT ASSENT STATEMENT

History Spacebook Research Study

Dear Student,

I am about to begin a unit of study over the civil rights movement. This unit will be taught in two different manners. The manner in which you are taught will depend on the class you attend. One class will be using textbooks and lecture while the other class will create web pages for the historical characters. I would appreciate your participation in this study.

You will take three short multiple choice tests over this unit and will be asked to participate in a short survey at the end of the unit. Your grade will not be impacted by any of the tests or your responses on the survey. No information that could identify you will be taken on either the tests or the survey.

I think this unit of study will be fun and exciting. Talk it over with your parents. If you both are in agreement that you can participate in this study, sign your name below.

Sincerely,

Lance McConkey

Print your name here: ______________________________
Sign your name here: ______________________________
Date: ______________________________
Appendix D

Initial Freedom to Brown vs. Board of Education Slideshow

Civil Rights
Initial Freedom to Brown v. Board

Early Civil Rights

Plessy v. Ferguson
- Supreme Court ruled in 1896
- Plessy v. Ferguson established separate but equal as
- Homer Plessy sued because he was kicked out of the
cars on a train traveling through Louisiana, he would
not go up to the white car as it was for
- Supreme court upheld Louisiana law of separate but
equal
- This ruling made segregation of races common law in
American society
- White citizens segregated
- Living, dining, housing, schools, etc.
- Legal equality in life
- Separate was more equal

Brown v. Board
- Separate but equal had been the law of the land for 12 years
- Linda Brown
- Third grader in Topeka KS
- Parents tried to send white students to lose in an all-black school one mile away
- Two parents tried legal proceedings
- 1954 Supreme Court overturned the Plessy v. Ferguson case
- Court decision said separate was not equal

Miranda v. Arizona
- Ernest Miranda
- Ка арестован на его доме за насилие и грабеж
- After two hours of police questioning he signed a confession
- He was convicted mainly on the confession
- Miranda appealed because police never advised him of his rights
- Right to an attorney
- Right to avoid self-incrimination
Mapp v. Ohio (1961)

- Dolores Mapp
- Convicted of possessing obscene materials
- The material was found after an admitted illegal search
- Police were looking for a fugitive and found the material in her house.
- Supreme Court overturned her conviction
- Stating an evidence obtained by search and seizure is violation of the Constitution, by the Fourth Amendment’s mandate into a state court.

Gideon v. Wainwright (1963)

- Gideon
- Charged in Florida with felony breaking and entering
- Asked court for an attorney cause he could not afford one
- Supreme Court overturned Gideon’s conviction
- Stated that a poor defendant could never get a fair trial without proper counsel.

Escobedo v. Illinois (1964)

- Danny Escobedo
- Arrested and taken to police station for questioning
- He requested his lawyer several times but was refused access to him
- After hours of interrogation he confessed to murder
- Supreme Court ruled on the case
- Justice Goldberg spoke of the absolute right to remain silent.
- Escobedo had been informed of his rights and was denied access to his attorney during his questioning.

Miranda Warning

- You have the right to remain silent. If you give up that right, anything you say can and will be used against you in a court of law. You have the right to an attorney and to have an attorney present during questioning. If you cannot afford an attorney, one will be provided to you at no cost. During any questioning, you may decide at any time to exercise these rights, not answer any questions, or make any statements.

Decisions of the Warren Court

- Supreme court from 1953-1969
- Court was under Chief Justice Earl Warren
- Made several landmark decisions especially on civil rights
- Key Warren Court Cases
  - Brown v. Board of Education
  - Miranda v. Arizona
  - Mapp v. Ohio
  - Gideon v. Wainwright
  - Escobedo v. Illinois
Appendix E

Civil Rights Advocates and Opponents

White vs. Black School

Is Separate Equal?

White and Black

Civil Rights Events

- Bull O’Connor
- George Wallace
- James Evers
- John Lewis
- Johnnie L. Johnson
- Diane Nash
- Betty Friedan
- Martin Luther King Jr.
- Harold Washington
- John Lewis
- Ossie Davis
- Rosa Parks
- Bayard Rustin
- Jim Forman
- Stokely Carmichael
- Malcolm X
- Coretta Scott King
- Sherron Williams
- Arthur L. Flemming
- John Lewis

Boycott

- arrest while attempt the Montgomery Bus Boycott
Stokely Carmichael

- 1964
  - He joined (SNCC) Student Non-Violent Coordinating Committee
- 1965
  - He became member of the Freedom Riders
- 1966
  - Stokely Carmichael became chairman of SNCC
  - Founder of Black Power movement
  - Supreme leader of the Black Panthers
  - Carmichael was very critical of MLK

Rosa Parks

- Rosa Parks
  - Seamstress in Montgomery, AL
  - Member of the Alabama NAACP
  - Rosa refused to give up her seat on a bus to a white rider
  - She was arrested for doing this.
  - Park’s arrest sparked the Montgomery Bus Boycott
Appendix F

Events of the Civil Rights Movement

**Major Events of Civil Rights Movement**

**Integration of Clinton High School**
- First school in TN to be desegregated.
- Protest inspired by New Jersey white supremacists John Carpenter and Alex Carter.
- National Guard troops called in to keep peace.
- Clinton 12: the first twelve African American students to attend Clinton High School.
- 1968 the school was damaged by a series of dynamite explosions.

**Governor Frank G. Clement**
- Governor of Tennessee from 1953 to 1959 and 1963 to 1967.
- Vetoed a bill that would have prolonged segregation in Tennessee schools.
- Ordered National Guard to Clinton to help with integration of Clinton High School.

**Little Rock Nine**
- 9 African American students who enrolled in Little Rock Central High School in 1957.
- They were not allowed to attend due to Arkansas Governor Orval Faubus.
- Eisenhower sent in 101st Airborne and National Guard to calm the situation.

**Montgomery Bus Boycott**
- A boycott of the bus system in Montgomery, Alabama to protest the segregation of the bus seats.
- Threw Martin Luther King Jr. into a leadership role in the Civil Rights Movement.
- After a year, the US Supreme Court ruled the Alabama and Montgomery bus segregation laws unconstitutional.

**Bombingham Alabama**
Civil Rights Laws

- Civil Rights Act of 1964 outlawed major forms of discrimination and ended unequal application of voter registration requirements and segregation in schools and workplace.
- Great Society set of domestic programs promoted by Lyndon Johnson with two main goals:
  - Eliminate Poverty
  - End racial injustice
Appendix G

Student Questions from Primary Sources

Martin Luther King Jr. “Letter from Birmingham Jail” 1963 Questions

1. According to King, what was the purpose of direct action?
2. Did he believe it was a good time to engage in direct action?
3. How did King describe segregation as affecting black Americans?
4. Why did he advocate breaking some laws and obeying others?
5. How did white moderates disappoint King?
6. Where did King position himself and those who supported nonviolent tactics and direct action on the spectrum of black society?

Black Power and Student Non-Violent Coordinating Committee Questions

1. According to this Chicago SNCC leaflet, what were the sources of strength for Black Power?
2. Who was the Great Black Prince, and what did he teach?
3. Who were the enemies of Black Power?
4. Why was it necessary to be “a complete fanatic”?
5. What “white thing” should be hated?
6. What tactics would bring about Black Power?
Appendix H

History Spacebook Template

| Insert picture of historical person in this cell of the table. | Name: |
| | Networks: |
| | Sex: |
| | Birthdate: |
| | Hometown: |
| | Relationships: |
| | Interests: |
| | Looking For: |
| | Political Views: |
| | Religious Views: |
| Status: | Top News Story: |
| Wall: | About Me |
| Friends: | Contact Info: |
| 3 Friends from that period of time | Personal Info: |
| 3 Friends from other times | Activities: |
| Photos: | Interests: |
| | Favorite Music: |
| | Favorite Books: |
| | Favorite Quotes: |
| | Favorite Videos: |
| Groups: | Education: |
| | Work Experience: |
| Relatives: | Causes: |
Appendix I

Pretest/Posttest/Delayed Posttest

* 1. The leader of the Southern Christian Leadership Conference who urged the use of civil disobedience to win civil rights was
   - Martin Luther King Jr.
   - Rosa Parks
   - Malcolm X
   - Cesar Chavez

* 2. Someone wanting to cause an organization to lose money by not buying their product would use which statement?
   - "Let's Ostracize this business"
   - "Let's Boycott this business"
   - "Let's Protest this business"
   - "Let's Outlaw this business"

* 3. Which one of the following outcomes is a direct result of the Montgomery Bus Boycott?
   - Buses in Montgomery were desegregated but segregation grew throughout the South.
   - Buses in Montgomery remained segregated but the Civil Rights movement found leadership in Martin Luther King Jr.
   - Buses in Montgomery remained segregated and many boycotters lost their jobs.
   - Buses in Montgomery were desegregated and the Civil Rights Movement ended.

* 4. A fiery African-American orator and founder of the Organization of Afro-American Unity who broke with the Nation of Islam and was assassinated in 1964?
   - Martin Luther King Jr.
   - Stokely Carmichael
   - Malcolm X
   - Diane Nash
5. "Separate educational facilities are inherently unequal."
-Brown v. Board of Education
The effect of this Supreme Court ruling was to
- Establish affirmative action programs in higher education
- Require the integration of public schools
- Desegregate the armed forces and the military academies
- Force states to spend an equal amount on each public school student

6. When necessary to achieve justice, which method did Martin Luther King Jr. urge his followers to employ?
- Using violence to bring about political change
- Engaging in civil disobedience
- Leaving any community in which racism is practiced
- Demanding that Congress pay reparations to African Americans

7. "I have a dream that one day this nation will rise up and live out the true meaning of its creed: 'We hold these truths to be self-evident; that all men are created equal.'"
—Martin Luther King Jr. Washington, D.C., 1963
Which step was taken following this speech to advance the dream of Martin Luther King Jr.?
- desegregation of the Armed Forces
- ruling in Plessy v. Ferguson
- elimination of the Ku Klux Klan
- passage of new civil rights acts

8. The changes shown in the chart above were most directly the result of the
- enactment of voting reform laws by these southern states
- Supreme Court decision in Brown v. Board of Education
- Passage of the Voting Rights Act of 1965
- Executive branch's resistance to protecting the civil rights of minorities
9. Martin Luther King Jr. first emerged as a leader of the civil rights movement when he
   ( ) led the bus boycott in Montgomery, Alabama
   ( ) refused to give up his seat on a bus to a white man
   ( ) challenged the authority of the Supreme Court
   ( ) was elected as the first black congressman from the South

10. The poster above was used during the
   ( ) abolitionist movement
   ( ) women’s suffrage movement
   ( ) civil rights movement
   ( ) environmental movement

11. Lunch counter sit-ins and the actions of freedom riders are examples of
   ( ) steps taken in support of the Americans with Disabilities Act
   ( ) programs dealing with affirmative action
   ( ) violent acts by the Black Panthers
   ( ) nonviolent attempts to oppose segregation

12. “All you gotta do is tell them your going to bring the dogs. Look at em run. I want to see the dogs work.”
    Which person involved with civil rights would have used this quote?
    ( ) Martin Luther King Jr.
    ( ) Eugene “Bull” Connor
    ( ) Rosa Parks
    ( ) Malcolm X
13. The image above represents the start of which civil rights protest.

- Voters rights march from Selma
- Project "C" in Birmingham
- Montgomery bus boycott
- The Freedom Rides

14. This civil rights leader served as chairman of the Student Nonviolent Coordinating Committee (SNCC) and as the Honorary Prime Minister of the Black Panthers. Showing his digression from non-violent protest to a more violent one.

- Malcolm X
- Martin Luther King Jr.
- Stokely Carmichael
- Thurgood Marshall

15. A strong segregationist, KKK member, and commissioner of public safety in Birmingham Alabama during the Civil Rights Movement.

- Malcolm X
- Strom Thurmond
- Thurgood Marshall
- Eugene "Bull" Connor

16. “It is a call for black people in this country to unite, to recognize their heritage, to build a sense of community. It is a call for black people to define their own goals, to lead their own organizations.” Stokely Carmichael

This quote illustrates Carmichael's involvement in which Civil Rights organization?

- Southern Christian Leadership Conference (SCLC)
- Black Panthers/Black Power Movement
- Student Nonviolent Coordinating Committee (SNCC)
- Congress on Racial Equality (CORE)
17. This future supreme court justice argued the Brown v. Board case in 1954?
- Thurgood Marshall
- Stokely Carmichael
- Eugene "Bull" Connor
- George Wallace

18. The separation of people by color in almost all aspects of life was called?
- Correlation
- Miscenation
- Incarceration
- Segregation

19. Which statement most accurately summarizes the main idea of the quotes presented above?
- Revolution is inevitable in a democratic society
- Government consistently protects the freedom and dignity of all its citizens
- Violence is the most effective form of protest
- Civil disobedience is sometimes necessary to bring about change

20. The Civil Rights Act of 1964 was passed in an effort to correct?
- Racial and gender discrimination
- Limitations on freedom of speech
- Unfair immigration quotas
- Segregation in the armed forces
Appendix J

Student Engagement Survey

Please answer the following questions as it relates to your level of engagement during class.

Use the following scale: SD=Strongly Disagree; D= Disagree; N= Neither Agree or Disagree; A= Agree; SA= Strongly Agree

<table>
<thead>
<tr>
<th>Item</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I enjoy social studies classes.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>2. I enjoyed learning about Civil Rights Movement.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>3. I enjoyed the way in which this unit was taught.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>4. I found myself looking forward to coming to class more during this unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>5. I enjoyed this unit more than other units we have discussed.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>6. I often found my mind wandering during class.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>7. I found myself thinking about what I was learning in class even when I was not in class.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>8. I found myself discussing what I was learning during this unit with others.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>9. During this unit I memorized facts.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>10. During this unit I had to analyze basic parts of an idea.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>11. During this unit I had to synthesize ideas and information into new more complicated interpretations.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>12. I worked with more other students during this unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>13. I worked with students outside of class during this unit.</td>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>
I tutored or taught class materials to other students in the class during this unit.

Open Ended Questions:

- What were your perceptions of class?
- What did you do in class?
- How did you feel?

VITA

Lance Heath McConkey received his Masters in the Art of Teaching from Lee University in Cleveland, Tennessee in 2005 and started his teaching career at Sequoyah High School in Madisonville, Tennessee. In 2006, Lance enrolled at the University of Tennessee, Knoxville where he began work towards the Specialist in Education degree. He received the Specialist in Education in 2008 in Theory and Practice in Teacher Education with concentration in Social Science Education.

He has taught high school social studies for the past 14 years at Sequoyah High School where he serves as the chairman of the School Data Team and is the founder of the Ethic Team Bowl and is Assistant football coach and presents school wide professional development workshops focused on the use of technology in the classroom. In addition, he has presented at multiple local and state conferences as well as the National Council for the Social Studies.

Lance returned to the University of Tennessee in 2010 to begin work on the Ph.D degree. Lance lives with his wife of 24 years, Angie, on their 80 acre cattle farm. He enjoys baby sitting his three granddaughters Maddy, 11, Hallie, 5, and Lyric, 2 months.