The Choices and Uses of Technological Tools in High School Government Classes

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(Abstract)

The purpose of this study was to examine how government teachers make decisions regarding the type of technological tools they incorporate in their instruction. As a case study of two teachers, this work was oriented by the question: How are U.S. Government teachers’ beliefs and perspectives about learning and teaching reflected in their pedagogical practice and use of technological tools.

There is little work about how teachers prepare students for the 21st century. Teaching U.S. Government or about the U.S. government has been ignored in much of the research of social studies classes. Additionally, most studies that examine the use of technological tools in the social studies classroom have either investigated the use of non-digital tools specifically or the use of digital tools specifically. Few studies combine how social studies teachers use both non-digital and digital tools in their instruction. My goal was to shift the gaze and include the swirl of influences shaping U.S. Government teachers’ decision-making process as when both types of technological tools are used with their classes.

This study has its antecedents in my desire to examine Technological Pedagogical Content Knowledge, TPCK. TPCK is a theoretical framework that posits that technological knowledge, pedagogical knowledge, and content knowledge are the key elements to understand teachers’ instructional choices. The findings in this study indicate
that while TPCK can offer teachers a framework to help begin to understand knowledge bases one could consider when planning class instruction, it falls short of providing the complete picture necessary to describe teacher decisions.
Dedication

To Mom, for all of your love and support through this journey and throughout my life.
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CHAPTER 1
INTRODUCTION

Experience hath shewn that even under the best forms [of government], those entrusted with power have, in time, and by slow operations, perverted it into tyranny; and it is believed that the most effectual means of preventing this would be to illuminate, as far as practicable, the minds of the people at large, and more especially to give them knowledge of those facts, which history exhibiteth, that possessed therby of the experience of other ages and countries, they may be enabled to know ambition under all its shapes and prompt them to exhibit their natural powers to defeat its purposes.

Thomas Jefferson, June 18, 1779
(Preamble to Bill 79 - A bill for the more general diffusion of Knowledge)

Over 230 years after Jefferson’s writing, “illuminating . . . the minds of citizens” remains a goal of education today. The National Council for the Social Studies (NCSS) proclaims, “The aim of social studies is the promotion of civic competence—the knowledge, intellectual processes, and democratic dispositions required of students to be active and engaged participants in public life” (NCSS, 2010, p. 3). This portion of the NCSS standards illustrates how integral social studies classes are to preparing citizens, and the most central of all the social studies classes to this end is the government class (Schmidt, 2011; Kahne, Chi & Middaugh, 2006).

In today’s democratic society the term “active citizen” has a dual meaning, active citizens engage in both civic and political activities (Martin & Chido, 2007). However,
Macedo et al. (2005) assert that schools “often teach about citizenship and government without teaching students the skills that are necessary to become active citizens themselves” (p. 33). According to Flanagan and Levine (2010),

Young adults today are less likely than their counterparts in the 1970s were to exhibit nine out of ten important characteristics of citizenship: belonging to at least one group, attending religious services at least monthly, belonging to a union, reading newspapers at least once a week, voting, being contacted by a political party, working on a community project, attending club meetings, and believing that people are trustworthy. Only in a tenth form of citizenship—volunteering—are they more likely to participate, probably as a result of deliberate efforts over the past several decades by schools, colleges, and community groups to encourage volunteering (p. 161).

And while our nation witnessed an increase from 47% to 49% in political participation for 18-24 year olds in the 2008 presidential election this demographic still participates at a rate below 50% (U.S. Census Bureau, 2009). These political participation rates and civic participation data signal a need to closely examine the classroom practices of teachers most responsible for citizenship development in our country.

This study seeks to provide more knowledge about how government teachers teach about government and citizenship and the tools they use to ready their students for societal participation. Given the tremendous growth of the use of digital tools, particularly the computer, in both society and schools it is important to examine how government teachers use this tool alongside non-digital tools to advance teaching and learning. Bimber (2003) contends, “At no time in the history of American democracy has
a new set of communication and information-handling capacities been assimilated so rapidly by the political system” (p. 1).

Computers are now available to most students in schools (Wells & Lewis, 2006). What is less clear is how these computers are being used. On the one hand, Cuban (2001) writes that computers in schools are “oversold and underused” and there is little evidence that the use of computers help to “create better communities and build strong citizens” (p. 197). Conversely, Rheingold (2008) contends, “In the twenty-first century, participatory media education and civic education are inextricable” (p. 103).

We have seen digital technologies proven to be effective in connecting citizens to political activities in recent elections in the United States. The Internet served to link citizens with political activities. For example in the 2008 Presidential election, Barrack Obama used digital technologies to engage citizens with his political messages. These technologies included emails, text messaging, on-line election updates, video and audio sharing sites, blogs, volunteer on-line sign ups, and on-line contributions (Smith, 2009). While these examples of citizen decision-making occurred in the public sphere and not the classroom, the findings cause me to wonder to what extent tools that are being used to link citizens with the government are being used in classes that teach about the government. How are government teachers using technological tools to deal with the conundrum between low participation rates and the potential and value of technological tools to foster active citizenship?

The research on the use of the Internet and political participation is mixed. Some studies suggest those using technological tools such as the Internet as a resource for
political information exhibit higher levels of political efficacy, knowledge, and participation (Johnson & Kaye, 2003; Kenski & Stroud, 2006). Other studies show that those individuals who use the Internet only for recreation do not do as well in terms of political efficacy, knowledge or participation (Shah, McLeod, & Yoon, 2001). Given that it appears how the Internet is used impacts participation rates, the examination of how government teachers are using technological tools to deal with the conundrum between low participation rates and the potential and value of technological tools to foster active citizenship is worthwhile.

Additionally, a number of commentators have suggested that educating young people for the 21st century will require a fundamental shift in the nature of schooling. Today, skills such as problem solving, collaborative group work, and working to understand the big picture as opposed to a single component are needed (Pink, 2005; Friedman 2007). If our goal is to insure that students are both consumers and producers of knowledge we have a need to know which technologies can prove to be transformative in citizenship education.

**STATEMENT OF THE PROBLEM**

There is little work about how teachers prepare students for the 21st century. Teaching U.S. Government or about the U.S. government has been ignored in much of the research of social studies classes. Additionally, most studies that examine the use of technological tools in the social studies classroom have either investigated the use of non-digital tools specifically or the use of digital tools specifically. Few studies combine how social studies teachers use both non-digital and digital tools in their instruction. My goal is to shift the gaze to include the swirl of influences shaping U.S. Government
teachers’ decision-making process as when both types of technological tools are used with their classes.

RESEARCH QUESTION

The question that guides my research is: How are U.S. Government teachers’ beliefs and perspectives about learning and teaching reflected in their pedagogical practice and use of technological tools? This question was designed to help answer the why, when, where, and how U.S. Government teachers incorporate technological tools, including digital technologies, to support the teaching and learning process. In order to fully answer the research question, consideration and analysis of several factors was necessary. The factors that influenced the teachers’ decision to utilize technological tools with their classes included both factors the teachers had control over and factors that teachers could not control.

RESEARCH PURPOSE

The purpose of my study is to examine the relationship between teaching and learning in U.S. Government classes. Specifically, I wished to examine how teachers make decisions regarding the type of technological tools and resources they incorporate to support teaching and learning during the teaching of a unit on Congress and a unit on Participating in State and Local Government. These units are part of a standardized curriculum in required Virginia and U.S. Government classes. The study included two heterogeneous classes of 12th grade students. Throughout the examination I remained aware that technologies are tools and a decision making process is involved in when, how, and why they are used.

RATIONALE
The content area of social studies, and specifically the discipline of government, is central to the development of civic values and interest in our democratic society. As such, it is important to examine how government classes instruct students on the importance of making economic, political, and social contributions to their world. There are multiple technological options government teachers may use with their students. One classroom option government educators might choose to adopt is the use of digital technology. However, a review of the literature indicates there is a paucity of information about teaching and learning in the government classroom using digital technologies. The majority of research conducted about the use of digital technologies in the social studies classroom has been focused on history and geography classes; there are few studies that examine the use of digital technology in the government classroom.

The suggestion has been made that greater informational engagement via the Internet may be the answer to young people’s political apathy (Delli Carpini, 2000). “People—young or old—choose to become engaged in public life when they have the motivation, opportunity, and ability to do so” (Delli Carpini, 2000, p. 343). If this suggestion holds true, are teachers using digital technologies in schools to offer student-centered opportunities to promote becoming informed about civic and political issues, and using technological tools as an opportunity to facilitate a more active/social constructivist classroom? Or as other researchers contend (Hammond & Manfra, 2009; Zhao, 2007) are the uses of technological tools in today’s social studies classrooms simply advancing traditional teaching pedagogies? Are digital technologies being used in classrooms for more than attempts to gain student attention and control student behavior?
Is there a difference in what a student learns with or without the use of technological tools?

OVERVIEW OF THE STUDY

This study sought to examine how U.S. Government teachers’ beliefs and perspectives about teaching and learning are reflected in their pedagogical practices and uses of technological tools. The study was unique as it examined the practices of two U.S. Government teachers, a content area not typically researched. The participants taught classes that were state required but did not culminate with a high stakes end-of-course test. Analyzing how technological tools were used to advance teaching and learning in these classes produced several significant findings that will be discussed in this paper including three themes that emerged from analysis of the data: time, space, and movement.

The conceptual framework that informed this research is Technological Pedagogical Content Knowledge, TPCK, a theoretical framework that posits that technological knowledge, pedagogical knowledge, and content knowledge are the key elements to understand teachers’ instructional choices. This study involved fifteen, ninety-minute non-participant classroom observations of two participants’ U.S. Government classes at a centralized high school of approximately 1500 students, grades 9-12, in rural southwest Virginia. The observations of both participants expanded across two complete units of study for each class. Data collection also included three one-on-one semi-structured interviews of each participant: one prior to the beginning of the study, one after the completion of the first unit, and the third at the end of the second unit’s observations. Additionally, documents including lesson plans, computer lab logs,
and student products contributed to the data collection in this study. Data analysis for this study was done through theoretical coding, using an inductive methodology that allowed the data to inform the discovery of theory. Such coding was iterative and systematic. The analysis of this qualitative study involved triangulation, respondent validation (member checking), and reflexivity. I employed the constant comparative method of analysis and Guba’s (1981) model of trustworthiness, truth-value, applicability, consistency, and neutrality to ensure the reliability and validity of my study.
CHAPTER 2

REVIEW OF THE LITERATURE

Twenty-eight years ago the National Commission on Excellence in Education published *A Nation at Risk*. This report sparked a nationwide conversation about how our schools were failing American children. The report clearly stated, “Our Nation is at risk. Our once unchallenged preeminence in commerce, industry, science, and technological innovation is being overtaken by competitors throughout the world . . . We report to the American people that . . . the educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a nation and a people (National Commission on Excellence in Education, 1983, p.5). Although in response to *A Nation at Risk*, changes in terms of curriculum standards and testing have occurred, today, at the beginning of the second decade of the 21st century, it is not unusual to see headlines about our nation’s schools with warnings similar to those published in 1983. During his 2010 commencement address at Hampton University, President Obama remarked,

> More and more, America's economic preeminence, our ability to outcompete other countries, will be shaped not just in our boardrooms, not just on our factory floors, but in our classrooms, and our schools . . . all of us have a responsibility, as Americans, . . . to offer every single child in this country an education that will make them competitive in our knowledge economy. That is our obligation as a nation” (Wiltmeyer, 2010).
Economic competitiveness continues to drive much of the educational agenda in America.

Global competitiveness is important, however, schooling is not simply about creating a ready and willing supply of workers. Historically, there are larger purposes to education that include but go beyond preparing workers to contribute to our nation’s economy; one such goal is producing an active citizenry. However, over the past 30 years participation in both civic and political activities in America has declined, this decline signals a need for our schools to promote active citizenship (Putnam, 2000). Such a decline calls for teachers to closely examine their classroom practices so as to provide opportunities for students to become more involved, to understand and appreciate the importance of societal participation to our democracy.

A follow-up study of high school seniors found that regardless of the students’ social class, academic background, and self-esteem, those who took part in voluntary associations in school were far more likely than nonparticipants to vote, take part in political campaigns, and discuss public issues two years after graduating (Putnam, 2000, p. 339).

Since the content area of social studies is central to the development of civic values and interest in our democratic society, it is important to examine how social studies classrooms can instruct students on the importance of making economic, political and social contributions to their world. One series of tools social studies educators might
choose to support such a mission comes in the forms of digital technology. According to Crowe (2006),

Social studies educators are instrumental in the process of preparing informed, thoughtful citizens, and technological tools are becoming vital to this work. Social studies educators must consciously consider the ways in which technology changes the life of a citizen and make choices to integrate technology in ways that support the development of an educated citizenry. (p. 119).

As a social studies teacher, specifically a government teacher, I am particularly interested in how digital technologies might impact citizenship development beyond economic determinism, or in other words how an individual’s productivity contributes to the overall economy. In this paper I will review the literature, through the lens of a government teacher, with regard to teaching and learning in the social studies classroom using both digital and non-digital technologies. This review will reveal that a deficit exists in research involving government classes. If educators are to better understand the potential digital technologies have for advancing and supporting citizenship studies, more research in this discipline is necessary.

Recent literature has produced few studies on non-digital tools in the social studies classroom, so an emphasis on digital tools is recognized. In order to fully examine the use of digital technologies in today’s social studies classrooms it is first important to understand society’s desired outcomes of schooling in America and how schools change
to meet shifting demands. Since the time of *A Nation at Risk*, an environment of accountability, complete with standards based curriculum and high stakes testing, has permeated American schools. Additionally, the demand for technology competence has been added to the knowledge bases required of many teachers. Appraising the usage of digital technology, both inside and outside of the classroom, provides a snapshot of the depth of its implementation and the educational results of its use. A survey of the research of the use of digital technologies in social studies classrooms can assist in projecting how valuable this technology is to teaching and learning and helps to forecast whether it can be successfully used to develop students into participatory citizens in the 21st century. Twenty-first century citizens will need knowledge of our nations’ civic foundations such as governmental institutions, and civic and political rights as well as possess critical reasoning skills, and a sense of individual and community responsibility.

**21st CENTURY SKILLS AND THE PURPOSE OF SCHOOLING IN AMERICA**

America has long depended on public schools to promote three main goals: democratic equality -- preparing students for citizenship; social efficacy -- preparing students for the workplace; and social mobility -- offering students a commodity that prepares them to become more competitive in society (Labaree, 1997). These goals often overlap, and each has taken prominence over the others at different times, within different groups of people, with different political emphasis. Today, the focus appears to be less on democratic equality and more on social efficiency and social mobility (Wiltmeyer, 2010)
While we know that education helps keep a nation economically competitive, what readies young people for economic competition has changed. Currently, a number of commentators have suggested that educating young people for the 21st century will require a fundamental shift in the nature of schooling. Today, skills such as problem solving, collaborative group work, and working to understand the big picture as opposed to a single component are needed in the workplace (Pink, 2005; Friedman 2007). The National Educational Technology Standards for Students: the Next Generation (NETS-S; ISTE, 2007) “now emphasizes technology as a tool for research, communication, collaboration, problem solving and decision making, which are essential citizenship skills” (Thieman, 2008, p.345).

In the 21st century the ability to amalgamate information will become paramount (Pink, 2005). Students will need to think creatively and synthesize knowledge positions to compete in our global economy. Expanding on Pink’s economic focus, Thomas Friedman writes of the importance of students learning navigation skills and becoming technologically literate in order to access information from the ever expanding universe of information on the Web and to help develop the judgment skills to interpret the information. “In the future, how we educate our children may prove more important than how much we educate them” (Friedman, 2007, p.309). Requirements are shifting for an institution that is conservative in nature and struggles with change.
TIME, CONTINUITY, AND CHANGE IN SCHOOLING

Changes to public schools are often motivated by a desire to improve both education and society (Tyack & Cuban, 1995). The skills that Pink and Friedman cite as necessary to 21st century citizenship are different from traditional curriculum offerings and require a change to how instruction is delivered. Regardless of the dominant educational goal popular at any given time, democratic equality, social efficacy, or social mobility, change to American schooling is often a prolonged process. The organization of schools, curriculum offerings, the routines of schooling and other school structures have remained stable over time (Tyack & Tobin, 1994). “Habituated to the traditional organizational practices and either taking them for granted or seeing them as institutionally and socially functional, educators, school boards and parents resisted fundamental change” (Tyack & Tobin, 1994, p. 465). Additionally, school reform does not always involve significant changes to the “grammar of schooling” (Tyack & Tobin, 1994). Even the National Commission on Excellence, the commission that produced the A Nation at Risk report, “essentially reinforced the existing apparatus, only urging it to do much, much better” (Goodlad, 2004, p. XVII).

The fact that organizational practices of American education are developed and implemented at three different levels of government, national, state, and local, also helps to explain the slow adoption of school change. “In such a decentralized yet national system of schooling that encourages plural interest groups and much prodding of professionals to alter what they do, it should come as no surprise that many reforms
seldom go beyond getting adopted as policy” (Cuban, 1990, p. 9). When reforms do succeed in getting beyond the adoption phase, implementation is conditional until accountability measures put teeth into the reform movement. This accountability in turn prevents new reforms from taking hold (Hargreaves & Shirley, 2009).

In 2001 the latest piece of federal education reform passed the United States Congress. This law, No Child Left Behind, NCLB, provides for an accountability piece necessary for this implementation of this educational reform. While social studies is not part of this legislation and as such the federal government does not assess student achievement in social studies classes, it is a discipline that has high stakes tests administered at the state level. For example, in Virginia several social studies classes now culminate with end-of-course high stakes test in spite of the discipline not being part of NCLB.

The literature has shown that standardized curriculum and high stakes testing has led to a condition of presentism that exacerbates the problem of enacting school change (Hargreaves & Shirley, 2009). Presentism is the idea that the “pressures of schools” keep teachers focused on immediate goals, such as passing scores on end of course tests, rather than planning or implementing systematic change. The literature states that the push for accountability and the move to more centralized bureaucratic systems of credentialing has led to complexity reduction and the chunking of information that is then tested on basic end of course tests (McNeil, 2000; Goodlad, 2004). This patterned genre of
teaching and testing is often devoid of inquiry and intrigue (Goodlad, 2004), and has slowed the integration of technology and instruction (National Center on Education and the Economy, 2007). What is disconcerting is that at the same time concerns are being expressed regarding the nature of teaching in schools and even the presence of such subjects as social studies (O’Connor et al., 2007; Carnegie Review, 2011) another disturbing trend is surfacing, a decline in high school graduation rates (Khadaroo, 2010). How much the drop out rate is rising is debatable and dependant on the scale used to measure the data, however regardless of how the data is measured high school graduation rates have declined since 1965 (Warren & Halpern-Manners, 2007).

It is difficult to expect schools to develop students into citizens if students are not present in school. Unfortunately, today “American public schools have a 30% national dropout rate, and a rate approaching 50% in urban schools. Approximately 1.2 million public school students drop out of high school each year” (Grey, 2008, p.1). The literature shows young people who drop out of school participate in political and civic activities at much lower rates than students who graduate from high school (Hess, 2008). While the high drop out rate has merited economic concern, these lower levels of political and civic participation indicated by the literature violate the very core our democratic society.
THE NATURE OF SOCIAL STUDIES AND CITIZENSHIP

The content area of social studies is central to the development of civic values and interest in our democratic society. The National Council for the Social Studies (NCSS) explains,

The mission of social studies at its most general level is the education of future citizens, preparing young people to ‘develop the abilities to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world (NCSS, 1994).

This mission is accomplished by following the ten standards developed for the study of social studies. Unlike many states, NCSS has chosen to consider social studies as the Integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology as well as appropriate content from the humanities, mathematics and the natural sciences (NCSS, 1994, p. VII).

Some states, such as Virginia, take a less integrated approach to social studies instruction, and provide standards for individual disciplines as opposed to the entire content area. Virginia titles social studies instruction as history and the social sciences, anchored by four subject areas: World History, Geography, U.S. History and U.S.
Government. While many social studies classes contribute to citizenship development, it is the discipline of U.S. Government that shoulders much of the responsibility for citizenship education. However, research studies that specifically focus on government classes are sparse, despite the fact that this course generally contains an element of civics education and “recent calls for action have included a greater emphasis on civic education” (Niemi & Smith, 2001).

The government teacher in America is faced with great responsibilities and challenges. These teachers are responsible for educating students about the tenets of democracy, the principles that underpin our Constitution such as popular sovereignty, representative democracy, limited government, rule of law, separation of powers, checks and balances and guarantees of civil liberties found in the Bill of Rights, as well as the ways of participating in our government, in other words teaching government with a focus on preparing students for active citizenship. Government teachers often teach 12th grade students and as such are the last encounter our next generation of political participants have to receive free instruction in citizenship education. Despite new calls to advance civics instruction, the National Assessment of Educational Progress, NAEP, in 2006 determined that “only 27% of twelfth-grade students are proficient in civics” (Scheuerell, 2008, p. 181). While government classes are not exclusively about teaching civics, the role of the American citizen in government is examined. An analysis of the tools used in social studies classes in the United States, including government and history classes, might prove to have an interesting connection to the civic proficiency levels
among our youth. Are social studies teachers, specifically U.S. Government teachers lulling our students into inactivity? Could newer instructional tools capture the attention of apathetic youths?

“Studies of instruction in American high schools generally report that teachers rely heavily on a narrow range of familiar practices” (Schug, Western & Enochs, 1997; Hope, 1996; p. 97). The principle instructional tool used in most social studies classes is the textbook (Evans & Rosenzweig, 1992; Schug et al., 1997; Porat, 2004; Edwards, 2008). Evan’s and Rosenzweig contend, “The conceptual and narrative framework of a basic textbook becomes, for thousands of students, the primary lens through which they incorporate historical knowledge for the rest of their lives” (p. 1377). Moreover, because social studies textbook are often full of prose, students have difficulty comprehending textbook narratives (Porat, 2004). Despite such comprehension difficulties, and the students tendency to “focus on processing the story and not on questioning the validity of the textbook author’s interpretation of events” (Porat, 2004, p.925), social studies teachers continue to consistently use the textbook in their classes. Schug et al. (1997) link the heavy reliance on textbooks in social studies classes to the economic theory of public choice. According to these researchers social studies teachers, like others, face scarcity. The teachers’ scarcity is time and the decision to rely on textbooks so heavily is motivated by the teachers’ self-interest, presumably the ability to organize their course not the interest of the students (Schug et al., 1997). In his writings about using textbooks to develop disciplinary knowledge in history, Edwards (2008) writes, “Textbooks are our
professional communities oldest classroom resource, yet, surprisingly, our least
examined” (p. 39).

In analyzing American textbooks, Abowitz and Harnish (2006) discovered the
most dominant discourses of citizenship found in these textbooks are the civic republican,
which focuses on patriotism and loyalty to our nation and the liberal framework that
focuses more on rights of individuals and equality. The civic republican discourse
focuses on citizen obligations, whereas the liberal discourse focuses on the rights of
citizens. Critical citizenship, a framework that challenges the boundaries of the civic
republicanism and liberal framework and includes feminist discourses, cultural citizen
discourses, neo-Marxist discourses, and transnational discourses, is not a predominant
framework found in contemporary government textbooks (Abowitz & Harnish, 2006).

W. Lance Bennett (2008) differentiates between the two dominant discourses of
citizenship by explaining that a “dutiful citizen” (DC), one that civic republicanism
fosters, differs from the “actualizing citizen” (AC), fostered by the more liberal
framework. The difference between the two types of citizens is that a “dutiful citizen”
operates from a sense of obligation, and an “actualizing citizen” from a more personal
connection to political and civic activity (Bennett, 2008). It is interesting to note that
there is a generational gap between the DC and the AC, with older Americans preferring
the DC definition and the younger generation relating more the to AC definition (Bennett,
2008). Unfortunately:
The groups that may be both the most important and most out of touch with the shifting citizen identity patterns of youth are educators and education policymakers. Most of those who preside over curriculum decisions and policies continue to be older-generation DC citizens who assume that their model of citizenship needs to be acquired by future generations (Bennett, 2008, p. 16).

Westheimer and Kahne (2004) developed another citizenship framework, one that created three categories of citizenship, “personally responsible citizens, participatory citizens and justice oriented citizens” (p. 238). The personally responsible citizen is the citizen who views his role in society as a law-abiding citizen who works and contributes to society through his responsible actions. The participatory citizen is committed to action. Beyond being law-abiding, the participatory citizen is active in community organizations and is willing to take on leadership roles in these organizations to better society. The justice-oriented citizen takes a critical lens to “social, political and economic structures to see beyond the surface causes and seeks out areas of injustice.” (Westheimer & Kahne, 2004, p. 240).

These three categories of citizenship closely align with Walter Parker’s (1996) description of three conceptions of citizenship education. Parker explains that the “traditional”, “progressive” and “advanced” conceptions of citizenship focus on different understandings. The traditional focuses on the organizational structure and workings of our government, the progressive focus is on this knowledge base but add a commitment
of civic participation similar to what Westheimer and Kahne include in their description of a participatory citizen. Parker’s advanced conception of citizenship education included the two other conceptions but also advances discussion and knowledge of the “tensions between pluralism and assimilation” (Parker, 1996, p. 113). Whatever the conception of citizenship education curriculum decisions and policies will need to be closely examined to ensure resonance with youth. Is it possible that the use of digital technologies, which is so welcomed by our younger citizens, could be used for citizenship development?

Societal participation is paramount for active citizenship. Preparing our youth for the “office of citizen” (Parker, 2003, p. 18) is a great responsibility. Developing participatory citizens requires instruction that allows students to discuss and deliberate public issues, problem solve, and view political participation beyond simply casting a ballot. Being mindful of Thomas Friedman’s position that how we educate our student is of critical importance, is social studies education readying students for idiocy? The word idiocy was chosen purposefully as Parker (2003) uses the Greek terms “idiot” to describe a “selfish” person who is disinterested in civic and community participation. “An idiot is one whose self-centeredness undermines his or her citizen identity, causing it to wither or, worse, never take root in the first place” (Parker, 2003, p. 3). In contemporary society, perhaps due to capitalism, rugged individualism or affluence, “idiots” are more common than in the Greek polis (Parker, 2010). Whatever the reason for the increased number of “idiots”, the “idiot” needs to move through puberty, and education can assist in
developing citizens. “As it turns out, schools are ideal cites for democratic citizenship education [because] a school is not a private place, like our homes, but a public, civic place with a jumble of diverse students” (Parker, 2010, p. 251).

The limited research available on the use of technology to teach about citizenship has produced competing findings on whether or not digital technologies are effective in advancing the understandings and practices of democracy. According to Lee (2008), “technology can play an effective role in lowering barriers to participation in democratic arenas . . . technology offers a way to authentically represent American society in student’s lived school experiences” (p. 140). Rheingold (2008) goes further in his endorsement of the use of digital technologies to support civic education, he states, “In the twenty-first century, participatory media education and civic education are inextricable” (p.103).

However, other researchers find that there is little evidence that technology is being used to “create better communities and build strong citizens” (Cuban, 2001, p. 197). Still other researchers promote the idea that technology offers the student the opportunity to massage material, and such insights and analysis help develop one’s capacity for citizenship. Proponents of digital technologies suggest this new media gives citizens “more control over their information diet . . . thus arming citizens with the information they need in order to participate” (Tsagarousianou, Tambini & Bryan 1998, p.6). Moreover, the value of increasing amounts of information is also questioned. Technology
has been blamed for "fostering social isolation and youth’s retreat into a private world disconnected from their ‘real life’ communities" (Bers, 2008, p. 140). Speaking to Hampton University’s 2010 graduation, our nation’s President warned, “With iPods and iPads and XBOXes and PlayStations — none of which I know how to work — information becomes a distraction, a diversion, a form of entertainment, rather than a tool of empowerment, rather than the means of emancipation” (Wiltmeyer, 2010). Despite the fact that a dichotomy between technology and citizenship skills definitely exists, the NCSS Position Statement on Media Literacy (NCSS, 2009) advocates: “Social studies educators should provide young people with the awareness and abilities to critically question and create new media and technology, and the digital, democratic experiences, necessary to become active participants in the shaping of democracy.”

DIGITAL TECHNOLOGIES IN THE SOCIAL STUDIES

Digital technologies permeate both the public and private spaces. To date, “more than two-thirds of the people in the United States have Internet connections at home, more than sixty percent of which are broadband” (Horrigan 2009). Additionally, “ninety percent of school-age youth use the Internet, with adolescents ages 12-17 representing the largest and fastest-growing group of users” (DeBelli & Chapman, 2006; Lenhart, Arafeh, Smith & Macgill, 2008). Moreover, adolescents are spending increasing amounts of time out of school on new media, specifically social networking sites such as MySpace, Facebook and Twitter. “Today, 8-18 year-olds devote an average of 7 hours and 38 minutes (7:38) to using entertainment media across a typical day (more than 53 hours a
week)” (Hamel et al., 2010). Nearly 100% of schools in America are connected to the Internet (Greenhow, Robelia & Hughes, 2009). Since the mid 1990’s, Internet connections in public schools have risen from 35% to 100%, and the student to computer ratio has decreased from 12:1 to 3.8:1 (Wells & Lewis, 2006). Despite a massive buy in on the part of school systems across the nation, a paradox exists; some claim that computers have not changed the way we educate our youth (Cuban, 2001). Claims that digital technologies revolutionize teaching and learning and raise test scores are unsubstantiated (Cuban, 2006).

However, over the last 25 years various digital technologies have been billed as the lynchpin to engaging students with these advanced thinking skills (Roschelle, Pea, Hoadley, Gordin & Means, 2000; Hopson, Simms & Knezek, 2001; Whitworth & Berson, 2003). Across our nation, federal, state and local governing bodies have committed significant financial resources to providing our schools with technological resources in an attempt to close the achievement gap and increase student achievement (Web-Based Education Commission, 2000). Unfortunately, research indicates that computers in schools are used differently with different groups of students and may result in widening the achievement gap instead of closing it (DeWitt, 2007; Blades, 2007).

The type of student, advanced or non-advanced, and their socio-economic status impacts how digital technologies are being used in social studies classes (DeWitt, 2007). DeWitt’s study is comprised of data collected from the practices of four accomplished teachers of social studies who were nominated for the study based on their expertise in
social studies instruction and the fact that they were using computers in their instruction. Two of the teachers teach students of lower socio-economic status and two teachers teach students of high-socio-economic status. During DeWitt’s four-month study, data was gathered through a combination of three semi-structured interviews of each participant, several hours of classroom observation, and data analysis of classroom handouts and PowerPoint presentations. DeWitt’s research indicated that teachers used computers primarily to support traditional pedagogical practices and that social economic status of the students did affect how computers were used in classroom instruction: “students in the highest and lowest social class status used computers more for school assignments than did others” (DeWitt, 2007 p. 293).

Blades (2007) report that Jim Cummings, prolific author and professor at the Ontario Institute for Studies in education, has found that the cultural divide is producing a pedagogical divide. Cummings writes, “Poor kids get behaviorism [in schools] and rich kids get social constructivism, in practice this means skills for the poor and knowledge for the rich” (p.2). This divide is what some education experts refer to as the “Matthew Effect” (Gladwell, 2008). The Matthew Effect” references the biblical Book of Matthew where,

One reads that the rich get richer and the poor poorer . . . The Matthew Effect in education is based on the fact that prior knowledge is a powerful predictor of future learning. The knowledge and skills children already possess enables them to learn still more (Parker, 2010, p. 2).
The literature shows that digital technologies are not being equitably disseminated across social classes and ability levels (DeWitt, 2007). “It may be the cruelest irony of No Child Left Behind that the students who most need to be prepared at school for an online age of information are precisely those who are being prepared the least” (Leu, O’Byrne, Zawilinski, McVerry & Everett-Cacopardo, 2009, p. 267). We were warned a long time ago that computer technology was an ideology that needed to be examined for its effective usage in schools (Goodson & Magnan, 1995). In order for digital technological expenditures to be maximized, educators will need to examine pedagogical practices to insure that deliberate curricula choices are made that positively affect student learning.

**THEORETICAL FRAMEWORKS**

Currently two theories have come into prominence in much of the literature that examines the relationship between teaching and learning in social studies and the potential and provisos of using digital technologies. These theories are Social Constructivism and Technological Pedagogical Content Knowledge (TPCK) also known as TPACK.

*Social Constructivism*

The co-production of knowledge is central to student-centered pedagogies and central to the philosophy of social constructivism. “Social Constructivism is currently the most accepted epistemological position associated with online learning” (Kanuka & Anderson, 1998, p. 60). Social Constructivists argue that individuals derive knowledge from shared social experiences, that knowledge is created between people. They assert
that knowledge is a social product and not an individual product. In fact, Social Constructivists do not view knowledge as an individual experience at all. Moreover, since knowledge is based on social experience, it is empirical and it “involves the active creation and modification of thoughts, ideas, and understandings as the result of experiences that occur within socio-cultural contexts” (Doolittle & Hicks, 2003, p. 76). Social interaction is vital to constructing knowledge and this knowledge serves a social purpose. “The use of computers and the telecommunications technology supports this social construction of knowledge while simultaneously creating an archive of this interactive process” (Kanuka & Anderson, 1998, p. 61).

The constructs of Social Constructivism may be at odds with the historical practice of education in general and social studies education specifically. Educators have long been thought of and considered themselves the experts in the field they teach. As experts, they often take the behaviorist approach to conveying their knowledge to novices and thus serving as the authority or the “bearer of truth” to their students. Constructivism, contrary to behaviorism, takes a different approach to knowing, to the truth, to reality. Constructivists believe that the students, in fact everyone, constructs their own reality through their experiences. This construction of reality shifts the focus from “trying to find truth to searching for perspective” (Doolittle & Hicks, 2003, p. 76). NCSS calls for the active construction of knowledge, which allows students to connect prior knowledge to new information about a topic. Learning should connect new information to prior
knowledge and may result in altering previous held beliefs based on new information
(NCSS, Principles for Learning, 2010). No longer is rote memorization the standard.

Classroom activities that offer opportunities for discovery beyond rote memorization of facts will ready students for the 21st century demands of problem solving, critical thinking, and creativity. A growing body of literature suggests that digital technologies may afford opportunities to support inquiry-oriented classrooms (Edelson, Gordin, & Pea, 1999; Edelson, 2001; Myers & Beach, 2004). However, until recently, these arguments were somewhat theoretically underdeveloped in terms of examining the relationship between teachers’ knowledge, pedagogy, and the tools they use to support learning.

Technological Pedagogical Content Knowledge (TPCK/TPACK)

A theoretical construct that holds promise for connecting teachers’ knowledge and pedagogy with digital technologies is known as Technological Pedagogical Content Knowledge (TPCK). TPCK is a theory about instructional choices that features overlapping considerations about technology, pedagogy, and content knowledge. TPCK is an outgrowth of Lee Shulman’s work at The Knowledge and Growth in Teaching Program at Stanford University. Shulman developed Pedagogy Content Knowledge, PCK, a theory that combined the components of pedagogy and content knowledge (PCK). Shulman’s theory suggests that teaching is more than knowledge of content;
comprehension of how the knowledge is shared and co-constructed is paramount.

Shulman viewed PCK as

The particular form of content knowledge that embodies the aspects of content most germane to its teachability. Within the category of pedagogical content knowledge I include, for the most regularly taught topics in one’s subject area, the most useful forms of representation of those ideas, the most powerful analogies, illustrations, examples, explanations, and demonstrations-in a word, the ways of representing and formulating the subject that make it comprehensible to others . . . [it] also includes an understanding of what makes the learning of specific concepts easy or difficult; the conceptions and perceptions that students of different ages and backgrounds bring with them to learning (Shulman, 1986, p.9).

Typically, PCK develops with experience. “Experienced teachers often have a unique way of understanding the content that they teach . . . These teachers have developed a way of knowing what enables them to function effectively and efficiently in the classroom” (Gudmundsdottir, 1991, p. 211).

The newer framework, TPCK, adds the component of technology, and it is important to recognize that the technology piece of classroom instruction is but one piece of the TPCK instructional decision and like content and pedagogical decisions should be selected purposefully. “The knowledge of technology cannot be treated as context free and good teaching requires an understanding of how technology relates to pedagogy and
content”(Koehler, Mishra & Yahya, 2007, p. 742). Additionally, it is important to note that the concept of technology has changed over the years. What was once thought of as a technology, such as textbooks, and overhead projectors have become what Mishra and Koehler, 2006, call “transparent” in that they are no longer considered technologies. “In contrast, the more common usage of technology refers to digital computers and computer software”(Mishra & Koehler, 2006, p. 1023).

Proponents of the TPCK framework contend that the framework helps educators to illuminate the relationship between technology and content and to make pedagogical choices that foster student understanding. Digital technologies used in classes simply to assist students in acquiring a technological skill falls short of the purpose of TPCK because this instructional decision does little to advance content knowledge. “An emphasis on merely learning the technology may lead to an emphasis on students learning technology (technology as the subject and content of learning) rather than the subject matter they are supposed to learn” (Mishra & Koehler, 2006, p. 1032). Conversely, TPCK requires educators to view each of the components as overlapping, co-dependent of each other. “Technology and content exist in a continually evolving relationship, sometimes driven by newer content-related ideas that emerge and at other times by newer technologies that allow for different kinds of representations and access” (Mishra & Koehler, 2006, p. 1044). It is possible that TPCK provides educators with an explanatory model for instructional planning and dovetails nicely within the constructivists’ viewpoint on learning.
TPCK is the basis of good teaching with technology and requires an understanding of the representation of concepts using technologies, pedagogical techniques that use technologies in constructive ways to teach content; knowledge of what makes concepts difficult or easy to learn and how technology can help redress some of the problems that student’s face; knowledge of students’ prior knowledge and theories of epistemology; and knowledge of how technologies can be used to build on existing knowledge and to develop new epistemologies or strengthen old ones (Mishra & Koehler, 2006, p. 1029).

Teacher preparation and/or professional development that expose social studies educators to the framework of TPCK may be a way to effectively elucidate the importance of connecting pedagogy, content and digital technologies.

John Lee (2008) suggests that TPCK, although messy when it comes to social studies because of its multiple disciplines, can be used to include technology in the social studies classroom. Lee asserts that with proper vetting, social studies teachers can effectively add technology to their lesson plans thus allowing students access great amounts of information and providing an authentic audience for their work.

Using Shulman’s term, transformative action -- actions that teachers take to assure their chosen pedagogy is most appropriate -- Lee describes technology as “a dynamic component in this transformative process” (Lee, 2008, p. 130). According to Lee there are six specific pedagogical actions that social studies teachers might use to frame inherently technological subject matter and four pedagogical actions designed to improve instruction that can inform educators about how technology might best be used
in the social studies classroom. Lee includes the following technological actions under the subheading of inherently technological subject matter found in a social studies classroom:

1. locating and adapting digital sources for use in the classroom,

2. facilitating their students’ work in non-linear environments, requiring students to make critical decisions about how to select their own resources and navigate through a wide variety of interfaces,

3. working to develop critical media literacy skills among their students,

4. providing students with opportunities to utilize the presentational capabilities of the Web to motivate and encourage students,

5. using the Internet to extend collaboration and communication among students, and

6. extending and promoting active and authentic forms of human interaction in technology enabled social networks (Lee, 2008, p.130).

Listed as actions that social studies teachers might chose to improve their instruction with technology include:

1. making use of historical source materials available through online sources,
2. promoting understandings of spatial, human, and physical systems aided by technology,

3. expanding social experiences using technology, and

4. encouraging economic literacy through the use of technology (Lee, 2008, p. 131).

Since pedagogical choices remain numerous, it requires a skilled teacher to select the most suitable uses of technology. However, the term suitable is unclear as a teacher generally makes instructional choices about their specific content area and the use of digital technologies based on previously held pedagogical choices (Goodson & Mangan, 1995; Cuban, 2001; Berson & Balta, 2004; Lee, Doolittle & Hicks, 2006; Zhao, 2007).

Hammond and Manfra (2009) advance the discussion of the importance of pedagogical choices and how these choices relate to the integration of technology into the social studies classroom by overlaying a three section model, giving-prompting-making, onto the TPCK framework. However, unlike, Mishra and Koehler’s (2006) work on TPCK, where each component plays an equally important role in “good teaching”, Hammond and Manfra (2008) choose pedagogy as the most influential component to the social studies classroom. Their findings reported that what a teacher does in the classroom is impacted more by their pedagogy than technology or content. According to these researchers, classroom instruction design is highly dependent on the pedagogical choices of the teacher and giving, prompting, and making categorize these choices.
Teachers who use the giving model impart information to students directly, often through lecture-based instruction. This pedagogy, in which the teacher is the primary source of information, is popular with teachers who are expected to “rapidly cover content, control the classroom and uphold standards of accuracy and exactness” (Hammond & Manfra, 2009, p. 165). When teachers with this pedagogy use digital technologies, the technology is generally such that it simply furthers the “giving” of information, including recall and other lower level thinking skills.

The prompting model is used by teachers who align themselves with the constructivists theoretical framework in that it requires the students to co-create meaning and not simply accept the teacher’s definition of the content. Since much of this model is based on inquiry-based instruction, this model requires teachers to scaffold the learning task (Brush & Saye, 2002). Filmstrips and overhead projectors helped scaffold instruction in previous decades, now the successful integration of digital technologies into a social studies classroom requires “significant amounts of adaptation and soft scaffolding from the teacher” (Hammond & Manfra, 2009, p.169). With this model, teachers may use digital technologies to help their students become more engaged in the learning process than is possible with teachers using the giving model.

The third model, the making model, extends the scaffolding of the prompting model to include the construction of new products, and as such, the students become producers and not simply consumers of information. While technology is not necessary
in the making model, as is witnessed by much project work in the social studies classroom, Hammond and Manfra (2009) contend

Incorporating technology into the making pedagogy mode seems to be a natural outgrowth of the traditional use of projects in social studies instruction.

Technology has frequently been integrated into the social studies as teachers increasingly assign research projects using Web-based resources for the construction of a project (p. 171)

Many of the studies listed in Table 1, are examples of students using digital technologies in project work. Hammond and Manfra’s three-pronged model offers a way for social studies teachers to consider how they integrate digital technologies within their teaching and to assist these educators in considering possible shifts in their pedagogical choices and new ways to incorporate digital technologies into their instruction.

Zhao’s (2007) study of seventeen social studies practitioners and their use of technology connects to Hammond and Manfra’s giving-prompting-making model in that Zhao’s categories of teachers’ use of technology is aligned with teacher practices found in Hammond and Manfra’s research. Zhao’s categories are based on descriptions found in earlier research that states teachers’ use of technology exists on a methods continuum ranging from teacher-centered methods to student-centered methods (Ertmer, Gopalakrishnan, & Ross, 2001). Zhao’s research illustrates that the closer a teacher is to the teacher-centered methods point on the continuum the more likely the teacher is to use
the giving model and chose technology to support this pedagogy. Whereas, as a teacher moves toward the prompting and making models, more student-centered methods are implemented. Technology is used to encourage inquiry and other 21st century higher order thinking skills and not simply to support traditional teacher-directed methods (Zhao, 2007; Hammond & Manfra, 2009). Moving toward these student-centered models will require change in the way social studies teachers approach their classroom activities.

STUDIES IN SOCIAL STUDIES AND DIGITAL TECHNOLOGIES

The social studies classroom is following the lead of school culture, and is slow to adopt change. While most schools in America have embraced computer use, social studies lags behind other content areas when it comes to classroom digital technologies usage (Stuckart & Berson, 2009). According to Berson and Balta (2004) “social studies classrooms have been especially reticent in applying uses of technology to instruction [and] technology has not appreciably changed the instruction of social studies in the last twenty years” (p. 142). This might be due to what Zhao, Pugh, Sheldon and Byers (2002) refer to as “distance from existing practice”. These researchers contend the further the innovation (e.g. digital technologies) is away from existing practices, such as teacher talk dominated social studies classrooms, the less likely the teacher is to change her practices.

Many of the studies examining the introduction of digital technologies in the social studies classroom have been done in history classes. However, social studies is not limited to the study of history: social studies cuts across several disciplines and as previously stated the discipline most responsible for the development of citizenship skills
is the content area of government/civics. More research is needed about how teaching and learning impacts citizenship development. Levstik and Tyson (2008) write,

In a field whose goals include developing citizens who draw on history and the social sciences to inform decision-making, we might expect a rich array of research to support these goals. With the notable exception of history, this has not been the case. Between 1995 and 2007, social studies and general educational research journals published relatively little research on teaching and learning in particular sciences (p. 5)

Table 1 outlines a representative slice of research studies that look at the nature and use of digital technologies within social studies classrooms. I maintain that a separate review of these classroom based studies is useful to understanding which disciplines are being researched and how digital technologies are being used in social studies education. The studies included in Table 1 are not meant to be an all-inclusive listing, but instead offer an initial way to view the literature landscape.
Table 1 -- Taxonomy of Sample Research Studies of Technology in Social Studies Classrooms

<table>
<thead>
<tr>
<th>Type of Instructional Use of Digital Technology</th>
<th>Discipline</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaffolding, Inquiry and Problem Based Learning</td>
<td>U.S. History</td>
<td>Brush &amp; Saye, 2000; Saye &amp; Brush, 2002; Brush &amp; Saye, 2002; Wolf, Brush &amp; Saye, 2003; Lee &amp; Calandra, 2004; Saye &amp; Brush, 2006</td>
</tr>
<tr>
<td>On-line Discussion</td>
<td>U.S. History</td>
<td>Larson &amp; Keipler, 2002; Larson, B., 2005; Berson &amp; Berson, 2006; Risinger, C., 2006; Journell, W., 2008; Snyder, C., 2008; Stoddard, Hofer &amp; Buchanan, 2008; Blankenship, W., 2009; Manfra, Gray, &amp; Lee, 2010</td>
</tr>
<tr>
<td>WebQuest</td>
<td>World History; U.S. History</td>
<td>Milson, 2002; Lipscomb, 2002; Strickland &amp; Nazzal, 2005</td>
</tr>
<tr>
<td>Cognitive /Graphic Organizers</td>
<td>World History</td>
<td>Boon, Burke, Fore &amp; Spencer, 2006; Boon, Fore &amp; Spencer, 2007; Boon, Fore, Rasheed, 2007</td>
</tr>
<tr>
<td>Digital Video/Audio Production</td>
<td>U.S. History; possibly Civics</td>
<td>Ferster, Hammond &amp; Bull, 2006; Bolick, Norberg &amp; Durbin, 2007; Libscomb, Guenther, &amp; McLeod, 2007; Dunsmore &amp; Lagos, 2008; Manfra &amp; Hammond, 2008; Fehn, Johnson &amp; Smith, 2010; Maguth, Yamaguchi &amp; Elliott, 2010</td>
</tr>
<tr>
<td>Digital Historical Libraries, Digital Timelines, Virtual Field Trips</td>
<td>U.S. History &amp; World History</td>
<td>Hicks, Doolittle &amp; Lee, 2004; Bolick, C., 2004; Lee, Doolittle &amp; Hicks, 2006; Potter, L., 2005; Resta, Flowers, &amp; Tothero, 2007; Wilson, Wright &amp; Peirano, 2007; Martin, Wineburg, Rosenzweig, &amp; Leon, 2008; White, W., 2010</td>
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**Scaffolding, Inquiry, and Problem-Based Learning**

Inquiry and problem-based learning are cornerstones of constructivists’ practices (Savery & Duffy, 2001). Studies that focus on the use of digital technologies and problem-based learning examine how hard scaffolding and soft scaffolding (Brush & Saye, 2002; Wolf, Brush & Saye, 2003; Saye & Brush, 2006) improve student products in U.S. History classes. Saye and Brush embedded student guides that provided hard scaffolding through additional resources and questions for students to consider in their multimedia software *Decision Point*. They found, “when compared to students in a more traditional civil rights unit, students who used Decision Point were more engaged with the content than their non-DP peers” (Brush & Saye, 2002, p. 7). Additionally, Saye and
Brush (2002) reasoned that using embedded hypermedia resources could help students get past stumbling blocks to critical reasoning.

Research that examined soft scaffolding with the use of digital technologies, teachers’ responses to student questions, found that “teachers faced unresolved issues created by this very demanding learning environment” (Saye & Brush, 2006, p. 207). Furthermore, Lee and Calandra (2004) researched the use of embedded scaffolding and found that not all scaffolding resulted in higher student achievement. Their study involved one group of students whose instruction included topical annotations, as a type of scaffolding, and another group whose instruction did not. Lee and Calandra’s results indicate that while scaffolding can be helpful to students, situational importance must also be considered. These researchers point out that some annotations can be classified as functional, useful, and meaningful while other annotations could be classified as nonfunctional. Annotations that explain key concepts are most beneficial and those that do not assist student in understanding the material are merely extras.

Embedding functional hypermedia resources, as a type of hard scaffolding, has been shown to help students develop critical reasoning (Saye & Brush, 2002), a skill that is necessary for students to become informed active citizens. Could the use of soft and hard scaffolding in the U.S. Government class result in more participation from students? Research that examines how government teachers use embedded hypermedia to help students comprehend difficult civic concepts and satisfy student inquiries might spotlight whether this instructional choice is useful to developing active citizens. While it would be
difficult to measure, it would be interesting to know if students who possess a deeper understanding of the key concepts in government more likely to participate in society than those who lack the understanding of key principles.

*On-line Discussion*

Much of the work done in social studies classroom calls for the examination of topics. Beginning with the premise that young people are expressive individuals, it is interesting to study how on-line discussions, which offer a different venue for class discussions than do the time and space constraints of a traditional classroom, affect how students express themselves. On-line discussions could allow for the examination of topics to continue beyond the time allotted for a high school class period, and allow for responses that might not surface in a face-to-face discussion. Additionally, more opportunities to participate in on-line discussions exist if the assignment requires the participation of all students over the few opportunities present in most classrooms. Merry Merryfield (2003) writes, “Over the last 5 years I have seen more complex thinking about course content in threaded discussions than I believe is ever possible in an oral whole class discussion in a conventional classroom” (p. 156). However, other research shows that the success of this type of discussion is also highly situational. Larson and Keiper (2002) compared classroom discussion in a traditional classroom to that of on-line threaded discussions and found that a teacher had much more difficulty re-directing the discussion in the on-line format.
Manfra, Gray, and Lee (2010) studied how blogs could provide opportunities for lower achieving students to connect with historical content. They instituted the use of blogs with units on the Progressive Era and the 1920’s. They concluded that using a blog in the instruction increased the level of student participation, and blog entries showed that the students had gained content knowledge. However, results on end of unit tests were mixed. On the progressive unit, test scores were low and appeared not to be altered by the blogging activity, whereas, on the 1920’s unit scores of students who blogged were higher than those who did not. “Blogs have unique pedagogical affordances that allow teachers new ways to teach content” (Manfra, Gray, & Lee, 2010, p. 116).

Journell’s (2008) study of the teacher’s role in facilitating historical discussions using asynchronous communication also indicated situational importance. Journell studied threaded discussion board postings and other online communication between teacher and student to determine if the teacher’s actions or inactions affected the educational experience. The teacher in Journell’s study did not effectively facilitate the online historical discussions. Journell concluded “adolescents cannot be expected to initiate and carry sophisticated historical conversations asynchronously without teacher support” (Journell, 2008, p. 343).

The topics frequently discussed in government classes, such as the most favorable course of government action on a myriad of issues, are often contentious as there is a wide range of opinions about such actions. Since young people “demonstrate
fluency with new ways of communicating and connecting through digital technologies” (Xenos & Foot, 2008, p. 51), it would be interesting to have research that studies if digital technologies provide, or do not provide, environments that promote more detailed and thought filled responses to controversial topics in government than does the traditional class discussion. Additionally “social studies educators have consistently been interested in the teaching of CPI (controversial public issues) because of the connection between learning how to discuss divisive public topics and preparing for democratic citizenship” (Hess, 2002, p. 11) and an on-line format might foster these discussions. If government classes are to develop active citizens, citizens who are involved in public life and affairs, then these students need to develop the ability to communicate their opinions effectively.

*WebQuest/Web Inquiry*

Social studies teachers promote inquiry learning (Milson 2002; Saye & Brush, 2006), and the Internet has afforded teachers and students a much larger repository of information. One approach to inquiry learning is the WebQuest approach. WebQuests assist students with their inquiry and analysis by affording them the opportunity to examine multiple primary and secondary sources that are available on the Internet (Lipscomb, 2002). WebQuests are akin to online scavenger hunts for information. While the designs of WebQuests facilitate the collection of information, research suggests that the use of WebQuests is not always the panacea for gaining content knowledge some educators expect, in particular educators question their usefulness to promote higher level thinking since their primary focus is to help students with “knowledge acquisition and
integration” (Maddux & Cummings, 2007, p. 118) and not the higher level thinking skills. Stickland and Nassal’s (2005) report end of unit tests showed students who used WebQuests to support their learning performed below the level of the students who did not. Similar to Milson’s work that shows students will choose the path of least resistance, these researchers found that although the WebQuest was designed to enhance the curriculum, few students really engaged with its content. “Educators must critically examine the benefits of any type of instructional strategy before implementation. WebQuests and other technological innovations should be no exception. Just because a strategy is novel does not mean that it is effective” (Strickland & Nassal, 2005, p. 145).

Like embedded hypermedia, WebQuests direct the student where to go on the Web to find information to answer a question or solve a problem. Given the amount of information on the Web about the U.S. Government, a WebQuest seems a natural fit for students who need to gain civic understanding. However, literature has shown that thoughtful direction and teachers modeling and managing of student engagement is required. It would be interesting to examine the extent to which WebQuests can support specific learning outcomes, such as the development of high level thinking, for students.

**Graphic Organizers/Presentation Tools**

The old adage, “a picture is worth a thousand words,” may best describe graphic organizers. These devices provide a visual representation of a concept. The research on social studies instruction that uses digital cognitive and graphic organizers to assist students has meted positive results. Boon, Burke, Fore, and Spencer (2006) looked at the
performance of students with mild learning disabilities in World History classes and analyzed whether the software *Inspiration 6*, a digital cognitive organizer, impacted student achievement. They found that students who used *Inspiration 6* outperformed students who only used the traditional textbook. Additionally, these researchers investigated teachers’ perception of using this software and found that teachers “believed the *Inspiration 6* software helped the students learn the content information and indicated the software significantly improved student achievement” (Boon, Fore, & Spencer, 2007). However, the study of student attitudes and perceptions of *Inspiration 6* were varied. The students with mild disabilities had a more positive attitude toward the software than did students without disabilities. Students without disabilities “preferred the use of the guided noted instructional format” (Boon, Fore, Rasheed, 2007, p. 23).

Graphic organizers, specifically concept maps, allow students to more fully understand key concepts. Organizers that visually display the differences between two or more concepts, compare and contrast constructs, could be useful in a government class that is responsible for imparting knowledge about different ways governments are organized and the different types of powers each have. Whether the use of graphic organizers helps to teach and learn citizenship skills has yet to be studied.

*Digital Video/Audio Production*

Digital technologies that combine video and audio technology are being used in social studies classrooms. Video cameras and flip video cameras are entering the classroom. These devices can assist students with class projects such as conducting
interviews and producing digital documentaries. According to Wilhelm (2005), “visual literacy is becoming more important from a curricular standpoint as society relies to a greater degree on images and visual communication strategies” (p. 24); however not all teachers are using digital video to the same ends. Manfra and Hammond (2008) examine how teachers’ pedagogical preferences affect their implementation of digital technologies. This study examined the use of PrimaryAccess, a free web-based software, to scaffold student learning. The study looked at the practices of two social studies teachers whose students produced digital documentaries. Their conclusion was that one teacher acted as a “manager” of the student learning and the other as a “facilitator” (Manfra & Hammond, 2008, p. 228). The case study focused on the role of the teacher, describing both the role of manager and facilitator. The student-created digital documentaries of the “manager teacher” were heavily loaded with standardized curriculum and teacher feedback. The students in the class lead by the “facilitator teacher” assimilated information from multiple sources including prior knowledge, class notes, and Web obtained resources: their documentaries went beyond the standardized curriculum (Manfra & Hammond, 2008). “Teachers pedagogical aims, rather than the technology or content, dominated both their planned and enacted curricula” (Manfra & Hammond, 2008, p. 223). While TPCK calls for an overlapping of technology, pedagogy and content knowledge, this study indicates that the circles of the Venn diagram depicting this overlap may not be equal in size and importance.
Dunsmore and Lagos (2008) investigated how video production could increase students’ political awareness. The participants in Dunsmore and Lagos’ study created a video modeled after a television show format on a political issue of their choice. This study of video production “supports the value of hands-on media production projects for understanding youth political knowledge and awareness, suggesting an additional tool for political communication and civic engagement research” (Dunsmore & Lagos, 2008, p. 1).

While the researchers’ results confirmed their assumptions that video production and an interactive environment resulted in increased civic engagement, interactive environments can be produced without digital technologies, e.g. inquiry based discussions. Furthermore, the success of this instructional lesson might have as much to do with the ability of students to choose their topic of study and presentation format (talk show, man-on-the-street, “Cops” show format) as it does the use of digital technologies.

The use of digital technologies to record student products provides teachers with another way to review and analyze student work and make suggestions for improvement, allowing the student to resubmit the edited work in a different format than written work that often proceeds through a similar process. Potentially the most powerful pedagogical aspect of this research is the fact that it is different from the more traditional format. Using digital technologies does heighten student engagement (Brush & Saye, 2002), and
it would be interesting to know if heightened student engagement with civics content could encourage more social and civic participation.

**Digital Libraries/ Digital Timelines**

Digital technologies afford students the opportunity to examine multiple perspectives. One such opportunity exists in the student development of digital timelines. Wilson, Wright and Pierano (2007) studied how students using Microsoft’s *Photo Story 3* could help student create digital timelines with multimedia. “*Photo Story 3* is a multimedia software program which allows the user to add motion, text and music to still images” (Wilson, Wright, & Pierano, 2007, p. 171). The results of this study show that there was increased student engagement when using the multimedia software, this was especially true for the non-advanced student and less so for the advanced student. It is interesting to note that these researchers measured “engagement” and not “learning”. Did the use of multimedia software positively affect student learning or was it simply more appealing to the students?

Lee, Doolittle and Hicks (2006) found less promising results for student achievement when they examined teachers’ digital curricula choices. From their study of 104 high school social studies teachers, the findings showed that teachers reported using digital resources in their classes but “did not report using these resources in a manner consistent with literature-based best practices” (p. 248).
While teachers’ digital curricula choices vary and will affect student achievement, the fact that digital libraries and digital timelines generally provide images as well as text should improve student comprehension by using these multimedia environments (Chun & Plass, 1997). Since it is vital for students to comprehend the key civic principles in order to become knowledgeable citizens, combining visual and textual information might serve the government class well.

*Geographic Information Systems (GIS)*

Geographic Information Systems (GIS) allow students to find and use geographically referenced data. Students may study the spread of H1N1 in different localities, information from the census or even electoral information. The use of geographic information systems allows the student to interact with the “real world” (Milson & Curtis, 2009). These researchers used MyWorld software to have high school students explore and analyze locations before deciding where to locate their business. The students in this study reported being frustrated by crashing computers; however the teacher and the researchers believed GIS “can be used successfully in the classroom to promote students’ spatial thinking” (Milson & Curtis, 2009, p. 118).

Shin’s study involved fourth graders and analyzed the extent to which classroom use of GIS supported inquiry based learning of geography and map skills. One of the premises of the study was that traditional geography education at the elementary level is often limited to memorization of the 50 state capitals and landforms. At this level, there is little to no inquiry involved in geography instruction. The implementation of GIS,
Shin suggested, to the classroom moves geography lessons from memorization to inquiry-based instruction that fosters the questioning of why things are located where they are. Interestingly, the student gains in geography skills were slow to emerge; no gains were noted after the first lesson but did increase with subsequent lessons. However, the study results indicate rapid improvement of the students’ map skills and the gains made in geography skills were “transferred to subsequent lessons” (Shin, 2006, p. 113). Initial studies of GIS show clear potential and there is a need for future research. Whether using these systems to teach comparative government or to map political data, it would be interesting to revaluate the usefulness of GIS to foster political inquiry and to see if the skilled gained carried beyond the unit of study.

Using digital technologies to teach citizenship skills might be one way to connect student preferences for technology with societal preferences for participation. “If democracy is to flourish in the new century, it must take account of the ways youth and find the means to channel their passion in socially productive ways” (Dunsmore & Lagos, 2008, p.8). While Dunsmore and Lagos’ (2008) article never mentioned the name of the discipline being taught in the classes they researched their research involved local political decisions, so it can be assumed that the course contained some government content. This is the only study that involved a civics class. Clearly there is a need for more research about the use of digital technologies in the discipline of government.
DISCUSSION AND CONCLUSION

This review began with warnings that American schools may be failing our children. Our world is shifting and changes in society are reflected in the skills necessary for 21st century citizenship. While certainly digital technologies are useful tools, the rationale for using these technologies in the classroom must be more than advancing the vocational skills of computer literacy. Education is an institution that is responsible for helping to shape both today and tomorrow’s society and participation in society is key to sustaining our democracy. Researchers have determined that “technology-based learning has the potential to facilitate the development of students’ decision-making and problem solving skills, data processing skills, and communication capabilities” (Whitworth & Berson, 2003, p. 472). When students are required to do, they have a true opportunity to know. Using digital technologies to allow students to become producers of their knowledge and not simply consumers of information will necessitate a significant change to the way schooling is presently conducted.

This review of the literature finds that education is slow to accept change and even with the preeminence of computers in today’s schools significant changes to teaching and learning in the social studies classroom are not present (Berson & Balta, 2004; Lee, Doolittle & Hicks, 2006). It appears that while there are digital technologies being used in the social studies classroom, the favored technology according to Evans and Rosenzweig, (1992); Schug et al., (1997); Porat, (2004); and Edwards, (2008) is the textbook and it textbooks like the chalkboard are seen as natural technologies and not
worth studying. There is no effort to examine or explore the interrelationship between non-digital and digital technologies. When the use of technological tools is studied it is studied in isolation.

Like the education environment that was analyzed for *A Nation at Risk*, today’s social studies classrooms are often highly teacher centered, not allowing for much student directed learning. Educators might look to digital technologies as a way to increase student involvement in instruction and as a way to increase social and political efficacy. “When carefully integrated into a cohesive learning environment, technology tools offer great promise for helping teachers develop citizens who can reason with rigor about the issues of democratic life, both past and present” (Saye & Brush, 2005, p. 171).

While Saye and Brush’s research findings state that digital technologies hold promise for citizen development, the need for careful integration of such technology cannot be understated. The literature shows that instruction involving digital technologies in the social studies classroom is not being equitably distributed among students (Blades, 2007; DeWitt, 2007; Leu et al., 2009; Parker 2010). Instead of helping to close the achievement gap, the use of digital technologies could result in widening the gap when instruction is meted out differently to students. Purposeful instructional planning examines how best to deliver content instruction equitably.

Similar to Friedman’s stance on the importance of the “how” we teach students, effective use of digital technologies in the classroom may well be more about the “how”
than the “how much”. TPCK asks the teacher to consider the “how” of technology use and to integrate its use with the teacher’s pedagogical stance and content responsibilities. TPCK keeps technology from just becoming an “add on” and instead integrates its use into purposeful classroom practices. Could more knowledge of theoretical frameworks that examine content, pedagogy and technology, such as TPCK, hasten the change in instructional delivery? If so, could this change result in a better-educated and more participatory citizenry? These questions are difficult to answer. However, if interactive technologies are truly going to impact teaching and learning, there needs to be a shift in social studies education that requires technology to be used as a resource stimulus for inquiry, perspective taking, and meaning making, and not as a conduit for the transmission of knowledge (Doolittle & Hicks, 2003, p. 87).

In order to gain insight into such inquiries, more research about the use of digital technologies is needed in the discipline most responsible for civic instruction, the U.S. Government class.

Some research suggests that those using the Internet as a resource for political information exhibit higher levels of political efficacy, knowledge, and participation (Johnson & Kaye, 2003; Kenski & Stroud, 2006). However, those who use the Internet only for recreation do not do as well in any political categories (Shah, McLeod, & Yoon,
The suggestion has been made that greater informational engagement with the Internet may be the answer to young people’s political apathy (Delli Carpini, 2000).

“People—young or old—choose to become engaged in public life when they have the motivation, opportunity, and ability to do so” (Delli Carpini, 2000, p. 343). Digital technologies in schools provide the opportunity and promote the ability to become informed about civic and political issues; however the motivation piece remains a mystery. Motivating students towards becoming participatory citizens is the difficult piece of the equation and there is a need for more studies about this. Delli Carpini (2000) states, “it is fair to say that the ability of new technologies to increase the motivation to act appears to be the least well-theorized and understood aspect of the potential for increasing civic engagement” (p. 348).

The literature indicates that digital technologies do foster an increase in student engagement (Brush & Saye, 2002; Wilson, et al., 2007). If social studies classes are to help produce an active citizenry, engagement with content that readies the student for citizenship may help move the student along the participatory continuum. What is not as clear is whether the use of digital technologies results in an increase in student learning, and if so what levels of learning are increasing? Are there measured increases in student achievement associated with the use of digital technologies?

As standardized testing is moving away from lower level thinking questions and towards higher-level thinking, raising the levels of student learning and achievement is an
admirable goal. Moreover, it would be interesting to know if a rise in student achievement is attributed to the inclusion of digital technologies in social studies lessons and if any increase in achievement levels can be sustained or transferred to other units.

Much of the classroom research has been conducted with history classes and focuses on how teachers use technology instead of the students’ perspective of using digital technologies in their social studies classes. While researchers are recognizing the critical role social studies educators play in developing citizens, it is unclear as to whether the use of digital technologies in the social studies classroom is producing different learning experiences, those that foster citizenship development.

Our evolving world requires educators to adapt their practices to reflect three significant changes: students need to acquire new skills for the 21st century; students need to be able to use Internet technologies to gain information necessary to solve problems; and recognizing that students are comfortable with multitasking and are searching to make real world connections (Wagner, 2008).

More research is needed to discover if the use of digital technologies in the government classroom is occurring and if its use represents the best instructional choices for the development of citizens. Research about how government teachers are using digital technologies in their classrooms is a good starting place to continue the discourse about the use of digital resources in social studies classrooms. “If the goal of social studies instruction as espoused by the National Council of Social Studies, is to enhance
civic competence, then research is needed that explores how computers in the classroom contribute to citizenship skills” (Berson, 1996, p. 496).

Additionally, given the major expenditure on computers in our schools, it is necessary to examine how both teachers and students are using these resources. Do digital technologies change the way social studies classes in today's standards based environment are taught or are they simply a more expensive way of shoring up traditional teacher-centered instructional methods? In other words, is a shift in the way we teach and learn about social studies occurring and can we expect different learning outcomes, or is the seismic tremble we are experiencing just the vibration of our school budgets being consumed by expenditures on digital technologies that do little to change the way we conduct schooling in America? This question certainly merits more research.
CHAPTER 3

METHODOLOGY

The purpose of my study is to examine the relationship between teaching and learning in U.S. Government classes. Specifically, I wished to examine how teachers make decisions regarding the type of technological tools and resources they incorporate to support teaching and learning during the teaching of a unit on Congress and a unit on Participating in State and Local government in a required Virginia and U.S. government class to a heterogeneous group of 12th grade students. In doing so, I was aware that technologies are tools and a decision making process is involved in when, how and why they are used. Textbooks and overheads are often considered transparent technologies and as such are not studied by many researchers. However, this perception may be considered myopic and overly deterministic given that Evans and Rosenzweig, (1992); Schug et al., (1997); Porat, (2004); and Edwards, (2008) all write of the textbook being the dominant tool in social studies classes. My goal is to examine how non-digital and digital tools are used and the ways they interconnect in the context of the U.S. Government classroom. This study was motivated by three distinct reasons:

1. There is very little research about how government teachers perceive and use technological tools including digital technologies in their classes.

2. In the state of Virginia, although Standards of Learning (SOL’s) are in place for the Virginia and U.S. Government class, there is not an SOL end of course test students are required to pass in order to earn a verified credit. As such, one reason teachers often cite for limiting the use of digital technologies in classrooms, the pressure of a
test and the time associated with preparing students for the test, is removed.

3. In the state of Virginia, the Virginia and U.S. Government course is taught in a student’s senior year and is the last social studies class that a student encounters in their K-12 experience. As such, this course is the last chance for social studies educators in Virginia to assist in producing an active citizenry. Research is needed to discover if the use of technological tools including digital technologies in the government classroom represents the wisest instructional practices for the development of citizens.

   The question that guides my research is: How are U.S. Government teachers’ beliefs and perspectives about learning and teaching reflected in their pedagogical practice and use of technological tools? This question was designed to help answer the why, when, where, and how U.S. Government teachers incorporate technological tools, including digital technologies, to support the teaching and learning process.

THEORETICAL FRAMEWORK

After reflecting on my ontological and epistemological beliefs and my preferred methodology, I chose to work within two frameworks, constructivism and TPCK. The research paradigm that undergirds my thinking is an interpretive paradigm, specifically the constructivist paradigm. This theoretical perspective supports my belief that reality is socially constructed and no one reality exists, instead, “reality is a set of mental and social constructions” (Guba & Lincoln, 1994, p.107). I am interested in knowing what people do and why they do the things they chose to do. I wished to examine my participants’ day-to-day activities and decisions and hope that such examination and
analysis will lead to greater understanding of wise teaching and learning practices in the government classroom. Additionally, the National Council of Social Studies, NCSS, calls for the active construction of knowledge, which allows students to connect prior knowledge to new information about a topic. Learning should connect new information to prior knowledge and may result in altering previous held beliefs based on new information. The second, but more focused framework, which narrows my perspective, is TPCK. The following is a brief discussion of both theoretical frameworks.

Soviet psychologist Vygotsky is the predominant voice on the subject of social constructivism. Vygotsky believed that through social interactions we come to know and learn. He believed that the genesis of knowledge is social. Vygotsky believed that children learn by being socially involved with family members or other adults. These adults help the child to learn both spoken and written language used by their culture. Vygotsky was interested in “the role of the adult and the learners’ peers as they conversed, questioned, explained and negotiated meaning” (Fosnot, 1996, p. 20). The assistance provided by the adults clearly illustrates a concept that Vygotsky is most often associated with, the concept of “Zone of Proximal Development”. The zone of proximal development” or ZPD, is a continuum, a measurement from point “A”, of what a student can accomplish without assistance, in other words on their own, to point “B” what the student can accomplish with assistance. According to Vygotsky, “the developmental challenge of any task is the function of the task’s relationship to a student’s proximal development”. He states that we internalize our knowledge through signs, internal symbols, and tools, external supports. We learn these signs and tools through our culture, a process that is called enculturation. According to Vygotsky, we move from lower
mental functions to higher critical thinking through social interaction with our culture. Since learning is accomplished in social settings and our students represent various ZPDs, it is important for educators to structure their learning environments to best meet the needs of their students. Vygotsky believes that educators need to teach students in front of where they are cognitively; educators should push students to the edge of their ZPD.

Classroom activities that offer opportunities for discovery beyond rote memorization of facts will ready students for the 21st century demands of problem solving, critical thinking, and creativity. A growing body of literature suggests that digital technologies may afford opportunities to support inquiry-oriented classrooms (Edelson, Gordin, & Pea, 1999; Edelson, 2001; Myers & Beach, 2004).

A theoretical construct that holds promise for connecting teachers’ knowledge and pedagogy with digital technologies is known as Technological Pedagogical Content Knowledge (TPCK/TPACK). As the discussion of TPCK found in Chapter 2 stated, TPCK is a theory about instructional choices that features overlapping considerations about technology, pedagogy, and content knowledge. It is an outgrowth of Lee Shulman’s work at The Knowledge and Growth in Teaching Program at Stanford University. Shulman developed PCK, a theory that combined the components of pedagogy and content knowledge (PCK). Shulman’s theory suggests that teaching is more than knowledge of content; comprehension of how the knowledge is shared and co-constructed is paramount. The newer framework, TPCK, adds the component of technology, to the knowledge bases for effective classroom instruction. Mishra and
Koehler (2006) contend the technology found in TPCK refers to “digital computers and computer software” (p. 1023).

Here, I think it is important to pull back a little from Mishra and Koehler’s definition of technology and include technological tools beyond digital tools. "Technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them” (Bain, 1937, p. 860). Hooper and Rieber (1995) consider print-based material such as books, worksheets, and overhead transparencies as much a technological tool as is computer hardware and software. Technology shifts over time “because we have experience and are capable of reflecting on it, we can change our technologies to safeguard ourselves and to support the new activities they make possible” (Feenberg, 2010, p. 12). This broader lens for looking at the use of technological tools is necessary because there is so little research about the government classroom, and research on social studies classrooms suggests that digital technologies are not so woven into the fabric of social studies classrooms. Furthermore, it is not clear if the digital technologies being used are not simply doing the same job as the overhead and textbook. My study looks at the tool set government teachers use, rather than focusing on one series of tools.

The following section outlines my plan for creating two case studies of two government teachers at Edmonds High School that will help find answers to the research question. The research focused on inductive reasoning, and I constructed my knowledge socially, relying heavily on specific situations to shape my inquiry. The unit of study was
the case itself, consisting of two bounded systems, two Virginia and U.S. Government teachers. It was a within-site study that was bounded by time and place. The methodology included a discussion of the question, participants and contexts, data collection, data analysis, and the role of the researcher.

**USING QUALITATIVE METHODOLOGY**

The question I desired to research could best be answered through interactions with and observations of participants in a natural setting and thus was best investigated through a qualitative lens. My review of the literature indicated that there are few research studies that examine how U.S. Government teachers use digital technologies in their classroom. Strauss and Corbin (1990) claim that qualitative methods can be used to better understand any phenomenon about which little is yet known.

While qualitative research is often difficult to define, it did allow me to attempt to understand the phenomena through the use a myriad of methods of data collection that contribute to knowledge construction. It is important to note that qualitative methodology can be described as a holistic approach to research. This means, “that the practice of qualitative research is reflexive, and process driven, ultimately producing culturally situated and theory-enmeshed knowledge through an ongoing interplay between theory and methods, researcher and researched (Hesse-Biber & Leavy, 2006, p. 5).

“Case studies are the preferred research design when the focus is on a contemporary phenomenon within some real-life context” (Yin, 2003, p.1). I planned my case study methodology based on Stake’s (2005) definition of multiple case studies. As such, I selected qualitative research, specifically a collective case study, which examined
how two high school government teachers perceived and used technologies in their classrooms. Yin (1984) suggests, “Case studies . . . are generalizable to theoretical propositions and not to populations or universes . . . and the investigator’s goal is to expand and generalize theories” (p. 21). While I stop short of making a claim that qualitative case study will result in producing knowledge that is generalized, some researchers assert, “The explanatory principled revealed in case studies are generalized because they can solve new problems [and] explore new terrain” (Walton, 1992, p.126). My desire was to add knowledge about how two government teachers make decisions for their classes in hopes that it might spark further study of the topic. Case studies do offer an opportunity to refine theory and encourage more research. They provide information about the “dimensions and dynamics of classroom living and learning” (Dyson, 1995, p. 5).

Flyvbierg (2006) asserts that even if knowledge generated from case study cannot be formally generalized, it does add to the body of knowledge in a given field. Studying the selected cases can “lead to better understanding and perhaps better theorizing about a still larger collection of cases” (Stake, 2005, p. 446). Clearly, my study is not generalizable in the same sense as quantitative data -- but the events may offer typifications of events that can open up insights into how people act in certain circumstances that are similar and could lead to theory generation.

The case study approach allowed me to describe in rich detail the “real life” pedagogical/curricular decisions of two government teachers as I sought to understand the larger phenomenon of how technological tools, including digital technologies, are or are not used in U.S. Government classes. I am interested in learning how teachers use
technology, or not, to support their pedagogical performances and support student learning. According to Lincoln and Guba (1985) research methodology that attempts to investigate the perceptions of people must find a way to access their beliefs and knowledge in order to develop an understanding of the world from their viewpoint.

As a qualitative researcher, I designed the study to increase my understanding of what government teachers do with their students to help prepare them for the 21st century. Yin (1994) suggests that the use of multiple sources of evidence will increase the quality of the case study, and as such I analyzed interviews, observations, field notes, and text to determine meaning.

*Context and Participants*

The context of the study is the classrooms of two government teachers who teach on the block schedule at a centralized high school of approximately 1500 students, grades 9-12, in rural southwest Virginia. The school is located in a county that can be described as economically depressed; the unemployment rate is two points higher than the state average. This high school is part of a school system that has made a commitment to utilize Marzano’s instructional strategies, nine strategies that are research based and likely to improve student learning. Moreover, the system has been named a participant in the Virginia Department of Education’s (VDOE) “Beyond Textbooks” initiative that is conducting a pilot study of using iPads to teach social studies at grades four, eight and nine. This pilot study is being conducted by the VDOE in partnership with Pearson publishing (http://www.eschoolnews.com/2010/09/30/virginia-using-ipads-to-teach-social-studies/#utm_source=feed&utm_medium=feed&utm_campaign=feed).

Additionally, the high school where the two participants teach is participating in an Apple
iLearn grant that provides MacBooks, and iTouches to specific classroom teachers. The participants in this study are not part of the pilot study or the iLearn grant.

As the researcher, I observed fifteen, 90-minute classes, for each of the two government teachers. This observation schedule allowed me to observe each teacher teaching both a unit on Congress and another unit on Political Participation in the State and Local Government. Research involving the idea of studying units in social studies classrooms is not a new concept. How teachers use units of study is a rich source of data in social studies research (Grant, 2001; Saye & Brush, 2002). Studying teachers’ activities in a particular series of units allows the researcher to clearly get into the classroom and get out of the data collection.

The participants for this study were purposefully selected, more specifically typical sampling, through criterion sampling procedures. The five criterion applied to this study are full time employment as a social studies teacher, a minimum of five years experience as a social studies teacher, a minimum of three years of teaching a course in U.S. Government, having achieved tenure in their present teaching assignment and teaching a minimum of one U.S. Government and Politics course during the fall of 2010. It is my perception that the two participants selected for study represent some interesting similarities that might serve to classify them as “typical” social studies teachers as they are both white males, in their late 30’s, early 40’s, and coach varsity sports. The participants “parallel each other sufficiently” (Ragin, 2004 p. 125) to permit comparisons. Moreover, there are some interesting differences such as years of experience (e.g. 7 years and 14 years), geographical background (e.g. one grew up in the community and graduated from the high school where they presently teach and the other teacher is from
another state), and finally, the path taken to enter the field to teaching (e.g. one took a
traditional licensure route, the other entered the field through provisional status that has
since been upgraded to a professional license). One of the participants is perceived as a
regular user of digital technologies and the other participant a less frequent user. It is my
contention that both the similarities and differences make the selected participants
“information rich” (Patton, 1990, p.169).

Additionally, a convenience factor must be acknowledged. My study was
conducted at the same high school where I am employed as a social studies teacher.
Access to K-12 classroom research environments is always a concern. This is
particularly true in the case of studying government teachers since often they do not
generally teach this subject matter all day, I was very fortunate that my school division
and my building principal agreed to grant me access to this site and both participant, who
meet all criteria of the study, agreed to the participate.

Data Collection

The primary data collection was completed through a series of one-on-one semi-
structured interviews, classroom non-participant observations, and a review of documents
including lesson plans, computer lab logs, and student products. The interviews were
more of a conversation than a question/answer session in hopes of encouraging
participants to reveal their understandings of what is going on in the government
classroom. As such the interview frameworks were more of a point of entry than a script.
These procedures of data collection were selected because they offered the best
opportunity to answer the question I wished to study. Participants were free to suggest
changes in design and refine data collected through member checking to insure all
viewpoints were valued. The interview protocol began with the assignment of a participant pseudonym based on the participants’ suggestions and narrative content. Participants were asked to answer demographical questions as part of the first interview, which was conducted prior to observations. The first interview protocol was designed to gather demographic information and illicit responses about how the participant views their pedagogy and how the participant presents a general perception about the tools they use in their instruction in their U.S. Government classes (see Appendix A). The second interview was conducted after the completion of the first unit of study and focused on instructional foundations, curriculum goals, and a discussion of how curriculum has been presented (see Appendix B). It is important to note that during the study there were several open ended “mini” interview/discussions conducted pre and post class so that the researcher could gain a sense of what was being taught, how it was being taught and why the particular teaching strategies were chosen (see Appendix C). Finally, a third interview, reflective in nature, was conducted after all observations were completed (see Appendix D). All interviews were recorded on a digital tape recorder, transcribed, coded, and analyzed for recurring themes and patterns. After the transcription of the interviews, I hand delivered the transcription to the participants to allow for member checks in order to insure the accuracy of the data.

Classroom observations spanned eight weeks with breaks in the observations for Thanksgiving and winter holidays. The observations allowed for the collection of data on the teaching of two units of study for each of the participants. Data collected from the observations consisted of teacher lesson plans and student products including assessments such as quizzes and tests in order to further discuss student learning with the participants.
Data from computer logbooks was also collected to document the use of digital technologies. Each observation followed an observational protocol (See Appendix F) that included both descriptive and reflective notes. The units of study I observed for both participants were a unit on Congress and a unit on Political Participation in State and Local Government.

In order to triangulate the data from the interviews and observations I reviewed documents such as computer lab logbooks and artifacts such as lesson plans and student products. All these forms of data collection allowed me to triangulate and provide rich insights to the research question. For a timeline of the study see Appendix G.

Data Analysis

Data analysis for this study was done through theoretical coding, using an inductive methodology that allows the data to inform the discovery of theory. Such coding was iterative and systematic. Interview transcripts, observations, lesson plans, student products, and other artifacts were coded. I did not use software to code the data, but instead personally coded all data. Following Hatch’s (2002) framework for data analysis outlined below, I coded data beginning with open coding; the process of naming, categorizing and defining the phenomena found in the text, attempting to answer the question, “What is this about”? I followed open coding with attempting to group concepts: axial coding. Axial coding was followed by the development of categories that lead to selective coding in which the data. The final step of theoretical coding is the development of theory. This process, which included the writing of theoretical memos, caused me to code and analyze the data simultaneously. The theory that developed was
checked by contrasts present in the data. To ensure academic quality and rigor, I maintained an audit trail that addressed the research process, individual research decisions, and analytic memos from the interviews and field notes.

The analysis of this qualitative study involved triangulation, respondent validation (member checking), and reflexivity. I employed the constant comparative method of analysis that required that I keep an audit trail of all of my decisions in my search for meaning. I employed Guba’s (1981) model of trustworthiness, truth-value, applicability, consistency, and neutrality to ensure the reliability and validity of my study.

My data analysis followed the steps for an interpretive analysis cited by Hatch (2002). While the process is more iterative than linear, Hatch does outline the following steps for interpretive analysis:

1. Read the data for a sense of the whole

2. Review impressions previously recorded in research journals and/or bracketed in protocols and record these in memos

3. Read the data; identify impressions, and record impressions in memos (I will begin this step with open coding and follow with axial coding.)

4. Study memos for salient interpretations

5. Reread data, coding places where interpretations are supported or challenged (At this point in the data analysis, I will attempt to selectively code the data – identifying one main category of data and will attempt to relate all other categories to the core category in hopes of developing theory.)
6. Write a draft summary

7. Review interpretations with participants

8. Write a revised summary and identify excerpts that support interpretations

(Hatch, 2002, p. 181)

As part of the process identified by Hatch, each step of the analysis process was progressively more inferential and interpretive. I conducted a cross-case analysis using the constant comparative method to analyze the data; specifically I followed Glaser and Strauss’ (1967) stages of data analysis. These stages include:

1. comparing incidents applicable to each category,

2. integrating categories and their properties,

3. delimiting the theory, and

4. writing the theory (p. 105).

Following Hatch’s framework for data analysis, I coded data and then assigned categories to the codes followed by comparing these data/codes with previously coded material that fit the same category as well as with data that was categorized differently. These processes caused me to code and analyze the data simultaneously. Open coding, axial coding, selective coding, and the writing of theoretical memos anchored the analysis. The theory that was developing was checked by contrasts present in the data. To ensure academic quality and rigor, I maintained an audit trail that addressed the research
process, individual research decisions, and analytic memos from the interview and field notes.

**Role of Researcher: Reflexivity and Ethics:**

I recognize it was important to reflect on my own history, viewpoints and relationships before embarking on case study research. I realized that as the researcher and a participant I played a significant role in finding the answers to my research question and as such my voice is present in my research. I have written two books on cooperative problem solving in the social studies classroom and I acknowledge my partiality toward student-centered activities. I have long been a proponent of active leaning and a professional developer of these classroom strategies for the past fifteen years.

Another preference I must recognize is my affinity to exploring the use of digital technologies in the social studies classroom. While I am not a proficient user of digital technology in the classroom, I am interested in exploring why and how teachers’ use it to teach government along with other tools that they use to support their pedagogical stance. I am in the midst of recognizing my own interest in using them in my classes. Presently, I am involved in the iLearn project at my high school. As part of this project I have been given a classroom set of MacBooks and iTouches for student use. My reputation as a professional developer, my involvement in the iLearn project and the fact that I have been teaching longer than any other member in my department has the possibility of affecting the power relationships between my participants and myself. Recognizing this, I will go to great lengths to make it clear that I am studying the teacher decision making
process and the origins and nature of their pedagogical decision making with regard to the types of tools and resources they use in their classrooms and not evaluating them.

Since I am also a government teacher at Edmonds High School and have a professional relationship with the two participants I will be especially careful to maintain and foster the collegial relationships. Since “reciprocity is an ethical issue in any research effort” (Hatch, 2002, p. 66), after completion of the research, I was willing to move away from the non-participant role and began talking more about ideas and professional development with my participants/colleagues when requested.

During the study, I kept my own field notes about ideas, thoughts and biases. It is important to note again that I personally coded all data and did not use software to code the data. This process allowed me to reflect throughout the analysis process. I consistently conducted member checks and allowed for participant input. I shared my analytical memos with my participants. I indexed all interviews and observations and kept all materials in a locked cabinet in my locked home. I was especially cautious of my procedural validity that included full disclosure of my data to my participants and the opportunity for the process to remain flexible to allow for participant input. I honored the ethical criteria of trustworthiness, credibility and dependability as put for by Flick (2002). I had informed consent on all of my work, and will keep all personal data confidential, using pseudonyms for my participants. However, because of the nature of the study I informed my participants that I could not guarantee anonymity.

Early in my research process I recognized the limitations high-stakes testing has placed on research in today’s secondary classrooms. Many school districts do not
welcome the classroom observations necessary to collect data. To counteract this fact, I undertook a case study of participants in a school district in which I teach. This district knew me and was willing to grant me permission to conduct the study, thus this case study could be termed a convenience study. Additionally, I am a member of the same social studies department as the participants. Although I have no supervisory role over the participants, I am, in terms of length of service, the most senior member of the department. The participants signed informed consent forms and the students in the participants’ classes signed informed consent forms in order for student products to be collected as artifacts. This study was approved by Virginia Tech’s IRB as well as by both the acting Superintendent and the building principle where the study occurred.

EDUCATIONAL IMPORTANCE OF THE STUDY

Knowledge of civics and of the importance of societal participation is paramount for active citizenship. Preparing our youth for the “office of citizen” (Parker, 2003, p. 18) is a great responsibility. Developing participatory citizens requires students to discuss and deliberate public issues, problem solve and view political participation beyond simply casting a ballot. “As it turns out, schools are ideal cites for democratic citizenship education [because] a school is not a private place, like our homes, but a public, civic place with a jumble of diverse students” (Parker, 2010, p. 251). The question of whether using digital tools will ignite student interest in participating in society remains unanswered.

The effectiveness of using digital technologies in teaching and learning is debatable. Levin and Wadmany (2006) found that teachers who used directed instruction almost exclusively discarded this practice in favor of more collaborative learning
practices after participating in a three-year study on integrating technology in the classroom. These results could represent a shift in the way schools conduct business and such a shift could result in shifts in our society.

Unfortunately, not all agree with Levin and Wadmany’s findings. It is important to point out that using technology in the classroom has produced a fair share of criticism within academic writings. In other words, the use of technology does not create a panacea for all, in all educational settings. Larry Cuban writes in his book, *Oversold and Underused: Computers in the Classroom*, despite massive amounts of money being spent on computers, “few of [the] new technologies have pursed deep and comprehensive changes in the existing system of schooling” (Cuban, 2001, p.195).

The widespread use of computers in society has brought us to a crossroad in education. Given adequate technological resources that afford opportunities for student-centered learning, will educators continue to allow students to simply be consumers of information, or will they provide opportunities for students to become producers of knowledge? According to Bennett (2008) students use technological tools primarily for “word processing, emailing and surfing the Net for pleasure . . .only a minority of students were engaged in creating their own content” (p. 778). The problem this study will address is how high school government teachers use technological tools, including digital technologies, in their government classes to help students negotiate the curriculum as they ready students to become participatory citizens of the 21st century.
The purpose of this study was to examine how government teachers make decisions regarding the type of technological tools they incorporate in their instruction. As a case study of two teachers, this work was oriented by the question: How are U.S. Government teachers’ beliefs and perspectives about learning and teaching reflected in their pedagogical practice and use of technological tools? This question was designed to help answer the why, when, where, and how U.S. Government teachers incorporate technological tools, including digital technologies, to support the teaching and learning process. The study reports on the use of, and the intersection between the textbook, a non-digital technological tool, and several digital tools such as teacher computers, student computers, and projectors, in the learning environments.

Research on teaching and learning in the social studies classroom typically focuses on social studies disciplines other than government, specifically history and geography (VanSledright & Limon, 2006; Levstik & Tyson, 2008; Hicks et al., in press). In terms of the role of tools used to support teaching and learning, the majority of studies either focus specifically on digital tools, such as on-line scaffolding and problem based learning, on-line discussions, WebQuests, digital cognitive and graphic organizers, video and audio production, digital timelines, and Geographic Information Systems (GIS), (Brush & Saye, 2002; Wolf, Brush & Saye, 2003; Saye & Brush, 2006; Merryfield, 2003; Larson & Keiper, 2002; Manfra, Gray, & Lee, 2010; Journell, 2008; Lipscomb, 2002; Boon, Burke, Fore, & Spencer, 2006; Boon, Fore, & Spencer, 2007; Boon, Fore,
Rasheed, 2007; Wilson, Wright & Pierano, 2007; Milson & Curtis, 2009; Shin, 2006) or specific non-digital tools, such as the textbook (Edwards, 2008; Callison, 2003; Schug, Western & Enochs, 1997; Krause, 2000; Shand, 2009).

However, this study, a departure from many earlier studies, began with a wider view of technological tools and examined both digital and non-digital technological tools used to advance teaching and learning in the government class. In previous studies, researchers classified non-digital technologies, specifically textbooks, as transparent and no longer warranting investigation (Mishra & Koehler, 2006). However, as Callison (2003) suggests, “No other instructional technology has had more influence on teaching over the past 100 years than the textbook (p.31; see also Schug et al., 1997). Recognizing that socials studies teachers are often slow to adopt digital technologies (Berson & Balta, 2004; Stuckhart & Berson, 2009), and their classes are routinely organized around the textbook (Schug, Western, & Enochs, 1997), I felt it important to analyze how the textbook was incorporated in classrooms where teachers also used digital technologies. Analyzing the use of both digital and non-digital technological tools in government classes will help to understand the deliberate choices and connections teachers make about both content and methods.

This chapter is divided into six distinct parts. The first part provides background information about the high school where the participants taught, background on each of the participants, and a discussion of technological tools available to them. The second part offers up descriptions of class activity taken from observations. These descriptions help facilitate the discussion of three key themes that emerged through analysis of the data: part three, time; part four, space; and part five, movement. While I recognize the
interconnection of the themes, I will discuss them separately. The final section of this chapter is the summary.

The examination of theme time is investigated in two separate sections, school time and teacher time. The discussion of school time helps to illustrate the participants’ perceptions of how class time, specifically the block schedule, impacted their choice of technological tools used in their instruction. Consideration of teacher time assists in showing how the participants used technological tools to control the pace of the class. The findings show that the participant’s were not able to control the amount of material covered in the student reading of the textbook, they were able to control the flow of information when they transferred the information from the text to the PowerPoint slides and read them aloud to the students. Additionally, a link between school time and teacher time was observed. The analysis shows that the participants’ actions to segment the 90-minute block did not change the delivery of the content but instead provided the participant more control of the pacing of the content.

The second theme, space, begins with an examination of the physical spaces of the study and highlights the extent to which the spaces where government was taught shaped how each participant used technological tools to advance teaching and learning. The findings show that the participants used two primary spaces to teach government -- their classroom and the computer lab -- and the technological tools used in these two spaces were different. Additionally, differences in how the participants used technological tools in similar spaces, particularly the computer lab, are examined.

The third theme is movement, specifically the movement of the content. The discussion of this theme is divided into three sections. The first section, illustrates how
technological tools were used by the participants to develop class content outside the school building for use in their classrooms. The second section examines how technological tools afforded the movement of the content from one participant’s classroom to the other’s classroom. The final section discusses the ways by which one teacher repackaged and reduced the class content in terms of simply moving the class content from the non-digital textbook to the digital PowerPoint slides.

BACKGROUND

Edmonds High School

Edmonds High School (pseudonym) is a rural, centralized high school consisting of 1,500 students in grades 9-12. It operates on a 4 X 4 block schedule. The school is located in a county that can be described as economically depressed; the unemployment rate is two percentage points higher than the state’s average. Manufacturing is the key industry in the county and loses in furniture and textile industries have led to a higher unemployment rate. The major employer in the community is a truck manufacturing plant whose work force is determined by market demand. While demand is cyclical and is presently on the upswing, over the past two years demand was sluggish and resulted in many layoffs.

At the time of this study there were 110 faculty members at Edmonds High School, 12 of whom taught social studies classes. The participants, Michael and Jackson, both taught history and government at this high school. Michael had been teaching for seven years and was the head varsity boys’ basketball coach at Edmonds High School. Jackson had been teaching for fifteen years and also served as a varsity football coach.
Edmonds High School is located in a state that requires every student pass a U.S. Government class in order to meet graduation requirement. However, there is not a statewide end of course test required for U.S. Government classes. Edmonds High School offers three levels of U.S. Government: AP Government and Politics, Dual U.S. Government and Academic U.S. Government. Michael and Jackson both taught Academic U.S. Government, the lowest academic level of government taught at Edmonds High School.

Edmonds High School is in a school division that prides and presents itself as being technologically rich, an attribute that it finds important because of its rural location. In fact, School Board policy provides for the establishment of an educational technology foundation “for the express purpose of implementing a public/private partnership to expand access to and improve the quality of educational technology in the division” (School Board policy ET). Edmonds High School district was awarded two separate partnership grants with a local university, the “Beyond Textbooks” a state department initiative and the iLearn grant through Apple. These grants provided MacBooks, iTouches and iPads to selected teachers at Edmonds High School to use with their students. However, the two participants in this study were not involved with either of these grants.

Edmonds High School teachers have a variety of technological tools at their disposal to assist them. Table 2 illustrates the technological tools available at Edmonds High School and those found and/or used in each of the participants’ classrooms during the observational period. The first three tools listed, textbooks, overheads, and desktop computers are available to every teacher at Edmonds High School. The tools listed in
italics are only available to teachers associated with specific technological grants, and the school faculty shares the remaining tools.
Table 2 – Technological Tools at Edmonds High School and those present in the Participant’s Classrooms

<table>
<thead>
<tr>
<th>Tool</th>
<th>Edmonds High School</th>
<th>Participant #1 (Michael)</th>
<th>Participant #2 (Jackson)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbooks</td>
<td>Multiple</td>
<td>X (Class set)</td>
<td>X (Class set)</td>
</tr>
<tr>
<td>Overhead Projectors</td>
<td>In excess of 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desktop Computers</td>
<td>350 computers</td>
<td>X (Teacher use only)</td>
<td>X (Teacher use only)</td>
</tr>
<tr>
<td></td>
<td>150 teacher/staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>200 student use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SmartBoards</td>
<td>44 in building</td>
<td>X</td>
<td>XX</td>
</tr>
<tr>
<td>Projectors</td>
<td>65 in building</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Student Response Systems (clickers)</td>
<td>3 class sets in building</td>
<td>X (Class set)</td>
<td></td>
</tr>
<tr>
<td>Elmo’s</td>
<td>30 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10 new/ 20 older)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iPod Touches</td>
<td>40 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(grant restricted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iPads</td>
<td>30 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(grant restricted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MacBook</td>
<td>30 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(grant restricted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printers</td>
<td>25 in building</td>
<td>Classroom computer prints to centralized printer located next door in computer lab.</td>
<td>Classroom computer prints to centralized printer located next door in computer lab.</td>
</tr>
<tr>
<td>Microphones</td>
<td>10 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flip Cameras</td>
<td>11 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP3 Players</td>
<td>6 in building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airliners (handheld)</td>
<td>8 in building</td>
<td>X (Teacher use only)</td>
<td></td>
</tr>
</tbody>
</table>

X = located in participant’s classroom and used by participant during observations
XX = located in participant’s classroom but not used during observations
Most classes at Edmonds High School have textbooks. Every classroom at the high school is equipped with a computer for teacher use. Teachers record attendance and discipline infractions on the computers. Many classrooms are still equipped with overhead projectors, including most social studies classrooms. Jackson had an overhead projector in his classroom, but Michael did not.

Both participants had SmartBoards in their classrooms; Michael used his, Jackson did not. Michael and Jackson both had projectors. Michael projected his images onto the SmartBoard and Jackson projected his images on a classroom wall. Neither participant had an Elmo or a printer in their classroom; however, a centralized printer was located in the social studies computer lab that was next door to each participant’s classroom.

Michael had two more tools than Jackson, a student response system that consisted of “clickers” that students used to indicate their answer to a particular question, and an Airliner, a handheld device that allowed Michael to write on and advance his PowerPoint slide projected on the SmartBoard from any location in the classroom. Michael was not tethered to his computer. The tools listed in italics in Table 2 are tools the participants did not have access to. The other items listed in Table 2, microphones, flip cameras, and MP3 players are housed in the schools Instructional Media Center and may be checked out by any teachers desiring to use them in their instruction. While Edmonds High School desired to be perceived as a technologically rich school, not every teacher had access to all tools at the high school.

Michael - Background

Michael, a 39-year-old white male teacher, was the only child born into his middle class family in Illinois. Michael’s family valued education highly, “which caused
me to go the other way, not much emphasis on athletics so of course that’s what I went for” (November 5, 2010 interview). Michael’s mother held a bachelors degree, his father did not have a college degree.

While born in Illinois, Michael’s family moved and he attended high school in Massachusetts. When asked what he was like in high school, Michael responded, “I was a pud” (November 5, 2010 interview). He explained that a “pud” meant a nothing. Specifically, he was an underachieving high school student, graduating with a C average.

Michael never took a government class in high school. He enjoyed social studies classes and remembered that one of his favorite teachers in high school taught U.S. History. In an attempt to better prepare for college, both academically and athletically, Michael took a postgraduate year at a school in New Hampshire before entering a private college in North Carolina where he played college basketball. He earned a B.A. degree in Political Science from this college and after graduation Michael went into the banking field. Michael chose to enter the teaching profession seven years later through a career switchers program.

Michael began his teaching career, under a provisional license, as a math teacher at a middle school in the county where he presently teaches. While teaching at the middle school for two years, he worked weekends to upgrade his teaching license from a provisional license to a professional license. When a social studies opening became available at Edmonds High School, Michael applied for the position and was hired. He has taught World History and U.S. Government for the past five years.

Michael’s U.S. Government class that was included in this study consisted of seventeen 12th grade students, eleven white males, five white females and one black
male. Additionally, a para-professional was in the class each day taking notes for one of Michael’s students.

Michael - Goals for Teaching Government

Michael’s main instructional goal for his students was to provide exposure to the various parts of the government and governmental issues that shape their lives. Michael’s goal matches the civic republicanism discourse of the textbook used in his class (Abowitz & Harnish, 2006), Bennett’s (2008) idea of the “Dutiful Citizen” and Westheimer and Kahne’s (2004) description of personally responsible citizens. Michael’s class content, e.g. PowerPoint slides, emphasized a need for the students to be knowledgeable about our nation’s government, to take responsible actions as a law abiding citizen, and to develop a sense of obligation to follow governmental guidelines, e.g. complete the census data. Michael stated,

I want to give them [students] some basic knowledge about government; I just want them to be aware of what’s going on around them to some degree. These kids have no idea what’s going on and they’re going to be out in the work force in a year. I love to talk to them about current events. My favorite days are when I have them engaged and we’re talking about health care or we are talking about immigration or we are talking about the economy and jobs, and things like that. I guess I just want them to have some idea of how things work and give them some information about what’s going on and not to tell them how they should feel about things but just to tell them these are issues that are out there and you probably need to know about them because they are going to affect you whether you feel
this way or this way the issues is going to be there when you leave here
(November 5, 2010 interview).

Despite having a clear idea of what he wished to accomplish in his U.S.
government classroom, Michael didn’t believe there was one way to accomplish his
goals. He stated,

I don’t think there is any set way they [students] learn best, ideally you want to try to do as many things with the same content and have it hit different ways, none of them learn the same. I mean everybody’s different and I know my best classes are when I am changing from one thing to another (November 5, 2010 interview).

Michael - Pedagogy

Michael remembered being bored in his high school classes because his teachers lectured almost exclusively (November 5, 2010 interview). He stated, “The teachers I had in high school didn’t give instruction in a lot of different ways and that is one thing that is different [about teaching]’ (November 5, 2010 interview). He went on to note:

I don’t want to be the guy that gives notes and tells them to read out of the book and then answer the questions at the end of the unit. I’d rather try to mix it up if at all possible and I try to mix in current events that are applicable things for the unit. I don’t want to be that routine in what I do that you know it’s the same thing every time (November 27, 2010 interview).

Despite his memories and description of his own practice, during the period of study most of Michael’s classroom activities could be categorized as whole-class, teacher-directed instruction. With the exception of end of unit student assignments and an
occasional student pairing to answer end of section textbook questions, Michael’s instructional plan was whole group instruction. He asserted that he never assigns group work because, “they just can’t handle doing group work” (November 5, 2010 interview), a position that reflects Kelly and Turner’s (2009) contention that whole-class activity structures are popular and prevalent in high schools.

Michael’s decisions about content delivery were also impacted by his teaching context. Michael did not consider his students very high achieving, and this perception affected his teaching methods.

If this was a higher level class, I’d probably give them more leeway, give them more general stuff but I feel like a lot of these kids, I mean some of these kids could do that but I have probably about five kids that if I don’t have specific guidelines for them they’re actually lost (after class interview 11/8/10).

When asked to describe what it was like to teach his students U.S. Government, Michael responded,

I guess I feel like it’s just a, feels like it’s a struggle, me against apathy in general, apathy in terms of this classroom, apathy in terms of their school work, apathy in terms of uh, the world around them, and how they know you know, whether they feel a part of what’s going on, or whether they feel like none of it effects them, or they just don’t give a rat’s behind abut it (November 5, 2010 interview).

Michael thought that his whole-group presentation would engage the students with the content more than other methods, a stance that stands in direct contrast to Kelly and Turner (2009) contention that, “Whole-class instruction may very well provide the
context for the reduced engagement of low-achieving students” (p. 1677). Observational data support that Michael struggled to align his beliefs with pedagogical practice. He gave the students the content in whole group settings and provided few opportunities for the students to individually make meaning of the content.

It was clear that most of Michael’s actions and choice of technological tools supported teacher-directed instruction, or what has been referred to as the “giving pedagogy” (Hammond & Manfra, 2009). However, the data will illustrate that Michael was not cemented to the “giving pedagogy” as he did on two occasions allowed his students to use computers to create products thus moving along the teacher-directed/student-directed continuum, once into the “prompting pedagogy” and once into the “making pedagogy” (Hammond & Manfra, 2009).

Jackson - Background

Jackson, a 40-year-old white male teacher, grew up in the community where he now teaches. He was from a middle class family that valued hard work and appropriate behavior over education. “I guess while we were at school, it wasn’t a focus on do your homework . . . it was more so you better be behaving (November 9, 2010 interview). Jackson’s father graduated from high school but had no higher education, and his mother quit high school in the ninth grade, at age fifteen, and married Jackson’s father. Jackson recalled that she went back to school to get her G.E.D. when he was in the fourth grade. Jackson was one of three children in the family, and his parents divorced when he was two years old.

Jackson reported that “high school was enjoyable; I liked high school a lot. My mom used to say that I could do well and not ever have to open a book. I’m sure my
grades weren’t the best but they weren’t the worst, I even failed a class or two (November 9, 2010 interview). Overall, Jackson was an average student. Jackson remembered he had a proclivity towards social studies classes, and particularly liked the story telling ability of his high school government teacher. His government teacher also happened to be one of his football coaches.

Jackson took a more traditional route to the classroom than did Michael. After high school graduation Jackson attended college at a small private school in Virginia less than two hours from his hometown. He only remained at this college for one year, as he did not like being so far from home. Jackson returned home and attended the local community college before enrolling in a mid-sized public university twenty minutes from the high school where he is employed. He spent three years at this university and graduated with a B.A. in social studies education.

Jackson’s interest in coaching football was a major factor in choosing education as his vocation. His first teaching assignment was at Edmonds High School. He has coached football at his school longer than he has taught there. When he began teaching Jackson only taught World Geography classes. Once state standards were implemented he began teaching a combination class of World History/World Geography which later became known as World History I. With the retirement of a U.S. Government teacher at his high school three years ago, the possibility to teach U.S. Government became available to Jackson. He requested this teaching assignment because he desired to move away from teaching ninth graders and “because you don’t have SOL’s, hanging over your head” (November 9, 2010 interview).
Like Michael, Jackson teaches Academic Government, the least rigorous course in U.S. Government available at Edmonds High School. Jackson’s class included in this study consisted of twenty-two students, six white males, twelve white females, three black males, and one black female.

**Jackson - Goals for Teaching Government**

Jackson was interested in exposing his students to the various aspects about their government. He often had class discussions spurred from the discussion of the essential vocabulary found in the textbook or from the content found on the PowerPoint slides. Like Michael, Jackson used the same textbook, American Government (2006) and appeared to follow Abowitz and Harnish’s (2006) civic republicanism discourse, Bennett’s (2008) description of a “Dutiful Citizen” and Westheimer and Kahne’s (2004) portrait of a personally responsible citizens. Jackson was primarily interested in,

> Helping kids to understand our government, I want them to understand what our government provides for us, and the responsibilities of our government, and our responsibilities. They need to have an understanding of what a large role government plays in their lives. Hopefully those things have been learned throughout the semester (January 13, 2011 interview).

**Jackson - Pedagogy**

Jackson was also very teacher-directed in his teaching. Whether that is due to his modeling how he was taught or simply being a teacher with a proclivity to lecture (Goodson & Mangan, 1984; Schug et al. 1997) Jackson’s classroom practices reflected a teacher-centered paradigm.
Jackson’s classroom was highly structured. He had definite classroom management rules and behavior expectations, and the students followed the rules and regulations. Often Jackson chose to lead the majority of the class activities, most of which were whole group activities. The only exception to whole group instruction occurred during the Legislative Branch unit, one when he allowed students to partner with one another on a worksheet assignment, and when he took his classes to the computer lab where students worked independently. Jackson remarked that if he were to teach this unit differently he would like to,

Have better plans for how to do group work and make it productive. It’s one thing to put them in groups and say ‘hey do this’, it’s a whole nother [thing] to really get something out of it, for people to be working, for everyone to have a part in that” (After class mini interview (November 30, 2010).

Similar to Michael, the type of student Jackson had in class influenced his instructional choices and the tools he thought would support learning. Mirroring McLaughlin and Talbert’s (1993) findings that, “Teachers agree that students are the context that matters most to what they do in the classroom” (p. 6), Jackson’s perceptions of his students clearly influenced how he approached teaching government. Jackson believed that his students had a hard time self-regulating and limited capabilities of staying on task for an extended amount of time. When asked specifically about how his students struggle with their study of government, Jackson stated,

It’s not a struggle necessarily with content as much as it is just a struggle with themselves as far as to how to manage themselves, I’m talking about the basic
things. Hey, I’ve got to where I don’t assign books no more; I keep a class set in there. I don’t know how many times [I’ve] told [them] if ya’ll would just come in here and pay attention, participate, get involved just a little bit, I mean I ain’t asking for a whole lot, you know what I’m saying, I mean just come in and get involved in whatever, whether it’s just your opinion of something, or participate in the discussion we’re having, or you know, doing whatever work I’ve asked you [to] do, and doing it the best you can. You know if you can do just those simple little things you’re going to do okay, you know, but I think that they struggle with them little things (November 9, 2010 interview).

TOOLS AVAILABLE

This case study analyzed how teachers’ beliefs about teaching and learning are reflected in their use of technological tools in two units of study: The Legislative Branch and Participating in State and Local Government. As the researcher, I wanted to examine teacher decisions regarding using and choice of technological tools and thought it most interesting to observe the decisions of two participants teaching the same units.

The two units are both part of the state curriculum and were deliberately selected for the study. The Legislative Branch Unit is a unit that is taught in almost all government courses; however the second unit, Participating in State and Local government, is not covered as frequently as it does not have a national focus. Moreover, a unit title with the word “participating”, led me to believe that I might observe the relationship between the content and the tools to be different than the more traditional unit on the national legislature. For more details about the units studied see Chapter 3, methodology.
It is important to note that Michael perceived himself and was perceived by others to be an early adopter and proficient user of technology both inside and outside the classroom. Although Michael is not a National Board Certified Teacher (NBCT), and he does not live in California, if Michael had taken the survey found in Forssell’s (2011) doctoral dissertation examining teachers’ TPACK confidence and the uses of technology with their students, his self-report would most likely place him in the high-TPACK teacher category. Jackson, also not a NBCT or a California teacher, was slower to adopt technology and considers himself less proficient with technological tools. Jackson would likely self-report survey responses that would place him in the low-TPACK teacher category. Moreover, Jackson has some tools, specifically the SmartBoard, in his room that he does not use because he feels he doesn’t have adequate knowledge of how to use it. Due to these perceptions, Michael has received more technological tools to use with his classes than has Jackson. Despite these differences, within both classes there was a range of technological tools used during the research period. Table 3 and Table 4 identify the technological tools that each participant used daily during classroom observations.
Table 3 - Michael’s choices of technological tools

<table>
<thead>
<tr>
<th>Date</th>
<th>Text-Book (Student Use)</th>
<th>Teacher Computer &amp; Projector</th>
<th>Smart Board</th>
<th>Student Response System (clickers)</th>
<th>Handouts &amp; Slides</th>
<th>Videos</th>
<th>Handheld Airliner</th>
<th>Student Computer Use (Lab)</th>
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“X” indicates Legislative Branch Unit
“XX” indicates Participating in State and Local Government Unit
(Michael shows videos using his computer and the SmartBoard)
Table 4 – Jackson’s choices of technological tools

<table>
<thead>
<tr>
<th>Date</th>
<th>Text-Book (Student Use)</th>
<th>Teacher Computer &amp; Projector</th>
<th>Smart Board</th>
<th>Student Response System (clickers)</th>
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“X” indicates Legislative Branch Unit
“XX” indicates Participating in State and Local Government Unit
(Jackson shows videos using a television and a VCR/DVD player)
Table 3 and Table 4 detail the technological tools each participant used daily. For example, on the first day of observation in Michael’s class he used Magruder’s *American Government* student textbook, the teacher’s computer, a projector, the SmartBoard, handouts/slot notes, videos, the handheld airliner, and student computers. Whereas, during the first day of observation in Jackson’s class, Jackson used the same textbook that Michael used, the teacher’s computer, a projector, handouts/slot notes, and videos. It is worth noting that even though Michael and Jackson may have used some of the same technological tools on a given day, they varied in how and why they used these tools. To develop a richer picture of the ways the two participants used the technological tools, I report a slice of activity from each of the participants opening day of the first unit observed, the Legislative Branch.

**SLICES OF ACTIVITY**

Using the opening day of the unit allows for comparing and contrasting the participants’ use of technological tools without giving considerable weight to pacing adjustments that were required later in the unit due to class interruptions.

Both participants used the textbook, teacher computer and projector, handouts, and videos as well as the same PowerPoint slide presentation on the first day of the unit; however, the teaching in these classes was considerably different. Michael used videos embedded in the PowerPoint presentations whereas Jackson did not use these videos. While both participants had the students work on unit vocabulary in their textbooks, Michael announced the class assignment and the specific terms with the PowerPoint slides whereas Jackson wrote the vocabulary terms on the board. Additionally, towards the end of the class period Michael allowed the students to work independently on a
project in the computer lab whereas Jackson continued whole group instruction with the showing of the video, *Distinguished Gentleman.*

**Michael (November 8, 2010 - Day one of the Legislative Branch unit)**

The students entered Michael’s class at 11:45. As they entered the classroom, the students stopped by a table by the door and looked for handouts to pick up and some picked up a textbook; it was obvious that these were classroom routines. This day there were three handouts: a four-page vocabulary handout, a 27-page slot-notes handout, and a one-page description of a PowerPoint assignment on the legislative unit. Michael displayed a PowerPoint slide on the SmartBoard that read 10-1 Vocabulary and announced to the students they would need their book. The students who did not pick up a textbook when entering the classroom got up from their desks and got a textbook that was housed on a bookshelf in the front of the room. Michael told the students that all they needed to complete was the first page of their vocabulary handout.

At 11:55, Michael announced that he was going to show the class a short film that illustrated the House of Representatives. A student blurted out, “You like videos don’t you,” and I concluded that that showing of videos in class was commonplace for Michael. Michael showed a video clip from C-Span video entitled, *The Capitol.* The video showed various images from the Capitol. At first the students were attentive but after a while their attention began to wane. Michael said, “I will not make you sit through the whole movie, but it does give you good information for your PowerPoint assignment.”

Shortly after 12:00, Michael switched from the video about the House of Representatives to his PowerPoint slides for the legislative unit; the slides were projected on the SmartBoard. He began with a slide that discussed the public perceptions of
Congress and their general approval rating. When Michael advanced the slides to an all
text slide the student immediately began filling in their slot-notes handout. It was
obvious that this was also a classroom routine.

The PowerPoint slideshow contained slides that guided Michael’s lecture and all
text slides signaled the students that they were to fill in their slot notes. As Michael
moved through the PowerPoint slides, he used a teaching pattern of reading the slides,
providing supplemental information such as definitions of terms, and answering student
questions as they arose. Michael talked to his students about population movement; it was
a monologue, and his students were not engaged.

Michael then projected an image of a 2003 map of the United States that showed
the number of representatives that each state had. Using the map, he asked questions
about which states had the largest number of representatives. There appeared to be an
increase in student engagement when he showed a map and not just text and when he
questioned the students about the PowerPoint slide as opposed to simply reading the slide
to the students. The visual of the map seemed to cause the students to look more at the
screen where the image was projected than they did when only words were displayed on
the screen.

The next slide showed a listing of states that had either gained or lost seats in the
House of Representatives after the 2000 census. Michael then advanced the slide and
almost in unison the students began to write in their slot notes packet again. Again, the
slide was all text, signaling to the students that it contained information for their slot
notes. While the students were filling in their slot notes, Michael read the slide to the
students. The bell rang at 12:28 and the students left for lunch.
The students began returning to class from lunch at 1:03. Michael announced to the students that they were going to do one more page and then they were done with their notes for the day. He began reading from a slide and the students filled in their slot notes.

After completing his PowerPoint slides for the day, he directed the students to get out their PowerPoint assignment sheet. This assignment required students to create a PowerPoint presentation that answered the questions Michael put on the assignment sheet. Michael reviewed the assignment requirements with the students explaining that each slide must contain the information requested and a visual. At 1:17, Michael’s students moved next door to the social studies computer lab to work on their project.

While in the computer lab, a couple of students questioned Michael if their visual was correct, but most students worked independently. I noticed the assignment contained questions beyond the scope of the material presented in today’s lecture and that most students used search engines such as Google or Bing to find answers to these questions. In a sense, this assignment was a type of digital scavenger hunt for the students. At 1:43 Michael instructed the students to save their work to their network drive and head back to the classroom.

Jackson (November 29, 2010 Day one of the Legislative Branch Unit)

The students entered Jackson’s class at 11:45. Jackson placed five terms on the board for students to define. Students picked up a textbook from the book cart at the front of the classroom and began working on their vocabulary terms while Jackson called roll aloud. Under the heading of Essential Vocabulary, Jackson had written the words, “term”, “session”, “adjourn”, “prorogue”, and “special session”. 
At 11:50 Jackson said, “Get us started [student name] with ‘term’. “ The student gave a definition of term aloud so the entire class could hear it. Jackson called on four more students, one for each vocabulary word, and each gave a definition aloud to the class. At 11:53 Jackson said, “Open your book up to p. 262. While I am passing out slot notes, I am going to give you seven to eight minutes of silent sustained reading,” (The slot notes handout appears to be the same that Michael used with his students).

At 12:01 Jackson said, “Okay guys . . . let’s move so you can see the screen, alright guys here we go . . .” The students shifted their desks toward the screen on the side wall, and Jackson put up PowerPoint slides and read each slide to the students while the students fill in their slot notes.

Jackson then put up a slide of the exterior of the Capitol building and asked the student to name the building explaining that some students in another class said it was the White House. The next slide Jackson displayed was the floor plan of the Capitol and he used the curser on his computer to point out key sections of the Capitol while he lectured. Next, Jackson showed the murals at the top of the Rotunda and asked the students if any of them visited the Capitol on their 8th grade trip to Washington?

Jackson continued to read the PowerPoint slides to the students while they filled in their slot notes, adding a small amount of information not contained on the slides to his lecture. Next Jackson displayed an image of the map of the U.S. showing the apportionment of 435 seats in the House of Representatives. This particular image was color coded to show gains and loses in the House membership after the 2000 census. Jackson steered away from directly reading slides at this point and asked the students to
predict why they thought a state might gain or lose a seat in the House. Student answers included jobs, retirees, climate and the effects of immigration. Jackson asked the student what the reaction would be if a census worker showed up at the home of an illegal immigrant. The students indicated that if they were an illegal immigrant and a census worker showed up at their house they would not fill out census questionnaires. Jackson told the students that their reaction was one reason why the U.S. population, especially in Border States, is undervalued.

Jackson continued to lecture about reasons why people leave a certain location. Jackson used an example of what happened to a local industry. Jackson named the industry and asked how many students had a relative or a friend who worked for this industry. Twelve students raised their hands. Jackson explained that when the workforce drops off at this industry people leave the area. He explained, “In Detroit, where the auto industry is located, people are leaving in droves” (November 29, 2010 classroom observation).

Before advancing to the next slide, Jackson asked the class if they had completed their slot notes. He showed a map of the student’s home district for the House of Representatives and explained that their district contained several counties. Jackson further explained that different districts are different geographic sizes. He explained the “One Man, One Vote” concept of representation and how before the court ruling in *Wesberry v. Sanders* rural counties were overrepresented in the House of Representatives, whereas urban areas were underrepresented. Before moving to the next slide, Jackson again made sure that the students had finished getting their information
down on their slot notes package and even called a student by name to check on her completeness.

Next, Jackson put up a slide of a white male and asked if they knew who was pictured in the slide. He said, much to his sadness, that his other classes had not known who this was either. No student ventured a guess. The picture was of Larry Craig but Jackson told the students that the person was a former Vice President of the U.S.; he announced that it was Dick Cheney.

At 12:40 Jackson turned off the projector and the students adjusted their desks to again face the front of the room. Jackson, then stated, “Okay, guys if we can keep the noise down and sit in our seats, we will watch a video I think you will like.” The students again adjusted their desks, this time to face the television that was located at the front of the room beside Jackson’s desk, and the video began playing. The video was The Distinguished Gentleman, a 1992 Eddie Murphy comedy film that focuses on the practices of Congressmen. Jackson sat at his desk and graded some papers while most students watched the movie. Jackson did not provide the students with a video worksheet and did not fast forward through a sex scene. Students continued watching the movie until the bell rang at 1:15.

Comparing the Slices of Activity

The slices of activity presented were purposely selected to capture the events of the first day of a unit (The Legislative Branch) that is taught in most U.S. government classes. Both participants divided their class time into different activity segment but neither participant introduced their unit nor provided learning objectives to the students. Michael began his unit with the students picking up handouts and having the
students use their textbooks to complete the first page of the vocabulary handout. Jackson began his unit, as he begins all of his classes, with requiring students to use the textbook to define between five and eight vocabulary terms. The students wrote the definitions in their notebooks, as Jackson did not provide a vocabulary handout.

While both participants began this unit with a vocabulary assignment, there were clear differences in the teaching on this first day. For example, Michael took his students to the computer lab and Jackson did not. This represents a typical pattern of computer usage, as is illustrated in Tables 2 and 3. Michael took his classes to the computer lab three times more frequently than did Jackson. Additionally, how students used the computers was another difference between participants. Further similarities and differences will be detailed in the remaining discussion that is organized around three key themes that emerged from the slices of activity: time, space, and movement.

TIME

Typically the concept of time is associated with the passage of time and what is accomplished within a given time frame. Such is the case for teachers whose lives are governed by “school time” as defined by the tick of the clock, the sound of the bell, standardized curriculum, and grading period benchmarks designated by a school system’s calendar. How “school time” is designed effects,

How families organize their lives, how administrators oversee their schools, and how teachers work their way through the curriculum. Above all, it governs how material is presented to students and the opportunity they have to comprehend and master it (National Education Commission on Time and Learning, 1994, p. 6).
“School time”, as described by the National Education Commission on Time and Learning, influences and shapes teachers’ practice. Time was one of the most significant factors shaping how the participants incorporated specific technological tools into their teaching. This section will address the role “school time”, specifically block scheduling, played in the selection of technological tools used in the instructional plans of both participants.

Both participants shared the belief that the 90-minute instructional block could not be treated as a whole. Based on their teacher preparation, both thought the block must be divided into different segments of activity. Interestingly, the shift to a different activity was signaled by a change in technological tools.

The examination of this theme also raised the consideration of another aspect of time, what I term “teacher time”. The discussion of “teacher time” illustrates how both participants used the tools to take control of the pace of the lesson from individual students reading of the textbook to whole class teacher presentation and reading of the PowerPoint slides. The concept of time, associated with both the need to structure and segment instruction and the participants’ perceived need to develop and increase the class cadence of content coverage within their classes, helped shape the participants decisions to use specific technological tools.

**School Time - Segmented Instruction**

Jackson and Michael were no different than most teachers who feel the pressures inherent within the culture of school. They were asked to teach under conditions in which they have very little personal control (Dale, 1977). Edmonds High School operated on a 4 X 4 block schedule. Each class period was 90 minutes long and the courses were
completed in a semester. Having an extended class period impacted how each of the participants approached their class time.

Both participants considered it important to divide class time so that classroom activities changed a minimum of three or four times during a 90-minute block. The participants stated that their beliefs about the necessity to segment their instruction came from their teacher preparation programs. Michael’s career switcher program “always talked about chunks, developing chunks in a lesson” (December 11, 2010 interview) and Jackson mentioned that his “education classes [talked about] time management and keeping kids on task, kinda dividing up time” (January 13, 2001 interview). In order to get and keep the students’ attention they used technological tools to help pace their instruction. Jackson divided his class time into three or four sections because of his perception of his students’ ability to behave and remain focused. In an interview, Jackson said,

In an hour and a half you know you’ve got to mix it up. I try to get at least three different blocks within a block, moving from one activity to the next, whether it’s a PowerPoint, a video or computer lab or what have you but just trying to divide that up so it doesn’t get so monotonous (January 13, 2011 interview).

In the slice of activity presented earlier, Jackson had three distinct segments of instruction. The first segment, lasting fifteen minutes, had the students using the text to acquire content knowledge, specifically vocabulary definitions. Jackson committed forty minutes of class time to the second segment, the PowerPoint presentation, and during the third segment Jackson showed the students a video for thirty minutes. Interestingly,
Jackson thought that students’ reading the content from the textbook was different from the students’ reading content on the PowerPoint slides, a point that will be developed later in the chapter. The shift in mode of content delivery from textbook to slide and the associated shift in students adjusting their desks towards the projection of the slides constituted a division or break in the classroom activities.

Michael also valued segmenting his class. “I think the more times I change pace the more they’re engaged in what’s going on” (November 27, 2010 interview). When asked if he thought he got better student engagement when using a variety of technologies, Michael responded, “Yes, it’s a change of pace and I think the more time[s] I change the pace the more they’re engaged in what’s going on” (November 27, 2010 interview). Michael’s first day of the Legislative Branch unit had three segments, two digital and one non-digital. Using separate and distinct technological tools, specifically, the textbook, the PowerPoint and the student computer lab in this case, helped Michael signal the classroom change as he segmented his 90-minute class time.

Michael’s use of the textbook, PowerPoint, and student computers on the day described can be surmised as fifteen minutes of textbook use, thirty-seven minutes of PowerPoint presentation, eight minutes of video viewed using the computer and the SmartBoard, and twenty-five minutes of computer lab time. Whereas time divisions of activities only represent one day, Figure 1 and Figure 2 reveal the amount of time Michael and Jackson used a particular technological tool each day during the observation of both units.
Figure 1 displays that during the first unit, The Legislative Branch. Michael’s instructional plan resulted in the students using their textbooks 24% of the time; viewing and completing slot notes and watching accompanying videos on the SmartBoard 32% of the time; watching Hollywood movies in class 21% of the time; reviewing material using a student response system 2% of the time; and spending time in a computer lab working on their own PowerPoint presentations another 21% of the time.

Jackson’s instruction time was similarly divided. His students spent 30% of their time using their textbooks; 34% of their time viewing and completing their slot notes; 19% of the time viewing Hollywood movies in class; and 17% of the instructional time in the computer lab.

Figure 2 illustrates the time divisions for the different technological tools used in the second unit, Participating in State and Local Government. During the teaching of this unit Michael devoted 24% of his time to the student text; 33% of class time to the PowerPoint presentation; 1% to videos; 33% to students using computers in the computer lab; and 9% of the class time to students reading newspapers for current events.

Jackson’s time was divided differently in this second unit. He did not take his students to the computer lab at all during the second unit. He, instead, dedicated 30% of his class time to the textbook; 34 % to the PowerPoint; 13% to a video; and 23% to a guest speaker, the school’s resource officer who is a member of the local sheriff’s department.
Figure 1 – The percentage of class time each technological tool was used in the Legislative Branch unit
Figure 2 -- The percentage of class time each technological tool was in the Participating in State and Local Government unit
“Teacher Time” - Pacing the Coverage of the Content

Both Jackson and Michael used the textbook and PowerPoint to manage the time necessary to give the students content knowledge. Michael and Jackson both had students read from their textbooks to complete vocabulary work and Jackson gave his students approximately eight minutes of class time each day for what he termed “silent sustained reading” of textbook pages. Both participants had plans for each instructional period and the plans contained a certain amount of material to be covered each day. The participants used the PowerPoint presentations to control the pace of content coverage.

At first glance, the data found in Figure 1 and Figure 2 does not appear to support Porat (2004) and Shrug, Western and Enochs (1997) proposition that textbooks are the dominant tools used in social studies classes (see also Edwards, 2008). However, analysis of the PowerPoint slides used by both participants actually strengthens these researchers’ contention. What became clear is that the content on the PowerPoint slides came from the student textbook. The PowerPoint slides were a simplified copy of information contained in the student text. The slides are not mirror images of the text but very close to it. While the participants could not control the pace of individual student reading of the textbook, they could control the pace of content delivery by reading the simplified version of the text found on the PowerPoint slides. Below are screen shots from the textbook and the PowerPoint slides that illustrate the similarities between the two.

The content displayed on these screen shots center on the U.S. House of Representatives. This textbook page (p. 267) has two headings, Size and Terms and Reapportionment. Both headings are followed by a narrative description of each term.
The PowerPoint slide also has two headings: Size and Terms and Reapportionment, followed by enumerated descriptive statements. To explain how similar the text and the PowerPoint slides are, a direct comparison is provided in Figure 3.

The first statement under the heading of Size and Terms on the PowerPoint slide read, “Today there are 435 members of the House of Representatives”; the text read, “The exact size of the House of Representatives – today, is 435”. The PowerPoint slide did include the fact that each member of the House represents approximately 600,000 people, a fact not included in the textbook. The second statement under the same heading on the slide read, “The total number of seats is apportioned among the states on the basis of their respective population”. The text read, “The Constitution provides that the total number of seats in the House of Representatives shall be apportioned among the states on the basis of their respective populations”. Under the heading Reapportionment the slide stated, “Reapportion is a redistribution of the seats in the House as a result of the decennial census”. The text read, “Article I directs Congress to reapportion –redistribute-the seats in the House after each decennial census”.
Every other autumn, all across the country, hundreds of men and women seek election to the House of Representatives. Most of them try to attract supporters and win votes with banners and posters, yard signs, billboards, flyers, humors, and other eye-catching campaign materials. Nearly all of them make their “pitches” with radio and television spots, newspaper ads, and now in cyberspace. In this section, you will discover the general shape of the office that all of those candidates so eagerly pursue.

**Size and Terms**

The exact size of the House of Representatives—today, 435 members—is not fixed by the Constitution. Rather, it is set by Congress. The Constitution provides that the total number of seats in the House of Representatives shall be apportioned (distributed) among the States on the basis of their respective populations. Each State is guaranteed at least one seat in the House, no matter what its population. Today, seven States—Alaska, Delaware, Montana, North Dakota, South Dakota, Vermont, and Wyoming—have only one representative apiece. The District of Columbia, Guam, the Virgin Islands, and American Samoa each elect a delegate to represent them in the House and Puerto Rico chooses a resident commissioner. Those officials are not, however, of the House of Representatives.

**Reapportionment**

Article 1, Section 2, Clause 3 of the Constitution provides that “Representatives shall be apportioned among the States on the basis of their respective populations."

8. Prorogue—president can adjourn if 2 houses can’t agree on date.

- **Size and Term**

1. Today there are 435 members of the house, each member represents approx. 600,000 people.

2. The total number of seats is apportioned among the States on the basis of their respective populations.

3. Each state is guaranteed at least one seat.

4. Representatives hold office for two-year terms.

5. No limit exists on the number of terms representatives may serve.

- **Reapportionment**

1. Reapportionment is a redistribution of the seats in the House as a result of the decennial census.

2. In 1929 the number of seats in the house was fixed at 435, to be redistributed every 10 years according to the census.
Combining the time allocated to textbook use and the PowerPoint, which was designed around the text of the textbook, the dominance of the textbook in Michael’s class increased from just less than one-quarter of the instructional time to two-thirds of the instructional time (Legislative Branch unit 24% to 66%; Participating in State and Local Government unit 24% to 67%).

Using the same formula, Jackson’s class dependence on the text increased from just less than one-third of instructional time to almost two-thirds of the instructional time (Legislative Branch unit 30% to 64%; Participating in State and Local Government unit 30% to 64%)

It was clear that both participants relied heavily on the textbook to cover the content in their classes, what was less clear is whether the participants recognized the dominance of the textbook in their curriculum. For example, when asked if he followed the textbook regularly, Jackson knew that his vocabulary came from the textbook but also said, “You know, I don’t know, I’d have to really sit down and look at the PowerPoint compared to the textbook to be honest” (January 13, 2011 interview).

The teachers used the PowerPoint as a conveyer of key elements of the textbook content. However, despite using the PowerPoint slides to increase the pace of content coverage, a glaring contradiction surfaced, both participants stated they seldom, if ever, completed the scope and sequence outlined by the state standards of learning (SOL) or the division’s pacing guide for a U.S. Government class.

For Jackson time scarcity was an especially large concern as his second unit observed was the last unit of the semester course. Time became a critical issue as Jackson
realized the need to finish the course while being plagued with weather disruptions and adjustments to the school calendar. He said,

> Time constraints kinda [put you] in a bind there time wise with some of the, the Christmas break, with uh, my own schedule personally, uh and then snow days, uh, end of semester, you know just the whole, whole thing there, the big picture kinda had me under the gun a little bit (January 24, 2011 interview).

The paradox was that without an end of course test Jackson and Michael had more flexibility with time than teachers of courses that must contend with covering the material tested on end of course tests. However, they still felt time constraints, constraints they imposed on themselves in terms of what they wanted to teach and to get through the PowerPoint presentations that were made.

Hargreaves and Shirley (2009), argued that high stakes testing has led to presentism (the idea that the pressures of schools keep the focus on immediate and present goals, such as passing scores on end of course tests, rather than planning or implementing systematic change to focus on the big picture) and teacher-centered classrooms, intimating that in classrooms without high stakes testing teachers are more likely to use different teaching tools and strategies. I purposely chose classes without a high stakes test thinking this fact might offset the argument that standardized testing handcuffs a teacher’s ability to think beyond the test. Originally, I thought I would see more student-centered activities in these classes. I thought the participants would use technological tools to assist their students in becoming producers of knowledge. However, what I observed was that without a high stakes test connected to the class, the
participants had a hard time recognizing that their course had standardized curriculum.

Michael said, “It is not a SOL course, I mean I teach to my test pretty much” (November 27, 2010 interview). Without recognizing the state standards as impacting their teaching, the participants chose to pace their course based on covering the PowerPoint presentations.

Inasmuch as Michael and Jackson’s course did not culminate in an end of course test, each considered the required curriculum as optional. When asked if he used the state standards to develop his curriculum, Michael replied,

I printed off a lot of the state standards and I use some of that stuff. But like when I came in uh, I mean, I’ll be honest, like uh, {my teacher mentor} probably wasn’t the best person for me to learn from [at least] anything that has to do with government because he pretty much said it doesn’t really matter, just do whatever you want to do (November 5, 2010 interview).

Time, both school time and teacher time, impacted the choice of tools the participants made to segment their classes and control the pace of the content delivery. Michael and Jackson chose different technological tools, e.g. textbooks, PowerPoint slides, videos and student computers, to signal segments of the 90-minute block. For both participants the PowerPoint slide presentations became the curriculum framework for the course. The course’s schedule was not defined by readying students for an end of course test but, instead, by the time it takes to cover a PowerPoint and the number of PowerPoint presentations defined what needed to be covered. Michael, who created the PowerPoint slides that were developed from the textbook, basically defined the scope of the
curriculum for these U.S. Government classes. Using PowerPoint slides as both the curriculum and the delivery system of the curriculum allowed the participants to better control the pace of content coverage. Interestingly, the textbook, a non-digital tool, clearly influenced the use of the most apparent digital tool, the projection of the PowerPoint slides.

SPACE

A second theme that emerged regarding the participants’ use of technological tools in a government class was the concept of space. Both Michael and Jackson used two main spaces in their instruction, their classroom and a computer lab. In this discussion, the definition of space is not limited to bricks and mortar (McCarthy & Wright, 2006), but instead how those spaces shaped the participants’ behavior within them. I will begin the examination of this theme with a discussion focusing on the structure where both participants teach and then move the analysis of space to examine how different spaces resulted in different uses of technological tools. While space influenced the use of technological tools, it did not always mean that the same tools were used in the same way as will be seen in the discussion under the sub-heading of same spaces, different uses.

Physical Location

Michael and Jackson both teach at Edmonds High School. The facility is an all brick structure that was constructed thirty-five years ago. The significant architectural feature of Edmonds High School is that there are two distinct buildings, one the academic building, and the other the technical center. The academic building has at its center an Instructional Media Center (IMC). The four academic disciplines are located in pods arranged around the IMC. Each pod consists of fourteen classrooms as well as
workstations for teachers at the classroom level and upstairs above the classrooms in the center of the pod. The social studies department, where Michael and Jackson taught, is pod “C”.

Entering pod “C”, or the social studies pod as it is better known, one can see a centralized workspace with multiple tables and chairs that are used for student work and four teacher workstations equipped with desktop computers that feed to a central printer. Teachers generally use the four teacher workstations for in-school planning. Fourteen perimeter classrooms surround this central workspace. One of the fourteen classrooms in the pod is a designated computer lab, housing twenty-five desktop computers for student use. While there is no expectation of using computers in their instruction, teachers are able to sign up to bring their students to the computer lab for 45-minute time slots. The departmental calendar for computer sign up is housed in the computer lab and functions on a first come, first served basis. Both participants indicated they had little difficulty accessing computers for their students.

Computer labs are also located in each of the other core subject pods -- the science pod, the math pod and the English pod -- and may be used by social studies classes if available. The English pod’s computer lab was the largest lab, consisting of 56 student computers and one teacher computer. Additionally, each pod is also equipped with wireless access points that allow teachers and students to use laptops anywhere in the pods. Edmonds High School has a laptop cart of thirty computers that may be reserved by teachers through the IMC.

Jackson’s classes eat lunch at a different time than all other classes in the social studies pod, so his classes had daily access to the social studies computer lab during the
half an hour other classes were eating in addition to any time he chose to schedule his class on the lab calendar. When asked if he was able to get computer access for his students Michael replied, “Yeah, yeah pretty much, you gotta sign up ahead of time [to] make sure you get in, gotta plan ahead” (November 27, 2010 interview).

*Different Spaces / Different Designations*

In this study the classroom space and computer lab space reinforced how different technological tools were used to connect the students with the content; specifically textbooks were used in the classroom and computers outside the classroom. Michael preferred to keep the textbooks on a shelf in his class so that when the students needed to use them they were available. Michael previously issued books to students but found that too often the students neglected to bring them to class. Jackson kept a class set of books as well,

[I’ve] just gotten away from the issuing of the books, [it] really boils down to students not bringing ‘em to class, you know, can I go back to my locker, I forgot my book, that crap every day you know, [I] just don’t want to hear it you know, so I just found it’s better to have a class set. Students that ask me uh, we have no problem uh, letting them take books home you know, I’ll write down the number, [tell them] to take it, bring it back tomorrow and they do, so it’s worked out pretty good (January 13, 2011 interview).

The belief was that students cannot be trusted to bring tools to class with them or to return them if they were allowed to circulate, so it was easier on the teaching and learning process to keep this technological tool in the classroom. Jackson confirmed this finding
when he said, “I don’t want to assign them because I don’t get them back” (November 9, 2010 interview).

While teacher use of textbooks and computers often overlapped from the teacher workstations in the pod to the classroom and the computer lab, there was no overlap in student use of these same tools. Participants designated student use of technological tools depending on the space where the instruction occurred. The reality was that the textbook, the dominant technological resource for many social studies classes, did not leave Michael’s or Jackson’s classroom, and the place designated for actual student use of computers was located outside their primary learning environment.

The Classroom: Same Space / Different Uses

For both participants the classroom represented a learning environment dominated by teacher talk and whole group learning, whereas the computer lab represented a quiet environment where the students worked at their own individual computer. Michael and Jackson used similar tools in these spaces; however how they were used by each differed. Most of Michael’s classroom instruction combined the use of PowerPoint and textbooks and even allowed one tool to reinforce another. Michael’s class described in his slice of activity began with a vocabulary assignment that students completed using their textbooks. Michael introduced this assignment in a PowerPoint slide projected on the SmartBoard. He explained, “I wanted to do something that I could put up that everybody could see and it was easier to read than me writing on the board” (December 11, 2010 interview). Below is a screen shot of a PowerPoint slide that Michael used to project on the SmartBoard to signal his students what was to be completed during a particular segment of class time.
While both participants had their students use textbooks to define vocabulary terms, Jackson, unlike Michael, did not use the PowerPoint to signal work in the textbook. The PowerPoint presentation included vocabulary slides; Jackson chose not to use them. Instead he preferred his established routine of essential vocabulary terms written on the board, a tool that Krause (2000) called a “natural technology” because it has been in the classroom for over 200 years.

Both participants used the same PowerPoint slide presentation for approximately the same amount of time in their units but the presentations looked very different in the two classes. Michael embedded videos into the PowerPoint presentations that Jackson chose not to show to his students. Michael relied heavily on the embedded videos to help connect the students with the content, whereas Jackson relied more heavily on discussion.

Figure 4 – Michael’s Vocabulary PowerPoint Slide from the unit on the National Legislative Branch

<table>
<thead>
<tr>
<th>Vocabulary-</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Standing committee</td>
</tr>
<tr>
<td>• Select committee</td>
</tr>
<tr>
<td>• Joint committee</td>
</tr>
<tr>
<td>• Conference committee</td>
</tr>
</tbody>
</table>

Using your book locate and write down the definitions to the above words.
of the content on the PowerPoint slide, which originated in the text, to connect his students with the content.

The Computer Lab: Same Space / Different Uses

One of the most significant differences found in the use of the same space occurred when Michael and Jackson took their students to the computer lab. Computer lab time at Edmonds High School must be scheduled. Michael and Jackson’s classes usually use the social studies computer lab unless it is unavailable and if that occurs they must try to schedule a computer lab in another pod. An important finding of the study was both the frequency of computer lab use by each participant and a description of the type of assignments each participant had students complete in the computer lab.

Michael took his students to the computer lab a minimum of three times a week, whereas Jackson scheduled one trip per week for his students to the computer lab. Michael’s instructional plan, specifically the culminating assignment for each unit, necessitated this amount of time in the computer lab. Jackson’s decision to take his students to the computer lab once a week can be described in part by Jackson’s perception of fairness. For Jackson, his decision to visit the computer lab once a week was an equity issue.

We have a system there with our computer lab you know, and how that’s split and I don’t think nobody wants to feel like they’re, at least I don’t want to feel like I’m, you know, in there more than my share if you will (November 29, 2011 interview).
However, the decision to visit the computer lab once a week was not totally about Jackson’s sense of fairness as he did have unlimited access to thirty minutes of computer lab time daily while other classes were at lunch.

When both participants’ classes moved to a computer lab, usually the social studies lab located next door to both participants’ classrooms, students sat in front of their own computer and completed the task the teacher assigned. For Jackson’s classes, the tasks assigned consisted of playing review games such as concentration, word search, card matching, battleship, and hangman. Each of these games was accessed through Michael’s teacher website.

Jackson also had his students access the iCivics website, a website he called “a God send”. iCivics is a well known website designed to teach students about civics and the U.S. Government. The site features curriculum units, lesson plans, WebQuests and games about the U.S. Government. Jackson only used the games on the site with his classes. Jackson said, “I think for them [students] to just be able to see it and you know cause it does, I think, give some good explanation to some of the things that are going on there in our government” (January 13, 2011 interview). The students were allowed to play any of the games on the iCivics site even those that did not pertain to the content area being studied.

Jackson liked a well-ordered class and suggested, “When you go to the lab there are very little people off task” (January 13 interview). Based on behavior, Jackson felt time in the computer lab was well spent when playing on the iCivics site, “They love it, love it, it is very interactive, they are able to, you know, have a good time and enjoy that and at the same time learn as well” (December 2, 2010 post class mini interview).
Jackson’s students were not asked to search for information, to create products indicating their mastery of the content, or in other words become producers of information/knowledge; they were consistently expected to be consumers of information.

The computer lab for Jackson’s students was used as a review tool to prepare for upcoming unit tests and a vehicle through which students could access content games for either review or pleasure. When asked if he ever gave assignments that asked the students to create something using the computer, Jackson answered,

I rarely [do], no. You know, and I’ll be quite honest with you, probably some of that has to do with, you know, my lack of knowledge with some of the stuff [digital technologies]. I’m not going to ask them to do things that I’m not even sure of myself, that’s going to be difficult to [help with] and they’ve got questions (January 13, 2011 interview).

It appeared that Jackson’s perceived lack of technical prowess was limiting his instructional choices, especially those involving digital technologies.

In contrast, Michal’s use of the computer lab was significantly different. Although the website Jackson used for review games was Michael’s site, Michael did not use it with his students during the observation period. He explained, “The site was just a Quia site, and I really don’t like Quia at all” (December 11, 2010 interview). Quia is short for *Quintessential Instructional Archive*, a web-based classroom management system that allows users to create and grade review games and assessment tools online. Michael’s Quia site was a compilation of games, quizzes, tests and other activities that a former teacher had either created or found many years ago and Michael added to it when he first arrived at Edmonds High School. While Michael was no longer using this tool for class
activities, he did use the website for testing. When asked why he continued to use the website for testing, Michael responded,

The testing has enough manipulation to it that I like to test on it just cause it’s easy and I can test on the computer. I worry about the kids looking at each other’s computer screen but you can randomize the questions so that [on] every computer the questions are randomized (December 11, 2010 interview).

When Michael’s students visited the computer lab, instead of playing games they worked on projects Michael designed for the units. The Legislative Branch Unit’s project was a PowerPoint assignment in which the students were to answer a series of questions by creating a presentation slide for each question. Michael told the students that the only requirements of the assignment are to answer the questions and to have a visual on each slide. Michael described the value of the assignment when he explained the process that students went through as they completed their PowerPoint slides. He said,

One of the questions they had was how many members of the House of Representative are there and 435 is a pretty safe answer. [However], they are taking this 435 and changing the colors and doing all this stuff with the 435 instead of just writing a number down. So it is taking them ten minutes to figure out what to do with this 435 . . . and they remember 435 because they spent ten minutes manipulating the slide (December 11, 2010 interview).

The culminating activity for Michael’s second unit observed, Participating in State and Local Government, was a WebQuest. Michael described this activity as “a directed tour around the website showing different parts of our government. It’s not so much about the questions as it is showing them the information they can access. I wanted
them to understand you know the entire Virginia Constitution is on line” (December 11, 2010 interview). This assignment asked the students to locate answers to specific questions using websites that Michael provided to them on a handout. While Michael could have easily given the students the information he instead chose to provide websites where the students could locate the information and take a more active role in their learning (Brush & Saye, 2002; Wolfe, Brush & Saye, 2003; Saye & Brush, 2006).

Michael suggested that this assignment format was a way of getting students to remember the content and to illustrate for them the resources that are available.

I try to give ‘em, show ‘em where I can look up laws and things. [Show them] there is a way you can plug in any kind of term, something of interest to them and that would bring up [State] codes as it [is] related to that term or subject. I thought they did pretty well with it, they worked pretty hard, they were getting answers out of it and you know, it’s always funny the things they latch onto you know. I asked them to look at the bios, more just kinda exploring through, what’s on there for our governor and in his bio they tell us about his sport highlight of playing [a] football game against T.C. Williams Titans, the particular team they made a move about. That same year [the Governor] had scored a touchdown and scored a two point conversion in that game and that was what he considered his sporting football highlight, so I had a question about that and I heard some people discussing the fact that he played football and things and I think that kind of personalizes that particular person, that’s probably something they would remember about their Governor [at] least for a little while (December 11, 2010 interview).
The description of space as a theme illustrated how a physical location, and the tools used within it, shapes and influences instruction. For example, the classroom, the primary learning space, only afforded students with the opportunity to use textbooks, and did not afford any opportunity for students to use digital technology, specifically computers. Additionally, the physical space did not always designate the type of activity conducted in it. This was illustrated by the discussion of how the two participants used different tools to capture the attention of their students. Michael used embedded videos in his PowerPoint presentations to this end whereas Jackson used the PowerPoint presentations to stimulate class discussion. Additionally, the way that each participant used the computer lab with their students differed from the other. Michael used the computer lab as a space for his students to search the Web for content to answer questions on a WebQuest and to produce a creative PowerPoint slide presentation. The PowerPoint assignment asked the students to search for content that answered specific questions and then transfer that content to a PowerPoint slide that was creative and contained a visual. This activity mirrored the way Michael presented his class content. He began by finding the key content for his units in the textbook then reducing the content to bulleted points, and finally presenting the information aesthetically. Conversely, Jackson used the computer lab as a venue for game playing; a space where his students were the recipients of information, much like Jackson was when he received the PowerPoint slides from Michael.

**MOVEMENT OF CONTENT**

Data that linked the concept of movement to time, specifically segmenting the class time and pacing the curriculum, has previously been discussed. However, now the
discussion of movement takes a slight turn, this discussion of movement details how
technological tools have afforded the movement of knowledge. The availability of
technology provided multiple ways for content to move from outside the school to the
classroom, between classrooms; from one participant to another, and from the textbook to
the PowerPoint slides.

Movement: Outside of School to the Classroom

The research documented the movement of content from outside the walls of the
school; specifically Michael’s home, back to school, and then back again to Michael’s
home. When Michael came to Edmonds High School he was assigned government
classes and he decided to create a PowerPoint slide presentation for each of the units he
taught. He went through the textbook and created PowerPoint presentations for the major
topics covered by the text. He worked at home and during his planning periods to develop
this centerpiece for each instructional unit. The PowerPoint presentations became the de
facto curriculum for his classes. When asked where he got the images he used in his
PowerPoint slides, Michael said, “I just pull them off the Internet and I’ll try to integrate
stuff off of YouTube” (December 11, 2010 interview). While the YouTube is allowed by
the Edmonds High School’s school district, other websites Michael likes to use,
specifically Comedy Central, is not.

Edmonds High School’s school division blocks all computer access to Comedy
Central Michael made a request to have this site unblocked for his classroom use but the
request was denied at the central office. However, Michael found significant value in
showing clips from the Daily Show to his government students and was willing to bypass
the division’s regulations.
I like to show the Daily Show and stuff because I think it is funny and it gives them an introduction to a lot of things that they wouldn’t pay attention to otherwise. I like it when they come back and tell me they watched the Daily Show last night. I know that some of the things that I use are having an impact when they go outside my classroom and actually investigate that stuff on their own (November 27, 2010 interview).

When Michael was asked how he showed blocked video clips from *The Daily Show* Michael said,

> There’s a website, it’s NCH, something like that and they have a variety of different software uh, I think the software was about 30 or 40 bucks uh, I mean, it had absolutely a ton of applications . . . the legality of it is probably borderline, but it essentially just records anything that I have playing on my desktop so I can play the Daily Show on my desktop (December 11, 2010 interview).

Michael copied the shows and brought them into school on a jump drive and embedded them into his PowerPoint presentation. This technological tool permeated the walls of the school, even circumventing the system-wide restrictions placed on the use of digital technologies.

Jackson’s work was more centralized to the workplace than outside the work environment. Others, especially Michael, did much of the preparation for Jackson’s classroom activities and he instead put his efforts into classroom delivery as opposed to classroom curricula preparation. His teaching responsibilities did not travel outside the school building.
Movement: From One Participant to the Other

The movement of PowerPoint from one teacher to another teacher provided an interesting example of how two teachers using the same PowerPoint used it differently. While, digital technologies are often considered a game changer (Christensen, Horn, & Johnson, 2008) what was seen was a flattened use of digital technology. A shift in the slide show occurred as it moved from one classroom to another. One aspect I contend that flattened, limited the newness and freshness, of the PowerPoint slides is authorship. The slides were developed by one of the participants in this study, Michael, and were given to Jackson when he asked for assistance with content materials.

Jackson, like Michael, used the PowerPoint slides as his main depository of his content information. In fact, the same PowerPoint presentation used and created by Michael traveled from Michael’s classroom to Jackson’s classes.

When Jackson began teaching U.S. Government, he asked teachers with experience in teaching government for any resources they might be willing to share. Michael shared all of his PowerPoint slide presentations. Even though Jackson said that the students preferred slot notes from a PowerPoint presentation to note taking off of an overhead transparency, something was lost in the transfer of this technology, something changed, it became bland.

The most dramatic difference between the two presentations was that Michael used embedded video clips to highlight the content found on the slot notes slides. Although Jackson had access to these same videos, Jackson did not show them to his students. Jackson instead used the PowerPoint slides simply as a class set of notes that were necessary for students to copy and get through to finish the unit. That kind of
practice is a reflection of Jackson’s contention that students preferred the slot notes to overhead transparencies. There was little difference, other than the size of the projection, from copying slot notes off an overhead and slot notes found on a PowerPoint slide show. Michael, on the other hand, felt the PowerPoint slides leveraged the power of technological tools to make his class more current and entertaining. Lovorn (2009) writes of infusing the social studies classroom with humor to invigorate learning. Michael attempted to connect popular media; particularly humor and political satire, to his content to increase student engagement with the material. In essence, the content from the PowerPoint was the same in both classrooms. For Jackson the content slides were enough for his lesson. Michael tried to do something different for his students. He enhanced the appearance and aesthetics of the PowerPoint presentation with videos and images.

Michael’s PowerPoint slide show was full of animation and extra visuals found in the embedded video clips. For example, during the unit on Participating and State and Local Government, Michael showed a four-minute clip from the Daily Show featuring Governor Rick Perry. Michael mentioned Governor Perry’s new book, *Fed Up* and the clip served to introduce Michael’s lecture on federalism. In fact, most of the videos Michael embedded in his PowerPoint presentations were used to open up Michael’s lectures on the content. Conversely, in Jackson’s class where there was no video clips used with the PowerPoint presentation, discussions occurred about the topics and content on the PowerPoint slides.

**Movement of Content (Textbook to Slides)**

It is significant that the digital technological tool, the PowerPoint, that originated outside of school and enhanced in other locations, was built around information found in
a non-digital technological tool, the textbook that did not leave the room. In fact, some of the slides contained references to page numbers found in a previous textbook edition. The slides had not been changed further indicating that teachers believe that textbooks are timeless.

While technology is often considered ever changing what was observed in these PowerPoint presentations was a diluted representation of the content. Previously when discussing the Time theme, I illustrated the similarities between the textbook and the PowerPoint slides in the Legislative Branch unit. An example from the second unit will again show that the content moved from the textbook to the PowerPoint, or at least some of it did. This example supports Tufte’s (2003) contentions that PowerPoint presentations reduce content in the process of disseminating information.

The PowerPoint slides were bulleted points of key information contained in the text. Page 686 of the student text outlines the provisions often found in State Constitutions, e.g. basic principles, and protection of civil rights. The paragraphs detailing basic principles to State Constitutions read,

*Basic Principles.* Every State’s fundamental law is built on the principles of popular sovereignty and limited government. That is, each State constitution recognizes that government exists only with the consent of the people, and that it must operate within certain, often closely defined bounds.

In every State, the powers of government are divided among executive, legislative and judicial branches. Each branch has powers with which it can restrain the actions of the other two. That is, each of the 50 documents proclaims separation of powers ad checks and balances. Each also provides, wither
expressly or by implication for the power of judicial review (Magruder’s


The PowerPoint slide presented on State constitutions was constructed from the content of the text. It lists:

B. Basic principles for all state constitutions

1. Basic Principles
   
   I. Popular Sovereignty; limited government
   
   II. Government exists with consent of the people
   
   III. Executive, Legislative, Judicial-checks and balances
   
   IV. Judicial Review

If one continued to analyze the text and slide pictured below one would find that the only difference between the two is that the book used the term civil rights and Michael used the term civil liberties to describe civil rights on his PowerPoint slide.
II. State Constitutions Today

a) All but 17 ratified before 1900
   1) Nearly all have been amended numerous times
   2) Basic principles for state constitutions
      1) Popular Sovereignty, limited government
      2) Government exists with consent of people
      3) Executive, Legislative, Judicial-checks and balances
      4) Judicial Review
      2) Protection of Civil Liberties
         1) Similar to Bill of Rights in most states
         2) Some states have additions
            a) right to unions, safe from debt imprisonment

follow the national pattern, providing only a broad outline. Most, however, cover the subject at length, and often in great detail.

4. Governmental Powers and Processes. All State constitutions list in detail the powers vested in the executive branch (the governor and other executive officers), the legislature, the courts, and the units of local government. The powers to tax, spend, borrow, and provide for education are very prominent. So, too, are such processes as elections, legislation, and intergovernmental (State-local) relations.

5. Constitutional Change. Each State constitution sets out the means by which it may be revised or amended. Since constitutions are fundamental laws—laws of such basic and lasting importance, they cannot be changed as ordinary law is changed. Constitutional changes are more difficult to bring about, as you shall see.

6. Miscellaneous Provisions. Most State constitutions begin with a preamble, which has no legal force but does set out the purposes of those who drafted and adopted the document. All of them also contain a number of “dead letter” provisions, items that have no current force and effect but still remain a part of the constitution.

Constitutional Change

Like the national Constitution, the State constitutions have been altered over time by formal amendment and by such other processes as court decisions and custom. But—and this is a very important but—those other processes have not been nearly so important at the State as at the national level.

State constitutions are much less flexible, and much more detailed, than the national document. The structures, powers, and procedures of State government are treated at great length; and the State courts have generally been strict in their role as interpreters of their State constitutions. In short, constitutional development at the State level has come about mostly through formal amendment rather than by other means.

Two kinds of formal changes have been used: amendments, which usually deal with one or a few provisions in a constitution; and revisions, which are large-scale changes that
For many years’ teachers have had to rely on textbooks and maps as the primary visuals in their classrooms. Now, through use of digital technologies, teachers can use images found on the Internet and even clips from television shows blocked by the school system’s regulations and move them to their classrooms to connect their students with knowledge. Previously teachers kept folders of notes and handouts for each unit taught, now these curricula materials can be placed on a flash drive and loaded to the teacher’s hard drive as well as shared with other teachers electronically. What this study highlighted is that although the unit’s content was delivered via the means of PowerPoint presentations, the content originated in the student text and moved to the digital format. These teachers are still relying on the textbook for the majority of their curriculum, and the difference between the classrooms was Michael’s use of aesthetics and pop culture.

SUMMARY

Both participants taught a heterogeneous class of 12th grade U.S. Government and neither participant thought too highly of the ability level of their students. The context of their teaching assignment impacted their instructional choices, including the choices they made about the technological tools used in class.

U.S. Government at Edmonds High School is a course without a high stakes end-of-course test. Both participants enjoyed more freedom with their pacing and curricula choices because there was not an end of course test. Jackson and Michael both cited time, the idea of saving time, as a reason for using technological resources. However, time was also a factor to why Jackson didn’t use technological tools, specifically digital technological tools, more. Jackson was less technologically savvy than Michael and
indicated he would like to know more about using technology in his classroom if he could find the time to take a class.

Both participants recognized that in order for learning to occur students needed to pay attention to the class content. The findings of this study revealed that the two participants used both digital and non-digital technological tools to focus the attention of their students. Michael used his computer and projector to show humorous videos embedded in his PowerPoint presentations in hopes the humor would engage his students with the content. Jackson used technological tools to help the students work with the content as well as to control student behavior. Specifically, Jackson used the textbook at the beginning of each class as a “do now” vocabulary activity.

The use of technology tools was not confined to a single place, however different places housed and fostered the use of different technological tools. Students used non-digital tools only in the classrooms and the digital technological tools, student computers, were only used in the computer lab. Some technological content originated outside the school and moved into school and through classroom walls. Other tools remained in the school.

The participants used technology to help make their job easier. Michael used online testing because it saved him time in grading and it was easier for him to record grades. Jackson used Michael’s PowerPoint because it was already developed and it was an easy way for students to gain access to the content.

What the study did not find is that technology changed the way the teachers taught their students. While researchers are recognizing the critical role social studies
educators play in developing citizens, and the possibility of digital technologies to be used to foster citizenship development, what was witnessed in these government classrooms did not appear to produce significantly different learning experiences from traditional classroom practices. While both participants used PowerPoint in their classrooms, both participants were teaching the same content that was found in the textbook. Michael inserted some videos and television clips into his presentations but the PowerPoint slides were merely reconstituted depositories of information contained in the student text. Jackson’s classes were similarly connected to the text.

What was observed is that these U.S. Government teachers used technological tools in the classroom to reinforce, not change, their teaching pedagogy. This confirms the findings of Sandholtz et al., (1997),

Changing the classroom environment to include technology may not eliminate many of the age-old problems inherent in the school system and, in some cases, may exacerbate them. Limited time, pressure to cover the mandated curriculum, problems with classroom management, scarce resources, and teachers feelings of isolation persist even in classrooms radically altered by the introduction of new technological tools (p. 3).

Both participants had very teacher-centered classes, and the tools used in their classes supported these practices. Much of the knowledge in these classes traveled from teacher or teacher-constructed/selected materials to the students, very little knowledge flowed in the opposite direction. Most of the assignments in both classes were connected to the textbook either directly or through ancillary materials. Jackson’s students were not given any opportunities to produce knowledge. Even when his classes were in the
computer lab his students used computers to play review games or other
government/civic games such as those found on the iCivics website. The only
assignments that allowed for student construction of knowledge were Michael’s two unit
assignments the students produced in the computer lab, the PowerPoint assignment and
the WebQuest assignment. Regardless, of whether the tool used in the classroom was
digital or non-digital, the use of these tools did not alter the teacher-centered landscape of
instruction.
CHAPTER 5
DISCUSSION AND IMPLICATIONS

“The great aim of education is not knowledge but action” (Herbert Spencer, 1860).

Today, over 150 years later, America is struggling with exciting its citizenry, particularly its younger citizens, to take an active role in both civic and political activities. The decline in civic and political participation over the last 30+ years is a signal to educators that a need to promote active citizenship exists (Putnam, 2000). Social studies classes, specifically U.S. Government courses, are recognized as central to the development of knowledge about our government and enculturation of civic values. Investigating the tools U.S. Government educators use to advance teaching and learning about our nation’s government and political systems helps to designate and illuminate the pedagogical practices educators are using as they ready students to become active citizens. Thomas Friedman (2007) writes, “In the future how we educate our children may prove more important than how much we educate them” (p. 309).

This study investigated how U.S. Government teachers’ beliefs and perspectives about teaching and learning are reflected in their pedagogical practices and uses of technological tools. The study was unique as it examined the practices of two U.S. Government teachers, a content area not typically researched. The participants taught classes that were state required but did not culminate with a high stakes end-of-course test. Analyzing how technological tools were used to advance teaching and learning in
these classes produced several significant findings that will be discussed in this chapter including the three themes, time, space, and movement that emerged from analysis of the data.

This study has its antecedents in my desire to examine Technological Pedagogical Content Knowledge, TPCK; a theoretical framework that I believed held promise for teachers to select student-centered instructional practices. Careful examination of the participants choices and uses of technological tools yielded findings that contribute to ongoing scholarly discussions and offer new topics for consideration in social studies education. This discussion will begin with the cogitation about TPCK and continue with insights that emerged from the study about time, space, and movement and what each means for the state of technology use in social studies classes.

THEORETICAL IMPLICATIONS

TPCK is a theoretical framework that posits that technological knowledge, pedagogical knowledge, and content knowledge are the key elements to understand teachers’ instructional choices. I was originally drawn to TPCK because I thought it provided educators with an explanatory model for instructional planning and it dovetailed nicely within the constructivists’ viewpoint on learning. Since the co-production of knowledge is central to student-centered pedagogies and central to the philosophy of social constructivism, I considered the TPCK framework a lynchpin to fostering such a student-centered classroom. I believed that when used appropriately, the TPCK framework helped educators to elucidate the relationship between technology and content, and to make pedagogical choices that fostered student-centered learning.
I expected to have research findings that showed the integration of technology, content, and pedagogical choices would result in an increase in student-centered learning.

Instead what I found was the knowledge bases in TPCK’s framework may not be enough to explain the results of the research, much less produce the results I expected. I realized that TPCK under theorizes the impact that context has on teachers decisions. In the discussions about TPCK, researchers tend to overemphasize the dispositional explanations of teacher decisions and underestimate the relational explanation, for those decisions.

In a recent dissertation (Forssell, 2011) that is currently being profiled on Punya Mishra’s home web page that reports on TPACK, Forssell analyzed 307 survey responses of California National Board Certified Teachers across several content areas in an attempt to explore these teachers’ TPACK confidence. The study categorized the participants into three categories, high, medium, and low TPACK confidence based on their answers to the survey questions. The researcher mentions three levels of context to consider when analyzing teaching and learning contexts, “school, classroom, and outside the school” (p. 83). The data was analyzed and the research findings were,

Exploration of the teaching and learning contexts of teachers with different levels of TPACK confidence showed no significant differences between teachers of different ages, genders, grade levels, subject areas or student populations (Forssell, 2011, vi).

The researcher was clear that the number of computers in a classroom had a relationship to the level of TPCK confidence as, “high-TPACK teachers were more likely to report 40 or more computers available for student use” (Forssell, 2011, p. 103). What was less
clear is how the researcher operationalized context. While the attempt to link context to TPACK is a move in the right direction and is more than simply a statement that context is everywhere, the details of the findings seem to reduce knowledge to what someone perceives they do, and not consider the quality of what they do. TPACK appeared to be more about measurement of what teachers know and not about why teachers do the things they do to advance teaching and learning.

While most TPCK researchers include some comments about context and its importance in their text, their discussions, specifically the conclusions in their writings, usually focus on what a teacher knew or didn’t know, instead of what shaped what they knew or didn’t know (Forsell, 2011; Mishra & Koehler, 2006; Koehler, Mishra & Yahya, 2007). For example, Mishra and Koehler (2006) contend that TPCK helps to connect educational theory with educational practice. This article’s conclusion states, “the TPCK framework allows us to identify what is important and what is not in any discussions of teacher knowledge surrounding using technology for teaching subject matter” (p. 1046), with no mention of the importance of context being important to using technology to teach subject matter or of context being a necessary discussion component when attempting to connect theory to practice.

In this study, TPCK failed to provide a full explanation of the decisions made by the participants about instructional decisions. The participants often made instructional choices based on the context of their teaching: their students, the extended class time, the school calendar, expectations or the lack of expectations to follow standardized curriculum. Pedagogical choices were shaped by context -- one could even say constrained by context. When you look at how a school actually works, the real world
requires teachers to navigate and negotiate through multiple contexts – including class size, student motivation, student ability, the physical learning environment, cultural norms, institutional norms such as teacher evaluations, standardized testing and length of instructional period to name a few. The classroom is not a pure lab; it is “contaminated” by the context. The TPCK framework has not been operationalized enough to fully include the importance of another “C”, context. While the TPCK model recognizes context, it is done in such a way that fails to develop how context is connected with technology, content and pedagogical knowledge. In a diagram used by Mishra and Koehler and subsequently in other publications on TPCK, context is illustrated as a dotted sphere surrounding the TPCK Venn diagram, with little emphasis placed on the importance of context. While an additional “C” messes up the acronym it is significant that the participants’ instructional decisions were not simply based on technical knowledge, content knowledge, and pedagogical knowledge, or even the combination of the three. Instead the research findings support Windschitl and Sahl’s (2002) contention that technology influences instructional decisions was mediated by

Teachers’ interconnected belief systems about learners in that particular school, about what constituted good teaching within the context of the institutional culture, and about the role of technology in the lives of students (p. 201).

Both participants based their teaching decisions around their perceptions of their students’ ability. Neither thought very highly of the academic abilities of their students and as such had low expectations for the students’ ability to handle more than the simplest of tasks. Many of the decisions these participants made were made for classroom management reasons, attempting to control both the content and the students. It was clear
that Michael recognized that the low academic level of his students required him to provide very specific instructions in order for his students to successfully complete class activities. Michael mentioned,

If this was a higher-level class, I’d probably give them more leeway, give them more general stuff but I have probably five kids that if I don’t have specific guidelines for them they’re actually lost. They’re just lower functioning and if I don’t give them some time direction and how to do it they will struggle or they just refuse to do it (November 8, 2010 classroom observation follow up interview).

The type of student in a teacher’s class is but one component of context, but in this study it showed to be a very important one, one that the TPCK rarely explicitly addresses.

While I did not witness a lot of “transformative action” (Shulman, 1986) and TPCK did not fully answer the research question, as a theoretical framework TPCK does have some traction in how technological tools are used in the classroom. Researchers have found that TPCK can be used to include technology in the social studies classroom. John Lee (2008) helps us to understand what teachers could do to effectively add technology to their instructional plans. Lee asserts that with proper vetting, social studies teachers can effectively add technology to their lesson plans thus allowing students access great amounts of information and providing an authentic audience for their work.

Lee (2008) in an attempt to link TPCK with social studies wrote of six pedagogical actions involving technology that social studies teachers might use in their classrooms. These six actions were included in Chapter 2 as part of the literature review;
however, it is worthwhile to revisit them here to discuss the pedagogical actions of both participants.

1. locating and adapting digital sources for use in the classroom,
2. facilitating their students’ work in non-linear environments, requiring students to make critical decisions about how to select their own resources and navigate through a wide variety of interfaces,
3. working to develop critical media literacy skills among their students,
4. providing students with opportunities to utilize the presentational capabilities of the Web to motivate and encourage students,
5. using the Internet to extend collaboration and communication among students, and
6. extending and promoting active and authentic forms of human interaction in technology enabled social networks (p.130).

Jackson’s instruction only exhibited one of Lee’s pedagogical actions. Jackson located digital sources for his classroom. Jackson secured Michael’s PowerPoint slides for each unit, had his students use the iCivics website and also showed several movies in his classroom. However, the second part to the first pedagogical action stated that the teacher would adapt these sources. Jackson made no changes to the digital sources.

Michael used three of Lee’s six pedagogies. His classroom PowerPoint slides illustrated his use of the first pedagogical action as well as other visuals he used in class including taped television shows and movies. Michael’s PowerPoint assignment did call for students to select their own resources and navigate through the Internet for answers to the assignment’s questions and provided the opportunity to create a presentation
(although they were not shared with the class, so there was no collaboration or communication among students). Additionally, this assignment fell short of the *NCSS Position Statement on Media Literacy* (2009) that proposes, “Social studies educators should provide young people with the awareness and abilities to critically question and create new media and technology, and the digital, democratic experiences, necessary to become active participants in the shaping of democracy.” Michael’s assignment allowed students to increase their awareness of the possibilities of technological tools but did not require the students to critically question information.

Both Michael and Jackson’s teaching in the two units observed, The National Legislative and Participating in State and Local Government, were primarily teacher-centered whole group instruction. The centerpiece of each of the units observed was a PowerPoint presentation created by Michael and used by both participants. The information on the PowerPoint slides represented a flattened version of the textbook information, a complexity reduction and a chunking of textbook information (McNeil, 2000; Goodlad, 2004). I thought a course without an end of course test might produce more opportunities for student-centered learning, especially a unit with the word “participating” in the title; however, this was not the case. Jackson appeared to be cemented to the teacher-centered end of the teacher practice continuum (Zhao, 2007). Jackson directed each moment of his class and required very little participation on the part of his students. Even his discussions which were intended to expose students to key governmental issues and increase student understanding followed the very familiar “question-answer-comment pattern” (Nuthall, 2005. p. 897). Jackson would ask a question of his students, a student would answer the question and then Jackson would
comment on the student’s answer. This pattern appeared to limit the class discussion, as students were not encouraged to respond to the answers of other students in the classroom. In essence, the “discussion” in Jackson’s class was in actuality a series of questions students answered with Jackson affirming or correcting student responses.

Analyzing the participants’ actions by using Hammond and Manfra’s (2009) description of a three-pronged approach to instruction, “giving”, “prompting”, and “making”, Jackson was stuck in the teacher-centered modality or what Hammond & Manfra termed the “giving” position. When asked if he ever gave assignments that asked the students to create something using the computer, Jackson answered,

I rarely [do], no. You know I’ll be quite honest with you, probably some of that has to do with, you know, my lack of knowledge with some of the stuff [digital technologies]. I’m not going to ask them to do things that I’m not even sure of myself, that’s going to be difficult to [help with] and they’ve got questions (January 13, 2011 interview).

Observations of Jackson’s use of digital technological tools reflect Sandholtz et al. (1997), five-stage model of technological integration. Sandholtz et al. claimed that the less technological knowledge a teacher has, the entry level, the more likely that teacher will have a teacher-centered classroom. The more knowledge of technology that a teacher has, up to a classification of interventionist, the more likely their classroom would be student-centered. However, this model does not explain all of the findings of this study.

While Jackson was at the beginning of his journey with technology and his classroom was very teacher centered, Michael was a proficient computer user, specifically of PowerPoint with embedded video, and his instruction also remained very
teacher-centered. Michael used digital technologies more frequently than Jackson, but Michael’s pedagogy did not change significantly with the introduction of digital technologies. Technological proficiency did not appear to significantly alter the teachers’ position on the student-centered to teacher-centered continuum. Interestingly, because Michael perceived himself as technologically proficient and as a teacher that uses a considerable amount of digital technology in his classroom it is likely that when completing a self-perception survey, such as the one use in Forsell’s study, Michael would have been scored as a high TPACK confidence teacher. This observation brings forth a question; does high TPACK confidence translate into good TPCK?

Unlike Jackson, Michael, was not cemented in the “giving” position, however Michael’s occupation of other positions on the practice continuum only occurred twice, each time represented the culminating assignment of the unit observed. Michael’s WebQuest assignment in the Participating in State and Local Government unit is an example of how Michael used web sites to scaffold student learning thus moving him into “prompting” position. He used the WebQuest to direct students where to find information about our state and local government. Michael’s WebQuest assignment called for “knowledge acquisition” and not higher level thinking skills (Maddux & Cummings, 2007, p. 118). Michael’s use of a WebQuest caused me to reflect on Strickland and Nassal (2005) warning, “Educators must critically examine the benefits of any type of instructional strategy before implementation. WebQuests and other technological innovations should be no exception. Just because a strategy is novel does not mean that it is effective” (p. 145). Michael’s PowerPoint assignment in his Legislative Unit is an example of the one time he allowed students to make their own
products and their own meaning through the use of the computer thus moving him further down the teacher practice continuum to the “making” position.

Analysis of the data showed that each participant required their students to follow a similar pattern of teaching each subscribed to. For example, Michael was slightly more of a producer than Jackson. Michael was a presenter who was interested in prettying up the content with aesthetics that he hoped would get the attention of his students. He searched the Internet for videos and images to embed in his PowerPoint presentations and then required his students to do the same for their PowerPoint presentations. Jackson’s class assignments also mirrored his pattern of teaching. Jackson was a consumer of Michael’s PowerPoint presentations and only required his students to be consumers of information, never requiring them to produce any type of knowledge or product.

This finding is particularly interesting as the role of the teacher in student-centered activities is often referred to as a facilitator or coach and both participants are varsity level coaches. As coaches they would be familiar with movement along the teacher-centered/student centered continuum of activities. Coaches are responsible for teaching their players the fundamentals of the game but must also recognize that when it comes to game night; it is the players, not the coaches, which have to execute the game plan. While a coach might begin the preseason practices in the “giving model” by the time the season begins, it is important to have moved the team into the “making model”. For example, a coach can give the best lecture on how to shoot a jump shot but eventually he is going to have to put his players on the gym floor and let them try to shoot it for themselves. While many researchers have noted that social studies is a field often dominated by teacher talk, secondary social studies positions are also dominated by
coaching personnel (Chiodo, Martin & Rowan, 2002). Neither Michael nor Jackson, while both coaches, spent much time at the student-centered, facilitator end of the instructional continuum.

Becker and Ravitz (1999) found that frequent use of computers increased teachers’ use of constructivist teaching practices (see also Sadik, 2008; Switzer, 2004; and Maor & Fraser, 2005). In this study, the use of computers, or any other technological tool did not move either of the participants into constructivist teaching practices. It was observed that the participants used technological tools to reinforce, not change, their pedagogical practices.

What impacted the participants instructional decisions, specifically the choice of technological tools, was the teaching context of each participant, particularly the desire to efficiently segment and control time; the space where the instruction took place; and the need to move content — package and repackage -- the content for student consumption. The movement of content was multifaceted: from outside the school to school; from participant to participant; and from the textbook to the PowerPoint slides.

THEME DISCUSSION

Time

Teachers know the importance of managing time well. There is a specific amount of content that needs to be covered in a class, pacing guides to follow, and assessment to be made about student knowledge. While neither participant had to contend with a high stakes end-of-course test, time was perceived as scarce as they each desired to complete the units of study that were prepared for this course.
In this study both Michael and Jackson used technological tools to control time in their classes. The technological tools were used to segment class time and to control the cadence of content delivery. Both Michael and Jackson used textbooks, PowerPoint, videos, and student computers to segment their classes into manageable amounts of time that they deemed long enough to complete the curriculum tasks and still keep their students engaged and controlled. Moreover, Michael and Jackson used the same PowerPoint slide presentation in their classes to control the pace of the content.

Neither participant believed the class, a 90-minute block of time, could be treated as a whole. Based on their teacher preparation, both thought the block must be divided into different segments of activity. Interestingly, the shift to a different activity was signaled by a change in technological tools. While technological tools were used to segment the class, they were not used to provide a student-centered learning environment.

Whereas, each of the participants had very little control over individual student reading, their reading of the PowerPoint slides allowed them to hasten the pace of content delivery. According to Susskind (2006) “One of the PowerPoint’s main features is that it provides structures to presentations. This enhances lecturers’ ability to order and pace lectures” (p. 1229). Students are accustomed to this type of passive learning, structured presentations such as PowerPoint slides with videos and images inserted were similar to watching television (Gabriel & Griffiths, 2005). These researchers go on to suggest,

The rapid incursion of PowerPoint in education can be viewed as symptomatic of long-term changes in teaching and learning technologies. These coincide with a changing range of skills of teachers and increasingly consumerist attitudes of
many learners. At its worst, PowerPoint can be viewed as part of the deskilling of teachers and the dumbing down of students. Teachers, under great time pressures to deliver . . . simplify their teaching by becoming commentators on slide shoes, often considerately provided by the publishers and authors of textbooks (Gabriel & Griffiths, 2005, p. 372)

While Michael did not have his PowerPoint slides provided to him by the publisher of the textbook, findings show that he did construct the slides with information he found in the student textbook.

Furthermore, Jackson considered the reading of the PowerPoint slides, which were developed from the textbook, as a separate classroom activity than when students read from their textbooks. In actuality, the assignments were quite similar. While when students read their textbook, Jackson was silent and when Jackson read the slides the students were for the most part silent, both activities involved the reading of material originally produced by the textbook publisher. When considering that the data showed that the PowerPoint slides were a simplified copy of the textbook, the amount of class time dedicated to the textbook averaged two-thirds of the instructional time. This finding supports Schug et al. (1997) proposition that the textbook is the dominant tool used in social studies classes. According to Schug et al. textbook use in social studies classroom can be traced to the economic theory of rational choice. It is only rational for teachers who contend with a scarcity of time to use a technological tool that allows for content coverage to be packaged in such as succinct manner. Schug et al contend that teachers’ heavy use of textbooks is motivated by self-interest, the desire to organize their course and control the content and not because it serves the best interest of the students.
While the dominance of the textbook was apparent, the participants did not recognize it as such. Michael stated, “I use the book to some degree, I have vocabulary stuff” (November 10, 2010 interview). When Jackson was asked if he followed the textbook regularly, he replied, “You know I don’t know, I’d have to really sit down and look at the PowerPoints compared to the textbook to be honest” (January 13, 2011) interview. Analysis of the data clearly presents that the textbook, a non-digital tool, influenced the use of the most apparent digital tool, the projection of the PowerPoint slides.

In addition to the PowerPoint slides controlling the pacing of class, the PowerPoint version of the textbook became the *de facto* curriculum for the U.S. Government course taught by both participants. This course does not have an end-of-course test associated with it and neither participant paid close attention to the state standards. Instead, they evaluated the pacing of their course on whether they were able to complete the PowerPoint presentations that had been developed for the course.

While technological tools assist educators with accomplishing tasks faster, speed does not necessarily equate to better. Consider the example of a roofer who uses a nail gun to drive the nails into roofing materials. While this technological tool allows him to move through his work more quickly, he still needs to know where to place the nails. Such is the case for teachers who need to understand the reasons they choose technological tools in their instruction, and these reasons must go beyond the desire to save time.

*Space*
Another significant area of findings falls under the theme of space. These findings include the fact that there were definite spaces designated for the use of individual technological tools, and the fact that the participants used the technological tools differently within the same space. When Edmonds High School was first built there were very few digital tools in the high school, none of which teachers used. However, some thirty-five years later digital tools dot the instructional landscape at Edmonds High School. Once digital technologies became more affordable and mainstream, the decision to convert a classroom in each academic pod to a computer lab for student use was deemed the highest and best use for the space by school administrators.

The theme of space emerged from a recognition that different spaces resulted in different technological tools being used by the participants and their students. Milligan (2003) contends, “Space does not determine interactions, but shapes, constrains and influences it” (p. 382). My study found that space shaped the decisions both participants made about the technological tools used in instruction. Different spaces were designated for different technological tools. In the classroom, the participants primarily had their students use the textbook to advance teaching and learning, whereas in the computer lab - a space designated for a specific use -- the participants did not use any technological tools themselves but had the students use computers. While in the computer lab, students of both participants worked independently and without much teacher direction. This was in direct contrast to the very teacher-directed whole group instruction that took place in the participants’ classrooms. The participants’ instructional decisions were narrowed by the choice and use of technological tools within each space.
The textbook was not allowed to leave the classroom. The previous experiences of the participants led them to decide that if they wanted students to have and use textbooks in the classroom it was best not to assign textbooks to individual students but instead keep a class set that did not circulate. Moreover, the only digital technological tool that the students used was the desktop computer that was housed in a separate computer lab. As the student computers were not housed in the primary learning environment, the classroom, they could be perceived as an add-on instructional tool and not central to student learning.

Both Michael and Jackson used the computer lab, Michael more frequently; in fact Michael used it three times as frequently as Jackson. Jackson stated that his limited use of use of the computer lab was due to the sign-up system in which all teachers in the pod use the same lab. Jackson did not want to be perceived to be “in there [the computer lab] more than my share” (November 29, 2011 interview). However, Jackson’s decision to visit the computer lab once a week was not totally about equitable use of the lab, as his class ate a later lunch than all other classes in the pod and had unlimited computer access to the social studies computer lab daily for 30 minutes while the other classes were at lunch.

Massey (2005) notes, “space is constituted through its relations” (p. 107), and this is best illustrated by the participants’ different use of the same space. During the time they were observed, Michael and Jackson used the computer lab very differently from one another. Jackson, on the one hand, used the computer lab as a quiet environment in which his students could play review games or games found on the iCivics site. Juckett and Feinberg (2010) suggest that, “Contemporary instructional methods, such as the
digital simulation game . . . can make such issues more relevant to students and may encourage them to become more active citizens” (p. 278). Jackson did not explicitly adjust his pedagogical stance in terms of what Juckett and Feinberg state simulation games might provide – an opportunity to motivate higher level thinking skills – as Jackson’s students’ computer time was used strictly for consumption of information. Michael, on the other hand, used the computer lab as a space where students could conduct controlled inquiry, access knowledge, and create products. The only assignments observed in Michael’s classes that were not teacher-directed occurred in the computer labs

Movement of Content

While both participants physically moved their classes between the spaces of the computer lab and the classrooms, the “movement” of the content into the classrooms was particularly interesting. When a social studies teacher reads the word “movement”, the tendency is to conjure up ideas about historical groups of people who have sought reform throughout the ages -- the Suffrage Movement, the Progressive Movement, the Civil Rights Movement come to mind. In this study, the theme of movement, with a little “m”, focuses on the literal movement of one thing, the content, specifically the PowerPoint presentation from one location to another. Analysis of the research point to three specific findings involving the movement of content: movement of content from outside the school to inside the school, movement from one participant’s classroom to another participant’s classroom, and the movement of content from the textbook to the PowerPoint slide.
As previously stated, it was Michael who developed the centerpiece of both participants’ curriculum for the two units studied. In hopes of getting his students to pay attention to the content, Michael developed the presentations thinking a PowerPoint might be more palatable to his students than him standing up and lecturing about the content. Over the years since Michael first developed the PowerPoint he updated his presentations to include more current video clips to enhance the presentation. He embedded video clips from YouTube, C-Span, and clips from television shows he felt connected with the content, most specifically *The Daily Show*, into his PowerPoint.

YouTube and The Daily Show are sites blocked by the school division. In order to use these sites, teachers must complete a written request that explains the educational purpose for requesting the use of any blocked site and central office personnel must approve the request. Michael submitted the required paperwork to the central office and they allowed him the use of YouTube but denied him access to Comedy Central, thus not allowing him access to *The Daily Show*.

Michael was so committed to using clips from *The Daily Show* that he decided to bypass the school division’s regulations and copy the show onto a jump drive and move the show’s content to his PowerPoint presentation. Thus technological tools, the jump drive and software Michael purchased to facilitate this process, allowed for the movement of class content from outside of school to inside the school.

Michael changed the PowerPoint presentations to include embedded videos and images he procured outside of school. What he did not update were the slot notes slides, those remained the same over the years even though they were developed from a previous
edition of the textbook and page numbers referenced on several slides indicated page numbers found in an earlier textbook edition. In this case, the participant felt so comfortable using the information contained in the textbook for the content of his PowerPoint slides that he did not even consider changing his slot notes slides as he trusted the earlier version of the textbook to provide all necessary content for his students.

Analyzing the movement of content produced another interesting finding, the fact that the content moved from one participant to the other. When Jackson began teaching U.S. Government he requested help from teachers with experience in teaching this course. Michael showed Jackson the PowerPoint presentations he developed for each unit and Jackson asked if he could have a copy of the presentations. Michael agreed to the movement of content from his classroom to his colleague’s classroom.

Jackson received one of the earliest versions of Michael’s PowerPoint slides and was very happy to have them. Jackson was content to use the original version, as he viewed it as a much-improved content delivery system compared to the overhead transparencies he used with his other classes. Even though both participants used the same basic PowerPoint presentation for each unit, because Jackson used an older version of the PowerPoint his presentation appeared to be less engaging, more flat, more boring than was Michael’s presentation. In an attempt to engage students with the PowerPoint Jackson used the slides to prompt class discussions of content topics whereas Michael did not engage in a lot of class discussion, instead he used the videos and images to engage the students.
Michael and Jackson both used the PowerPoint as the significant digital tool for delivering content to the students. However, what was found in this study is that the content for the PowerPoint slides came from the students’ textbook. While not an exact copy of the textbook pages, the PowerPoint reduced the content contained in the textbook to key bulleted pieces of information that mirrored the words used in the textbook. So although a digital technological tool, the PowerPoint, conveyed the information to the students, the content on the PowerPoint slides originated with a non-digital technological tool, the textbook. This finding again supports Schug et al. (1997) of the dominance of textbook use in social studies classes (see also Edwards, 2008; Porat, 2004).

Overall, the findings associated with movement revealed that a participant was willing to circumvent the school division regulations on using banned content in his class in order to make his class presentations more pleasing to his students. On the opposite end of the spectrum, one participant was willing to accept the PowerPoint curriculum developed by another as the centerpiece of his curricula units and did not require the updated versions, as he perceived the original as good enough. Additionally, regardless of which version was presented to the students, the PowerPoint presentations had their origin in the students’ textbook.

IMPLICATIONS

For many parents, school administrators, and teachers the use of computers and other digital technologies in today’s classroom is often presented as a way to ready our students to become participatory citizens in the 21st century global society (Pink, 2005). However, it is not necessarily the computer that will help students develop 21st century skills. Instead, it is the growth of computers that has reduced the need for humans to
perform lower level problem solving and communication tasks (Autor, Levy, and Murnane, 2003; Levy and Murnane, 2004), and have fostered an era of new skills being necessary for the work force.

The use of technology in education has been a timely and hotly contested issue for over fifteen years (Windschitl & Sahl, 2002). While school expenditures on technological resources have increased dramatically, the productive uses of such technology have not keep pace with the expenditures, or in other words, school systems are not getting enough “bang for the buck” (Cuban, 2001; Roschelle et al., 2000; Hopson et al. 2001; Whitworth & Berson, 2003). My study indicates that a shift in TPCK, one that values context and student learning, might begin to increase the productive uses of technology in our classrooms.

This study highlights that context is not simple and my findings begin to operationalize context by giving rich details of the importance of context to teachers’ decisions. While the demand for digital tools in schools has increased and technological proficiency has been added to the list of competencies required of many teachers, social studies teachers have been especially slow to use technology in their instruction (Stuckhart & Berson, 2009; Berson & Balta, 2004). This may be true because the “antecedent subculture” (Goodson & Magnan, 1995) in social studies classrooms is the stand and deliver practice.

According to Tyack and Cuban (1995) changes to public schools are often motivated by the desire to improve both education and society. The skills necessary for 21st century citizenship are different from traditional curriculum offerings and require a change to how instruction is traditionally delivered (Pink, 2005; Friedman, 2005).
Despite recognizing a need for change, as evident by changing proficiency competencies for teachers, “educators, school boards, and parents resisted fundamental change” (Tyack & Tobin, 1994, p. 465). Moreover when school reform does occur it does not always involve significant changes to the “grammar of schooling” (Tyack & Tobin, 1994). Whether due to the community norms, institutional climate or the propensity of social studies teachers to stand and deliver their instruction, the subculture Goodson and Magnan found was present in both participants’ classrooms, although the location of where the teacher stood in the classroom was altered by the PowerPoint presentation.

The participants were very clear that their PowerPoint presentations were central to the delivery of the unit’s content. What was less clear to the participants was the fact that PowerPoint presentations do little to alter the stand and deliver practice. Some teachers, such as Michael, may not even recognize that this traditional practice is not altered by one’s position in the room. Although Michael lectured from his PowerPoint slides daily, his perception of his presence in his class was altered by their use. Michael said, “I’m not just going to stand up there talk” (November 27, 2010 interview), although that is exactly what he did; he stood to the side of the SmartBoard and read the slides to the students.

To explain Michael’s perception of his role in the classroom, one might consider Knoblauch’s (2008) work that explains the differences between a lecture and a PowerPoint presentation.

The presentation is not just a two-sided relation between a speaker, impersonating a text, and an audience as Goffman (1981) has shown for the lecture. Rather, the
presentation is a relation between three elements in which the screen and the slide appear in the position of a third party in the interaction. This extension of a twofold into a threefold relation is underscored by what may be called the de-centering of the speaker (p. 85).

This “de-centering” of the speaker may allow teachers, such as Michael, to believe that they are not in the stand and deliver mode.

It is important that teachers reflect upon their use of presentation tools and ask questions regarding the origins and nature of their presentations and also the extent to which such presentations support or improve student learning. Teachers who use PowerPoint presentations are using digital technologies to assist with teaching and learning to the same end of lecturing and other teacher-directed instructional methods.

The instruction did not change significantly with the introduction of this digital technological tool; teachers are still directing instruction, but they have moved from “sage on the stage” to “slide jockeys on auto-pilot” (Gabriel & Griffiths, 2005, p.372).

This study suggests that it is a mistake to simply assume the use of technological tools, or teachers’ confidence with technology in the classroom is a game changer. Christensen and Horne (2008) proposed that the use of technology in the classroom is a way to move classrooms to more student-centered activities. This research study did not support this claim. This study, instead supports the findings of DeWitt (2007), teachers use computers primarily to support traditional pedagogical practices. Moreover, the contention that traditional teaching practices are linked to standardized testing (Hargreaves & Shirley, 2009) may also need to be reexamined and unpacked a little more
carefully and thoughtfully. In this study neither participant had a standardized test connected to his course yet both participants continued with teacher-directed instruction in spite of their use of technological tools.

Zhao et al. (2002) contends that the reason for the slow adoption of technology and instructional changes in social studies classrooms is directly associated with the existing practices of teachers and their resistance to change. This description seems to better fit with the findings of this study. This study showed that technological tools were used to help teachers manage their class, but did not significantly alter the participants’ pedagogical practices.

While TPCK can offer teachers a framework to help begin to understand knowledge bases one could consider when planning class instruction, it falls short of providing the complete picture necessary to describe teacher decisions. Presently TPCK places emphasis on dispositional knowledge and factor and the result of such an emphasis maybe a blind spot in terms of the importance and impact of context—something which needs to be taken seriously when looking at the complexity of teaching and learning to teach.

Instead of simply acquiring the knowledge of how to use technological tools, teachers need to fully understand how using those tools will meet the pedagogical needs of the students and create more student-centered classrooms. Junket and Feinberg suggest that, “each student will have a different experience with technology and learning and now more than ever teachers must adapt to the needs of their students” (2010, p. 280). If educators are truly going to ready students for action and not simply focus on the
acquisition of knowledge, recognition of the students’ needs and the creation of student-centered classrooms are required.

**DIRECTIONS FOR FUTURE RESEARCH**

This study examined what two U.S. Government teachers did with their classes to get through the day, and to meet their stated goals of exposing the students to some “basic knowledge about government” (Michael, November 5, 2010 interview), and having students develop an “understanding of what a large role government plays in their lives” (Jackson, January 13, 2011 interview). These participants made their classroom decisions based on meeting these goals. These goals were not overly ambitious.

According to Grant and Gradwell (2010) “ambitious teachers deeply understand their subject matter and actively seek ways to connect that subject matter with the lived experiences of their students” (p.2). According to this definition, neither participant would be classified as an ambitious teacher. To further the understanding of how technological tools are used in social studies classes to advance teaching and learning, specifically U.S. Government classes, studies of government teachers who fit Grant and Gradwell’s definition of an ambitious teacher are recommended. Cases of idealized versions of wise practice, perhaps National Board Certified Teachers (NBCT’s), would provide a pool of applicants who have previously certified their expertise in pedagogical and content knowledge. This type of case study could lead to answering the question of whether the use of technological tools by exemplary teachers impact student learning in the government classroom. Additionally, a longitudinal study of the practice of government teachers’ use of technological tools is recommended. Such research would provide insight into whether their classroom practice changes over time or if the
classroom practices are reinforced by time. A longitudinal study could provide a more contemporary examination of the “grammar of schooling” (Tyack and Tobin, 1994), analyzing how much, if any, classroom practices have changed since the increased availability of digital tools in the classroom.

I began this dissertation with a quote from Thomas Jefferson about the importance of educating “the minds of the people at large” to protect our society against the possibility of tyrannical government. And while it is clear that our nation and our world have changed significantly since the writing of these words, it is clear that education is still critical to the continuation of our democracy. What is also clear is that instruction in the social studies classrooms has not changed as significantly despite the many technological advancements that have been made. This study found a heavy reliance on textbooks and as such research on the use of e-books and iPads in the government class would be an interesting study. One could examine to what extent the students’ experiences with e-books or iPads differ from the experiences students have with textbooks. A study of how teachers use these digital tools would provide knowledge on whether teachers use them differently than printed textbooks, or if the use of e-books and iPads reinforce the antecedent subculture of social studies.

A study that conducts a content analysis of the relationship between the text and teacher PowerPoint presentations might produce additional findings on the use of technological tools in the government classroom. Additionally, future research might examine how students use technological tools to advance their understandings and achievement? Moreover, studies that measure the effectiveness of different types of instruction with technology, e.g. teacher-directed and student-directed, in terms of
promise for student learning would be advisable. Future research might also include the study of how each of the components of TPCK and the added “C” for context, impacts teaching and learning in the U.S. Government class.

Future studies of U.S. Government classes might include examining how digital technologies are being used to foster the different frameworks of citizenship Abowitz and Harnish (2006), Bennett (2008), and Westheimer and Kahne (2004) describe. To what extent does the participants’ understanding of citizenship shape their use of digital technologies? Is the frequency of use or type of use of digital technologies different with a more active or social justice oriented approach to citizenship?

And to truly understand which instructional practices might translate into producing an active citizenry, a longitudinal study of any possible relationship between student use of technological tools in U.S. Government class and participation in civic life is suggested. This type of research, while lengthy and difficult to secure accurate participation rates, might serve to provide knowledge of which type of classroom practices result in producing the type of students that as Jefferson suggests are willing and able to protect against governmental tyranny.
Resources


Appendix A

First Interview Frame:

This interview will take place at the beginning of the study prior to classroom observations.

*Pseudonym Assignment ____________________________

Demographic Information:

Name:

________________________________________________

Ethnic Identity (race): __________ Age: __________ Gender: __________

Current employer:

________________________________________________

Current teaching assignment:

________________________________________________

What institutions of higher learning have you attended as a student? What degrees were you awarded? Please list your areas of endorsement on your teaching certificate and date of expiration.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Interview Questions:

1. Could you talk about your background, your family, where you grew up and how you were raised?

2. Tell me about your experience as a high school student.

3. Can you describe a teacher that had a significant impact on you and how that teacher influenced you?

4. What do you remember about your high school social studies classes? What do you remember about the content of your social studies classes? What do you remember about how these classes were taught? Any specific about your government class.

5. Can you remember when you decided to become a social studies teacher? What about the career was appealing to you and why?

6. Please describe the route you took and the reasons that you became a teacher.

7. How long have you been a social studies teacher?

8. Please describe your teaching background (subject/grade/level/schools/years taught).

9. Could you please describe your typical classroom and planning process?

10. In what ways is the reality of teaching different from your perception of teaching?
11. What do you think the purpose of teaching government is?

12. How do you perceive your role as the teacher in the U.S. Government class?

13. What curriculum do you use to teach U.S. Government? Where does this curriculum come from? What other factors influence your choices of curriculum?

14. What tools do you see as useful to your teaching and why?

15. How did you find out about these tools? Where do you get ideas for lessons? Have you been encouraged to use specific tools? How? By anyone else?

16. Where do they get the tools?

17. What influences shape your practice in terms of the tools and resources you choose?

18. How do you believe students learn best?

19. What difficulties do students have in your class?

20. What issues with motivating learning do you often see and how does this affect your decisions with regard to your teaching and the tools you use?

21. What else do you think I need to know to better understand your experience with teaching U.S. Government?

22. What question did I not ask that you would like to talk about?


Appendix B

**Second Interview Frame:**

This interview will take place after completion of the first unit of study observations (Approximately one to two weeks into the participant study).

1. How do you decide how to teach something and which strategy (ies) to use?

2. Tell me what learning goals you had for this unit.

3. How do these goals fit your overall purpose of teaching U.S Government?

4. How did you go about accomplishing your goals?

5. What tools did you use to assist you in reaching your instructional goals?

6. How, if at all, did you incorporate digital technologies into accomplishing your goals?

7. What did you see as barriers and facilitators to using digital technologies in this unit of study? Are you comfortable using digital technologies?

8. How would you describe your access to digital technologies for use with this unit?

9. Tell me how you think digital technologies may or may not advance the teaching of citizenship skills.

10. What evidence is there, if any, to indicate that using digital technologies in this unit made a difference in student learning?
11. Tell me about any value that was added to the unit through the use of specific instructional tools.

12. How did you assess student learning for this unit?

13. Tell me about your strengths of your teaching in this unit. What do you attribute those strengths to?

14. Tell me about your weaknesses of your teaching in this unit. What do you attribute those weaknesses to?

15. Tell me about any changes that you plan to make to this unit for next semester.

16. What question did I not ask that you would like to talk about?
Appendix C

**Pre/Post Class Observation Frame:**

The mini interviews will be conducted before and after each class session observed.

1. Tell me about what you are going to teach today.

2. What are your goals for class today?

3. What worked in your lesson today? How do you know it worked?

4. Is this the way you usually teach this topic? How might you teach this lesson differently if you could teach it again?

5. What influenced how you taught today?

6. What surprised you about today’s lesson?
Appendix D

Third Interview Frame:

This interview will be conducted after all observations have been completed, at the end of the second unit.

1. Tell me about the strengths of your teaching these two units of study. What do you attribute these strengths to?

2. Tell me about the weaknesses of your teaching these two units of study. What do you attribute these weaknesses to?

3. How did you attempt to make the content of these two units relevant to the student’s lives?

4. Describe for me your attempts to advance your purpose of teaching U.S. Government in these two units.

5. Tell me about a specific lesson that you feel reflected an attempt to fulfill your purpose of teaching U.S. Government.

6. Describe how students used digital technologies in these two units to support their learning.

7. Tell me about which activities seemed to engage the student in the learning process.

8. What question did I not ask that you would like to talk about?
Appendix E

Observational Field notes

Setting: Classroom ________

Role of the Observer – Non-participant

Date:

Time:

Length of Observation:

Description of Object (chronological) Reflective Notes: (insights, hunches, themes)