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EXAMINING YOUTH ATTITUDES TOWARD CIVIC ENGAGEMENT: A STUDY OF COLLABORATIVE SOCIAL ENTREPRENEURSHIP USING A MULTI-USER VIRTUAL ENVIRONMENT

A Dissertation in

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by

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ABSTRACT

Over the last decade, the narrative in education had often been that schools should develop “21st century skills” in our youth, including the competence to effectively use information and communication technology. Much debate has surrounded what “21st century skills” and the political rhetoric that drive the push for those skills. Existing guidelines by the Partnership for 21st Century Skills (P21) and the National Council for the Social Studies (NCSS) agree that collaborative learning, critical thinking, problem-solving, and civic engagement are important for today’s students. This study examines how an intervention using an issues-centered classroom model, deliberation, and collaboration on a social entrepreneurship project in a multi-user virtual environment can potentially develop greater civic engagement in high school seniors participating in a county-wide dual enrollment program for youth interested in future careers in healthcare.

This study revealed that before the intervention, participating students as a whole espoused high levels of social responsibility. However, the students lacked civic efficacy, ability to critically analyze the root causes of social issues, civic engagement through action for social change, and a clear understanding of social justice. The deliberation of social issues, particularly those related to the social determinants of health outlined in the US Department of Health and Human Services Healthy People 2020, demonstrated how the issues-centered model of teaching social studies can be lead to positive self-reported shifts in the students’ ability to think critically and communicate regarding social issues. Several other important conclusions emerged from the intervention. First, civic learning opportunities positively affected students’ espoused commitments to civic engagement and their attitudes toward the learning experience. Second, MUVEs can be a useful tool for development of skills as articulated by the Framework for 21st
Century Learning, although serious thought and reflection must be made to ensure when and how technology is incorporated into schools and curriculum. Third, social justice can be perceived through a lens of community responsibility, although the ambiguity that students have regarding social justice suggests that social deliberation is a more effective lens of encouraging students to critically examine issues and problems in society. Lastly, social entrepreneurship is but one way to conceptualize active and participatory civic engagement.
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Chapter 1: Introduction

The task of education is to transform and integrate... an inclination towards both the common good and our individual goods, so that we become neither self-rather-than other-regarding nor other-rather-than-self-regarding...to what is both our good and the good of others. (McIntyre, 1999, p.160)

The Problem and Its Importance

As the global economy increasingly relies on information and communication technology (ICTs), a standard narrative in education and workforce development is that there will be a greater reliance on work practices rooted in information and knowledge. Over the last decade, the notion of “21st century learning” has driven much of the educational technology initiatives in the US. Those efforts intended to foster competency in collaborative learning, creating thinking, problem-solving, and new literacies, particularly through the use of ICTs (Binkley, et al, 2013; Partnership for 21st Century Skills, 2007). The advances in ICTs over the last decade has led to some educators, policy makers, businesses, and other to call for today’s students to be able to navigate those technologies, interact with peers in online spaces appropriately and effectively, and make sense of digital literacies as both consumers and producers (Lankshear & Knobel, 2006; Squire, 2011; Binkley, et al, 2013; Partnership for 21st Century Skills, 2007).

With the movement in many schools toward ICTs, and therefore requiring more complex knowledge and skills, a decrease in civic engagement is evident in our society, especially as social inequalities are becoming more prevalent. There are widely differing views in the social studies field on what civic engagement and civic education looks like or how to achieve it. Civic engagement can be defined as an individual’s actions that reflect civic understanding and result in actions, whether individually or collectively, to critically recognize and address social issues
and problems (Battistoni, 2002; Engle & Ochoa, 1988, Ehrlich, 2000, Ochoa-Becker, 1986). Moreover, Ehrlich (2000) contends that civic engagement is described as “working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference” (p. 2). Educators today are faced with the challenge of cultivating youth who are equipped to become engaged and participatory citizens in diverse free society in which there is often widespread disagreement on most social and political issues.

After the passage of the No Child Left Behind legislation and the importance it placed on testing and accountability, the trend in K-12 education in the US has moved to focus on testing accountability for measurable achievement outcomes. Consequently, time spent on social studies subjects, including civic education, has declined (Engle & Ochoa, 1988; Bennett, 2008; Amna & Zetterberg, 2010). Students are exposed to little formal civic education focused on citizenship and civic engagement (Westheimer & Kahne, 2004; Rubin, 2007). Civic education in today’s enacted social studies curriculum tends to be narrow and simplistic, revolving around the conceptualization of civic engagement as participation through the voting process or membership in voluntary organizations (Bennett, 2008; Anna & Zetterberg, 2010). Other aspects of civic education, such as empowerment and action, often have been and are underdeveloped (Wilkenfeld, Lauckhardt, & Torney-Purta, 2010; Flanagan, 2013). Thus, today’s youth may not develop a strong operationalization of civic engagement (Flanagan, 2013, Bennett, Freelon, & Wells, 2010). A lack of civic engagement represents a growing concern. Increasingly, younger generations may fail to see the significance of the democratic process in their own lives and lack the will to engage the democratic process (Bennett, Freelon, & Wells, 2010). A Carnegie study (2003) stressed the need to develop civically engaged students through public speaking and
collaborative problem-solving, in addition to voting. Westheimer and Kahne (2004) have promoted civic engagement that transcends personal interest and incorporates citizenry based on social justice. Nevertheless, substantial challenges exist because of the lack of consensus regarding civic education and classroom practices that should be implemented (Westheimer & Kahne, 2004, p. 238).

Recently, the concept of social entrepreneurship has become more popular, especially amongst young adults in their 20s and 30s. Social entrepreneurship describes as innovative, social value-creating activities that can occur within or across the nonprofit, business, and public sectors (Mair, Robinson, & Hockerts, 2006). Alternatively, some refer to social entrepreneurship specifically as social intrapreneurship to emphasize the creative, social value-creating activities that occur by individuals as part of an existing company rather than the creation of a new, start-up business. For this study, social entrepreneurship broadly encompasses all innovative, social value-creating activities both within existing companies and new, start-up businesses. In the workplace, corporations and businesses increasingly recognize the importance of addressing social issues as part of a successful business model and that individuals motivated by social issues are valuable assets. Social intrapreneurs are “quickly becoming the most valuable employees at many companies because they are good for the bottom line, right for the brand, and good for staff morale” (Ashoka, 2014). Furthermore, social entrepreneurs are “being recognized as key players in tackling the world’s biggest problems like poverty, hunger and the need for universal education” (Ashoka, 2014). Based on recent trends, social entrepreneurship may serve as a useful means of conceptualizing and operationalizing civic engagement among teenagers.

Education research often discusses technology-mediated curriculum and pedagogy. Few studies, particularly in K-12 social studies education, examine the use of multi-user virtual
environments (MUVE) to facilitate social studies teaching and specifically to foster civic engagement in students. Furthermore, the idea of social entrepreneurship as an extension of civic engagement in social studies curriculum has not been explored deeply. Through this study, my goal is to pilot the utilization of ICTs, particularly multi-user virtual environments, as a potentially effective and engaging means of developing “21st century skills” in students. Furthermore, I aim to promote civic engagement and social entrepreneurship through collaboration and teamwork among diverse and geographically separated individuals. To realize this goal, I created a small curricular unit within the larger context of a high school dual-enrollment healthcare-oriented curriculum. Additionally, I developed a mixed-methods, design-based research study to explore the students’ civic knowledge, skills, attitudes, and actions, their understanding of social issues, and their competency with “21st century skills”, including collaboration, digital literacies, and use of ICTs. This dissertation explores how high school students reflect about their civic identity and social issues. Moreover, it examines the ways they can enact social change, in particular through the use of a MUVE to bring youth from different areas and backgrounds together to collaborate on addressing social issues.

**Background: My Interest in the Topics**

This study emerged from my varied background as a teacher in the public school system, a graduate student in education, and as a professional working with learners in the healthcare industry. While I was a classroom teacher, I placed a great deal of value on students’ ability to consider and explore different perspectives of social, political, and economic issues. Particularly, I wanted them to consider the opinions of their peers, and to use sound research and logical arguments during class discussions. As a teacher and a role model for youth, I firmly believed that it is important and necessary to challenge students to consider and reflect on difficult and
controversial issues in ways that respectful and thoughtful of views that differ from their own. In my classes, I endeavored to develop in students the skills necessary to become civically engaged. This was accomplished through an understanding of government function and society, economic decision-making that influence and behaviors, and the crucial impact of geography. Furthermore, I sought to cultivate more mature and sophisticated aspects of civic engagement including empowerment, critical thinking, tools of rhetoric, and public speaking. However, when reflecting on the practices of myself and my colleagues in school, I realized that improvements made in our curriculum and instruction that can lead to greater civic engagement in our youth.

When I was in my early-20s and preparing for my first field experience as a pre-service teacher at Penn State University, teaching for social justice was encouraged by my course instructors. My understanding of social justice was nebulous and certainly did not play a significant role in how I designed and developed my lesson plans. Indeed, much of my concern involved the nuts and bolts of designing lessons for my class, aligning the content and activities to curricular standards, and strategies for classroom management. Teaching for social justice did not factor very significantly, if at all, into my teaching practice. The lack of inclusion or thought to include elements of social justice in my curriculum, units, and lessons continued as I secured my first high school social studies teaching position. At first I taught only US history to 10th-grade students but during my second year, the social studies department added 11th-grade global studies my teaching load. Through many of the topics in the global studies course, such as scarcity of resources, cultural differences, and inequities in the US and globally, I increasingly incorporated an issues-centered framework for how I taught and how and what the students learned.
To me, social justice represents not a politically or divisive ideological idea but rather a means of becoming civically aware of the serious issues facing our communities and our country and to serve as a foundation for actively working toward improving our society. A deeper explanation of how my conceptualization and operationalization of social justice is more expansive than those in the recent research in the social studies will be discussed in Chapter 3. Moreover, my interest and enthusiasm for issues-centered social studies and teaching for social justice grew as I started my school’s first Model United Nations team and developed a curriculum to teach Advanced Placement Human Geography. Upon reflection years later, I realized that many of the social studies colleagues that I worked with did not include much in the way of issues-centered approaches to teaching social studies. Indeed, it seemed that they did not challenge students to interrogate social issues and injustices not just globally, but even within their own communities, even those that directly affected them. As Engle and Ochoa (1988) emphasized, issues-centered social studies is critical to developing knowledgeable, competent, and participatory citizens. The deficiency of issues-centered curriculum and social justice I felt left a gap in the educational experience of our students. This is especially glaring given the rhetoric that preparing our youth to be responsible, participatory citizen in our democracy is an important mission of schools.

My wife’s medical residency match at a large regional healthcare network several hours away led me away from high school classroom teaching to work as an educational analyst in the education department at the same healthcare network. As part of its community outreach activities, the education department oversees a dual-enrollment program for high school students in the region who are interested in future careers in healthcare. Although my role as an analyst primarily involved evaluations of the department’s training programs, a colleague recognized my
background and interest in teaching high school students and invited me to become involved in the program. As I became more involved in the program, I observed a lack of issues-centered teaching not only in the dual-enrollment program but also in the students’ schools of origin. This lack of issues-centered teaching was consistent with my experiences observing my teaching colleagues as a pre-service teacher and as a full-time classroom teacher.

Additionally, the dual-enrollment students expressed strong values about helping others as a motivating reason they wanted to pursue a career in healthcare. However, the students consistently demonstrated a lack of awareness and understanding of social issues, chiefly those that impact the health and well-being of different groups of people in the community. The majority of the students were not able to clearly articulate factors that influence an individual’s health beyond the ability to pay for medical services. When considering my research interests in civic engagement and social justice, it struck me that the dual-enrollment program offered a unique curriculum to embed issues-centered instruction on topics (i.e., social determinants of healthcare) that are directly relevant to the students’ career goals.

In addition to my interest in issues-centered teaching practices, I have always been interested in using technology, whether for learning or for leisure. While growing up, my father, an environmental engineer, was keen to provide my siblings and me with computers and other technology, perhaps being aware of how computers and other information technology were beginning to be essential to the work environment. I found that the technology kept me engaged. In particular, I remember the Sierra™ adventure games that were among the first games to combine rich graphics with complex problem-solving that would keep me playing for hours.

While working as a healthcare educator at a large regional hospital system, I provided input and helped test a MUVE simulation designed to help train physicians and other healthcare providers.
Overwhelmingly, the participants in those healthcare simulations reported that they enjoyed learning in the MUVE, even if they had no prior experience with simulations or gaming in MUVEs.

Additionally, a handful of my coworkers were self-professed gamers and convinced me to try *World of Warcraft (WoW)*, a massively multiplayer online role-playing game (MMORPG) set in a MUVE. From my perspective and the observation of other players in *WoW*, it was clear that the game was highly engaging, perhaps addictive. It was not uncommon to find players, even those that identified themselves as teenagers, who regularly spent more than twenty hours a week in the game. A subgroup of the *WoW* that greatly interested me was the “raiders.” As a raider, I observed in myself and other players a great deal of learning that occurred in the game. A part of the gameplay in *WoW* and other similar MUVEs, raids require players to work in a team to overcome challenges within the game environment. These include defeating difficult artificial-intelligence (AI) enemies called “bosses.” To be successful in defeating “bosses,” players must invest significant amounts of time and effort to master a broad range of game mechanics (e.g., intricately timed attack skills and combinations), develop the ability to process large amounts of complex and dynamic data and information simultaneously and often under stress, and to communicate and collaborate effectively with their teams. Interestingly, players spent considerable time outside of the game researching the game play and mechanics, writing guides and other digital content for other players, making podcasts to discuss aspects of the game, creating software programs and add-ons to enhance gameplay, and analyzing data on their own and others’ performance.

Meaningful learning can occur through social interaction. From a learning perspective, I was deeply interested in how game developers can successfully keep players continuously
engaged and motivated to improve their gameplay. The MUVE and the context for its use in this study is not a game. However, some of my experiences from gaming and recent research into digital games for education and workforce training provide insight into how MUVEs may enhance or support student learning, performance, and engagement. As a classroom social studies teacher, I observed how ICTs were integral to most students’ lives. Recent initiatives such as the Classrooms for the Future sought to improve student achievement, “21st century skills”, and engagement. Since the dual-enrollment students come from diverse backgrounds and schools in the region, it provided me the opportunity to try out a MUVE to complement social studies curriculum and teaching practices.

The Framework for 21st Century Learning, developed by the Partnership for 21st Century Skills, served as a guide for how the study’s social entrepreneurship unit was designed. Additionally, it delineates the knowledge, skills, and civic attitudes that were intended to be developed in the students. Formed in 2002, the Partnership for 21st Century Skills is a coalition of the US Department of Education, businesses, educators, and policy-makers promoting guidelines for improving students’ “21st century skills”. My interest in using the Framework for 21st Century Learning stems from my experience as a classroom social studies teacher developing lesson plans. As a teacher in a school that participated in the Pennsylvania Department of Education’s Classrooms for the Future program, I was expected by my administrators to incorporate “21st century skills” in my instruction and student learning activities. Like many schools that were part of Classrooms for the Future, a technology coach was available to assist teachers in my school with the learning technologies. Furthermore they provided guidelines to help with the incorporation of technology in their lessons. My experience as a Classrooms for the Future teacher and my observations of my professional colleagues and
their use of technology affirmed my position that technology often represents an expensive luxury in the classroom that often does not add value to student learning outcomes. The standard guideline used by my school district and my technology coach was the *Framework for 21st Century Learning*. While I recognize that the phrase “21st century learning and skills” represents political rhetoric, the widespread use of the phrase serves as a common language for skills that classroom teachers can relate to. As a teacher, I found the skills articulated by the *Framework for 21st Century Learning* were not just technology-oriented, but aligned with skills outlined in the Pennsylvania social studies standards. These standards included interdisciplinary literacy (e.g., civics, economics, and the environment), global awareness, critical thinking and problem-solving, and collaboration. In Chapter 2, I discuss how the *Framework for 21st Century Learning*, and the more recent National Council for the Social Studies (NCSS) *College, Career & Civic Life C3 Framework for Social Studies Standards: Guidance for Enhancing the Rigor of K-12 Civics, Economics, Geography, and History* are similar and help to provide teachers with definitions and guidelines on how to apply the “21st century skill” to classroom practice. In Chapter 2, I discuss new technology use in schools and the problematic nature of assuming that technology in schools is value-added.

**Research Questions**

The overall objective of this study was to examine if and how a particular unit on social entrepreneurship, grounded in theoretical framework of issues-centered education and pragmatism, will impact high school students and their espoused perceptions, knowledge, and skills of “21st century learning,” social justice, and social entrepreneurship. Adopting a design-based research process, this study initially sought to address three research questions that
ultimately provide meaningful and useful findings that benefit educators in the classroom and in designing and developing curriculum:

- How are skills as articulated by the *Framework for 21st Century Learning* operationalized by students in the MUVE environment?
- Will the intervention and MUVE environment in totality cause any shifts in students articulated perceptions, espoused values, and stated positions about social justice and social entrepreneurship.
- Does any evidence suggest that the unit on social entrepreneurship actually influenced students to become more civically engaged?

I initially thought that I would address those three research questions. However, as I proceeded through the design-based research process and studied the data collected after the conclusion of the intervention, I recognized that I was addressing two alternative research questions instead. The change in the research questions was a necessary part of the design-based research process. The two research questions that the study addressed instead were:

- Will a designed instructional intervention based on social entrepreneurship measurably shift or observably affect students’ espoused commitments to or articulated feelings about social justice and civic engagement?
- Will the integration of information and communication technology (ICT), specifically a multi-user virtual environment (MUVE), into the instructional intervention have any measurable or observable beneficial effects on how students feel about the learning experience or about social entrepreneurship, social justice, and civic engagement?
I hypothesized that the benefits to student will be two-fold and will guide the literature review. First, through the intervention I sought to examine whether students altered their perceptions and attitudes toward ICTs beyond social networking and games such as massively multiplayer online role-playing games (MMORPGs) and moved toward an understanding of how ICTs are essential to the skill set demanded by many of today’s employers and industries. Moreover, I was interested in whether students would become potentially more skilled in navigating digital spaces for collaboration. Secondly, I hypothesized that a focus on social issues, ideas of social justice, and social entrepreneurship will result in changes in the students’ espoused commitments to civic engagement and action to enact social change. As discussed earlier, prior research suggests that overall civic education has been lacking, and the hands-on learning activities they engaged in may foster better understanding of what social justice is for an engaged citizenry. The primary focus involved in-depth deliberation and debate with their peers, examinations of specific examples of how individuals have engaged in social entrepreneurship as an expression of civic engagement, and their results.

Additionally, I hypothesized that students participating in this curriculum will build skills and confidence in entrepreneurship, particular entrepreneurship rooted in social justice and view it as something that is realistically actionable rather than an abstract idea. While participating in the MUVE, students utilized new media literacies, such as communicating and collaborating with their teams using digital artifact sharing, instant messaging, and sharing of videos, podcasts, and blogs. Furthermore, I hypothesized that the student participants will become increasing more competent and comfortable creating, using, and sharing various forms of new literacies in a work-orientated environment.
Theoretical Approach

The audience for this research primarily includes those involved in social studies education. These include practicing social studies teachers, pre-service teachers, educators who train social studies teachers. The work also encompasses broadly other disciplines that recognize how civically engaged citizenry transcends the social studies. The goal of developing a curricular unit around social justice and social entrepreneurship was to push secondary school students to become engaged citizens that understand the challenging issues facing their own lives, their communities, and society as whole and to induce them to feel the confidence to seek solutions. Social justice, and even what it means to be civically engaged, have contested meanings and the inclusion of social justice and social issues in any curriculum raises questions, and rightly so, of possible indoctrination of students. However, I strove to develop actively engaged, open-minded, critical students regardless of how they lean on the political spectrum. Indeed, as a high school social studies teacher, I derived a significant amount of pride that my students could not determine my political bearing, even as we discussed and debated sometimes controversial topics. Essentially, I would probe students for deeper analysis of social issues from different perspectives and viewpoints rather than taking a particular stance and debating with the student the merits of my position. Students were encouraged to construct their understanding of justice and social responsibility by recognizing their civic values and positions. Nevertheless, they were encouraged to so based on logic, reasoning, and evidence.

The politically left conceptualization of social justice often contains elements (e.g., institutions, groups of people, laws) of society that create injustices or even oppression with particular emphasis on class, race, and gender, I sought to broaden the idea of social justice in this study. Specifically, I tried to frame social justice as social responsibility building upon
perspectives and views of healthcare providers about the overall health of the communities they serve. The assumption, though, is that there are inequities in the community and society that contribute to a variety of health issues in the community and patients. Regardless of political ideology, a healthcare provider is professional responsible as part of his or her occupation to improve the overall health of the community. The ways in which researchers and scholar often characterize and measure civic values, dispositions, engagement through social responsibility. A distinction needs to be made between professional responsibility and social responsibility, which can have elements of each overlap with each other. Professional responsibility encompasses the core attitudes, values, and actions expected of individuals in particular professions. These expectations include those within and outside the profession. For example, a widely used model of professionalism utilized by the medical profession is the Stern model (2005). In the model, physicians are expected by other physicians, patients, and society to be altruistic, emphatic, and humanistic. Conversely, social responsibility is a construct based upon an individual’s values, beliefs, and ideological positions.

Pragmatism in education, built upon the foundations of Dewey’s work, serves as an important lynchpin between progressive educational reform through the implementation of technology in schools and issues of social justice. According to Dewey (1910), the learner’s mind is borne out of the association. In other words, individuals learn through inquiry within the sociocultural context of their environment and their interactions with other people and information in a wide variety of modes. Learning, Dewey argued, occurs when people use their inquiry skills to understand and solve to problems. The individual inquiry experience combines with others engaging in the inquiry process and the collective learnings help move toward collective problem-solving. Gee (2008) argued that sociocultural linguistics and new literacies
help to inform this perspective of the student learning through experiential inquiry. Biesta (1994) argued that pragmatism in education is regarded as a process of communication and shared meaning among people. Furthermore, the conceptualizing of pragmatism as a communication process represented a means of understanding democracy that is vital to democratic education and social justice.

The central notion in this experiential inquiry approach was the idea of participation and civic engagement as a social practice. Dewey's argued that participation has the potential to engender learning that leads to understanding and development of ideas from all participants engaging in the learning activity. Collective formation of ideas and knowledge occurs through democratic participation. However, the difficulty of participation is not about getting people in together to participate but rather engaging participants to buy-in to the collective learning process. There exists only authentic participation if everyone has a real interest in it. Simply put, it is the quality of the participation that matters.

Dewey's perspective regarding democracy reflected this conception of quality participation. Ideally, a social group with diverse interests and interactions with other social groups is desired over situations where a social group isolates from other social groups and is only held together by limited interests. A social group that is connected to other social groups has greater opportunities for collaboration, peer sharing, and therefore opportunities to learn. Isolation of social groups restricts and limits opportunities to learn. The current educational system often promotes this separation of social groups that Dewey characterizes as ‘partial and distorted’ (Dewey, 1966, p. 83).

The idea of social groups and shared participation represent an essential basis for understanding the role of technology in schools (Deim, 2006). Instead of striving for schools to
develop a collective identity and purpose of its students, Dewey proposed that schools instead should concentrate on opportunities to learn and socially participate. From the opportunity to participate and learn comes the learning environment where a collective attitude may arise (Findlay, Wray-Lake, & Flanagan, 2010; Engle & Ochoa, 1988). Once again, not any participation will suffice. Rather, it is participation where all involved have an interest or stake. This represents an internal democratization of knowledge and can and should exist within and outside of the traditional school environment. Especially in this context of standardization and high-stakes testing, the implementation of cooperation and learning among diverse social groups that participate and communicate with each other represents an immense challenge.

Innovative uses of technology can help to facilitate the participation and democratizing of learning that Dewey supports. Civic responsibility demands that citizens are aware and knowledgeable such that they can participate actively in society. Problems halfway around the world are becoming increasingly more complex as the linkages between countries all across the globe likewise become more intricate. Inevitably, those problems become our problems as well and similarly, our problems become the worlds. Therefore, it is important that when teaching students in our social studies classes here in the US, citizenship includes understanding how interconnected our society here in the US is with the rest of the world. The ability to understand and resolve complex cultural issues from multiple perspectives is essential, and this multiculturalism is an indispensable tool for democratic citizenship in an interconnected world.

The development of a MUVE can provide the affinity space, places for individuals sharing mutual interest to gather, for different social groups the opportunity to participate in problem-solving an issue of shared interest, and therefore come to a work collaborative to solve a problem. The basis for understanding the underlying reasons why a MUVE can provide
enhanced learning lies in Dewey’s notion of pragmatism. While Dewey’s ideas of participation and opportunity to learn among diverse social groups is important, it is also imperative to understand the role of new literacies and new media technology that can help facilitate the sociocultural learning. According to Moss, Pullin, Gee, Haertel, and Young (2008), opportunity to learn in schools for all students is among the most pressing issues facing education in the US. Current concepts of opportunity to learn are linked with standardized, high-stakes testing, and accountability. The use of new literacies and digital technologies such as MUVEs offers an alternative to traditional instructional modalities and pedagogies and has potential to engage students and to promote active and meaningful civic engagement and participation. More detailed discussions of the theoretical approaches and lens that inform this study are addressed in successive chapters.

Chapter Summaries

In Chapter 2, I begin with a literature review of the relevant civic-oriented constructs and the meanings they have for this study. The constructs include civic engagement, social justice, social entrepreneurship, and the issues-centered instructional model. Because each of these constructs has meaning dependent on how they are defined, I elaborate on how those terms are conceptualized in this study, with discussions of how competing perspectives shape how others may regard them. I start with the Partnership for 21st Century Skills (2007), its Framework for 21st Century Learning, and its call for an expanded conception of civics education that uses new literacies and global awareness. I argue that despite the criticisms of the “21st century skills,” the proposed curricular elements serve as useful rationale for curricular development and classroom instruction that incorporates civic engagement, social justice, social entrepreneurship, and MUVEs. Additionally, I define and rationalize the use of social justice in a social studies
curricular context. Chapter 2 also explores the arguments for and against the use of technology in the social studies, with particular attention afforded to MUVEs. Because there is very little in the social studies education literature regarding MUVEs, including curriculum that uses the technology and discussions of how it may augment or detract from classroom learning, I borrow evidence from other disciplines, including educational technology, science education, corporate training, and even research in virtual reality and gaming. My aim was to contribute to the literature by researching the application of MUVE technology to the social studies. Specifically, I sought to explore how classroom teachers may use the technology to promote and develop civic engagement in their classrooms and their students.

Chapter 3 explains the study design and research methodologies employed in the study. This section explores the use of a pragmatism paradigm for research and its relevance to the design, development, and implementation of an issues-centered social studies unit. As a methodological framework for this study, Deweyan pragmatism serves to provide a rationale for mixed methods design to address the research questions in ways that provide useful and practical findings and suggestions for classroom and curricular practices for educators (Biesta & Burbules, 2003). This chapter also discusses the design-based research process, study participants, data collection, data analysis, and an overview of the issues-centered curricular unit. I explain the unit that will serve as an educational intervention and will explore the concepts of social justice and social entrepreneurship through the examination and discussion of selected problems or issues facing contemporary society. The selected problems will revolve around key areas outlined by the US Department of Health and Human Services Healthy People 2020 (2011) initiative. Furthermore, class discussions incorporate issues facing the healthcare industry with particular emphasis on patient and community engagement.
Chapters 4 and 5 provide analyses and discussion of the data collected through the quantitative and qualitative instruments and methods, including the pre- and post-surveys and individual student interviews. Chapter 5 offers discussion and summary of how the analyses answer the research questions. I present findings from the data analyses and implications of the analyses in relation to similar efforts outlined in the literature review. Additionally, I offer practical suggestions for other educators to implement similar interventions around civic education, social justice, social entrepreneurship, and the use of MUVEs as a possible learning platform. Furthermore, Chapter 5 examines limitations of this study and directions for future research of civic education, social justice, and other aspects of issues-centered social studies curriculum.

I hoped to demonstrate a number of things through this study. My goal was to show that a unit on social issues, social entrepreneurship, and social justice using an issues-centered curricular model can motivate students to become more aware of the issues facing our society and to understand the interconnectedness of themselves and others. Furthermore, the findings of this study provided possible strategies to encourage civic engagement through action to enact change in the issues that personally interest and drive them. Ultimately, I sought to provide evidence and insight into how practicing classroom teachers may think about developing civic engagement in students and ways of improving the knowledge and skills necessary for civic action, whether it is activities for social change, voting, volunteering, or other dimensions of civic engagement.
Chapter 2: Review of the Literature

*Understanding the demands of justice is no more of a solitary exercise than any other human discipline.* (Sen, 2009, p.88)

Several criteria informed and guided the literature review and situated the context for civic engagement this study. Primarily, it is my experience as a high school social studies teacher in public schools and work with students from varying socioeconomic and diverse backgrounds that I observed a distinct lack of civic awareness and engagement outside of the narrow focus of participation in the political voting process or even service learning projects. Secondly, my work with students interested in healthcare and the current impetus for community engagement to improve overall health outcome contributed my interest in civic engagement and social responsibility.

The literature review establishes the historical and pedagogical foundations of how the constructs utilized in this study are defined and how they form the basis of analyzing the impact of the curricular intervention on the high school students. The intervention, described in detail in the subsequent chapter, comprises of a unit on an issues-centered instructional model in the social studies that encourages students to examine social inequities and the impact of action toward the common good for the individual and the community. To form the foundation for understanding of civic engagement, social justice, social entrepreneurship, and use of information communications technologies (ICTs) for instruction and learning in the context of the intervention implemented in this study, I reviewed the relevant educational research and theories, beginning with “21st century skills” as outlined by the *Framework for 21st Century Learning.*
Framework for 21st Century Learning

The Partnership for 21st Century Skills (P21) is a collaborative effort by the US Department of Education, business and technology partners such as Hewlett-Packard and Oracle, and education groups such as the National Education Association (NEA) and Education Testing Services (ETS). According to the Partnership for 21st Century Skills, the Framework for 21st Century Learning is a set of guidelines designed to promote a “holistic view of 21st century teaching and learning that combines a discrete focus on 21st century student outcomes (a blending of specific skills, content knowledge, expertise and literacies) with innovative support systems to help students master the multi-dimensional abilities required of them in the 21st century and beyond” (Partnership for 21st Century Skills, 2007). Similarly, the National Council for the Social Studies (NCSS) College, Career, and Civic Life (C3) Framework for Social Studies State Standards (National Council for the Social Studies, 2013) offers similar student outcomes to the Framework for 21st Century Learning, but specifically for social studies content. The C3 Framework states that:

“Advocates of citizenship education across the political spectrum, but they are bound by a common belief that our democratic republic will not sustain unless students are aware of their changing cultural and physical environments; know the past; read, write, and think deeply; and act in ways that promote the common good. There will always be differing perspectives on these objectives. The goal of knowledgeable, thinking, and active citizens, however, is universal.” (p.5)

Primarily, the Framework for 21st Century Learning is used in this study since the class that the social entrepreneurship unit was designed for was a dual-enrollment high school program that can be characterized as a vocation or a science class (e.g., students learn anatomy and
physiology) rather than a social studies class. However, civic learning, traditionally taught within a social studies context, can be an important component of these types of classes. Though the C3 Framework is rigorous and appropriate for this intervention, the Framework for 21st Century Learning by nature includes a broader audience of educators and content. The student outcomes of the Framework for 21st Century Learning are found in Figure 2.1.

Figure 2.1
Framework for 21st Century Learning Student Outcomes and Support Systems

![Diagram of Framework for 21st Century Learning](image)


While the term “21st century skills” refers to knowledge and skills that advocates contend are essential and unique to present and future society, skills such as critical thinking, collaboration, and problem solving and even global awareness are not new to conception of educational curricula. Yet the phrase “21st century skills” serves as a useful as a common
language for those in education, particularly practitioners who may utilize the findings of this study to inform their own practices using ICTs and MUVEs. In Pennsylvania, for example, many K-12 public school teachers have participated in *Classrooms for the Future*, a state-funded program designed to enhance students’ “21st century skills” by training teachers to incorporate new digital and Web 2.0 technology in their practice. Although a discussion of how those in education can negotiate exactly what and how “21st century skills”, including its historical, cultural, and political nature, contexts, and implication, is useful and perhaps necessary, the pragmatic methodology of the study provides generalized practical applications of the finding and conclusion for classroom teachers in their own practice who are often expected by their administrators to effectively incorporate technology to enhance learning. As students use MUVEs to collaborate with peers, they may develop greater competency in a variety of “21st century skills,” namely those outlined in the *Framework for 21st Century Learning*, including (note: the parentheses refer to the subsequent sub-headers):

- **Interdisciplinary literacy (civic, economic, health, environmental):** Understanding the functions, levels, processes of government, exercising the rights and responsibilities of citizenship, making thoughtful personal economic choices and understanding how they may impact society, understanding global health issues and working to improve personal and societal health, and committing to individual and collective action to address environmental challenges. *(Civic Education and Engagement; Social Justice as an Important Component of Civic Engagement)*

- **Global awareness:** Appreciating and learning from other cultures, languages and nations. *(Civic Education and Engagement)*
• Communication and collaboration: Communicating with others effectively and engaging with others in a spirit of compromise to accomplish common goals.  

(Significance of Participatory and Deliberative Citizenship)

• Critical thinking and problem solving: Knowing how to make difficult decisions and solve problems in innovative ways. (Social Entrepreneurship)

• Creativity and innovation: Generating new ideas that help benefit communities.  

(Social Entrepreneurship)

• Information and ICT literacy: Accessing and evaluating information effectively, creating and using media as a tool for sharing ideas and working with other to solve problems, and using digital technologies to accomplish civic priorities (ICTs and New Literacies) (p.14).

Civic Engagement

Civic engagement continues to be a significant challenge not only to researchers but also classroom teachers. For educators, policy-makers, and scholars, civic engagement is a deeply normative idea on the surface but in reality the term is highly contested (Levine & Higgins-D’Allessandro, 2010; Haste, 2010). There are differing perspectives in the social studies of how to define civic engagement. Civic engagement can be described as an individual’s actions as a result of his or her civic knowledge, values, and positions. Researchers, however, emphasize different dimensions of civic engagement that encompass a broad range of activities. Many researchers identify participation in the political process (i.e. voting) and volunteering as two fundamental dimensions (Engle and Ochoa, 1988). Membership in formal and informal organizations and the value and development of social capital that membership provides to the
individual also offers key dimensions of civic engagement (Putnam, 2000; McLeod, Shah, Hess, & Lee, 2010).

The Partnership for 21st Century Skills has created and disseminated a useful definition of civic engagement that informed this study. Civic engagement consists of a sense of responsibility to one's communities and action for the betterment of the community, society, and the common good (Partnership for 21st Century Skills, 2007). Through civic engagement, individuals are empowered to pursue social change for the betterment of community and society (Levinson, 2010; Shor, 1992). For this study, civic engagement is characterized by responsibility to the community, analysis of social issues and action taken to enact social change (Battistoni, 2002; Engle & Ochoa, 1988, Ochoa-Becker, 1996).

Civic engagement requires basic civic knowledge and skills, such as how government is structured, political and voting processes, and how to analyze social and political issues (Engle & Ochoa, 1988; Flanagan, 2013). Similarly, Gibson and Levine (2003) argued that civic engagement requires awareness and concern for public affairs and includes issues at the local, regional, national, or global scale. Westheimer and Kahne (2004), in their studies of civic participation, found that the items below are skills necessary for civic engagement are the ability to:

- explain and analyze information
- transfer and apply knowledge
- identify, evaluate, and analyze issues
- collaborate with colleagues and peers
- manage conflict
- develop and present ideas
In addition to civic knowledge and skills, Westheimer and Kahne (2004) argue that students’ values and positions on social issues are also important to fostering increased civic engagement. It is important to note that the role of the teacher is not to indoctrinate students to adopt a particular value or position, but to think critically about social issues and to reflect on their ideological choices. Additionally, community and societal responsibilities are also critical (Bennett, 2008). Consequently, it is the individual’s conceptualization and operationalization of their civic values and positions that are influential in how well they become civically engaged. This is crucial in civic education, especially in the social studies.

**Effectiveness of School-Based Civic Learning Opportunities**

Schools have long tried to motivate students to be civically engaged, such as through the political process, service-learning, or internal student government, a definitive way to achieve this is not clear and is dependent on the demographics of the schools, the school itself, the students, and the teachers (Flanagan, 2013, Thorton, 2004). Given the current academic environment of standards-based testing and accountability many social studies curricula barely touched upon civic engagement, if at all. As an example, curricula that stress individual civic development focus on personal responsibility while programs focused on participation often disproportionally focus on laws, process, and procedures that are necessary to partake in the political process (Flanagan, 2013, Thorton, 2004). Social justice-oriented curricula are apt to focus on the development of students’ critical inquiry of social issues but overlooks built in activities or processes for developing students’ self-confidence and empowerment to undertake meaningful action to attempt to bring about social change (Westheimer & Kahne, 2004).

Traditional classroom deliberation may not be effective in fostering higher-order and critical thinking skills, encouraging analytical mindsets, and promoting the consideration of
divergent ideas. Hess (2002) emphasized the importance of engaging students with diverse and opposing perspectives and ideas, stating that students frequently regard conflict, especially in discussions, as something to be avoided. Furthermore, students often lack the knowledge or awareness of how ideological differences significantly impacted decisions throughout history (Hess, 2002). Wraga (1986) found that there is a positive relationship between discussion of complex issues and the development of tolerant attitudes and knowledge for the need of tolerance in democracies. Another study’s findings suggested that civically disengaged youth can become civically engaged if the issues are relevant to them and action for change is seen as possible (Youniss, Bales, Christmas-Best, Diversi, McLaughlin, & Silbereisen, 2002).

Although civic education has tended to focus on knowledge and engagement, attention increasingly has given to school-based civic learning experiences that promote civic engagement (Levinson, 2010; Campbell-Patton & Patton, 2010; Engle & Ochoa, 1988). School-based civic learning opportunities can take various forms such as service-learning projects, volunteering, student government, and in this study, social entrepreneurship projects. Research has indicated that incorporating school-based civic learning opportunities in addition to traditional lectures and textbook readings can lead to greater civic engagement in youth. Research that utilized surveys of large populations of high school youth show that civic learning experiences and deliberation of issues with their teachers and among their peers indicated significantly greater civic knowledge and engagement (Gibson & Levine, 2003; Torney-Purta, 2002; Keeter, Zukin, Andolina, & Jenkins, 2002). An international study that examined youth in 28 countries found that deliberation and debate of social issues resulted in greater civic knowledge (Torney-Purta, Lehmann, Oswald, & Schulz, 2001) studied youth in 28 countries, reported that in-class discussion of political issues was a strong predictor of civic knowledge. This result is supported
by findings from 10 Chicago city high schools (Kahne & Sporte, 2008). A study of data from the National Assessment of Educational Progress found that some civic learning opportunities resulted in higher gains in students’ civic knowledge (Niemi & Junn; 1998). Other studies have examined specific civic education activities. These studies found similar examples of positive civic engagement outcomes (Kahne & Sporte, 2008; Kahne, Chi, & Middaugh, 2006; Metz & Youniss, 2005; Torney-Purta, 2002; Torney-Purta, Amadeo, & Richardson, 2007). However, it is important to note that many of the aforementioned studies investigated varying types of civic learning opportunities, analyzed different dimensions of civic engagement, and included different youth populations.

Moreover, not all studies on school-based civic learning opportunities found absolute positive results from civic learning opportunities. Billing, Root, and Jesse (2005) determined that civic engagement increased only for classes and curriculum that had highly qualified teachers and rigorous, intensive civic learning activities. Important supporting research indicates that youth that demonstrate higher levels of civic engagement also continue to exhibit greater civic engagement as adults (Theiss-Morse, 1993). Additionally, there is a strong relationship between classrooms whose teachers incorporate issues-centered curriculum and deliberation, school-based civic learning opportunities, and students’ civic knowledge, skills, and civic engagement (Campbell, 2005; Hart, Donnelly, Youniss, & Atkins, 2007; Torney-Purta, Lehmann, Oswald, & Schulz, 2001; Gibson & Levine, 2003). Watts, Armstrong, Cartman, and Guessous (2008) observed in their study of students and community service learning as part of the school curriculum that students were more aware of social problems, clearly articulated their values and positions on the problems, and were motivated to work with their class peers to address social problems. Civic education has tended to focus on knowledge and engagement, but little attention
has been paid to civic experiences that promote civic engagement (Levinson, 2010; Campbell-Patton & Patton, 2010; Engle & Ochoa, 1988).

An important qualification must be made regarding the size of the studies examining school-based civic learning opportunities and civic engagement. The majority of research consisted of small samples and often with very specialized and atypical curriculum. Thus, the findings of the research beyond that particular study population are limited. Furthermore, the broad demographics in the previously mentioned studies and the wide range of school-based civic learning opportunities investigated raised questions about the positive link between school-based civic learning opportunities and higher levels of civic engagement. However, what we can derive from the previous studies is that educators must strongly reflect on what civic learning opportunity is to be used and if it is appropriate for their students and the issues that motivate and engage them. Importantly, youth in communities that offer few chances for civic action can become civically engaged if the issues are highly relevant to them. What may be the greatest challenge to curriculum that seeks to develop higher-order thinking skills and critical inquiry of social issues is curriculum where the breadth of content is too expansive resulting in superficial treatment, demands on schools to focus on core subjects covered by standardized testing, and low expectations of students (Bennett, 2008; Ochoa-Becker, 1986; Onosko, 1991).

**Civic Learning in an Issues-Centered Social Studies Framework**

How civic education should be constructed in the school curriculum in order to develop civic engagement in the classroom represents a complex question. Prior research indicates that teaching civics, whether it is as a stand-alone course or blended in other social studies courses such as history, geography, or economics, is inadequate for developing the civic knowledge, attitudes, and skills to motivate students toward civic engagement on social issues (Bennett,
Freelon, & Wells, 2010). The traditional approach has been to teach social studies in order to affect student dispositions. Other strategies include service learning, an emphasis on student participation, and discussion to encourage engagement and the basic skills of political discourse. A significant barrier to overcome is bridging understanding and conceptualization of civic knowledge and creating motivation and capacity to become civically engaged and actively participatory. Rubin (2007) argues that although learning activities designed to build political and civic engagement are increasingly available and accessible within the social studies curriculum, to adequately develop student civic engagement, care must be taken to ensure the opportunities present the students with sufficient constraints and challenges to replicate the difficulties of civic engagement outside the classroom. A robust experience in civic engagement represents a significant challenge to structured learning activities within the social studies classroom and the curriculum.

Additionally, the instructional pedagogy and the teacher significantly influences on the student experience. Social studies curriculum that challenges students to critically analyze artifacts (e.g., print and online text, audio recordings, etc.) and discuss instead of rote memorization is associated with increased academic performance and achievement civics assessments (Engle and Ochoa, 1988). Furthermore, research demonstrated that the most complex components of civic competencies of analysis, evaluation, and engagement, require rigorous instruction and scaffolding to be successful (Parker, 1990; Hess, 2004). These types of learning strategies parallel Dewey's approach and are most effectively adopted by the students in the context of pedagogies that model civic engagement (Parker, 1990). There is a wide range of literature concerning curricular design and methodology with respect to deliberation. Deliberation, according to Hess (2004), encompasses a "range of pedagogical processes designed
to engage students in thoughtful, structured discussion in which varying options are analyzed, potential consequences considered, and judgments are made” (p. 23).

In order to develop citizens to become active participants in a democratic society, some educators in the social studies have utilized issues-centered curriculum (Evans & Saxe, 1996). Over the past several decades, instructional and curricular studies have been developed to promote student investigation and interrogation of social and political issues (Evans & Saxe, 1996). For this study, the issues-centered instructional model developed by Engle and Ochoa (1988) was adopted and implemented as the foundational framework. Specifically, this model offers social studies teachers with a conceptual instructional and curricular framework that stresses deliberation and debate skills, critical inquiry and analyses of social issues and current events, especially those that are controversial. There is an emphasis placed on holding the expectation that many of the issues can and are controversial, involving different values and perspectives that influence how different individual approach the topics. A key component of the curriculum is a collaborative project that encourages students to construct an understanding of their communities and society through peer interactions and teacher facilitation as well as urging students to acquire knowledge and skills necessary for identification of problems, critical inquiry, analysis, conflict resolution, recognizing and defining problems, collecting relevant information, determining rhetoric, facts, and opinions, consideration of alternative perspectives and views, and ultimately taking action to enact change. The skills and attitudes that the issues-centered instructional model seeks to develop in students are those that are transferrable to other issues, conflicts, and contexts not just in school and class, but in the workforce and the real world (Engle and Ochoa, 1988).
A significant challenge faced by teachers utilizing an issues-centered social studies curriculum is maintaining a classroom environment that provides students with the confidence that discussions are not dominated by a few outspoken peers, respect for different perspectives are encouraged, and arguments are based on logical arguments and facts. Wraga (1986) includes a list of useful guidelines for fostering a classroom environment that is conducive to deliberation and debate of social issues (p.272). See table 2.1 below. The guidelines served as an important tool in the development of the curricular unit in this study.

**Table 2.1**

**Guidelines for Dealing with Societal Issues**

<table>
<thead>
<tr>
<th>Guidelines</th>
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<tbody>
<tr>
<td>1. Lead students to expect controversy in the classroom.</td>
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<tr>
<td>2. When dealing with an issue, clarify the nature of the issue and agreements and disagreements surrounding it.</td>
</tr>
<tr>
<td>3. Ensure student exposure to a best-case, fair hearing of competing points of view.</td>
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<tr>
<td>4. Ensure that sufficient factual information is brought to the discussion to promote the development of informed opinions.</td>
</tr>
<tr>
<td>5. Ensure that logic is used as a criterion for evaluating the credibility of arguments.</td>
</tr>
<tr>
<td>6. Employ small-group discussions to enable all students the opportunity to participate and to enable the teacher to work individually with more students.</td>
</tr>
<tr>
<td>7. Respect students' right not to express their opinion publically on all issues.</td>
</tr>
<tr>
<td>8. Be willing to accept that not all issues can be resolved.</td>
</tr>
<tr>
<td>9. Establish closure to all discussions of issues (e.g., deciding when the class will agree to disagree.</td>
</tr>
<tr>
<td>10. Occasionally provide opportunities, as appropriate, to revisit previously addressed issues.</td>
</tr>
</tbody>
</table>

Reproduced from Kelly (1989).
Wraga (1986) emphasized that an issue-centered curriculum provides intrinsic motivation rooted in critical and reflective inquiry and thought that relies on factual knowledge, skills, and an awareness of personal beliefs and values. His research suggests that students experience positive learning outcomes when exposed to issues-centered social studies curriculum (Wraga, 1986, Engle & Ochoa, 1988). However, the traditional approach to issues-centered social studies curriculum, one that primarily focuses on critical deliberation and debate on issues, may not adequately provide the skills and tools needed to build students’ capacity to engage in action for social change (Ross, 2001). The inclusion of a collaborative activity in this study is intended to build upon the deliberation and discussions in an issues-centered social studies curriculum.

Studies of classroom discussion and how it helps to train students in the fundamentals of civil and democratic conversations and debates are especially important. Studies such as Hess (2002) serve as a model since they are based on promoting in students the ability to respectful debate and deliberate, consider other perspectives different from their own, and offer classroom teachers with strategies and guidance to effectively facilitate and scaffold discussions. If the objective is to cultivate youth who can articulate their civic values and positions and to engage in debate and deliberation with the people around them, then striving for an issues-centered curricular model of debate and deliberation is important. Wraga (1986) asserts “issue-focused instruction requires sensitivity to the potential volatility of certain issues and should be handled using techniques that ensure fair and balanced treatment of conflicting viewpoints (p.272). The reluctance faced by teachers to include issues-centered activities and controversial issues is highlighted by Kahne, Westheimer, and Rogers (2000), who found in their study that most lessons they observed did not identify any social problem while in only 8.1% of the lessons, a social problem was identified, root causes analyzed, and suggestions to solve the problems
offered by the students. Furthermore, none of the multitude of classes observed asked the students to analyze evidence or theories regarding causes and solutions to the problems (Kahne et al., 2000).

**Discourses on Social Justice**

While there are many notions of what social justice is in not only education but in other areas of research and inquiry, Bell (1997) contends that the “goal of social justice education is full and equal participation of all groups in a society that is mutually shaped to meet their needs” and that the people possess “sense of their own agency as well as a sense of social responsibilities toward and with others and the society as a whole” (p.3). Social justice is often considered an agenda of the ideological left and conservative critics of social justice point to an overemphasis on race, class, and gender. Elements of Bell’s definition of social justice requires some deconstructing that I believe can offer offers a way to conceptualizing social justice that is ideologically balanced. However, it is important to understand the historical roots of social justice, especially as it pertains to education in the US.

Although social justice has a long history with discussions relating to philosophical considerations of social justice in the writings of Aristotle and Plato, the modern conception of social justice in American public education has its roots in the social reconstructionist movement. Primarily guided by faculty member of Columbia University’s Teachers College, including George Counts, William Heard Kilpatrick, Harold Rugg, and John Childs, the social reconstructionists believed that schools and educators should assume a significant and critical role in influencing social change (Lagemann 2000). They considered schools as a convenient way for disseminating the knowledge, skills, and attitudes to promote positive societal changes (Lagemann, 2000). Although the social reconstructionists ideas of incorporating social justice
into school curricula as a means of creating social change gained significant popularity in the 1930s (Evans, 2007), that popularity diminished greatly as the economic struggles of the Great Depression in the 1930s and World War II exacted significant economic, political, and psychological stress on the American people.

Yet, the basic beliefs of social justice still existed in school curricula in the late 20th century (Lagemann, 2000). More recently, education scholars have explored problems of schools, curriculum, pedagogy, assessments, opportunities to learn, and policies, especially relating to race, gender, and socioeconomic status through the lens of social justice (Kahne, Chi, & Middaugh, 2006; Houser & Kuzmic, 2001; Lynch & Baker, 2005; Schudson, 1998).

Moreover, in the social studies the concept of social justice has been utilized when studying civic, citizenship, democratic, economics, and service-learning education to examine a broad range of issues on local, regional, national, and global scales (Westheimer & Kahne, 2004; Houser & Kuzmic, 2001). Other application of social justice in social studies curricula have sought to develop knowledgeable, reflective, and civically engaged youth that have the skills and abilities to engage in individual or collective efforts for social change (Westheimer & Kahne, 2004; Houser & Kuzmic, 2001). Other scholars have explored how schools and the policies that drive education can contribute to creating and reinforcing an unjust society (Apple, Au, & Gandin, 2009; Friere, 2000; Bickmore, 2008) but can also serve as a motivating source to address and potentially overcome societal inequities. According to Bickmore (2008), the fundamental challenge for social studies educators teaching for social justice is that the goal is to provide the opportunities through learning experiences that encourage the development of knowledge and skills important to students’ understanding social justice.
North (2008) and Lynch and Baker (2005) have argued that social justice seeks to deal with social inequalities by addressing its structural and systematic roots. In education, the notion of opportunity to learn again arises where the important question is how educators offer equal access to education, including technology and new literacies, in particular among underrepresented and marginalized populations (Moss, et al, 2008). Dewey (1966) offers similar arguments for teaching for social justice. He argued that information often is addressed as an end in and of itself through the accumulation of knowledge and that the accumulation and recall of information are not necessarily productive (Dewey, 1966). Instead, the use of knowledge to critically analyze and think about issues should be the goal and stressed the need for education to encourage people to reflect on elements of society, namely power, access, and obstacles that hinder some social groups (Dewey, 1966). Similarly, Freire (2000) argued that educational practices, especially institutions and the social structures, can lead to oppression of marginalized social groups (Freire, 2000). Freire (2000) also expressed concern regarding what Dewey regarded as repositories of knowledge but extended his arguments to policies and curricula that determined what knowledge would be learned. Rather than being active participants utilizing knowledge for social justice, these students would be passive consumers of information and knowledge that serve to reinforce social inequities and power relationships (Freire, 2000). Today, the various conceptualizations of social justice in education have taken the form of culturally relevant teaching (Ladson-Billings, 1994), multicultural education (Sleeter & Grant, 2007), and privilege and power in education (Harro, 2000, Adams, 2000).

Having touched on the historical roots of social justice, particularly the efforts of the social reconstructionist of the 1920s and 1930s to contemporary conceptualization of social justice, I endeavor here to provide justification for a broader, more ideologically neutral
conceptualization of social justice. To reiterate the Bell (1997), the “goal of social justice education is full and equal participation of all groups in a society that is mutually shaped to meet their needs” and that the people possess “sense of their own agency as well as a sense of social responsibilities toward and with others and the society as a whole” (p.3). Especially important to consider is the objectives of the intervention of this study (see Chapter 3 and table 3.2), which include social justice as awareness and sensitivity to the disparities of human circumstances and social activity as actions to correct unsatisfactory conditions. These two curricular goals serve as the foundation of how I conceptualize social justice in education. It is important to note that both goals are general and unspecific and are intended to be so. This allows students the opportunity to construct their own meaning of the disparities of human circumstances, unsatisfactory conditions, and what actions they deem appropriate to address those issues.

Newmann (1989) contends that curriculum combining civic engagement and social justice can actively involve youth in meaningful and purposeful exploration of relevant social issues, particularly through deliberate debate that allows students to remain true to their ideologies and values (Rossi, 1995; Brandhorst, 2004). Though challenging and difficult, not just for students but for teachers to appropriately plan and enact in their classes, students have the opportunity to learn how to ascertain issues in society and their roots, develop goals to work towards, create a plan to accomplish those goals, take action, and ultimately reflect meaningfully on the process. Through the process, students debate and discuss the issues from multiple perspectives and consider differing, even competing, ideological frameworks that shape how we and others view the issues (Brandhorst, 2004). This is an important aspect of issues-centered social studies curriculum and represents how current conceptualizations of social justice conflict with the goal of students’ debating, deliberating, and ultimately constructing their own
understanding of issues and ways to solve them. More conventional conceptualizations of social justice, while important to the critical theorizing of various problems in education and society, are often too narrow and oriented to a particular problem. Additionally, the extreme ideological positioning of social justice in some prior scholarship and educational advocacy may unwittingly exclude those who accept socially responsibility and are empathetic towards others (as is the case for many clinicians in the healthcare industry) but identify as more ideologically conservative.

Again, a broader definition of social justice that I apply to this study consists of the objectives of the intervention as mentioned above. Since the students in this study are interested in future careers in healthcare and demonstrate high levels of social responsibility and care for others (see Chapter 4 and 5), the sensitivity to disparities of human circumstances and actions to correct unsatisfactory conditions align well with the expectations and often the values and positions of practicing physicians, nurses, and other healthcare professionals. Further references to and discussions of social justice in this dissertation assume this broad, ideologically balanced conceptualization of social justice.

Developing curricula that address these social justice issues face the several important challenges. First, the curriculum ought to be rigorous academically. Secondly, thoughtful consideration must be directed at developing ways to empower students so that they feel knowledgeable and confident to act for social change. In this study, the social entrepreneurship unit and the collaboration on a social change project in the MUVE sought to foster awareness of critical community issues, such as socioeconomic disparities, poverty, community health, childhood obesity, and environmental concerns. The students’ task in the virtual learning environment consisted of constructing their own understanding of the community issues and
through collaboration with their peers, teachers, and outside individuals, develop a social entrepreneurship action plans to begin to solve the problems.

According to Bickmore (2008) and Shor (1982), educators can utilize a social justice perspective to nurture understanding of crucial social justice issues, especially through critical analysis of the places and communities around them. Moreover, it allows for students’ to make connections to their own personal experiences. Some recent research on social justice in the social studies curriculum highlight students to collaborating to identify issues they see in society, whether in their own communities or on a larger scale, and to take actionable steps to attempt to solve those problems (Selman & Kwok, 2010, Fox, Mediratta, Ruglis, Stoudt, Shah, & Fine, 2010). In this way, students engaging in social justice in their classes can begin to earnestly adopt the objective that they, as participatory citizens, need to be equipped with the knowledge and skills to solve the challenges of the present and future. Incorporating curriculum with social justice and civic engagement elements offer opportunities, through an extensive breadth of content, to foster the necessary knowledge, dispositions, and skills as well as critical higher-order thinking (Onosko, 1991; Kuhn, 2005; Selman & Kwok, 2010).

Curricula that promote ideas and practice of social justice have been demonstrated positive effects for participants’ identity, learning, citizenship (Lynch & Baker, 2005). The students’ participation in a community oriented simulation in a multi-user virtual environment can potentially impact their perspectives of social responsibility. Students are more engaged to actively participate in social issues that are personally significant (Bennett, Freelon, & Wells, 2010; Upadhyay, 2010). A constructivist learning environment that promotes social justice can enhance student academic learning if it effectively incorporates academic content and real-world application, thereby raising interest in approaches to solving issues of social justice (Jadallah,
2000). Often in school curricula, in particular social studies, learning about multiculturalism and diversity focuses on celebrating and learning about diverse cultures. From a social justice standpoint, curricula like this lacks the rigor needed to critically understand cultural differences and the social and political inequities that often accompany them (Brandhorst, 2004; Blatchford, 2003). Increasingly, the emphasis in education for social justice stimulates critical thinking and a deeper understanding of diversity, equality, and access issues (Banks, Banks, & Clegg, 1999).

Although numerous researchers addresses social justice in content areas in addition to the social studies, there exists a relatively smaller body of scholarship that explores ideas of social justice in conjunction with new literacies and new technologies such as multi-user virtual environments. These gaps include research in curricula as well as social studies pedagogy. Student empowerment and engagement is often associated with greater student participation in the classroom. While instances of pedagogical approaches to develop student empowerment have been demonstrated in research, little have been done to examine what students learn, do, and experience within such education (Shor, 1992; Upadhyay, 2009).

When implementing social justice curricula there may be exist tensions from the hierarchical nature of student and teacher educational interactions (North, 2008). Consequently, the tension can limit student empowerment (North, 2008). Additionally, the hierarchical nature of classrooms and schools may hinder educators in developing and implementing learning experiences that foster understanding of social justice. An acknowledgment of the power dynamics in schools and classroom between teachers and students and among students themselves is important to address. Therefore it is important for the implementation of social justice curricula to provide students with the guidance to develop skills, knowledge, and tools, such as new literacies, to collaborate and communicate with each other in such a way that
encourages student empowerment. There exists a hierarchical power structure in schools between teachers and students that may hinder student empowerment and therefore active participation for social justice. Creating opportunities for students to experience and construct their own ideas and understanding within school, perhaps through changes in school policies, structures, and even attitude, may positively affect student empowerment and therefore social justice: Without doubt, a safe learning environment contributes to a students’ sense of empowerment (Lynch & Baker, 2005; North, 2009).

Social Entrepreneurship: An Alternative Conception of Civic Engagement

Social entrepreneurship is a concept that often used in business, economics, and management literature and can be characterized as activities that are innovative, provide social value, and can occur within or across the nonprofit, business, and public sectors (Mair, Robinson, & Hockerts, 2006). Moreover, social entrepreneurship is considered a dynamic process created and managed often done collaboratively by a team, which strives to create innovations that are not just good from a business standpoint, but addresses social issues and improves community and society (Mair, Robinson, & Hockerts, 2006). Austrian economist Joseph Schumpeter described the concept of entrepreneurship most generally referred to presently. Schumpeter contended that entrepreneurs lead changes in the economy through generative and disruptive actions and entrepreneurial spirit and transforms production. Successful entrepreneurship triggers an iterative cycle where other entrepreneurs expand and improve the original entrepreneurial product or service (Borenstein, 2007). With the rise in the number of social entrepreneurs in today’s workforce and that social entrepreneurship offers a practical, business and market-oriented means of enacting social change, pursuing social entrepreneurship as a curricular objective in high schools, coupled with pedagogy supporting
issues-centered models of instruction, can potentially improve schools’ development of engaged citizens. David Borenstein author of *How to Change the World: Social Entrepreneurs and the Power of New Ideas*, points out that recently, the Nobel Peace Prizes have been awarded to social entrepreneurs and that “conceptual firewalls that once divided the world into social and economic realms are coming down and people are engaging the world with their whole brains” (Borenstein, 2007, p.1)

Borenstein (2007) argues that the individuals that can affect the most change are most probably not traditional social entrepreneurs that start new business ventures but rather social intrapreneurs. Specifically, Borenstein (2007) contends that it will be those employed in big, established corporations and possess the aptitude to recognize new opportunities, leverage resources and personnel, and to link market-driven ideas with social causes. These social intrapreneurs are capable of driving changes within corporations, making affirmative and simultaneous impacts to their companies run and for the world, and aligning corporate values with needed societal changes. Social intrapreneurs demonstrate traits and characteristics analogous to social entrepreneurs but are able to navigate large complex systems to accomplish their social and corporate goals at a large scale and with more impact, importantly because the resources they need are readily at their disposal.

One of the most influential persons to drive the social entrepreneurship movement is Bill Drayton, who founded Ashoka: Innovators for the Public, a not-for-profit organization whose mission is to identify and support social entrepreneurs globally. Drayton was strongly influenced by Mahatma Gandhi, Martin Luther King, Jr., and Ashoka Maurya, an Indian emperor the third century BCE who enacted social welfare projects. It was Drayton’s belief that social entrepreneurs were scarce (Borenstein, 2007). The organization continues to advocate and
support both large and small efforts directed at social change by providing financial and
technical assistance and networking of other social entrepreneurs. Since its founding in 1980,
Ashoka: Innovators for the Public has supported in excess of 2,500 social entrepreneurs
throughout the world in a broad range of industries and fields. According to many scholars and
researchers, social entrepreneurship endeavors to work toward systemic and widespread social
change. Innovation is a term frequently associated with social entrepreneurship, though
admittedly innovation can assume many different forms and does not necessarily inventing
something new. Rather, innovation can be the application of existing ideas in new ways to new
contexts. Furthermore, innovations can entail addressing unmet needs in society. For social
intrapreneurs, innovation might encompass the development of new or improved products,
services, strategy, programs, or a novel was of how a business operates.

Currently, many long-standing, successful nonprofit organizations have realized
substantial social impact but are not viewed by the public as social entrepreneurs, often because
their work is not perceived as new or innovative since they focus on community rather than
system-changing solutions. Social entrepreneurship that addresses community needs is as valid
as those that attend to system-changing efforts. Borenstein (2007) argues that social entrepreneur
exhibit the same characteristics, attitudes, and skills as business entrepreneurs. Austin,
Stevenson, and Wei-Skillern (2006) contend that social entrepreneurs typically demonstrate the
characteristics of commercial entrepreneurship, namely, efficiency, high performance, and
economic sustainability.

Often, an ideological divide exists between common conceptualizations of social justice
and the intent of businesses. Specifically, some proponents of social justice on the political left
view businesses as capitalistic, profit-driven entities that serve to create and maintain injustices
and inequities in society. Conversely, businesses often view social justice negatively as unwanted distractions, a fundamental challenge to the free market, or incompatible with the profit motive of their business model. These broad generalizations serve to highlight the problems a narrow, ideologically exclusive conceptualization of social justice, particular those that view social justice as political rhetoric. As previously mentioned, social justice in this study is broadly defined as awareness and sensitivity to the disparities of human circumstances and action to correct unsatisfactory conditions; how that broad definition of social justice is constructed depends on how the individual student leverages his or her civic knowledge, values, and positions.

**Multi-User Virtual Environments for Learning and Collaboration**

One of the newer technologies is virtual reality (VR), specifically three-dimensional, multi-user virtual environments (MUVEs). First coined by Myron W. Krueger in his creation of VIDEOPLACE in the 1970s, artificial reality (AR), or more recently referred to as virtual reality, can take on different forms (Johnson & Levine, 2008). It generally encompasses internet and non-internet based computer-generated digital environments. Often virtual reality characterizes a wide range of applications commonly related to immersive, graphically rich, three-dimensional spaces. These virtual reality environments often simulate actual real world places, such as military combat simulation or may create imaginary worlds like those commonly found in video games. In these virtual environments, participants control graphical “avatars” that can move and interact with the digital environment and with other users within the virtual space. Although most virtual reality environments are predominantly visual, many offer other sensory experiences including sound through speakers. More advanced sensory interactions include technology that utilizes vibrational touch feedback through devices such as gloves, keypads, or other devices.
(Johnson & Levine, 2008). Often used in gaming and medical applications, these technologies can simulate touch sensory information like textures and resistance (Johnson & Levine, 2008).

These environments are designed to be synchronous, meaning that many individuals can navigate through the space and interact with each other in real-time rather than typical asynchronous forms of media such as blogs, wikis, or even single-user video games (Gee, 2007). Additionally, the environments are persistent such that the environment exists and can potential change when an individual goes offline, leaving the virtual environment. During the past decade, dozens of virtual world applications have emerged. Currently, there are a number of mature multi-user virtual environments used for educational purposes, including Second Life, AvayaEngage, Harvard University’s River City, Active Worlds, and North Carolina State University’s Wolfden. Additionally, many current massively multiplayer online games (MMOGs), such as World of Warcraft and Everquest, and the learning associated with them cannot be discounted. Among them, Second Life has emerged as one of the more popular and well-used virtual world applications (Dickey, 2011). These popular and often highly detailed multi-user virtual environments offer an open-ended virtual reality platform where user can develop, construct, and alter the virtual space (Dickey, 2011). The user is provided tools that allow them to change the appearance of their avatars, build structures, alter the terrain, and insert in world devices for social networking, sharing of information and data, and communication. The flexibility that the virtual space offers allows for a wide range of applications and is well-suited for K-12 education in a number of content areas (Hew, 2007). These types of robust and adaptable multi-user virtual environments are viewed as a prospective technology tool for formal education in schools. In practice, it is currently very difficult to create a high-fidelity virtual reality experience, due largely to technical limitations on processing power, image resolution,
and communication bandwidth (Bers, 2009). However, rapid improvements and accessibility in computer hardware, processors, and graphics cards have significantly improved the fidelity of virtual reality environments (Konstantinidis, 2009).

From a training perspective, virtual reality environments offer a business’s employees to participate in simulations where they can improve their skills without the real-world consequences of failure (Dickey, 2011). The military has exploited virtual reality environments for combat training, allowing its soldiers to experience different combat situations in a controlled environment that allows for detailed feedback. Among the forefront of virtual reality usage, the military often places its soldiers in fully immersive virtual learning spaces using head mounted displays as well as apparel such as suits and gloves that provide tactile feedback. Furthermore, the use of multi-user virtual environments can bring together the different military branches to engage in joint training operations (Hew & Cheung, 2010). With greater popularity and access of the internet to the mainstream public in the mid-1990s, interest in exploring learning through computer- and digital-based environments has swelled. In regards to educational technology, one of the most critical research questions centers around how educators and instructional designers can find meaningful ways to utilize the potential of multi-user learning environments while adhering to established educational psychology and philosophical tenets that drive education today.

**New Literacies and Students’ Use of ICTs**

New literacies refer to modes of literacy made possible by digital and computer technology, such as the internet, blogs, wikis, video games, and multi-user virtual environments. Gee (2008) argues that literacies should not be treated simply as texts but ought to be approached from a sociocultural lens. He argues that literacies are a form of social practice that has meaning
within the social groups that people form and participate in. More succinctly, literacy is more than simply an individual’s ability to comprehend and decode the structure of letters, words, and phrases and to put them together to communicate with others. Likewise, Lankshear and Knobel (2003) describe new literacies as new technologies that influence practices that individuals engage in to make negotiate meaning of the world around them. New literacies are different from traditional conceptualizations of literacy where literacy refers to the skills to read and write texts.

The connection between technology and literacy embodies a key question in educational research today. Much of the existing literature explores the potential improvements to teaching and learning in the classroom due to the implementation of technology. Yet, realistic barriers and challenges exist and are overlooked by ideological and optimistic voices of those espousing technology as a fix all for current educational problems. Traditional notions of literacy historically have been located within the individual and ignore sociocultural influences. In the 1980s the A Nation at Risk report (Commission on Excellence in Education, 1983) raised fears of a literacy crisis, focusing on the technical aspects of reading and writing (the most traditional notion of literacy) in order to reduce the educational and economical gap between the US and other advanced nations. Gee (2008), Squire (2011), and other researchers have examined in depth the historical roots of the ‘literacy crisis’ in the US and literacy as a means of accountability in the current high-stakes testing educational environment.

Gee (2008) argues that literacies are a form of social practice that has meaning within the social groups that people form and participate in. More succinctly, literacy is more than simply an individual’s ability to comprehend and decode the structure of letters, words, and phrases and to put them together to communicate with others. Likewise, Lankshear and Knobel (2003) describe new literacies as new technologies that influence practices that individuals engage in to
make negotiate meaning of the world around them. Literacies, Gee (2008) argues, are connected with social, institutional, and cultural relationships and thus must be located within their social, cultural, and historical contexts. People process text as what Gee refers to as ‘bits’ or the words and phrases, but make meaning of those bits by understanding the Discourses surround the texts. Discourses are the social practices, communication, identities, and contexts that people understand and make meaning of texts. Different people from different social groups and situations read and make meaning of the text in different ways. This conception of literacy, supported by Squire (2011), Lankshear and Knobel (2003) and Gee (2003), recognizes and builds on the work of the new literacy studies. Barton (2001) contends that virtually every activity that people engage in today is mediated by literacy, and therefore the behavior and action that people exhibit are done within a textually mediated social world. Leu, Kinzer, Coiro, and Cammack (2004) delineates three principles of new literacies that provide the theoretical framework for understanding the role of new literacies in education. These include a critical analysis of text and communication, the opportunity to engage with multimodal forms of text and communication, and for students to become active, cognizant producers of text.

The first principle is critical literacy where teachers must help students critically analyze text, especially in terms of its sociocultural context to fully understand the text’s meaning not just to the student but also to others (Nixon, 2003). It is important for students to understand the motivation and purpose of the author. Included in this critical analysis of texts is what information is included and excluded (Barab, 2007). A student proficient in new literacies can formulate a sociocultural lens that allows them to read and process information by considering and critically scrutinizing how elements of society, culture, class, gender, and power influence the meaning of texts (Freire, 1987; Gee, 2003).
Competency with new literacies requires that students are exposed to multimodal texts by what Bezemer and Kress (2008) refer to as “socially and culturally shaped resources” in either traditional or digital formats (p. 171). With digital text modes, interactive elements including links, redirects, graphics, images, and other elements help students situate information from different perspectives (Hassett & Curwood, 2009). The use of multimodal texts can increase motivation and engagement among students and therefore traditional literacy performance (Barton, 2001). New literacy also requires that students become conscious producers of texts and information rather than just passive consumers. Augmenting Dewey’s idea of learner’s as active participants, students should engage new literacies and multimodal text to develop and share their collective learning that supports social action (Nixon, 2003; Hassett & Curwood, 2009; Bers & Cassell, 1999). The social entrepreneurship unit utilizing a MUVE where the learning activity would encourage students to critically analyze, question, and situate the social issues while using digital technology to think critically about issues and take action rather than simply become technologically competent.

School curriculum that adopts new technology must, therefore, recognize and discern how technology alters our traditional notions of literacy. More specifically, educators must come to terms with how texts in digital contexts are produced and consumed, both by students and teachers. With increasingly new technologies available that influence how we communicate with others and to access information, it is clear that the literacy-mediated activities are often literacies rooted in the computer and digital worlds. Although print literacy still plays a significant role in society today, in particular in schools, the growing role of new literacies on computers and the internet are important to consider.
Literacy teaching and learning must evolve with a changing world (Cope and Kalantzis (2000). Moreover, the evolution of the educational process to embrace new literacies necessitates new ways of communicating with students. Recent scholarship has looked at the emergence of new literacies using technological tools and the educational uses of new literacies and the potential to increase academic achievement, especially in conjunction with traditional literacy skills (Burnett, Dickinson, Merchant, 2009; Lankshear & Knobel, 2003; Larson & Marsh, 2005; Cope and Kalantzis, 2000; Gee, 2003). Although the promise of new literacies using new technology is optimistic, it remains challenging to effectively implement new literacy practices and may require fundamental changes in school policies and instructional pedagogy (Burnett, C., Dickinson, P., Merchant, G. & Myers, J., 2006; Squire, 2011). As described earlier in this chapter, the Partnership for 21st Century Skills provides teachers with guidelines to include new literacy practices through its Framework for 21st Century Learning. High-stakes testing and accountability presents a significant challenge to the use of new literacy practices. Traditional conceptualization of literacy and its focus on standardized test may force teachers to refrain from utilizing new literacy practices. Lankshear and Knobel (2003) and Dickey (2011) argue that innovative new literacy practices, such as simulations and multi-user virtual environments go against traditional instructional practices and challenge deeply rooted attitudes and beliefs regarding literacy, learning, and relationships between students and teachers.

These innovative new practices challenge existing educational philosophies, policies, and pedagogies of schools rooted in traditional text literacies (Burnett, Dickinson, Merchant, & Myers, 2006; Lankshear & Knobel, 2003). Larson and Marsh (2005), Cope and Kalantzis (2000), and Gee (2004) argue for the need to change the educational process in order for educators to provide students with learning experiences that address new literacy in contemporary society.
They contend that a broader acknowledgment of how new technologies influence literacy both inside and outside of formal education is required. While a number of researchers explore the implementation of technology in the classroom, relatively little research examines new literacies of multi-user virtual environments, especially in the social studies. The movement towards constructivism and the impact of technology has had great influence on the design of virtual environments for learning. In the conceptual design of the multi-user virtual environment, an important consideration is that active and meaningful learning can occur in a multi-modal environment. Participants in the multi-user virtual environment assume an active role in constructing knowledge (Hannafin, Hall, Land, & Hill. 1994; Hannafin, Land, & Oliver, 1999; Jonassen 1999). Learners construct knowledge through interactions with not only information and other means in the multi-user virtual environment, but also through active social learning by interacting, collaborating, and reflecting with other participants in the learning space. Appropriate guidance and scaffolding must be incorporated in the design.

Although the research on new literacies has not thoroughly examined literacy on the web or in virtual learning environments, preliminarily there are concerns regarding access and opportunity to learn. Leu, et al (2004) argues that educational policies in the US potentially contribute to widening the achievement gap between different socioeconomic groups. This represents a major concern for educators seeking to implement new literacies and technology in schools as part of the formal curriculum. Students in more affluent schools have greater access to high-speed internet in their schools and at home. Therefore, new literacy practices can be interwoven into the curriculum much easier than schools where students of low socioeconomic status may not have access to high-speed internet. Although underprivileged students typically have on the whole the least access to the Internet, both in school and at home, they are
unfortunately also subject to intense pressure to improve low scores on standardized tests, especially in traditional literacy of reading and writing (Henry, 2006; Cooper, 2004). Inclusion, therefore, of new literacies, therefore are not a consideration in the curriculum of poorer schools. Herein lays the problems of equity, access, and opportunity to learn that are fundamental structural issues of social justice in education.

**Summary**

Students who develop civic knowledge and skills such as problem-solving, critical-thinking, collaboration, and analysis are better equipped to become more civically engaged youth. Civically engaged individuals are more likely to partake in the democratic process through voting, grassroots efforts, holding of public positions, and actions for social change. The advancements of technology to disseminate information quickly and to allow collaboration among many end-users over a wide geographic area demonstrate how ICTs impacts society. Schools have been quick to implement new technologies under the assumption, often unsubstantiated, that there will be students learning and achievement gains from increased use of technology. The capability of youth to obtain pertinent information, evaluate and synthesize its contents, and make informed choices based on that information, embodies some of the skills that students must master, whether or not technology is implemented in the social studies classroom. Social studies educators must critically reflect on the use of technology in their lessons to determine its value on student learning outcomes. Conversely, educators and researchers should not refrain from trying new technologies, such as MUVEs, or technology-laded strategies in their classrooms to incorporate students’ ability with new literacies and to develop other skills needed for civic engagement.
While greater access to technology can lead to more opportunities to learn in schools, technology itself does not necessarily lead to greater learning outcomes. Nor does more technology in classrooms necessarily help overcome the digital divide and socioeconomic class gaps. They may, in fact, widen the gap. In an educational setting lacking appropriate pedagogy, training, policies, and resources, the implementation of new technologies may instead serve as a distraction or impediment to learning. Moreover, it also may exacerbate the prevailing sociocultural divisions. The application of technology in schools without sufficient forethought, policies, and pedagogies may lead to a greater division between those privileged (e.g., greater socioeconomic status) and underprivileged. This chapter sought to address the theories and research regarding youth’s attitude toward civic engagement, the use of issues-centered curriculum to promote a better understanding of social issues and to encourage critical inquiry and analyses of social issues through deliberation and discussions, and how the use of ICTs might potentially help meet suggested 21st century competencies. How students interact and learn using technology are also interesting areas to explore to determine if the use of technology in schools and in the social studies can improve teacher instruction and student learning.
Chapter 3: Methodology

There is no such things as a neutral educational process. Education either functions as an instrument that is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it, or it becomes “the practice of freedom; the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. (Richard Shaull in the forward to Pedagogy of the Oppressed, 1970, p.34)

Methodological Approaches and Study Design

The study utilized a design-based research process as the methodological framework for designing, implementing, and refining the social entrepreneurship intervention. The objective of using a design-based research process was to continuously evaluate the intervention and to make changes as necessary in order for the intervention to be practical and useful for classroom teachers (Wang & Hannafin, 2005). The design-based research process emphasizes a cycle of design and implementation where the researcher uses the implementation of the intervention to collect data about subsequent design (Wang & Hannafin, 2005; Barab & Squire, 2004). Within the design-based research process, multiple methods, including collected data and informal observations, can be applied to analyze how the intervention worked and to refine parts of it (Wang & Hannafin, 2005; Cobb, Confey, diSessa, Lehrer, & Schauble, 2003).

As explained in Chapter 1, initial research questions were revised as the implementation of the intervention occurred and data were collected. I determined that as I began to analyze the data, I realized that the data did not sufficiently address the original three research questions. Instead, the study addressed two alternative questions: a) does the intervention and MUVE environment in totality cause any shifts in students articulated perceptions, espoused values, and
stated positions about social justice and social entrepreneurship and b) will the integration of information and communication technology (ICT), specifically a multi-user virtual environment (MUVE), into the instructional intervention have any measurable or observable beneficial effects on how students feel about the learning experience or about social entrepreneurship, social justice, and civic engagement?

I took several steps to approach and answer my research questions. In the first two chapters, I endeavored to define the constructs that provide the foundation for this study by addressing several issues: a) civic education in the social studies curriculum and its role in developing civic engagement; b) how the conceptualization of social justice can be broadened beyond prevailing definitions focused on addressing injustices and oppression; c) how civic engagement can be expressed in the form of social entrepreneurship; d) MUVEs as just one example of how ICTs may be utilized to connect and engage students that might not otherwise do so and to broaden their civic experience; and e) evidence of how MUVEs and other ICTs can build competencies in “21st century skills” and any criticisms of their use. This chapter establishes the philosophies, methods and approaches, and curricular models I employed in the study. First, I review the methodological influences on the design and implementation of the study, grounding the study in a pragmatism paradigm. Secondly, I explain the design of the study, including discussion of the methods for the study population, data sources (i.e., pre- and post-surveys, interviews, and observations), and methods for data collection and analyses. Finally, I detail how I enacted the social entrepreneurship seminar curriculum.

The intervention involved the design and implementation of a standards-based unit that would serve to explore the concepts of civic identity, social justice, and social entrepreneurship through the examination and discussion of selected problems or issues facing contemporary
society. The approach for the design of the study of social entrepreneurship unit and MUVE relied on Creswell (2012) where I identified the context and environment, interrogated my role as both the teacher and researcher, determined the different data and evidence that are relevant to answering my research questions, created and implemented a curriculum for the intervention and MUVE experience, and developed a strategy to collect the evidence and data, given time and resource constraints. The selected problems revolved around key areas outlined by the US Department of Health and Human Services Healthy People 2020 initiative. Additionally, the discussions of issues incorporated topics currently identified as challenges to healthcare providers, such as the prevention of health problems rather than a focus on treatments and increasing the ability of patients to access and understand medical and health information.

A mixed method approach was selected for the research design of this study in order to utilize the advantages of quantitative and qualitative measures in answering the research questions. Mixed methods provide a means where “several issues may be investigated simultaneously, requiring multiple methods” (Wiersma & Jurs, 2009, p. 306). A quantitative methodology, for instance, may provide only an incomplete narrative regarding the intervention whereas mixed methods methodology “avoids possible unimethod bias, and somewhat overcomes the advantages and disadvantages of different methods (Wiersma & Jurs, 2009, p. 306). Evidence have suggested that studies that combining quantitative instruments and measures (e.g., surveys) with qualitative measures (e.g., interviews and focus groups) provide a rich description of the context and environment that is being studied (Seidman, 2013). Since I intended to examine several research questions in this study, the use of mixed methods was appropriate. Moreover, a number of prior studies of civic identity and engagement in the social studies have utilized the mixed methods approach (Creswell, 2014; Teddlie & Tashakkori,
Wiersma and Jurs (2009) have stated that “educational outcomes are complex and often influenced by a variety of factors” and contends that mixed methods “can give a more complete understanding of the phenomenon being investigated” (p. 309). Given that our civic identities and engagement by nature consists of complex individual internalizations and interactions among individuals and groups, adopting a research paradigm that takes that addresses those for multiple perspectives was essential.

The philosophical orientation most commonly associated with mixed methods research is pragmatism, which provides an alternative to constructivism and post positivism and focuses on the problem to be researched and the consequences of the research (Green & Caracelli, 2002; Creswell, 2014). As an alternative approach, pragmatism assumes that there exist different realities and truths and that the main research motivation is anchored in addressing and providing solutions to practical problems (Green & Caracelli, 2002; Creswell 2013; Teddlie & Tashakkori, 2009). Adopting a pragmatism approach offers a way to conduct the research without needing to choose between post positivism and constructivism and the methodologies associated with each (Creswell, 2014). Greene and Caracelli (2002) assert that pragmatism is appropriate for viewing reality as multi-layered, with both objective and subjective parts. Pragmatism maintains the argument that research should offer usefulness and functionality to those utilizing research, whether it is scholars or teachers in the classroom (Morgan, 2007; Green & Caracelli, 2002; Teddlie & Tashakkori, 2009). Therefore a mixed methods approach supports the pragmatism paradigm that views a phenomenon being studied is multi-layered, complex, and cannot be fully measured by quantitative or qualitative means. When using a pragmatism through mixed methods approach, the use of specific methods and data collection instruments or the combination of them do not preclude the use of others (Creswell, 2014; Wiersma & Jurs, 2009).
A researcher utilizing pragmatism seeks to interrogate a phenomenon with the most appropriate method or methods to reach a rich, multifaceted understanding.

Creswell (2014) states that researchers to be cognizant that a pragmatism lens presumes that unpredictable human element exists and that the data collected and organized when studying a phenomenon, the human element may mean that the data may not entirely fit the research questions. This means that the results of the data collected and analyzed requires careful reasoning, reflection, and flexibility on the part of the researcher. To reiterate, pragmatism disregards the debate between purely quantitative and qualitative approaches and justifications and focuses on providing the researcher with the tools necessary to answer his research question and provide utility to those using the research to inform their practice (Green & Caracelli, 2002; Teddlie & Tashakkori, 2009).

**The Dual-Enrollment Program**

This study’s intervention unit was held on the campus of a large, regional health network in northeastern Pennsylvania. The students were enrolled in a dual-enrollment program for high school students interested in future careers in healthcare. A dual-enrollment program is one in which high school students enroll in and take college courses before they graduate from high school. This allows students to gain firsthand exposure to college-level courses and simultaneously earn high school and college credit. Within the regional health network is an education department that is responsible for training and education of the network employees and learners, including physicians, nurses, advanced practice clinicians, medical students, residents, and fellows. Additionally, the education department oversees a variety of youth programs, including the dual-enrollment program. In this dual-enrollment program, the curriculum combines not only high school and college components, but also technical anatomy
and physiology content and real-world experience in healthcare environments. Ten area public high schools participate in the dual-enrollment program in partnership with the regional health network.

The Research Participants

The selection of this student population is a sample of convenience. I had a working relationship with the program directors and instructors and obtained their approval to incorporate the intervention unit. This sample encompassed students from multiple schools, allowing for piloting of a MUVE on a relatively small scale. The students that consented to participate in this research study were high school seniors from the ten member school districts. Rising juniors from these schools are eligible to participate given they meet the academic prerequisites. Students interested in enrolling in the dual-enrollment program submit an application, recommendations, and transcripts and undergo in-person interviews. Application materials are reviewed and interviews are conducted by a committee. Once selected, the students committed to completing the entire yearlong program. There were 55 students in the program, with 14 males and 41 females. One week prior to the intervention, the students were provided an informed consent outlining the research study, the potential risks and benefits of their participation in the study, and an explanation of the option to decline participation in the study without adverse effect to their grades or participation in the dual-enrollment program. The students were instructed to discuss the informed consent and the research study with their parents and return the informed consent. All 55 students, with their parents’ approval, consented to participation in this study. The itemization of high schools of the student participants were as follows:
Table 3.1
School Itemization of Research Participants

<table>
<thead>
<tr>
<th>Participating Schools</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catasauqua</td>
<td>2</td>
</tr>
<tr>
<td>Dieruff</td>
<td>4</td>
</tr>
<tr>
<td>Emmaus</td>
<td>1</td>
</tr>
<tr>
<td>Northern Lehigh</td>
<td>3</td>
</tr>
<tr>
<td>Northwestern Lehigh</td>
<td>10</td>
</tr>
<tr>
<td>Parkland</td>
<td>7</td>
</tr>
<tr>
<td>Salisbury</td>
<td>1</td>
</tr>
<tr>
<td>Southern Lehigh</td>
<td>16</td>
</tr>
<tr>
<td>Whitehall</td>
<td>10</td>
</tr>
<tr>
<td>William Allen</td>
<td>1</td>
</tr>
</tbody>
</table>

Role of Researcher

I was the teacher responsible for several units in the overall curriculum for the dual-enrollment program, including development of the unit lesson plans, learning objectives, instruction, and assessments. The program previously did not have a specific unit on social determinants of health and social change, whether through social entrepreneurship or other means. However, the inclusion of ideas of social justice is not new to the dual-enrollment curriculum; throughout the year, guest speakers have been brought in to discuss topics such as bioethics, multiculturalism, and diversity. This unit and intervention simply provides a more methodological examination of social determinants of health and social justice and social change issues related to healthcare.

Given my role as instructor in the program, it cannot be overlooked that there conceivably exists some amount of effect on the students that may not otherwise exist if I was a non-partial observer and researcher. Through direct contact with the students, especially through prior interactions with them, how I collect and interpret the data, especially the qualitative data, may be swayed by my own personal biases. With students, I strove to establish an interview approach that fostered honesty and openness in the students. Moreover, my prior experience and
interactions with the students allowed for what I observed as greater willingness to share their perspectives and reflections with me.

**Data Collection and Analysis**

The overarching unit objectives are to a) to develop student understanding of how social determinants, such as economic status, race, gender, community, literacy, and access to resources, impacts the health of individuals and the healthcare they receive or do not receive, b) to discuss the role of social entrepreneurship has in moving healthcare systems toward innovation, patient and community engagement, and high quality care and safety, and c) to provide the students with the opportunity to actively develop a social entrepreneurship idea that can lead, through implementation, to social change while meeting the goals of healthcare institutions. These goals may include increasing patient and community engagement, lowering costs, and/or improving care in either inpatient or outpatient settings. While many of the topics and issues that will be addressed are controversial, as is typically of issues-centered social studies instruction and learning, the students will be encouraged to critically build their own understanding of social justice and the issues that they feel drawn to (Engle and Ochoa, 1988). These may include but are not limited to health literacy, water shortage, oligopolization by corporate food producers, and public patient education. Furthermore, students’ positions on the issues, and how they view solutions to those issues, are built upon interactions with their peers, research into the issues, and discussions with subject-matter speakers that are invited to come in to present to the students. No right or wrong positions on issues explored as part of the learning intervention are determined at the outset; however, students need to support their positions and arguments using evidenced-based research and careful deliberation.
The design, development, and implementation of the unit were primarily my responsibility, as was the content and materials and for teaching the unit. These learning activities were held during the regularly-scheduled program times either in a classroom or in the MUVE and required six 2-hour sessions. The unit included a variety of learning activities was designed to help support the objectives of the unit, including research, debates, and group discussions. Students were assigned a reading and convened in a MUVE, a physical learning space designed and configured to support team-based learning. The MUVE is a web-based cloud system created and hosted by AvayaLive Engage and is a commercially available product used by the education department in the healthcare network for other educational and training simulations. In the MUVE, the students engaged in the aforementioned learning activities. The other teachers and I provided adult supervision and support to help guide, facilitate, and mentor the students.

Participating students were placed in student-led teams combining students from different high schools to begin research into a self-chosen social issue in healthcare and to begin formulating ideas of innovate products or business plans to address their chosen social issue. Students then met in the MUVE to collaborate with their social entrepreneurship teams, while the teachers were also present in the MUVE to provide guidance and scaffolding. At the end of the unit, the student teams convened a final time in the MUVE to present their ideas in a science fair format.

Data was collected using a mixture of quantitative and qualitative methods in order to gain a multidimensional understanding of the students’ experience with the social entrepreneurship intervention and the collaboration in the MUVE. As mentioned previously, I decided to utilize a mixed methods approach based on a pragmatist paradigm. The data
collection included a survey prior to the unit (Appendix A), observations of the students in the classroom, observations of the students in the MUVE, post-unit survey, and post-unit student interviews. Unfortunately, due to technical difficulties and limitations of researching in this hospital-school context, screen captures and digital logs of the participants in the MUVE were not taken and could not be included when discussing the results in Chapter 4. However, screen captures of the MUVE were taken after the intervention and included in Chapter 4 to provide a sense of the virtual space in which the students worked.

This study used longitudinal survey data using a pre- and post-survey to measure the changes in knowledge, attitudes, and skills of the participants from the beginning of the intervention through the end of the study. The pre- and post-surveys utilized Likert-type questions based on established and validated from the Center for Information and Research on Civic Learning and Engagement (CIRCLE) as well as additional questions regarding students’ ICTs. These surveys were designed to provide quantitative measures of the students’ knowledge, attitudes, and dispositions (such as civic engagement), civic organization skills, civic presentation skills, community awareness, social problem solving skills, social responsibility, understanding of social entrepreneurship, social-justice orientation, communication, and ability using ICTs. I administered a pre-survey at the beginning of the first lesson and a post-survey immediately following the students’ presentations of their social entrepreneurship projects.

At the end of the unit, interviews with some of the students were conducted to gain insight into the intervention that potentially was not established through the pre- and post-surveys and the observations. More specifically, I wanted to gain an understanding of the students’ articulated feelings about civic engagement and social entrepreneurship, the impact deliberation and debate in the classroom had on their views of social issues, the usefulness of the
MUVE for learning and collaboration, and any unexpected challenges or resistance to the intervention. Since the interviews were conducted at the end of the unit, it allowed me to have a conversation with the students to be able to debrief their overall experience of the social entrepreneurship intervention and the MUVE and provide them the opportunity to reflect on the process and what they learned. Due to time constraints, a randomly selected group of ten students was selected to be interviewed individually. The interview questions were created using a semi-structured approach where an interview protocol was developed such that a number of standard open-ended questions were asked during each interview with opportunities, based on the participants’ responses, to probe for more information (Appendix B). Interview responses were recorded using a laptop and a word processor.

The qualitative data from the survey instrument and the qualitative data from the semi-structured individual interviews provided a triangulation of the data that provides a rich description of what occurred during the intervention (Miles, Huberman, & Saldana, 2013; Creswell, 2003). Instead of cross-validating the data, the intent of the use of triangulation and mixed methods was to gain insight into the phenomenon from different contexts and perspectives that a single qualitative or quantitative methodology cannot. The data analysis concentrated on categories related to the research questions, specifically skills outlined in the *Framework for 21st Century Learning*, conceptualization and operationalization of civic identity, social justice, and social entrepreneurship, and civic engagement behaviors. To make meaning of the categories, data from the surveys were analyzed using paired t-tests to determine if changes occurred from the beginning to the end of the intervention, with statistical significance at the .10 level. Effect sizes were calculated. From the interviews, values and evaluation coding was used to determine if any patterns or themes emerged regarding the students’ attitudes, dispositions, and behaviors.
toward social justice, social entrepreneurship, and civic engagement as well as to gain perspective into how the students’ viewed and regarded the significance of the intervention (Miles, Huberman, & Saldana, 2013).

**The Social Entrepreneurship Intervention**

Several criteria were utilized to create the social entrepreneurship curriculum and the specific daily units over the six class periods. The pedagogical format included a combination of didactic and deliberation, with greater emphasis and time allotted to deliberation among the students with facilitation from me as the teacher. During the classes, the students identified social determinants of health, through their own experiences, presentations by guest speakers, and readings that they were assigned prior to the class. In addition to identifying the social determinants of health, the students deliberated the role of the healthcare system to address those social determinants. With teacher facilitation and scaffolding, students studied the topics while also increasing their conceptual knowledge and understanding of how social factors affect healthcare. Since learning is a social endeavor (Bandura, 1976), all in-class activities and discussions were group oriented. The social entrepreneurship curricular unit consisted of the following:

**Table 3.2**  
**Selected Goals Pertaining to Issues-Centered Curriculum**

<table>
<thead>
<tr>
<th>Curricular goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Justice - Sensitivity to the disparities of human circumstances.</td>
</tr>
<tr>
<td>Social Activity - Actions to correct unsatisfactory conditions.</td>
</tr>
<tr>
<td>Critical Judgment - Development of ability to assess facts, opinions, and rhetoric.</td>
</tr>
<tr>
<td>Public Health - Actions to improve health of the community.</td>
</tr>
</tbody>
</table>

Lesson 1: A Systems-Based Practice Approach to Healthcare

Lesson one focused on one of the six competencies of the Accreditation Council for Graduate Medical Education (ACGME) competency of systems-based practice. Although intended as a guideline for resident physician training, the ACGME competencies are useful and important for all kinds of students who intend to pursue a career (clinical or non-clinical) in healthcare. Furthermore, Houser and Kuzmic (2001) advocate for a systems-based approach to citizenship education, similar to the ACGME competency, where “our dialogue must be substantial, and that our discourses must not be limited to dominant ideologies that privilege parts at the expense of the whole, individuality at the expense of community, citizens of a nation at the expense of citizens of the world, or mankind at the expense of the rest of the planet” (p. 454). The objectives of the lesson, which extend throughout the unit, are that the students should be able to demonstrate the following outcomes:

- awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value
- understanding of how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society
- knowledge of the impact of demographic factors on access-to-care and epidemiology of disease
- commitment to expectation that healthcare providers are accountable to the communities they serve.
- knowledge of the health care needs of the community
- knowledge of the health care resources available in the community
The lesson largely consisted of an overview of the recent history of healthcare in the US, including use of data on demographic shifts, costs of medical care for both providers and consumers in the healthcare system, role of the health insurance system, and political and legislative efforts related to the healthcare system. Much of the history of political and legislative efforts regarding healthcare is highly polarized and many of the issues that are raised are complex, multidimensional, and often controversial (e.g., abortion, hospital care for immigrants, Medicaid, etc.). The second part of the lesson involved presentation of the ACGME competencies and the lesson objectives, with detailed discussions of each objective. Since the objectives were broad in language, the students were guided to dig deeper in their groups. Specifically, the students were asked to concentrate on the following questions:

- What information do healthcare providers need in order to provide the best care possible for their patients?
- Hospital systems are increasingly asking their healthcare providers to understand the complexities of the communities they serve. How might aspects of community influence the way healthcare providers treat patients?
- In what ways are healthcare resources (e.g., from hospitals, clinics, information, time with physicians or advanced practice clinicians) made available or allocated to different groups of people within a community?

However, discussions of these topics are important to developing youth that have the civic knowledge and skills to become civically engaged. Houser and Kuzmic (2001) argue that social education is “often flattened or trivialized” and social studies curriculum is often simplified to avoid topics of political controversy (p. 452). The students were seated around tables with seven to eight students at each table and were provided explicit expectations to civilly
consider all perspectives and comments from their peers, using evidence and logical arguments to voice any disagreements with peers’ thoughts, opinions, or comments. I circulated throughout the room to ensure that no one student dominated their group’s discussion, and all students had the opportunity to contribute and participate in the discussions. Additionally, as I moved from group to group, I prompted the students, through questions and comments, to reflect and consider deeper what their peers were saying as a means of demonstrating critical thinking skills and careful deliberation. As I was doing this, I was careful not to provide bias or inclination toward any ideology or political standing, but sought rather to engage the students to think more carefully in their discussions. About every ten minutes, I choose three or four students to switch seats to bring different perspectives to each of the groups.

Lesson 2: Social Determinants of Health and Inequalities

Patient experience has become the primary objective of healthcare providers in our present society. Therefore, engaging patients and families in their own health care represents an important goal and requires healthcare professionals move beyond simply diagnosing and treatment patients to helping patients before their health becomes an issue. For healthcare professionals, patient and community engagement is a significant challenge as they seek to provide quality patient care. Moreover, increasing the quantity of patient encounters while decreasing the time spent with patient, greater complexity of illness and diseases, and changes in how hospital systems and healthcare providers are reimbursed also creates substantial worries for healthcare providers. To effectively involve patients in their own self-care, education for healthcare providers must address issues of health literacy, cultural awareness and sensitivity, sociological structures, and other socioeconomic factors and inequalities that represent important social justice issues. The students were encouraged to explore and discuss various conceptions of
social justice that were presented briefly in class, including discussions of John Rawls’s *A Theory of Justice* (1971), Amartya Sen’s *the Idea of Justice* (2009), and Alisdair McIntyre’s *Dependent Rational Animals* (1999) as well as healthcare-specific scholars such as Ruth Faden and Kristin Shrader-Frechette.

The learning activity for the lesson on social determinants of health again combined a small portion of didactic lecture and the majority of time spent on deliberation among the students with guidance, facilitation, and scaffolding from myself as the teacher. The lecture involved significant discussion and conversations with the students to identify what could be important social determinants of a patient’s health that must considered by healthcare providers. Among the topics discussed, which are based on the US Department of Health and Human Services *Healthy People 2020* (2011), were:

- literacy, including health and digital literacies
- quality and access to education
- social norms and attitudes
- exposure to crime, violence, and social disorder
- economic status and stability
- environmental conditions
- civic and political participation
Figure 3.1
*Healthy People 2020 Social Determinants of Health*


Seated around tables of seven to eight students, the students were provided case studies from David Bornstein’s book *How to Change the World: Social Entrepreneurs and the Power of New Ideas* (2007) to analyze and discuss. The case studies profile individuals, the social issues they sought to address, their innovative ideas, and the process they took to enact their ideas. The groups were then instructed to read the case study and discuss the following questions:

- What were the social issues the social entrepreneurs wanted to address? How might these issues be important to overall community health?

- How would you describe the attitudes and dispositions that made them successful in working toward social change?
What were the steps and processes that the social entrepreneurs took to make the implementation of their ideas successful?

For the last sixty minutes of the lesson, the students were provided a written handout outlining the social entrepreneurship project (see Appendix B) and discussed the expectations for the project, including use of the MUVE for the next four class meetings. Ross (2001) states that:

As social educators we should not be content to merely teach the principles of democracy and then wait for our students to translate those principles into action. This great leap forward, from understanding democratic principles to active engagement as a democratic citizen (and ultimately to the creation of truly democratic society) requires all of us (students, educators, and others) to start making connections that are generally not made. (p. 396)

In light of his observation, students were assigned to groups of five and were asked to begin work on the following:

- Think about your experiences (e.g., shadowing, presenters, case studies, interviews, etc.) in the healthcare system this year. What social issues came up, especially those related to patients’ health and well-being? Write those social issues down.
- Identify a social problem or issue in the local community that interests the group as a whole. Be prepared to provide a rationale why you and your group choose to focus on that issue.
- Brainstorm with your group about how you might go about addressing the issue within the context of the hospital and healthcare system.

A discussion was held to explore examples of social entrepreneurship projects the students were expected to develop in their collaborative groups. After reading Bornstein’s (2007) book
In the MUVE – Collaboration on Innovations for Social Change

Each of the next four lessons allowed for two hours of time for a total of eight hours for the students to collaborate in the MUVE. To pilot the use of MUVE as a technological tool for collaboration, particularly for diverse groups of students from different, and often very far,
geographic locations, this study utilized AvayaLive Engage. AvayaLive Engage is a cloud-based, three-dimensional multiuser virtual environment designed for online learning and web collaboration. Since AvayaLive Engage is cloud-based, it requires only a web-browser (e.g., Microsoft Internet Explorer, Mozilla Firefox, etc.) and requires only speakers or headphones and a microphone to communicate while in the virtual environment. The MUVE is highly customizable and can be built to suit a variety of needs, from its basic generic conference and presentation space to environments that replicate college campuses or hospital inpatient units.

Similar to online MUVE environments and games, such as Second Life, Active Worlds, World of Warcraft, and Everquest, users of AvayaLive Engage create and control avatars that represent themselves in the virtual environment. In the virtual environment, users’ voices are projected through the voice-over-internet protocol (VoIP) as if the avatars themselves are speaking such that while moving or turning away from an avatar that is speaking will result in a gradual decrease in that avatar’s voice volume. Furthermore, voices are spatially positioned accurately such that a voice coming from the left registers in the left headphone and vice versa. In this way, the environment is made to feel more realistic and the users more present in the virtual environment.

Movement within the AvayaLive Engage virtual environment also provides a close approximation of real physical environments. Users control their avatars as they walk around in the virtual environment, sit in chairs or seats, stand at podiums, utilize microphones, and interact with other avatars through speech, hand and arm gestures, and even facial expressions. These avatar movements and speech increase the perceived realism of the virtual environment, creating a social and perceptual realism that contributes to greater sense of realism leading to increasing the users’ immersion and engagement in the virtual environment (McMahan, 2003; Dickey,
In each of the small conference rooms is a large table with ten chairs and screens that users can access, upload, and show a variety of digital resources, including web content such as websites and YouTube videos, and Microsoft products such as Word and PowerPoint files. The central meeting space in the MUVE is an amphitheater, with many rows of seats and a central stage platform with a podium, microphone, and large presentation screen. Figures 3.2 through 3.6 show screenshots of the MUVE utilized by the study participants to work collaboratively on their social entrepreneurship projects. As described in Chapter 3, screenshots of the actual student interactions and movement in the MUVE were not captured due to technical reasons difficulties. The following screenshots provide a sense of the virtual space that was utilized as part of the intervention.

**Figure 3.2**
Instructions for Participants Entering the MUVE
Figure 3.3
Amphitheater Audience View in the MUVE

Figure 3.4
View of the Podium from the Audience Microphone in the MUVE
Figure 3.5
View of a Small Group Collaboration Space in the MUVE

Figure 3.6
Pop-up Options to Share Digital Content in the MUVE
The hospital network’s education department that partners with the healthcare dual-enrollment program had been using AvayaLive Engage to test MUVEs for clinical simulation training of its outpatient providers. For this study, the department generously allowed me to utilize the generic conference space, which was beneficial to me in that there was no additional programming or customization of the virtual space or costs to use. Since it is cloud-based, the study’s participants needed only their home computers, internet connection, and the appropriate log-in information to access the MUVE. Discussions of the participants’ experience using the MUVE, including difficulties and factors such as lack of high-speed internet or appropriate equipment (e.g., no microphone), are discussed in the results chapter.

At the end of the second lesson, the participants were oriented to the MUVE. Participants were asked to log onto a laptop from the classroom cart, open a web browser, and type in the appropriate log-in information. Orientating to the MUVE for the participants required a very small learning curve. Movement of the participants’ avatars in the virtual environment uses standard gaming controls (W, S, A, and D on the keyboard) to move forward, backward, right, and left. Similarly, the MUVE automatically detects the input (microphone) and output (headphones or speakers) devices, making speaking and conversing with others in the MUVE simple and straightforward. More advanced features such as uploading and sharing files and using the features of the presentation displays in the main presentation area or small collaboration spaces took less than ten minutes to demonstrate to the participants.

During the third, fourth, fifth, and sixth sessions, the participants did not meet physically in their normal classroom at the vocational school but were asked to log into the MUVE. Attendance was taken similarly to in-class meetings where the instructors took roll-call from the avatars in the MUVE. After a brief reminder of the expectations for their projects, the
participants were permitted to utilize any of the virtual space to collaborate on their projects. The final project required the students to present their ideas, in the MUVE in the main amphitheater presentation area, using PowerPoint, Prezi, or another presentation software. Reflections of the students’ experience in the MUVE are discussed in the results chapter while the assessment rubric, grades, and other artifacts can be found in the Appendices.

**Discussion**

This chapter sought to lay out the theories and pragmatism approach that guided the design and development of the curricular unit on social entrepreneurship. For this study, the relationship between instructional pedagogy, deliberation on social issues, the experience of collaboration and engaging in action for social change, and the development of civic engagement is important. Additionally, information technologies, such as MUVEs, are just some of the tools that youth can develop a social and civic identity and to engage in robust deliberation. These constructs serve as the basis for the data analyses that will be discussed in the following chapter and are the framework for answering the research questions.

The following chapters present the results of the data collection from the pre- and post-surveys and the individual interviews and discuss the finding in detail. However, some of my initial observations and reflections are discussed here. Overall, the students responded well to the issues-centered curricular model that emphasized discussions and deliberation on the social issues. Though broadly anchored in the social determinants of health as outlined in the *Healthy People 2020* guidelines, the specific social issues were brought up by the students with minimal prompting from me as the teacher and facilitator of the discussions. As a basis for the start of the discussions, the social determinants of health themselves could be considered a particular ideological value or position. Although I endeavored to refrain from sharing my own values,
positions, and perspectives on the issues brought up by the students, it is conceivable that additional prompting on my part to encourage the students to “dig deeper” in their analyses of the social issues may have caused some students to interpret that as affirmation of my stance on the issue. Similarly, more dominant or outspoken students in the class may unduly have influenced or altered other student’s values or positions on social responsibility and social justice.

Avoiding indoctrination of the students to a particular ideology, value, or position was always a concern and a challenge for me throughout the lessons. Indeed, as with any issues-centered curriculum, the actual issues themselves may have been perceived by students as signaling what positions or values are desirable or expected. How issues are “framed” in lessons, including what they are called, intrinsically positions them are ways that are potentially suggestive or limiting politically or culturally. Difficulties arose when only a few students expressed a particular stance on an issue while most of the other students disagreed. Specifically, when discussing the amount of financial, physical, and personnel resources that are allocated to clinics serving low socioeconomic patients, three students initially stated their position they did not think the clinics needed additional resources and that “the best doctors should be serving those who can afford that highest levels of medical care.” The highly emotional responses by many of the other students, both verbal and nonverbal, required me to intervene to explain and discuss the importance of critically considering the perspectives of other through logic, evidence, and reasoning. However, it was clear that two of the three students that were in the minority were hesitant to participate vocally in the remaining discussions, even on different issues. Moreover, other students may have externally adopted the values and positions of the vocal majority for a variety of reasons, including the desire to avoid appearing different from their peers. Similar
group dynamics where the vocal majority can influence or silence dissenting opinions or voices could have occurred while the students engaged in the collaborative group work in the MUVE where I could not provide as much oversight or facilitation. However, this does not necessarily mean that indoctrination occurred. The intention of the issues-centered deliberation and the collaborative project in the MUVE was for the students to develop their ability to critical analyze social issues affecting community health and to work together to formulate an idea to begin to address an issue that interested them. Certainly, the instructions I provided both verbally and on paper emphasized that the social entrepreneurship unit did not seek to get students to agree on a particular perspective or opinion. Rather, the students were encouraged to develop their own understanding of the why and how of different issues, and to explore differences in those understandings that their peers or even I as a teacher may express. This “tyranny of the majority,” as Alexis de Tocqueville referred to in *Democracy in America*, where the outspoken majority voice suppresses less widely held ideas or values, is a major challenge facing teachers. Even situations where a vocal, assertive, and collectively strong minority can overwhelm the majority is also a concern. Teachers must balance the vocal voices in the classroom by finding ways to ensure that all students’ feel that their own opinions, beliefs, and perspectives are valued.

While indoctrination of the students to a particular position or ideology is a possibility or a vocal majority may unduly influence other students, I followed Wraga’s (1986) guideline for dealing with societal issues to minimize indoctrination as much as possible, including ensuring that logic is used a criterion for evaluating the credibility of arguments, accepting that not all issues can be resolved, and clarifying the nature of the issue and the agreements and disagreement surrounding it. Additionally, while I have reflected upon the intervention and the possibilities of indoctrination of the students to particular ideological positions or values on
issues, I did not observe any evidence of indoctrination. It is important to remember prior research by Kahne, Westheimer, and Rogers (2000) that issues-centered social studies curriculum, especially those that ask students to analyze social issues deeply through deliberation and discussions, are rarely done because of the controversial nature of some issues and the reluctance of teachers to broach those topics in class. Yet the value of issues-centered curriculum and deliberation to develop the critical thinking, problem-solving, and communication skills that are important to the development of civic engagement in youth offer justification for using this type of instructional strategy despite the potential for indoctrination. As discussed earlier, it is important for teachers considering using issues-centered practices in their classrooms to give serious consideration to how to manage not only the discussions and deliberation amongst the students, but their own language, values, and positions on issues.
Chapter 4: Results

He who knows only his own side of the case, knows little of that. His reasons may be good, and no one may have been able to refute them...nor is it enough that he should hear the arguments of adversaries from his own teachers, presented as they state them, and accompanied by what they offer as refutations. That is not the way to do justice to the arguments, or bring them into real contact with his own mind. (John Stuart Mill, *On Liberty*, 1859)

The main purposes of this study are to use established theories of civic engagement and curricular uses of information communications technologies (ICTs), apply them through an intervention within a dual-enrollment high school curriculum, and analyze how the intervention influences students’ perceptions, espoused values, and stated positions on civic engagement. While established theories and the application of those theories are addressed in Chapter 2, evidence of how the intervention of a social entrepreneurship unit influenced the high school students will be discussed here. Through surveys at the beginning and end of the intervention and individual participant interviews, I explored if the intervention and the multi-user virtual environment (MUVE) in totality caused any shifts in the students’ articulated perceptions, espoused values, and stated positions regarding social justice and social entrepreneurship. Furthermore, I investigated if the intervention caused any changes in the students’ espoused greater commitments to civically engagement. Furthermore, I discuss the students’ attitudes and perceptions of the MUVE.

As reviewed in Chapter 2, applying existing theories of civic engagement in the development of an issues-centered curricular intervention utilized the work of Engle and Ochoa (1988) on issues-centered social studies curricula. Additionally, this study relied on the work of
Kahne and Sporte (2008) on using civic learning opportunities to develop civic engagement in high school students. Additionally, civic engagement was influenced by a number of different skills and experiences through the intervention and in the MUVE as described in Chapter 2 and was captured through the surveys and interviews. The data collected were placed into categories based on the Framework for 21st Century Learning: interdisciplinary literacy, communicating and collaboration, engagement with others to compromise and accomplish common goals, critical thinking and problem-solving, creativity and innovation through the generating new ideas that help benefit communities, and information and ICT literacy. From the student surveys administered at the beginning of the intervention, several conclusions were derived from the survey data. The conclusions were further evident in observations and from the individual student interviews at the conclusion of the intervention. The results are presented and discussed in two main segments: 1) students’ perceptions, values, and positions and 2) analyzing the students’ self-report of the students’ skills and experiences engaging in critical thinking and problem-solving, working collaboratively on the social entrepreneurship projects, and utilizing the MUVE.

**Students’ Perceptions, Values, and Positions**

**The Pre-and Post-Survey and Statistical Tests**

The survey questions on civic knowledge, skills, and dispositions used in the study consist of Likert-type scales. The individual questions found in the tables in this chapter represent items that form a dimension of civic engagement. The questions were adapted from a variety of questions to measure civic engagement in youth. These questions were available to the public through the Center for Information and Research on Civic Learning and Engagement (CIRCLE) as part of the National Center for Learning and Citizenship (NLCC) database. The
survey questions and their scales were tested for reliability and validity by their original developers, including the University of California Berkeley Service-Learning Center, the Carnegie Foundation for the Study of Teaching Political Engagement Project, Kahne, Chi, and Middaugh (2006), and the California Civic Index (see Appendix for more details on the developers and their corresponding questions). According to the CIRCLE, these questions were developed and tested by civic education and learning researchers for “their clarity and meaningfulness in relation to the competencies of civic knowledge, skills, and dispositions.”

To determine the students’ initial perceptions, values, and positions about social responsibility, social justice, and civic engagement, a pre-survey was emailed to the students one week prior to the first lesson of the unit. The students were instructed to complete the pre-survey before they attended the first lesson in person. Fifty-five participants completed the electronic pre-survey prior to the first lesson. A post-survey containing the same questions as the pre-survey was emailed to the students one week after the conclusion of the unit. The students were instructed to complete the post-survey within seven days. Use of the pre- and post-surveys allowed me to determine if any changes occurred in the students’ perceptions, values, and positions based on the intervention. Any movement from the beginning to the end of the intervention in the perceptions, values, and positions of the students’ was determined by comparing the mean responses of the students’ as a whole on the Likert Scale from the pre-survey to the post-survey.

The tables throughout this chapter report dimension of civic engagement, specifically social responsibility, youth responsibility, justice-orientation, civic efficacy, critical thinking and problem-solving, civic organization skills, and social problem-solving skills acquired during a civic-related experience. In each table on civic knowledge, skills, and dispositions, descriptive
statistics of the mean are reported for each item in the pre- and post-survey. The range of
differences and the sum of the differences for each item between the pre-survey and post-survey
means are also reported. The confidence intervals provide an estimate of how likely the interval
contains the population mean. For each of the question items, a 95% confidence interval was
used and reported in the tables. The sum of the differences was calculated by adding all the
participants’ responses for each question item. The paired t-test was used to determine if the
differences in means from the pre-survey to the post-survey were statistically significant.
Statistical tests were calculated using SPSS 16.0. The paired t-test was used since each
participant responded to the pre- and post-survey and could be matched. From the paired t-test,
the p-value was calculated, which indicates how likely the two samples (pre- and post-survey
data) are different and not due to sampling error. Finally, the effect size is included in each table
indicating the magnitude or size of the difference between the two samples, not just whether each
sample from the pre- and post-surveys were different. The effect size was used to provide a more
practical interpretation of the significance of the differences in the pre- and post-survey data. For
this study, I used Cohen’s (1988) suggestions for interpreting effect sizes such that .20, .50, and
.80 represent small, medium, and large effects, respectively. Items in the tables showing a
medium effect size (> .50) are denoted by bold-faced type.

Although the survey items are reliable and validated, there still exists the possibility that
the answers provided by the students were based on their familiarity with me as the teacher.
Moreover, the students may have experienced pressures of social desirability, meaning they
answered the survey items to give the impression that they are socially responsible, are justice-
oriented, and care of the well-being of others. However, the potential for social desirability
existed for both the pre- and post-surveys and movement in the espoused perceptions, values,
and positions of the students as a whole can be considered authentic. It is important to note that the findings from this study provide insight into this particular class of students and are not generalizable. The intervention in this study represents a specific example of using issues-centered classroom strategies and a school-based civic learning experience to try to engender positive civic engagement student outcomes. Furthermore, the individual student interviews also provided deeper understanding of the impact of the social entrepreneurship unit on the student. As discussed in Chapter 3, the students’ perceptions, values, and positions about social responsibility, social justice, and civic engagement were categorized into the following categories: socially responsible citizen, civic efficacy, and justice orientation. Interview participants are identified with a pseudonym to protect student confidentiality.

**Socially Responsible Citizens**

Although there are many definitions of what constitutes a socially responsible citizen, it can be characterized as a person that exhibit values that correspond with individual contributions to the community. Examples of these contributions to the community may include caring for the health of others, helping those less fortunate, and considering the welfare of the community. Schools and curriculum that pursue the development of socially responsible citizens seek to foster positive civic identities and personal responsibility through a variety of means, including character building and active participation in in politics, community, and other civic affairs. The objective of the intervention study was to encourage students to engage in collective actions that address social issues that confront communities and seek ways to solve those issues. Extended further, the development of socially responsible citizens also emphasizes collective relationships and commitment to the common good.
Overall, the survey data reveals that the students espoused high levels of social responsibility particularly when asked about taking care of people, helping people in need, and their own kindness towards others (see Table 4.1 and 4.2). This may very well reflect a selection effect of the students in the dual-enrollment program, since they aspire to careers in healthcare that may attract individuals who hold (or believe that should espouse) those values and positions, and may not be broadly representative of a general youth population. Katherine typifies the high level of personal responsibility when discussing the relationship between her personal values, career choice, and addressing the needs of the community:

I’ve always felt good helping others, especially people who really need the help. Last spring I helped out with Special Olympics through my school’s Key Club. I got paired up with this really cool kid Josh. He has Down Syndrome but being with him that day and helping and entertaining him during his events and while we were killing time between events was one of the best times I’ve had. Things like that and being a part of this program has been a wonderful experience and talking with people while shadowing has helped reaffirm me wanting to become a pediatric nurse.
<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Doing something that helps others in the community is important to me.</td>
<td>5.69</td>
<td>5.80</td>
<td>6</td>
<td>(0.02, 0.19)</td>
<td>.024</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>2. I like to help other people, even if it is hard work.</td>
<td>5.69</td>
<td>5.80</td>
<td>(0.01, 0.19)</td>
<td>0.38</td>
<td>0.28</td>
</tr>
<tr>
<td></td>
<td>3. Helping other people is something everyone should do, including myself.</td>
<td>5.36</td>
<td>5.55</td>
<td>(0.05, 0.27)</td>
<td>0.24</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>4. It is my responsibility to help improve the community.</td>
<td>4.75</td>
<td>4.93</td>
<td>(0.08, 0.29)</td>
<td>&lt;.01</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>5. I am aware of important needs in the community.</td>
<td>3.78</td>
<td>4.35</td>
<td>(0.43, 0.70)</td>
<td>&lt;.01</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>6. Helping other people is something that I am personally responsible for.</td>
<td>5.20</td>
<td>5.36</td>
<td>(0.06, 0.26)</td>
<td>0.07</td>
<td>0.41</td>
</tr>
<tr>
<td></td>
<td>7. Being actively involved in community issues is my responsibility.</td>
<td>4.51</td>
<td>4.98</td>
<td>(0.34, 0.61)</td>
<td>&lt;.01</td>
<td>0.69</td>
</tr>
<tr>
<td></td>
<td>8. Being concerned about state and local issues is an important responsibility for everybody.</td>
<td>3.47</td>
<td>3.95</td>
<td>(0.35, 0.63)</td>
<td>&lt;.01</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>9. In the next three years, I expect to participate in political or social causes to improve the community.</td>
<td>1.67</td>
<td>2.07</td>
<td>(0.27, 0.53)</td>
<td>0.02</td>
<td>0.63</td>
</tr>
<tr>
<td></td>
<td>10. Everyone should be involved in working with community organizations and local government on issues that affect the community.</td>
<td>3.58</td>
<td>3.95</td>
<td>(0.23, 0.49)</td>
<td>0.03</td>
<td>0.61</td>
</tr>
<tr>
<td></td>
<td>11. In the next three years, I expect to be involved in improving my community.</td>
<td>1.93</td>
<td>2.42</td>
<td>(0.35, 0.63)</td>
<td>&lt;.01</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Note: Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.
The highest scoring items in the social responsible citizens dimension were items #1 and #2, which indicated the espoused value of helping others. Although many of the students indicated that helping others in the community is important and that it is something they claim are their personal responsibility, the comments of one of the students interviewed demonstrated disagreement with that espoused belief. Andrew stated that:

I consider helping others as a choice, not necessarily because I have to do it or it is something that I am responsible for. Me and my parents talked about this a couple of times. I think that some people are motivated by the benefits they get from helping others. Like some doctors are in it for the money or the prestige. Does it really matter if they really like helping people or not? I’m not so sure.

When pressed further about his observations, he continued:

It like that saying, the ends justify the means. As long as people are helped, does it matter if they morally or ethically driven to help people? Does it matter if they really care about others? That’s not to say that I don’t personally care about helping others. I do. It’s just that we’ve all heard people talk about how doctors should want to become doctors because they should want to help people. I just think there are other valid reasons for wanting to become a doctor.

Andrew’s statement raises concerns from the students’ perspective that being socially responsible, as in those in the healthcare professions, is a prerequisite for helping others. Additionally, Andrew was quick to add that he does personally care about helping others, despite questioning the need for doctors to have a commitment to social responsibility. Andrew’s comment potentially indicates issues of social desirability in the study, where individuals care about the perceptions of others and are unwilling to reveal their true beliefs, especially those that
may not be socially acceptable. Specifically, during the interviews and the pre- and post-surveys, the students’ could have espoused attitudes toward social responsibility and other civic dispositions that they did not truly have in order to gain what they believed would be a favorable perception of them from me as the teacher and researcher.

Students’ initial responses to items #5, #8, and #10 of the social responsibility dimension on the pre-survey were the lowest, with the mean result of students slightly disagreeing with the statements. Both items characterize similar knowledge or awareness of community issues and whether those issues are important dimensions of social responsibility. The lack of awareness of community issues was evident in the classroom deliberations, the students’ collaboration on the social entrepreneurship project, and the interviews. Several factors could have contributed to this lack of awareness as Kali stated in her interview:

When we were discussing different things in class, I realized that I really didn’t know much about my community as I probably should. At least for me, if it doesn’t affect me directly, I don’t think much about it. I guess I just take things for granted. Things like a quiet neighborhood when I need to do homework at night. Or even being able to go outside and go for a walk in the evening with my dog and feeling safe doing it. Or when I need to do meet up with my friends to study, I can drive there or my mom or dad can. You know, being in this program helped me understand that a bit better when I saw some of the guys in my class having to share rides.

The notion of “taking for granted” the privileges the students may enjoy and not being aware of community and social issues was also expressed by several other students. Additionally, Katherine stated that community issues were rarely discussed in her classes in her
school but that her participation in outside groups. More specifically, her membership in her church’s youth group provided a forum where those issues were raised and discussed.

In my classes, community issues were just something we hardly ever talked about, unless it happened to be used as part of our current events discussions. That almost never happened though because almost always talked about big international things happening. And the times that there’d be something interesting in the local news, the kids in my classes didn’t seem all that interested in them. Where we did talk about those local issues was in my youth group. It was great. Even though the people that go to my church are pretty well off, my pastor got really excited about partnering with our ‘sister’ church in the city and that it was our responsibility as Christians to help out in the city for those less fortunate.

While the increase in the mean for items #5, #8, and #10 were statistically significant, only item #5 resulted in the students agreeing with the statement after the intervention. Additionally, item #5 represented the greatest change in the social responsibility dimension. Items #5, #7, #8, #9, #10, and #11 showed a medium effect size while all the remaining items describing social responsibility showed a small effect size. The results suggest that the intervention may have had a positive impact on the students’ awareness of community needs. Specifically, the interviews suggest that the social deliberation had the largest influence for this change. Andrew stated that the deliberation with the other students “helped me to get a better handle of what problems are in my community” while Emily asserted that hearing from her classmates from less affluent schools in the dual-enrollment program “gave me a bigger perspective of what disadvantaged people in my community experience. Similarly, Sarah claimed that although her parents have tried to talk about social issues in her community, “it
didn’t sink in until I heard it right from people my age.” Sarah expands on this by describing her experience hearing from two students from Dieruff, one of the less affluent city schools in the dual-enrollment program. She noted that:

The discussion we had in class were the most beneficial to me because when Angela and Beth talked about how they’ve seen friends from elementary school get caught up in the city and gang culture, it made me think about how there’s so much I don’t know about what goes on here in the Lehigh Valley.

Sarah also explained how Angela and Beth both expressed and agreed with each other that they “wished” that others outside of the city would “put more effort” in “understanding and doing something about” the problems they experience in the city. Based on the interviews of the students, most of who are from more affluent schools, it is possible that privilege and affluence may affect the espoused social responsibility values of the youth in this study and how they view others’ social responsibility. Sarah’s commentary of what Angela and Beth said during the class deliberations serve to highlight possible differences in how students of different socioeconomic environments express their view of others’ social responsibility in items #8 and #10.

Unfortunately, because of the random selection of participants for the interviews, no students from either of the two city schools were interviewed.

It is interesting to note that the students referenced the classroom discussions as influencing changes in their espoused values of social responsibility rather than the social entrepreneurship project. In fact, the only mentions of the social entrepreneurship project occurred when the students talked about the discussion of what issues their groups would address as part of the social entrepreneurship project. It would seem that the issues-centered deliberation had the greatest impact on the espoused values of social responsibility of the students in this
study. However, not all students articulated positive influences of the intervention, specifically of the issued-centered deliberation. Mark stated that:

The talk in class about different issues didn’t do much for me. I mean, it’s fun getting into debates with others, but I’m not sure I learned much from it. I’m a more straightforward kind of learner, you know? I actually learn better through lectures where I know exactly what I’m supposed to get out of the class that day.

Mark expressed the strongest language when describing his doubts about the issues-centered deliberation. Furthermore, Abigail also articulated similar reservations albeit less categorically. She voiced her uncertainty regarding any positive influence of the issues-centered deliberation by stating:

My friends in the class seemed to learn a lot from the discussions we had in class. For me though, I don’t know. I feel like I already think a lot about my responsibility to help others and such.

The hesitation of both Mark and Abigail suggest that the issues-centered deliberations, while viewed positively by many of the students as exposing them to community issues they may not have previously been aware of and increasing their espoused social responsibility to their community, may not be as impactful for some students.

Despite the students’ claim that they have a strong sense of social responsibility and value helping others, they indicated in items #9 and #11, as well as in similar questions about involvement in civic improvement activities or action, that they are unlikely to take action for social change. Indeed, the students in this study most strongly disagreed with any items stating they would engage in civic action in the next three years. In the post-survey results, there were positive and statistically significant shifts indicating the students were more likely to participate
or become involved in civic action. However, the mean result of espoused values for civic action in the near future remained in the disagree categories. The consistently small standard deviations in these items indicate widespread uniformity among the students on this issue. This indicates that the intervention was not enough to overcome the barriers to civic action in the students’ near future. Several factors could contribute to the unlikelihood of civic action by the students in this study and are supported by the interviews. Primarily, many of the students communicated in the interviews that the academic workload of their college classes would be their chief focus in the next three years. Conversely, it appears that those students that were already actively involved in civic activities like volunteering and community service were more likely to engage in civic action.
### Table 4.2
**Youth Responsibility**

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Young people can play an important role in making their communities better.</td>
<td>3.58</td>
<td>3.98</td>
<td>22</td>
<td>(0.27, 0.53)</td>
<td>0.03</td>
<td><strong>0.64</strong></td>
</tr>
<tr>
<td>2. It is good for democracy when young people are obligated to help people in the community.</td>
<td>4.87</td>
<td>4.96</td>
<td>5</td>
<td>(0.01, 0.17)</td>
<td>0.15</td>
<td>0.27</td>
</tr>
<tr>
<td>3. Young people have a responsibility to help people in their communities.</td>
<td>3.65</td>
<td>4.13</td>
<td>26</td>
<td>(0.34, 0.61)</td>
<td>&lt;.01</td>
<td><strong>0.69</strong></td>
</tr>
<tr>
<td>4. Young people have a responsibility to help solve environmental problems in their communities.</td>
<td>3.04</td>
<td>3.62</td>
<td>32</td>
<td>(0.45, 0.72)</td>
<td>&lt;.01</td>
<td><strong>0.77</strong></td>
</tr>
<tr>
<td>5. Young people should be involved in working with community organizations and local government to improve their communities.</td>
<td>3.93</td>
<td>4.01</td>
<td>21</td>
<td>(0.25, 0.51)</td>
<td>&lt;.01</td>
<td><strong>0.62</strong></td>
</tr>
</tbody>
</table>

*Note:* Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.

Interestingly, the findings in Table 4.2 that describe the students’ espoused beliefs about the importance of youth in helping others and the community suggest that they are less confident about the role of youth in community improvement. With the exception of item #2, the students overall disagreed with all items about youth responsibility. As Katherine observed in the interview, a possible reason for this is that youth do not feel their input is valued.

It’s tough for teens like us to really feel like we’re making a difference. Real difference has to come through Congress and laws. What I might do myself in the community isn’t
going to make much of a difference, except maybe for a few people. Things like that movie where the kid’s class project to pay it forward doesn’t happen very often. This is consistent with prior research that suggest that increasing civic engagement in youth, especially at the community level, relies on ensuring youth feel their contributions are meaningful and valued. The students consistently conveyed their belief that the social entrepreneurship project helped them see that people working together to influence social change is valuable. Increases in the mean for items #1, #3, and #4 were statistical significant yet still low, with only item #3 showing a shift from student disagreement in the pre-survey to agreement in the post-survey. However, items #1, #3, #4, and #5 showed a medium effect size while item #2 showed a small effect size. These results suggest that the intervention did lead to some positive shifts in the students’ espoused attitudes and perceptions of youth responsibility.

This finding is also consistent with the experiences of students who already actively engage in social change with other youth. Again, Katherine’s involvement in her church’s youth group suggests that opportunities for youth to work together collaboratively to identify social issues and enact social change in the community are beneficial to improving civic engagement in youth.

In my youth group, our youth pastor challenged us to come up with a community service project among ourselves. It was kind of like what you were having us with the social entrepreneurship project. What I thought was cool was that I working with the others in the youth group, we were able to come up with these cool ideas and people got really excited about it. We decided to get our younger brothers and sisters and their friends to donate their soccer cleats at the end of the fall or spring season. We collected these cleats to give to inner-city kids that can’t afford them. It was a similar idea that we thought of
for underprivileged women who want to get into a nursing career. We would set up a program to collect used scrubs and work shoes like Danskos.

James expressed similar values about personal responsibility of himself and his peers in the dual-enrollment program:

Of course, yes I think it is important that physicians, nurses, and others in healthcare really want to help others. I mean, why else would you want to want to do it? You’ve got to be someone that likes working with people, no matter whether they’re middle class, or poor, or rich. Being in healthcare means that when there’s a person that’s sick and needs help, you not only help them, you really want to help them, you know?

From the post-survey, the data suggests that the intervention had a marginal effect on the students’ position on social responsibility. For items where the students espoused an initially high degree of social responsibility initially (e.g., item # 1, #2, #6, change in their stated positions was statistically insignificant. However, it is interesting that while the students rated themselves very highly on most components of personal responsibility, they were not as inclined to feel personally responsible for keeping the community clean and safe. After the social entrepreneurship unit, there was a significant positive change in how the students positioned themselves on their personal commitment to community cleanliness and safety. Emily discussed this position change by saying:

At first I didn’t think that this question applied to me much. Environmentalism never really was my thing, you know? Like, I often don’t recycle or anything like that. It just wasn’t that important to me. But after learning more about the determinant of health and especially listening to the others in the class talk about how the environment around us really does make a difference in our health, it just clicked. Because I want to be a PA
(physician’s assistant), the health of patients are really important, and making sure that they have good, clean environments to prevents the spread of diseases and sickness and things like that really are very very important. I think I get it now. I just never had thought of it that way.

Similarly, Andrew concurred with Emily’s perception and position change on the importance of environmental issues to the community as part of an individual’s social responsibility, asserting that:

When we discussed the cleanliness of the environment and how poorer areas are less sanitary than more well-to-do areas, it was like a realization for me. It isn’t something I valued much before. Probably because people in my neighborhoods take such good care of the area around them. Like recycling and properly disposing of trash. Now that I think of it, driving through some of the poorer areas of Allentown, I can see why this is an important issue and how it might affect the overall health of the community.

**Justice-Orientation**

An individual’s values and positions regarding social responsibility are influential in their justice-orientation. Characterizing the students’ justice orientation was more difficult. A student’s justice orientation is based on values and positions regarding issues of injustices the importance of pursuing social justice. As described in Chapter 2, social justice builds on perspectives like those of Freire, Rawls, and McIntyre, where the individual orientation emphasizes commitments to social change by critically analyzing and addressing social issues and injustices. In particular, justice-orientated citizens would look at the problem of high health risks in low socioeconomic demographics and question what societal factors lead to a greater prevalence of those high-risk populations.
Table 4.3  
Justice-Orientations

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When thinking about what needs to be done, I often focus on the root causes of social problems.</td>
<td>3.71</td>
<td>4.18</td>
<td>26</td>
<td>(0.34, 0.61)</td>
<td>&lt;.01</td>
<td>0.69</td>
</tr>
<tr>
<td>2. In the next three years, I will work to promote justice.</td>
<td>1.93</td>
<td>2.36</td>
<td>24</td>
<td>(0.30, 0.57)</td>
<td>&lt;.01</td>
<td>0.67</td>
</tr>
<tr>
<td>3. I think it’s important to work for positive social change.</td>
<td>5.31</td>
<td>5.55</td>
<td>13</td>
<td>(0.12, 0.35)</td>
<td>0.06</td>
<td>0.47</td>
</tr>
<tr>
<td>4. In the next three years, I will work with others to evaluate and try to change unjust laws.</td>
<td>1.25</td>
<td>1.80</td>
<td>30</td>
<td>(0.41, 0.68)</td>
<td>0.03</td>
<td>0.73</td>
</tr>
<tr>
<td>5. By organizing and participating in protests, people make society better.</td>
<td>4.56</td>
<td>4.98</td>
<td>23</td>
<td>(0.28, 0.55)</td>
<td>0.07</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Note: Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.

Although the survey data suggest that the students value working toward positive social change is important (see Table 4.3), their conceptualization of social justice is underdeveloped and nebulous. Indeed, several students interviewed confirmed this. Sarah commented that:

Of course my one teacher in 10th grade talked about justice, but mostly it had to do with the Civil Rights movement and equality for all types of people. Or we learned about justice as part of the law. You commit a crime, you got the consequences under the law. That’s justice. But it never seemed that personal to me. I had always thought that justice would apply to me if I wanted to become a lawyer or politician or something like that.

Another student, Lea, stated that:

If you had asked me what social justice was even a month ago, I would have had no idea what to say. I think of justice as following the letter of the law or what’s written in the
Constitution. That’s how I learned it in my social studies class. If you really wanted me to give you a definition of social justice, I would have said that it is how society views the laws and what is considered to be normal practice. But like I said, I would be trying to define it out of nothing.

Similar to the findings in CIRCLE’s (2012) study *That’s Not Democracy: How Out-of-School Youth Engage in Civic Life & What Stands in Their Way*, the students in this study, while indicating that they consider being actively involved in community is their individual responsibility, they did not plan on being involved in action to improve their community, try to change unjust laws, or promote justice. Items #2 and #4 were similar to previous dimensions of civic engagement in that the students’ indicated substantial disagreement that they would engage in activities for social change or promote social justice. However, items #1, #2, #4, and #5 showed a medium effect size, suggesting that the intervention led to movements in the student’s espoused attitudes and perceptions of social justice despite their overall disagreement with the statements after the conclusion of the intervention. Lea’s and Sarah comments regarding their understanding of social justice describes one factor of why students may be unlikely to pursue action toward social change or social justice. Although I sought to allow and encourage the students to construct their own understanding and position on social justice, it also may have contributed to the students’ unresolved conceptualization of social justice. Lea explained this further:

Even now I’m still not quite sure how to go about doing something about social justice. I get the social determinants of health, the stuff about inequalities and all. But it seems to me that those are really big problems that require lots of people, important people, to get it solved. Being young and just finishing high school, I don’t think I’m at the point yet
where I know where and how to get involved about social justice. I still don’t even think I really all that much about any particular issue yet. Isn’t that what is needed for social justice? For someone to really care about an issue?

In item #5, students’ indicated that their espoused values of protests make society better. Katherine expressed her disagreement regarding protests as a means of affecting social change.

For me, I don’t like the idea of protests. I understand that in America our laws are well developed for democratically getting at change, unlike in some places around the world. But I look at the protests in the Middle East and it seems like it just leads inevitably to violence. Even peaceful protests, like those of Martin Luther King or Gandhi, sometimes leads to people physically hurting each other on both sides. And even things like labor unions striking can be very disruptive to everyone else, that it creates inconveniences for a lot of other people that aren’t even involved. I think there are better ways to get at social change.

Rachel stated that:

Problems in our society are very complicated. I basically knew that before you had us do this project. But it also made me think that social justice is not so simple either. When we talked about the social determinants of health and their causes and how they affect the health of different groups of people, it made me aware of how different things contribute and add up to form the problem. But that makes social change very hard to do as well, you know? How can we do a project like you wanted us to do if there are lots of different things that make the problem a problem? I don’t know. I don’t think I’m explaining myself very good.
Rachel’s comments provide insight into how difficult it can be for youth with little experience examining and analyzing complex social issues to form a clear understanding of social justice. The uncertainty of how to define social justice makes civic action to improve their community, change unjust laws, or promote social justice problematic. As Rachel’s struggle to articulate her understanding of social justice exemplified, the ambiguity of what social justice is has implications for civic engagement outcomes that are based on social justice or social change.

Kali also articulated her espoused values on social justice, although changed, are still being formed. Specifically, her comments during the interview reinforced the idea that while defining and constructing an understanding of social justice can be learned relatively quickly, taking action for social justice is relatively more difficult. Although she stated that she felt more confident in her understanding of what social justice is to her and expressed interest in working to promote justice in the next three years as she prepares for a career as a nurse, she noted that “it’s interesting after we had talked about social justice in class and debated what it meant to all of us, many of us came up with different definitions” and that she “had no idea what it meant when it was first brought up.” She articulated that her understanding of social justice was “better now after I’ve had the chance to hear what the others in the class thought,” implying that her peers’ understanding and conceptualization of social justice influenced how she herself came to understand social justice. When pressed further about whether she planned action to promote justice or enact social change, Kali voiced uncertainty:

I’m still not quite sure what that means for promoting justice or whatever. As someone who will be helping others by providing medical care, I’d like to do something to make the lives of the patients in my community better. The social entrepreneurship idea is one way I guess, but I don’t think it’s how I would go about it. I guess I could volunteer or
something like that, but I don’t think that really gets to the bottom of the some of the bigger problems like the inequities we talked about in class.

Civic Efficacy

When trying to understand the students’ perceptions, values, and position about social responsibility, social justice, and social entrepreneurship, it is important to consider their individual civic efficacy to get a sense of whether they feel empowered to pursue civic action for social change or to improve their communities. Table 4.4 shows data indicating that the students as a whole did not feel that they had the power to make a difference in their community or had enough influence to impact community decisions prior to the intervention of the social entrepreneurship unit.

Table 4.4
Civic Efficacy

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel I have the power to make a difference in the community.</td>
<td>3.58</td>
<td>4.53</td>
<td>79</td>
<td>(1.20, 1.67)</td>
<td>&lt;.01</td>
<td>0.86</td>
</tr>
<tr>
<td>2. I believe I have enough influence to impact community decisions.</td>
<td>2.89</td>
<td>3.80</td>
<td>50</td>
<td>(0.68, 1.14)</td>
<td>&lt;.01</td>
<td>0.73</td>
</tr>
</tbody>
</table>

Note: Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.

Andrew, in discussing the disconnect between his espoused commitment to social responsibility, community, and helping others, noted that:

I understand that trying to improve our community and society impacts the overall health and well-being. I think most of us realize that to some degree or other. But trying to make a difference as high school students is tough. Yes, some of us do volunteering with our
youth groups at church or thing like that but I don’t think that I could do that on my own.

I just don’t think that to really make a difference, kids like us aren’t really taken seriously. Even if we have great ideas.

Andrew exemplified the students’ perception that the structure of their communities gave them little confidence that they could pursue meaningful social change. More specifically, their communities’ processes for civic action are often perceived as being primarily available to adults. The students do not feel that they do not receive enough recognition for civic work that they may do. This perception is consistent with the prior research (CIRCLE, 2012).

After the intervention of the social entrepreneurship unit, however, there was evidence of statistically significant positive changes in the civic efficacy of the students. Additionally, of the two items describing civic efficacy, item #2 showed a medium effect size while item #1 showed a large effect size.

Specifically, the students as a whole agreed with the statement that they have the power to make a difference in the community after the intervention. Similarly, the students as a whole disagreed less with the statement that they have enough influence to impact community decisions. The findings from the two items on civic efficacy suggest that the intervention had a positive impact on the espoused sense of empowerment in the students. As previously noted, there were high levels of social responsibility and interest in helping others espoused in the pre- and post-surveys and interviews.

**Students’ Attitudes and Perceptions of Their 21st Century Skills**

The discussions up to this point have concentrated on the students’ espoused perceptions, values, and positions on social responsibility, youth responsibility, social justice, and civic efficacy. What was evident was that many of the students’ expressed high levels of individual
social responsibility and interest in helping others yet indicated that at present and in the near future they did not expect to take action to improve their communities or to promote justice or social change. The following sections examine the impact, if any, of the social entrepreneurship unit on the students’ “21st century skills” as articulated in the Framework for 21st Century Learning and their articulated changes, if any, about their critical thinking and problem-solving skills in the issues-centered unit and in the MUVE as part of the social entrepreneurship project.

**Critical Thinking and Problem-Solving Through an Issues-Centered Model**

Important to the conceptual framework of this study established in Chapter 2 is an issues-centered curricular model and social justice. These are addressed by the Framework for 21st Century Learning’s emphasis on students’ ability to communication and collaboration with not only their peers in school but with others. Specifically, the Framework for 21st Century Learning asserts that students should be able to communicate effectively and engage with others in a spirit of compromise to accomplish common goals. These include the ability of the students to “articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts, use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade), use multiple media and technologies (e.g., MUVEs), demonstrate ability to work effectively and respectfully with diverse teams, and exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal” (Partnership for 21st Century Skills, 2012). The literature on how best to teach civic learning outcomes focuses on deliberation to help develop students’ higher-order critical thinking and problem-solving skills as necessary components for effective development of engaged citizens (Engle & Ochoa, 1988; Parker, 2008). The dual-enrollment students in this study had a significant amount to comment on regarding the social entrepreneurship unit, the
collaborative project, its intentions, and the MUVE. Their remarks revealed insightful and reflective insights into what kind of pedagogy were effective and the problems they experienced. This is important from a pragmatic perspective and for this study in the students’ insights offer practical suggestions and implications for curriculum development, teachers practices, and use of technology for greater civic development in school. Importantly, this unit was done outside of the typical social studies curriculum. Overall, the students indicated that they felt that their critical-thinking and problem-solving skills were good prior to the social entrepreneurship lesson with the students agreeing with the dimensions of three of the four items assessing critical thinking and problem-solving. However, the students as a whole indicated that the largest improvement occurred in the ability of the students to explain social and political issues to other in item #1. Indeed, only item #1 showed a medium or greater effect, although the other three items describing critical thinking and problem-solving showed a small effect size. It has to be noted that potentially the students’ ability to explain their ideas about social and political issues may be limited to the issues related to healthcare and not necessarily more broadly reflective of social and political issues in general.
Table 4.5
Critical Thinking and Problem-Solving

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can explain my ideas about social and political issues to others.</td>
<td>4.60</td>
<td>5.11</td>
<td>28</td>
<td>(0.32, 0.70)</td>
<td>&lt;.01</td>
<td>0.59</td>
</tr>
<tr>
<td>2. I can weigh the pros and cons of social and political issues from different positions.</td>
<td>5.09</td>
<td>5.42</td>
<td>18</td>
<td>(0.15, 0.50)</td>
<td>0.08</td>
<td>0.44</td>
</tr>
<tr>
<td>3. I can gather information about social and political issues from different sources.</td>
<td>5.36</td>
<td>5.69</td>
<td>18</td>
<td>(0.14, 0.52)</td>
<td>0.07</td>
<td>0.42</td>
</tr>
<tr>
<td>4. I understand articles in the newspaper about social issues and politics.</td>
<td>5.67</td>
<td>5.91</td>
<td>13</td>
<td>(0.12, 0.35)</td>
<td>0.08</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Note: Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.

Based on observations of the students during the class and comments from most of the student interviewed, the students seemed to be engaged during the semi-structured, issues-centered discussion design of the unit, the breadth and depth of the discussion topics, and to the ways in which the topics were relevant to the healthcare career aspirations of the students. They recognized that the social entrepreneurship unit was ambitious and different from what they typical were accustomed to; they respected the pedagogical method even if they initially were overwhelmed with what they were asked to do. Emily expressed her initial apprehension about the deliberation:

   When we were first introduced to the [social entrepreneurship] project, I was nervous about the discussions expectations that you had of us. Some of the other students talked about it after the first class and they said the same things. Some of my classes in my home school had discussions, mostly my social studies or English classes. But it was
usually the teacher who picked the topics and it was rarely controversial. And honestly, the teachers had a hard time getting people to talk deeply about the issues. The teacher ended up doing most of the talking.

Similarly, Rachel stated that:

In my other classes, not just this year, whenever we had discussions, it sometimes got heated. Especially when someone clearly had strong political views. Sometimes it was amusing to watch the few students get into it, but sometimes it went too far and one person would say something personal that had nothing really to do with what was being discussed. That’s the problem with difficult topics and often my teachers would just avoid the topics altogether just to make sure nothing got out of hand.

The statements of Rachel and Emily are consistent with prior research regarding controversial issues in social studies lessons. Kahne, Westheimer, & Rogers, 2000) found in their study that 80.7% of lessons they observed did not identify any social problem while in only 8.1% of the lessons, a social problem was identified, root causes analyzed, and suggestions to solve the problems offered by the students. Moreover, although a small percentage of the lessons observed by Kahne et al. (2000) examined at least one social issue, none of the multitude of classes asked the students to analyze evidence or theories regarding causes and solutions to the problems (Kahne et al, 2000). Discussions of social issues in the classroom are often trumped by historical chronology, facts, and narratives. Yet the students as a whole in this study expressed that they enjoyed discussing social issues in the class and among their peers.

However, there were two instances where discussions of social issues became potentially disruptive and counterproductive to developing the students’ skills in critical thinking and analyses of issues and their root causes. The first instance involved the issue of teenage
pregnancies among minorities in Allentown school community. One of the male students made an offhand remark about Puerto Rican girls that exemplified cultural stereotyping that elicited not only angry retorts from the students from the Allentown schools (Dieruff and William Allen) but also from some of the other females students from other schools. Notably, a few jokes were made by other students to try and provide levity to the situation but only served to antagonize the offended students more. In the second instance, the issue of healthcare and job opportunities for undocumented immigrants produced strong opinions and statements from several students. However, the second example did not produce as much tension in the classroom as the first. In both occurrences, I had to intervene in the discussions by interrupting the students speaking and to explain the need for the students to use evidence to support their arguments and to refrain from using emotion or prejudices. The guidelines for deliberation in an issues-centered social studies curriculum as outlined by Wraga (1986) and discussed in Chapter 2 served as a useful strategy for maintaining a classroom environment that is open, balanced, inclusive, and respectful. Even so, I felt uncomfortable with the direction of the discussion when I reflected on the two instances.

Furthermore, I was aware that the because of the heated nature of deliberation, many of the students in the class were also uncomfortable. Indeed, I observed that the level and quality of the participation had dissipated substantially. Rachel, who had described the potential for problems when using deliberation of social issues in the classroom, remarked on how the heated nature of the deliberations during the social entrepreneurship unit caused her to feel uncomfortable:

Yeah, that time when we were talking about teenage girls and pregnancies was not fun.

There’s a couple of other times too that I felt thing might get out of hand. I mean, you did
a good job of keeping everyone in line, but sometimes people say stupid things at stupid times. I didn’t like it, but when people started to raise their voices, I just wanted to stay out of it, so I just talked to my friend Sarah about hanging out after school.

Likewise, Lea expressed how some of the discussions were uncomfortable for her, especially when her peers argued “vigorously” and with “obvious political beliefs.” She noted that some discussions caused her to become less willing to participate in the discussions:

I’m non-confrontational, so when a couple of the people in our class really went at it. I mean really went at it, I was slightly amused but there was no way I was going to make a comment that would make them turn on me. I like discussions and all, but sometimes it gets to be too much. Other times though, I loved getting into the debate.

Andrew, on the other hand, disagreed with Rachel and Lea, stating that the tensions created by the debate over controversial issues “are good for people to be able to handle disagreements” and that it is “important to be stick to your guns” on ideological values, beliefs, or opinions. The observations I made in the classroom as part of the issues-centered discussions and deliberations statements from Rachel, Lea, and Andrew, underscore why classroom teachers often avoid discussing potentially controversial social issues in class and the negative effects it can have on the classroom environment and the students. Although it seemed like I managed the two instances appropriately based on Wraga’s (1986) guidelines for dealing with social issues in the classroom, there seemed to be a definite effect, on the students.

Despite the controversial nature of some of the topics and the tension it created in the classroom, several students noted that in particular the experience with an issue-centered format changed their level of engagement. Indeed, the issues discussed were mainly student-driven with some teacher facilitation to probe for deeper analysis or to involve other voices in the
deliberation. Most tellingly, it also changed their levels of confidence in their own ability to engage in deliberation. Katherine noted,

I never really wanted to speak in class, but the class discussions really made me want to engage the comments of my classmates—they sometimes made me mad—and to get my perspectives across. I found that I cared more about this class than any other, which is sort of funny because I didn't really always like the topics but you could see that because we came up with the topics, most of us wanted to talk about them.

In particular, students spoke at length about how individual the teaching style of different teachers, including both their home schools and this unit in the dual-enrollment program, encouraged or discouraged further engagement on social issues. The social entrepreneurship unit allowed students to reflect on their own assumptions about social issues affecting the health of communities and to share prejudices, misconceptions, and ignorance of those social issues. The U.S. Health and Human Services *Healthy People 2020 Framework* in particular offered a useful foundation for this type of deliberation. In speaking about social disparities related to disparate abilities of lower socioeconomic individuals to know and be able to access health information, Kali noted,

It was really eye-opening listening to my classmates and debating with them about what it means to have different abilities to access health information. I obviously took for granted that I had such an advantage over a lot of kids and families around here, especially things like internet, a laptop, and iPad at home. It didn’t really occur to me that others don’t have the same things I do. I mean, I knew but really never thought about it that way. It has really forced me to think about how lucky I am and to rethink how I view patients and the problems they might have in taking good care of their own health.
In this case, Kali acknowledged her privileged position within society but also started to form a clearer understanding and perspective of those less fortunate. Though Kali demonstrated how the issues-centered curricular model resulted in positive civic outcomes related to greater appreciation of social justice and justice-orientation, she was not the only student interviewed that began to consider more deeply the inequities in their communities and society. On the same point, Katherine stated,

   Discussing the things that impact a person’s health really engaged me and made me think about my own motivations to become a nurse. Having the opportunity to state my opinions, and to defend my own positions and to consider the perspectives of others in the class, made me more confident in my ability to think about these issues.

Her comments are noteworthy because they address the student’s perspectives on civic skills and the improvement of those skills through deliberation. What this tells us, in addition to the survey data, is that deliberation can improve critical thinking and problem-solving. This same was further highlighted by Mark, who stated,

   The discussion format was unlike any course I have ever done in my home school. While we covered issues and ideas, I truly felt that the course was not about content—this was really exciting since it allowed me to focus on what was being said and the arguments that were being developed. I learned so much more from this course than content. I really think that I began to learn how to think. I think that the style of teaching, questions and stuff, really forced this on me and while I hated it at first, I really grew to value the way we were pushed to engage each other and to defend our ideas.
Abigail made a similar statement:

The things that I most liked about the unit is that my and the others’ opinions seemed to count. That and the things that we talked about were issues that were very important to our future careers in healthcare. Things like what causes people to have significant health risks like diabetes, cardiovascular disease, or obesity. What made us really think was how things like poverty, neighborhoods, unemployment, family and relatives, all play into those risks. Before I would have never really thought about those things when thinking about patients that I might see as a doctor someday. That is why I feel that what we learned over the last couple of weeks helped me to really see that from a new angle. It really made me want to find out more and to become better aware of the community around me. Things in the news are now different to me. I look at what is happening in the news, with things like Obamacare and politics, and I now sometime discussing it with my parents where before I would have never really cared or thought much about it.

This is a clear articulation of the potential power of issue-driven curricula and the power of deliberation in an issues-centered curricular model as a tool for developing the skills needed for active civic engagement. It also reveals indications of growing civic values and positions development and increased comfort and confidence examining and engaging in dialogue about social issues, especially those that are controversial. As scholars like Levine (2007), Westheimer and Kahne (2008), and Parker (1990) argue, exposure to complex dimensions of citizenship, namely the analysis and evaluation of civic issues, requires specific training and the ability to engage the deliberative aspects of discussion.

Mark’s comments indicate possible effects of this and how it can potentially influence a youth’s attitude and perspectives to issues in contemporary society. Both Katherine and Mark
reflected on the experience as important in their cognitive and civic development. Moreover, all 
the students interviewed commented on the social learning that occurred in the deliberation in the 
issues-centered format. Katherine also mentioned how critically examining the social 
determinants of health and healthcare forced her to see the world differently and how, as students 
debated the realities of it, she was forced to re-think many assumptions about equity and fairness. 
Indeed, the majority of the students expressed to some degree in the interviews that discussing 
issues relevant to their desired careers in healthcare was especially engaging.

According to the *Framework for 21st Century Learning*, critical thinking and problem-
solving skills requires students demonstrate the ability to be able to make difficult decisions and 
solve problems in innovative ways. In this study, the critical thinking and problem-solving skills 
represent necessary higher order thinking skills needed for social entrepreneurship as an 
expression of active civic engagement. It is important to note that the students in this study are 
generally high achieving high school students as evidenced by their class ranking and GPA. The 
students are more exhibit a greater willingness to engage in the social entrepreneurship project. 
However, several of the students interviewed expressed their apathy toward the collaborative 
project even though they completed all requirements.

A curriculum that promotes and develops critical thinking and problem-solving combines 
the ideas related to social issues and conditions with an intellectual and values dimension to 
develop higher-level thinking and decision-making skills. Data from the pre-unit survey suggests 
that the students were uncomfortable with examining social problems and were especially weak 
at identifying and ways of addressing community problems and how action by groups can solve 
social problems. Katherine commented on this lack of problem-solving skill and the 
improvement in that skill through the unit:
In my classes we normally wouldn’t go into too much about social problems. The classes that we had, with the discussions, working together on the project, and all, was beneficially for me for understanding how to really look at and question social issues. In my group, we all researched lots of different sources and some of us had really really different views on our chosen issue of childhood obesity. But we considered a lot of the perspectives out there, and it took lots of discussion and compromise to come up with a solution to try and solve, or at least address, the issue. That’s not something I would have done earlier this year.

Fundamental to critical thinking and problem solving is the ability to judge the reliability of various sources of information, including first-hand experience and research-based information as well as to make reasoned judgments where the evidence is conflicting or where there is conflict between desired values.

**Information and ICT literacy**

A premise common to the idea of 21st century skills is that students need to be competent in the use of information and ICT literacy. The *Framework for 21st Century Learning* describes this as students’ ability to access and evaluate information effectively, create and using media as a tool for sharing ideas, and work with other to solve problems, and using digital technologies to accomplish civic priorities. At the end of the social entrepreneurship unit, the post-survey instrument included a series of questions to try and determine whether MUVEs are viable educational tools that students can use for a broad range of tasks and purposes. The results are displayed in Tables 4.8. The response scales of the questions regarding technology and those focused on civic perceptions, values, and positions discussed earlier in the chapter are different. Since each was adapted from measurement instruments with different scales that had been
previously tested for reliability and validity, I chose to maintain those scales originally used. As discussed in Chapter 2, students use MUVEs very infrequently in a school setting and rarely in social studies classes. From a pragmatic perspective, I was interested in collecting data that would provide insight into whether MUVEs could be practical for social studies educators to implement in their own classrooms.

The survey data suggests that the students had mixed feeling toward the use of MUVEs. Students generally indicated that while in the virtual environment they were engaged by the technology but not overwhelmingly so. Some of the lack of engagement in the MUVE can be explained by their lack of experience with technology inhibited their engagement in the virtual environment. Katherine articulated the relationship between the lack of experience with technology and her engagement in the virtual environment, stating: “I’ve never been in a virtual environment before and for the first day or two, I was pretty intimidated by it.” Conversely, Mark and all of the others admitted never being in a MUVE before, but for Mark, the novelty of the experience in the virtual environment kept him engaged.
<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>95% Confidence Interval</th>
<th>Very True</th>
<th>Somewhat True</th>
<th>Not at all True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The virtual environment kept me engaged with the work environment.</td>
<td>3.49</td>
<td>(3.26, 3.72)</td>
<td>6</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>2. I was able to work well with my team members while in the virtual environment.</td>
<td>3.13</td>
<td>(2.90, 3.35)</td>
<td>3</td>
<td>14</td>
<td>25</td>
</tr>
<tr>
<td>3. I felt engaged in the group work while in the virtual environment.</td>
<td>3.36</td>
<td>(3.07, 3.66)</td>
<td>7</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>4. I felt that my lack of experience with technology impeded my engagement in the virtual environment.</td>
<td>2.95</td>
<td>(2.65, 3.24)</td>
<td>0</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>5. I was able to use the presentation tools in the virtual environment easily.</td>
<td>3.42</td>
<td>(3.15, 3.69)</td>
<td>9</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>6. I was able to upload and download content in the virtual environment.</td>
<td>3.49</td>
<td>(3.26, 3.72)</td>
<td>6</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>7. Virtual environments are useful tools for working with other students.</td>
<td>3.77</td>
<td>(3.10, 3.69)</td>
<td>14</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>8. Doing the project in the virtual environment was better than if using other types of technology (e.g., email, Moodle, Skype).</td>
<td>3.48</td>
<td>(3.21, 3.75)</td>
<td>8</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>9. The virtual representation of my team gave me a greater sense of their presence that other educational technology tools.</td>
<td>3.93</td>
<td>(3.67, 4.19)</td>
<td>20</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>10. Overall, I liked using the virtual environment for collaboration.</td>
<td>3.82</td>
<td>(3.53, 4.11)</td>
<td>16</td>
<td>23</td>
<td>10</td>
</tr>
<tr>
<td>11. Overall, the project in the virtual environment was a worthwhile learning experience.</td>
<td>3.39</td>
<td>(3.10, 3.69)</td>
<td>4</td>
<td>29</td>
<td>14</td>
</tr>
</tbody>
</table>

**Note:** Questions are based on Likert-type scales with a value of 5 representing “very true,” 3 representing “somewhat true,” and 1 representing “not true at all.

Although some of the students lacked experience with these types of educational technology, most were able to quickly learn how to use the digital tools within the virtual
environment to conduct share information and to work with their group members to complete the project. Abigail commented that:

The technology was pretty easy to grasp. Once I got a handle on how to move my person [avatar] around the screen and orient myself to where everything was, it was actually kind of fun. The quick tutorial on how to share our desktop screens, share files with each other, and talk to one another through the microphone was enough. I think most of us are used to technology and are quick to pick up on them when we need to use them.

This sentiment is consistent with research on youth and learning with new technologies and digital literacies (see Proserpio and Gioia, 2007). Abigail’s comments speak to the ability of the current youth generation who have grown up with technology being ubiquitous in their daily lives that they quickly adapt to the different uses of technology. However, as was discussed in Chapter 2, it would be erroneous to assume that the youth generation today is universally adept with technology and have equal access to technology.

As a means of facilitating collaboration and work for students outside of the physical space of school and especially for students who are geographically far apart, the students seemed to agree that MUVEs are useful tools for working with other students, especially when compared with other information communications tools available to them such as Moodle or Skype. James stated:

What I liked about the virtual environment was that it was interactive as if I was there with the others [students]. I’ve had to use Wikis in my class before to do group work where we could post comments and reply to others or upload documents to share. But doing it that way was pretty boring. Having to move around inside the virtual reality and having to move close to another person just to talk to them made me feel like I had to be
present. Sometimes when I have to use the Wikis for group work, I end up being distracted by other things on the internet. I was less distracted while in the virtual environment.

James demonstrates what is common in the literature regarding students today and their need for interactivity and engagement. Gee (2003), Gorrel and Downing (1989), and Squire (2011) have found that an interactive approach can increase learning effectiveness, problem-solving skills, and collaboration. It was also interesting to note that in her interview, Katherine explained that her group had gone into the virtual environment outside of the designated class time several times to get together to work on their project, stating that:

Going into the virtual environment was fun for all of us, except for Neal who didn’t seem to like the project anyway. It is definitely much better, and much more productive, than emailing each other constantly and waiting for replies. Going in [to the virtual environment] felt like we were actually getting together, like how my friends and I get together to work on a class project. And it’s much more convenient since some of us live far away from each other.

One of the other students interviewed also indicated that his group had also spent some additional meeting time in the MUVE for similar reasons. A key aspect of Katherine’s commentary is that the virtual environments appears to have the potential to provide more engaging tools for peer-based collaboration or conferencing and informal feedback that Niemi and Junn (2009) contends deepens learning as well as transition from individualism to awareness of group needs (Anderson & Lubig, 2012). Her statement regarding ICTs and new digital literacies correspond to studies done by Bennett, Maton, & Kervin (2008) and Staley (2000).
Despite the positive attitudes and experiences described by some through some of the student interviews, one of the students acknowledged that there were disengagement issues for their groups while attempting to complete the social entrepreneurship project in the MUVE. Lea explained that:

I don’t think it [the virtual environment] was good for me and my group. Some of my group said, and I agree, that we could easily do this work without the virtual thing. So that’s what we did. Even though we were to go in during the class time, we really just did things on our own. You know, like how most group work is done. By divvying up the work, working on our own, and then putting it all together at the end.

Lea’s comments highlight the mixed attitudes toward using the MUVE and support the data from the survey where many of the students were not able to work well with team members or felt engaged in the group work while in the virtual environment. She further clarified that while not all members of the group held a negative perspective on the using the virtual environment, the more outspoken ones were and therefore dictated how the group used, or did not use, the virtual environment. However, when pressed about the intended collaborative nature of the social entrepreneurship project, Lea admitted that her group did not really collaborate but assigned tasks to everyone in order to “get it done.” It is noteworthy that while Lea’s group did not fully embrace the use of the virtual environment, they also had avoided the collaborative process that the unit and project intended. While observing the other student groups in the virtual environment, it appears that the intended collaborative process was followed. The conclusion can be drawn, and will be discussed further in Chapter 5, about the importance of scaffolding the skills that are meant to be developed in this and any curriculum, including the collaboration process. Perhaps the disengaged students would have been more engaged if they were facilitated
better toward actual collaboration, teamwork, and discussion rather than individual piece-meal completion of the parts.

**Civic Engagement as Expressed Through Social Entrepreneurship**

Revisiting the research questions, I sought to determine if the social entrepreneurship unit, including the classroom deliberations and the group project in the MUVE, had an impact on the civic engagement of the students in this study. The social entrepreneurship ideas developed by the students ranged in complexity and intent, with many of the projects underdeveloped and rudimentary. Descriptions of the students’ social entrepreneurship projects can be found in Appendix F. For example, one group of students sought to address health illiteracy in the city’s immigrant population by proposing a mobile education unit staffed by residents to visit immigrants at their homes to show them resources they can access through the internet to better understand their healthcare options. Though well-intentioned, the plan did not consider language issues beyond Spanish, digital illiteracy, or lack of access to computers or the internet. Another group of students developed a more robust plan for a corporate bicycle ride share program where bicycles would be available for employees to encourage better individual physical health and reduction of car exhaust that pollute the environment, especially in dense, low-socioeconomic urban areas. The company’s health insurer would reimburse the participating employees through lower health insurance premiums but also provide a financial donation to local schools with high proportions of low socioeconomic families to fund after school physical exercise programs. The project represented a personal interest of Rob, one of the students in the group, who is an accomplished junior track cyclist at the local velodrome. Although observations of the groups collaboration to identify a social issue and develop an innovative idea to address it suggested that the group considered several different ideas, it is possible that Rob’s outspokenness, charisma,
and personal interest in cycling resulted in the group choosing his idea to work on. Indeed, it is
the possibility that one or a few students, whether in group collaboration or deliberation as part
of the issues-centered class discussions, that silence or marginalize the thoughts, ideas, and
opinions of their peers.

Although the social entrepreneurship ideas generated by the students were often
underdeveloped and rudimentary, the importance of the intervention, as evidenced in the
research questions, was the growth of the students in terms of skills advocated by the Framework
for 21st Century Learning, the ability of the students to clearly identify and understand both their
own and others’ perspectives, values, and positions on social issues, and ultimately whether they
indicated they were more civically engaged. Furthermore, there appears to be a significant
difference in the students’ civic organization skills before and after the intervention, specifically
with their ability to organize others to take action on a problem, develop ideas to take action on a
problem in society, and persuade others that a problem in society needs to be solved (see Table
4.7). Each of the three components of civic organization skills were skills that students engaged
in while collaborating with their peers on the social entrepreneurship ideas. Moreover, the post-
survey results for civic organization showed a general decrease in the standard deviation,
suggesting that the students’ indicated agreement with the survey items in Table 4.7 were more
alike. The results revealed in Table 4.7 also suggest that the intervention as a whole, including
the social entrepreneurship project, influenced an overall shift from to greater agreement that
they could accomplish various aspects of civic organization to solve a problem or issue in
society. All four items describing civic organization skills showed a medium effect size.

However, caution must be made when examining the results. The students could
potentially have interpreted the survey items in Table 4.7 primarily in reference to the in-class
project; their ability to civically organize their ideas and others to solve a social issue or problem outside of school may not be as well developed. The survey item that did not show a statistically significant change from the pre- to post-survey was if the student know who to contact to get something done about a problem in society. The students’ disagreement with this statement suggests that outside the often well-defined context of the school and class environment, students still face challenges in applying their civic skills and becoming civically engaged. Yet, improvement in civic organization, however small or limited in context, still represents an improvement toward greater civic engagement in youth.

**Table 4.7**

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can organize others to take action on a problem.</td>
<td>4.45</td>
<td>4.95</td>
<td>27</td>
<td>(0.28, 0.70)</td>
<td>&lt;.01</td>
<td>0.55</td>
</tr>
<tr>
<td>2. I can develop ideas about how to take action on a problem in the society.</td>
<td>4.40</td>
<td>4.82</td>
<td>23</td>
<td>(0.25, 0.59)</td>
<td>&lt;.01</td>
<td>0.55</td>
</tr>
<tr>
<td>3. I know who to contact to get something done about a problem in society.</td>
<td>2.89</td>
<td>2.96</td>
<td>59</td>
<td>(0.85, 1.30)</td>
<td>&lt;.01</td>
<td>0.79</td>
</tr>
<tr>
<td>4. I can persuade others that a problem in society needs to be solved.</td>
<td>4.53</td>
<td>5.11</td>
<td>32</td>
<td>(0.36, 0.80)</td>
<td>&lt;.01</td>
<td>0.58</td>
</tr>
</tbody>
</table>

*Note: Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.*

James’s reaction was typical of many of the students in the class that supported the survey data and the other interviews that indicated that the school-based active civic learning opportunity in the classroom and in the MUVE had a positive impact on students, especially compared to traditional classwork:
I learned more by doing this project than if I was just in the classroom. In my school, there aren’t really any hands-on stuff. Mostly it’s the teacher using PowerPoint to teach us the lesson and we copy the notes in our notebooks. I liked working on a project like this where we actually were trying to solve a problem. In the end, I feel pretty confident that I solving social issues is within my power. I actually feel motivated to do something.

Conversely, the difficulty the students may face in applying those civic organization skills to contexts outside of the school environment was highlighted by Emily when she described the challenges she experienced when trying to complete a school community service requirement.

Every senior is required to do a community service project. Lots of seniors at my school don’t take it very seriously but I wanted to actually do something cool that related to my interest in healthcare. So I thought about trying to raise awareness in Allentown about homelessness, maybe trying to get businesses interested in funding some sort of program to get their foot in the door for a job. Sort of like the companies that promote hiring of military vets. I can’t remember what company that was. Anyway, trying to find out how to get started, who to get a hold of in the local companies, or even in the city government’s offices was really hard. I would call and get forwarded on to another person who wasn’t very helpful. So I ended up giving up and doing something easier at school.

The individual skills needed to work toward active social change are also listed in Table 4.8. Development of those skills, in addition to the civic values, perspectives, and positions discussed earlier in this chapter, provide the basis for active civic engagement. When considering the civic organization skills and the social problem-solving skills acquired during a civic-related experience, the survey data demonstrates varying degrees of perceived improvement from the
pre-survey to the post-survey results. Of the four items describing social problem-solving skills acquired during a civic-related experience, items #2 and #4 showed a medium effect size while items #1 and #3 showed a large effect size. The students as a whole showed statistically significant increases in all items examining students’ social problem skills. In particular, and perhaps most significantly when viewing civic engagement through the lens of social entrepreneurship, the greatest change occurred in the students’ indicating that they learned how groups can examine social problems and take action to begin to devise ways to address those problems, no matter how small the impact may be. However, after the intervention, the students’ agreed slightly agreed with the statements that “I learned to examine social problems” and “I have learned about individual’s responsibility to their community.” Both of those statements reflect skills and values that seem to be more easily taught and discussed in the classroom. Conversely, the students disagreed with the statement “I have learned ways of addressing community problems” and “I have learned how action by groups can solve social problems” even after the intervention (3.58 and 3.60, respectively) although there was a movement toward more agreement. The standard deviation for each of the survey items increased after the intervention as well, suggesting that some students experienced greater shifts in their social problem solving skills while others did not experience as much of a shift. This indicates that that the skills needed to develop and take action for social change, through ways to address community problems and how action by groups can solve social problems, is much more complex and varied depending on a variety of factors (e.g., the issue, the people involved, the political environment, etc.).
Table 4.8
Social Problem-Solving Skills Acquired During a Civic-Related Experience

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Sum of Differences</th>
<th>95% Confidence Interval for Difference of Means</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have learned how to examine social problems.</td>
<td>3.84</td>
<td>4.78</td>
<td>52</td>
<td>(0.77, 1.12)</td>
<td>&lt;.01</td>
<td>0.82</td>
</tr>
<tr>
<td>2. I have learned ways of addressing community problems.</td>
<td>2.78</td>
<td>3.58</td>
<td>44</td>
<td>(0.58, 1.02)</td>
<td>&lt;.01</td>
<td>0.70</td>
</tr>
<tr>
<td>3. I have learned how action by groups can solve social problems.</td>
<td>2.51</td>
<td>3.60</td>
<td>60</td>
<td>(0.89, 1.29)</td>
<td>&lt;.01</td>
<td>0.83</td>
</tr>
<tr>
<td>4. I have learned about individuals’ responsibility to their community.</td>
<td>4.05</td>
<td>4.85</td>
<td>44</td>
<td>(0.58, 1.02)</td>
<td>0.02</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Note: Questions are based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate a moderate or strong effect size >.50.

The intention of the social entrepreneurship intervention was not to solve a social issue or problem. Indeed, the complexities of social issues, including the root causes of those social issues, are multi-faceted and often anchored by different political and ideological values and beliefs. Moreover, it was stressed to the students that disagreements about how to best address social issues are common and are to be expected. Rather, the intention was to develop the knowledge, skills, and confidence in the students to be able to examine social problems, explore different ways of addressing those problems, and foster group collaboration as a means of engaging in action to enact social change. The Framework for 21st Century Learning encourages the development of student creativity and innovation through the generating new ideas that help benefit communities. For this study, the process undertaken by the students to research and identify a social issue that motivates their groups collectively, brainstorm innovative ways to
address that social issue through a healthcare institution and to create a presentation to promote their ideas represents the collaboration and engagement through social entrepreneurship.

**Discussion**

The data collected from the social entrepreneurship intervention through triangulation of quantitative and qualitative data in the form of pre- and post-surveys and the individual student interviews revealed mixed results. The intervention sought to design and implement a curricular unit that utilized theories of civic education and issues-centered social studies curriculum and test a three-dimensional multi-user virtual environment as a platform for engaging students located far distances apart to deliberate relevant social issues in community health and to collaborate to civically engage in trying problem-solving the issue. It was my intention to re-conceptualize civic engagement not as participation in volunteer activities or political processes (e.g., voting, grassroots campaigning) but rather to build upon recent research indicating that trends in youth civic engagement are moving toward social pursuits of causes that deeply motivate them. Moreover, this study follows prior research that provides empirical evidence that interactive, student-driven school-based civic learning opportunities and not traditional focus on drilling the students on the mechanics of government and politics are more effective in developing skills necessary for youth to become more committed to civic engagement.

Although the primary purpose of the study was to examine the effects of the intervention on skills outlined in the *Framework for 21st Century Learning*, including civic skills and use of information and communications technology (ICTs) in the high school dual-enrollment students, it was helpful to gain an understanding of the initial perceptions, values, and positions of the students about social responsibility, social justice, and civic engagement. The profiles of the dual-enrollment students in this study are similar to the finding of large national surveys from the
Center for Information and Research on Civic Learning and Engagement (CIRCLE) and other research on civic engagement in youth conducted by Joseph Kahne, Constance Flanagan, Diane Hess, Judith Torney-Purta, and others as discussed in Chapters 2 and 3. In particular, the students understanding of and positions on social justice were not very well developed. They lacked confidence that they had the power or influence to make a difference in their communities. Consequently, and not surprisingly, their skills in social problem-solving were also underdeveloped. However, the dual-enrollment student displayed strong positive positions and values regarding social responsibility.

It is important to reflect on the findings of this study with the study population in mind. As discussed in Chapter 3, the population for this study was self-selected as a sample of convenience, relatively small, and shared a common espoused interest and desire to pursue a career in healthcare. Though the students come from a variety of socioeconomic backgrounds, communities, and schools, they are relatively homogeneous. Additionally, the students are generally strong academic performers and consider themselves college-bound. Therefore, the results of the pre- and post-surveys and the interviews may look completely different if the intervention were to be applied to other groups of students. Indeed, it is not surprising that the dual-enrollment students showed high levels of espoused social responsibility and a willingness to try a MUVE to create a social entrepreneurship project. The challenge for them, as the data suggests and the interviews revealed more clearly, was to bridge the disconnect between high degrees of social responsibility and actively seeking social change to address social issues.

The deliberation and discussion component of the intervention, which followed an issues-centered curricular model, was well-received by the students. Students interviewed generally stated that they found the discussion to be relevant, engaging, and beneficial in that the specific
topics were raised by the students themselves and scaffolding occurred as the teacher encouraged the students to research deeper on the topics and to consider multiple perspectives. The focus on social determinants of health outlined in the U.S. Department of Health and Human Services *Healthy People 2020* was pertinent to the students’ stated future goals of becoming healthcare providers. More importantly, data from the pre- and post-survey and the interviews suggest that higher-order critical thinking, problem-solving, and social problem solving skills increased through the issues-centered deliberation format, although not all questions descriptively showing a positive increase were statistically significant and standard deviations ranged widely in size, frequently suggesting considerable internal variance among students.

One of the most interesting finding from the pre- and post-surveys and the interviews was that very few of the students indicated that they would, in the next three years, engage in political or social activities to improve the community, change unjust laws, or promote justice. There is some evidence that students as a whole in this study perceive that they do not have the power or influence to influence social change despite high espoused levels of social responsibility. This suggests that the outcome of increased civic engagement in youth may need to address ways to increase civic efficacy. Additionally, some students indicated in their interviews that they anticipated needing to focus primarily on their own academic performance in college and therefore would be unlikely to be able to spend time on activities that improve the community or promote justice. Moreover, the difficulty in defining and constructing their understanding and conceptualization of social justice and how action for social justice looks like, contributed to the improbability that they would take action in the next three years. The intervention did influence statistically significant shifts in the students’ espoused commitment to action for social change,
although as a whole, the students were still indicated that they were unlikely to engage in those
types of civic action.

Although the positive impact of the intervention on the students’ skills as outlined in the
Framework for 21st Century Learning was encouraging, the students did not overwhelmingly
embrace the MUVE learning platform to collaborate on their social entrepreneurship group
project. Many of the students did find the technology to be somewhat engaging, but the data
regarding the collaboration process while in the MUVE were not as convincing. The interviews
also revealed that some students reverted to more traditional means of completing a group
project: They assigned individual parts to each of their peers in the group and essentially worked
individually. A lack of experience with similar types of technology proved to be an initial barrier
to the use of the virtual environment; however, students demonstrated skill in using ICT tools by
quickly adapting to the work environment, navigating the virtual space, communicating with
each other, and utilizing the features of the virtual environment to upload, share, and collaborate
on digital media. Furthermore, since the study was intended to examine the practicality of using
such a virtual platform in social studies classes, the results of this study help to inform future
practice. Discussion of the implications and recommendations of social studies educators using
MUVEs in their classes for a variety of purposes and content will be discussed in the following
chapter.

Lastly, the collaborative projects to develop a social entrepreneurship plan to address a
social issue of interest was designed to serve as a civic learning opportunity for civic engagement
building upon the skills outlined by the Framework for 21st Century Learning. What the data
indicate is that when using social problem-solving skills and civic organization skills as a means
of describing the civic engagement of the students, there was a positive impact of the
intervention on the student’s civic engagement. Moreover, the interviews also revealed that the students were more likely to engage in the work to promote social change, a key indicator of increased civic engagement as defined in this study.
Chapter 5: Discussion and Conclusion

The world of classrooms is marked by continuity and many small changes – seldom ones that fundamentally turn around the dynamic of that complex world. In that world, the basic teacher-student relationship, one that is shaped by both persistent continuity and incremental changes, one that is constantly negotiated and renegotiated, determines the degree to which good and successful teaching occur.” (Cuban, 2013, p.186)

Very few studies have investigated student outcomes (e.g., civic engagement) of technology enriched civic education. This study investigated how an issues-centered curricular unit utilizing a multi-user virtual environment (MUVE) can impact attitudes toward civic engagement of high school students in a dual-enrollment health care program. Schools, and especially the social studies subjects, have long been considered the vehicle for developing the civic competence of youth in American society. Advocates of participatory and justice-oriented civics education in schools often argue the difficulties of promoting those goals within formalized curriculum, especially in the stressful environment of high-stakes testing and accountability (Cuban & Shipps, 2000; Flanagan, 2014; Westheimer and Kahne, 2004). Moreover, the testing-driven emphasis on other academic subjects, such as mathematics, readings, writing, and the sciences, diminishes the impetus of schools and educators to implement these civic education practices, in particular those that call for use of unfamiliar technology or address uncomfortable topics (Rubin, 2007; Sherrod, Flanagan, & Youniss, 2002). The tension between the longstanding civic educational mission of schools and the present era of high-stakes testing is worthy of consideration and examination given the central role public schools supposedly plays in facilitating the development of our citizens.
Revisiting the research questions, I sought to investigate whether the intervention of the social entrepreneurship unit and the MUVE led to any changes in the students’ articulated perceptions, espoused values, and stated positions regarding social justice and social entrepreneurship in this highly specialized, self-selected student population. Additionally, I sought to explore how the students’ self-reported their feelings about the skills outlined through the *Framework for 21st Century Learning* changed, if at all. To examine whether shifts occurred in the students’ articulated attitudes, perceptions, and feeling about social justice, social entrepreneurship, and civic engagement, I collected and analyzed both quantitative data from the pre- and post-surveys and qualitative data from the interviews and observations. Overall, the results suggest that the intervention did indeed lead to modest movement on some, but not all, of the students’ perceptions, values, and positions about social responsibility, social justice, and commitments toward civic engagement. As discussed in the previous chapter, the self-selected student population began the intervention with fairly high self-assessed levels of social responsibility. It was interesting to note that most of the students, despite the social entrepreneurship intervention, continued to feel that active civic engagement through action for social change was not something they planned to do within the near future but would be important to them once they completed post-secondary education. This finding calls into question how deep the shifts in attitudes and commitments toward social responsibility, social justice, and civic engagement really were.

When considering the use of ICTs and the related skills articulated in the *Framework for 21st Century Learning*, the students demonstrated ease in using the technology, even though nearly all of the students in the study had never used a MUVE before. The most important finding from this study is that some school-based classroom activities, particularly those that
engage students in thoughtful deliberation of relevant and meaningful social issues in their communities, can have a significant impact on some dimensions of students’ commitment civic engagement. The use of a MUVE, however, to facilitate collaboration on a social entrepreneurship project was shown to be inconclusive. The students’ perspective toward the incorporation of the MUVE as a key component of the intervention varied, with many students indicating indifference. Some of the positive feedback regarding the use of the MUVE can be attributed to the novelty of the ICT; most of the students had never used a MUVE for even leisure, let alone in a school setting. Moreover, many students revealed they circumvented the intention of the MUVE, which was to provide a platform for virtual collaboration and synchronous interaction. Instead, the students engaged in a common practice of dividing the work among themselves, completed the parts separately off-line, and reconvened to put together a finished product. The result was that the students did not participate in all parts of the work and team process. Their circumvention of the ICT negated the intention for the use of the MUVE and reiterated the challenges of trying to incorporate ICT use in class activities.

It is important to recognize that the integration of ICTs in schools and classrooms in ways that are meaningful and effective for improved student learning or teacher instruction continue to be a difficult task. This mixed responses of study’s participants toward the use of ICTs in the intervention highlight how problematic implementing technology into the curriculum, especially given how academically driven and self-selecting the students were, the small, specialized program, and the lack of typical constraints that traditional classrooms and teachers face. The challenges of effectively incorporating ICTs persist in spite of the continual enthusiasm and confidence among many educational technology advocates that educational technologies will transform how students learn. It is likely that attempts to integrate MUVES and other educational
technology in typical school contexts would prove as challenging as it was in this study, if not more so.

Although the results from this exploratory study cannot be generalized to develop broader conclusions regarding MUVEs in social studies curriculum, they suggest possibilities of greater collaboration, critical thinking, and problem-solving skills as recommended by the *Framework for 21st Century Learning*, but provide caution for those wanting to incorporate ICTs into learning activities. The findings from this study are not generalizable to other populations beyond this study; they do, however, indicate both tensions and possibilities for how social entrepreneurship through ICT-based instruction can be utilized in civic education.

As discussed in Chapters 3 and 4, the study population for this study is small, selected as a means of convenience, and unique in that the students are part of a dual-enrollment program for high school seniors interested in careers in healthcare. Additionally, the students involved in the study are relatively homogenous and are typically high academically performing students. The student population in this study is very specific and therefore the findings of this study are limited to this particular student population and curricular intervention and may not be applicable to other student populations and contexts. However, the findings will be discussed in relation to prior research and may suggest potential implications for practice for social studies educators and tensions that may exist for similar student populations and contexts. The findings for this student sample and intervention broadly encompass the following:

- Issues-centered curricular models promote deliberation
- Students’ views civic engagement primary as participation in the voting process and lack deep understanding of social responsibility
- Civic learning opportunities positively affect students’ civic engagement
• MUVEs as effective instructional tools
• Social justice can be perceived through a lens of community responsibility
• Social entrepreneurship is but one way to conceptualize civic engagement

Within schools, educators often face choices about how to apportion instructional time and what learning outcomes they value if the assumption is that an important function of schools is the development of youth to become civically engaged regardless of any political ideology they may or may not adhere to. The contemporary education setting that underscores the pressures of accountability and high-stakes testing makes attempts to focus on other aspects of education, including civic education, a challenging conversation for public school administrators and classroom teachers. This raises questions of how we can expand school-based civic learning opportunities that addresses the necessary high-stakes testing requirements of schools, but also does not shortchange the civic development of our youth.

**Issues-Centered Curricular Models Promote Deliberation**

What emerged from this study is that the dual-enrollment healthcare program students had little, if any, experience with issues-centered lessons in their home schools. When students discussed issues in their classes, the instructional model was more teacher-centered with little engagement from the students. Moreover, controversial topics were frequently avoided or superficially discussed. Andrew stated that:

There were times when a hot button topic would come up. Like abortion, or the death penalty, or gun rights I for one, like when we get to talk about things like that. I think it’s good for us to talk about those things, you know? Especially if we can learn how to be polite and civil about it. Not like what you see on some talk shows or even on the [internet] when people post comments on Facebook or on news sites. But we never really
talked about it class. You could see that the teacher was uncomfortable with it. She even said so, even bringing up a time that another teacher years ago had gotten into some trouble by having her class talk about religion and abortions.

He continued by commenting that he “really liked” the issues-centered unit on social entrepreneurship because it “made me think carefully about what the deeper problems were.” Discussion and deliberation of larger societal issues served a similar function, including both issues located within the local community as well as issues from a broader, global perspective. Students exhibited greater social responsibility through extended exposure and discussions of global issues such as shortages in clean, fresh water, lack of access to vaccinations in developing countries, and civil strife and conflict in places like Syria, Sudan, and Iraq influenced students’ social responsibility. These issues compel youth to evaluate and probe social issues beyond their immediate contexts and expand their critical inquiry to areas of their communities, society, and the world.

The few students that indicated that they had experiences with school-based civic learning opportunities or an issues-centered program were very engaged with the topics and issues, especially since the issues were relevant to their careers. This student engagement is an important corollary to the finding the issues-centered curricular models promote deliberation and critical thinking skills consistent with the Framework for 21st Century Learning. It is essential that educators find ways to make the content meaningful to the students, whether it is an issues-centered curriculum or some other curricular model.

Although the social entrepreneurship unit was relatively short, spanning three weeks, the positive impact of it on the students’ critical thinking skills and interdisciplinary literacies (e.g., economics, community health, civics, geography) as articulated by the Framework for 21st
Century Learning was evident in varying degrees. Consistent with current and past research, the positive impact on the students suggests that exposure to issues-centered curriculum and deep deliberation can lead to positive student civic outcomes. Though not a formally investigated in this study, it would be interesting to explore whether the improvement of skills outlined by the Framework for 21st Century Learning and developed through an issues-centered curriculum can potentially improve academic performance in line with federal and state high-stakes assessment requirements.

**Civic Engagement Primarily as Voting Rather Than Social Responsibility**

Students espoused high levels of social responsibility even before the social entrepreneurship unit, which could be explained partly by their interest and desire to pursue careers in healthcare. However, the data from the surveys and the interviews indicated that the students initially viewed civic engagement narrowly as participation in the voting or similar formal political processes. Consistent with the findings from Westheimer and Kahne (2004), the students initially had not moved beyond rudimentary levels of social or personal responsibility to more complex civic constructs such as participatory and community orientation. Thus, civic engagement of the students in this study was low compared to other individual civic measures, such as social and youth responsibility. Few of the students in this study described themselves as social activists beyond localized functions such as participating in student government, voting, or attending a church youth group. Deeper, more involved actions representing civic engagement and social responsibility encompasses critical analyses of issues and their underlying causes and taking action to address those root causes, whether on their own or through a group. Indeed, it was surprising that few of the students expressed in the interviews that service learning activities represented ways they were civically engaged, despite their positions and values about social
responsibility. However, how civic engagement manifested in the students’ everyday experiences was not formally explored. Previous research has indicated that civic engagement can be demonstrated through a broad range of activities, including participation in the voting or formal political process, volunteering in service learning activities, partaking in extracurricular school-based programs, and membership in groups or organizations outside of school (Putnam, 2000).

Nearly all students interviewed did not cite deep awareness or involvement in community facets of citizenship. Although the surveys suggested that the students viewed community as important and that their responsibilities as citizens meant that they should work to address and improve issues in their communities and society, most students expressed vague understanding of what that would look like. Students seemed to regard their community awareness and social responsibility in the context of their personal experiences and were, in most cases, unable to articulate how others within their community might have different perspectives on the same social issues. Indeed, the magnitude of issues as problems within a community varied greatly between students from different socioeconomic backgrounds.

Rachel, from one of the two urban school districts in the dual-enrollment program, expressed a distinctly different perception of a community issue discussed in class than the other students from more affluent districts. On the issue of health illiteracy, Rachel remarked,

I know of people in my neighborhood that don’t have the internet because they can’t afford it. And even if they did have the internet, they don’t understand how to find information on medications or doctors or illness or things like that. Many can’t even speak English well. I have to help my mom when she goes to see a doctor down at the clinic because she doesn’t always know what the doctor is saying, even though to you
and me, it’s easy. So I have to help explain what the doctor has said, or to tell the doctor what it is that she wants to say.

She continues by expressing her views of her peers’ understanding of health illiteracy: It’s easy for all of you to overlook the problems of those who aren’t as well off, or come from a totally different background. I hate to say it, but listening to some of you talk down on people, like my family or those like us in the city, makes me mad. It’s an important issue to me and the people around me. I wish that you could see it.

Rachel viewed health illiteracy as a significant issue with personal contextualization and meaning. She indicated that before the social entrepreneurship unit she did not feel confident that she had the skills to work to solve the issue or that youth could make a difference in solving the problem. Her perception that youth cannot make a meaningful difference in their community represents a significant barrier to youths’ commitments to civic engagement. Often, the community itself does not provide the necessary structure for empowering youth to become civically engaged through more sophisticated means. However, after the intervention, she mentioned that she felt better equipped to address social issues, but still expressed “doubts about how much I can really impact the community.”

Civic Learning Opportunities Positively Affect Students’ Civic Engagement

The findings from this study confirmed what previous research has recognized, that basic knowledge of how the structure of government and political processes typically covered in social studies curriculum falls short in the development of civic engagement in youth as defined in this study. There exists a tension in social studies education between teaching about civic organizations, institutions, and processes and specifically discussing controversial issues and analyzing the reasons for them. Additionally, the encouraging students to develop skills that
foster active civic engagement, identification of pressing social issues, and problem solving to enact social change can also be sensitive given how schools and the communities they serve can be deeply political and ideological. Most students in this study report that they rarely are involved with community civic activities or political activities as typically defined.

Achieving higher levels of civic engagement in youth is complex and multifaceted. The association between classroom practices and their influence on youth’s commitments to civic participation has been investigated by Gibson and Levine (2003) and Finlay, Wray-Lake, and Flanagan (2010). Conversely, others have raised doubts of the capacity of schools positively to develop students' civic engagement, especially those that simply offer civics or government courses focused solely on basic knowledge of governments and politics (Colby, 2003; Campbell-Patton & Patton, 2010). Indeed, it is difficult to isolate the effectiveness of school-based civic learning opportunities in general. Social studies courses throughout the United States vary greatly with regard to the civic learning outcomes they seek to achieve in their students and the kinds of school-based civic learning opportunities they utilize (Westheimer & Kahne, 2004; Kahne & Sporting, 2008). Westheimer and Kahne (2004) and others have suggested that in order to develop deeper civic engagement in our youth, opportunities are needed for students to identify and refine their civic values and positions, including ideas of social justice and social responsibility.

A youth’s potential for civic action does not ensure that he or she will act upon that potential, such as through an actual social entrepreneurship idea outside of the confines of the school. This dissertation contends that developing in our youth the skills necessary for that potential for action represents progress. Westheimer and Kahne (2004), Rubin (2007), and Verba, Schlozman, and Brady (1995) has shown that although offering school-based civic
learning opportunities is important, educators must balance those opportunities with challenges, barriers, and constraints that they may encounter while undertaking civic action toward social change. As discussed in the previous chapters, the use of issues-centered curricular models, deliberation of social issues, and encouraging students to pursue civic action toward social change can place classroom teachers in uncomfortable and undesirable positions with school administrators, parents, community members, and their own colleagues. Indeed, the findings from this study suggest the potential for an uncomfortable learning environment to occur because of heated discussions of sensitive and controversial topics.

Moreover, structuring projects for success diminishes the opportunities for students to truly engage with the real challenges to civic engagement. Students have to realize that failure is a possibility of engaging in civic action and developing that resiliency in youth to overcome failures is paramount. As this study demonstrated, developing the civic skills and empowerment as articulated in the Framework for 21st Century Learning (e.g., examining social problems, understanding ways of addressing community problems, developing ideas about how to take action on a problem in society, organizing others to take action on a problem) does not necessarily mean that youth will engage in community improvement activities or even social entrepreneurship. Several students expressed hesitation about engaging in actionable social change in the next several years. Katherine’s comments typified those students who expressed reluctance to commit to future action toward social change.

Although I have a better sense of what social justice is, and I understand the importance of people doing good to create social change, I just don’t think I will have the time to do things like that. I do feel that I have better skills to be able to get an idea off the ground,
but my focus right now is on getting off to a good start at college. And besides, won’t I be doing enough good for society by treating patients that are sick and ill?

It is important to highlight that the curricular approach of using an issues-centered curricular model coupled with active civic learning opportunities may provide valuable skill development for students Verba, Schlozman, and Brady (1995). Prior research allude to the notion that well-conceived and implemented school-based civic learning opportunities can overcome the factors that contribute to apathy or lack of empowerment to civic, political, and social issues. There is evidence that involving students in active civic learning opportunities led to some movement in civic engagement. From the finding discussed in Chapter 4, the students as a whole showed movement from the pre-survey to the post-survey on items related to civic organization and social problem-solving skills that are important to the development of civic engagement. Specifically, as discussing in the conceptual framework, prior research (Hart, Donnelly, Youniss, & Atkins, 2007; Kahne & Westheimer, 2004) indicates that classroom active civic learning opportunities with specific civic and social responsibility foci can develop students’ sense of civic efficacy, social responsibility, and justice orientation. These are key foundations of individuals’ civic identity and civic engagement.

The intervention in this study did not purport to influence students to adopt a particular civic identity grounded in a specific political ideology. Social justice, while often viewed as liberal rhetoric and agenda, can be conceived of more broadly. As discussed in Chapter 2, I endeavor sought to encourage a broader, more ideologically balanced conceptualization of social justice that encompasses an awareness and sensitivity to the disparities of human circumstances and social activity as actions to correct unsatisfactory conditions. Throughout the intervention and the deliberation of social issues, my goal was to refrain from indoctrinating the students with
my own beliefs and positions on social justice. I sought to allow students the opportunity to construct their own meaning of the disparities of human circumstances, unsatisfactory conditions, and what actions they deem appropriate to address those issues. However, the conversations that I had with the students during the interviews emphasized to me that some of the students experienced difficulty in developing an understanding of social justice and therefore had difficulty applying social justice as a reason for civic action for social change. Conversely, most of the students interviewed stated that deliberation as part of the issues-centered unit was useful in getting them to think about social issues, consider multiple perspectives, investigate root causes of issues, and use what was discussed and debated to inform action for social change.

Reflecting on the findings from this study, a more appropriate lens for encouraging students to engage and develop students’ “21st century skill” as articulated by the Framework for 21st Century Learning, including critical thinking and problem-solving and collaboration and teamwork, is social deliberation. Although developing students’ construction and conceptualization of social justice does not need to be discarded completely in lieu of social deliberation, the findings of this study suggest that social deliberation contributes more toward the outcome of increased civic engagement in youth.

In addition to the positive impact of school-based active civic learning opportunities, this study finds that students demonstrated higher levels of civic engagement when they spent time discussing issues and ways to address them. Moreover, higher degrees of civic engagement were found when the students examined instances of how communities seem to support and encourage participation by youth. The higher civic engagement is consistent with recent research (Andolina, Keeter, Zukan, & Jenkins, 2003; Youniss and Yates, 1987). It appears that when students are exposed to how others demonstrate concern for community and issues in the home, school, or
community, they were more likely to be committed to civic engagement. This concern for community and social issues can be fostered in the classroom through an issues-centered social studies model and active civic learning opportunities designed around community and social change. When youth perceive their communities as valuing their contributions, and they are more engaged in deliberation about social issues, it seems reasonable to expect that their sense of civic efficacy, social responsibility, and justice-orientation will increase.

Civic knowledge has long been part of the social studies curricula in public schools. However, it is important that educators concentrate on making sure that students are exposed to effective, evidence-based curricula and classroom teachers are trained to incorporate sound pedagogical techniques rather than simply requiring students to have civics or government classes. The content, activities, and instruction are enormously important. Programs such as the dual-enrollment program in this study are well positioned to pursue a curriculum such as this. Indeed, since this program lies outside of the traditional regulatory confines of public schools, even though the students are part of the public school system, the constraints of high-stakes testing are not as pressing or evident. Specifically, and perhaps more importantly, programs such as this are not bound by external expectations about their academic programs that traditional schools face. However, its strengths as an untraditional program for high school seniors interested in healthcare professions external to the constraints of a public school are also its limitation. If the goal is for civic learning opportunities to be more widespread in public schools to develop civically engaged students, then although this intervention might not be replicable in a traditional school setting and curriculum. The intervention in this study was somewhat successful in influencing positive changes in the students toward social responsibility, social justice, and civic engagement. Educators’ freedom and flexibility to try this kind of actionable civic learning
opportunity and to attempt to use ICTs and a MUVE to do so might not be feasible. Given the current high-stakes test and accountability environment that today’s educators work within, especially in public schools, it is challenging to find space within the existing curriculum for such a non-traditional and perhaps ambitious intervention.

**Can MUVEs Be Effective Instructional Tools?**

The literature points to how ICTs and MUVEs in schools and as part of a social studies curriculum can potentially be beneficial. However, proponents of educational technology often overemphasize positive learning outcomes while minimizing issues or trade-offs that arise from the use of technology to enhance learning. It is unclear from this study’s surveys and interviews whether the use of the MUVE had any meaningful impact on the ultimate objective of increased civic engagement among the participants. Reframing it as a question, would participate in the issues-centered unit and collaboration on the social entrepreneurship project had any less impact on the civic engagement of the students had they done it in a traditional classroom rather than in the MUVE? Unfortunately, the simple answer would be ‘no’ when looking at the overall results from the surveys and interviews.

When scrutinizing the survey results, it appears that MUVEs, like many other new educational technologies, can increase student engagement, or how absorbed or engrossed the students are in a particular tasks or activity. Most of the students signified that the MUVE did keep them engaged in the task of collaborating with their peers on their social entrepreneurship projects. However, six of the ten students interviewed noted that while the MUVE was “cool to use” and “interesting” they were not sure if using the technology really changed how well they collaborated on the learning task or the end product. Emily’s comments encapsulated the perspective of the six students:
In the end, while I thought the virtual environment was a nice idea to try, I’m really not so sure that it was all that necessary. I think we could have just done the whole thing in class. Sometimes it’s just a hassle to use technology for class. Some teachers I think just use technology just to use it. I’m not saying that’s true of this project, but like I said, I’m not sure if using the technology was really necessary. Sorry!

During deeper discussions with the students during the interviews, some saw the potential of the MUVE and other similar ICTs for learning and collaboration among distributed teams or students across large geographic distances. Mark remarked on this:

For working with other people in different states or countries? Yeah, that would be cool and definitely the virtual environment would be great for that. I’d much rather get into the virtual world and meet others than using Skype or discussion boards like I’ve seen other students in my school do. It seems more realistic if I can move around, meet and talk to people like I would do in person. In that case this kind of technology would be perfect.

Mark’s comment, which was indicative of several from other students too, suggest that the MUVE can be an effective tool for bringing students that are geographically far apart together to meet, discuss, and work on collaborative efforts. Although the results from this study were mixed in terms of the use of MUVEs, Mark remarks highlighted the potential for this technology. Although the rationale behind using a MUVE in this study was to pilot how ICTs might be used in the ways that Mark talked about, that rationale was unclear from the students’ perspectives and that rationale was not elaborated to the students at any time throughout the course of the unit.

Many students today may enter the classroom with a working understanding, albeit varied, of technology, whether designed specifically for educational purposes or otherwise. The
results show that although the students in this study lacked experience with the MUVE that impeded their engagement in the virtual environment, they were able to become quickly acclimated to the technologies. This included navigating their avatars, communicating in the MUVE, or uploading or downloading content via the environment’s tools. As discussed in Chapter 4, virtually all of the students were using a MUVE for the first time in this intervention but were able to adapt easily to navigating the environment and using the tools for sharing files and presenting their work. What this implies is that because ICTs are ubiquitous in the lives of today’s youth, and that they are so accustomed to using technology, the need for schools to take it upon themselves to train students how to use technology for learning or work may be overstated.

What can be inferred from the results is that the quality of scaffolding and feedback by the teacher during unfamiliar learning activities, such as the process of creating a social entrepreneurship idea, is substantial (Brush & Saye, 2002; Lee & Molebash, 2004). Overall, this study’s use of a MUVE and prior research (Brush & Saye, 2002; Kingsley, 2005; Lee & Molebash, 2004) provide insights for the use of ICTs in social studies education to promote greater civic engagement outcomes. Once again, it is important to keep in mind that the study population and the context were highly unique and it cannot be assumed that the same results, neither the positive nor the negative ones, will be applicable to other populations and contexts. Lastly, the goal of using ICTs for civic education, as piloted in this study, was not to advocate or endorse that technology is integral to civic education. Rather, the goal was to investigate whether the technology can provide a useful means of developing the skills articulated by the Framework for 21st Century Learning. Although there is evidence that today’s workforce is increasingly required to be competent in the use of technology for everyday work and much is often made of
how today’s schools need to ensure that students are technologically proficient, this study does not provide sufficient evidence to support those assertions. Deim (2000) argues that technology by itself will not be the foundation of education reforms in schools or the social studies. Rather reflective curriculum development and careful instructional design based on empirical research and evidence are essential to the meaningful use of technology in schools.

Social Justice through a Lens of Social and Community Responsibility

An important focus of the study was to develop in students the awareness of social issues, particularly those that relevant to the students, whether on a professional (e.g., healthcare career) or community level (e.g., lack of resources at their local school). Prior research, including Kahne, Chi, and Middaugh (2003), have found that curricula that promote civic engagement do not necessarily develop students’ abilities to analyze and critique root causes of social problems. Indeed, the complexity and multiple perspectives regarding social issues and their causes are open to much debate. Similar results were found in this study at the beginning of the social entrepreneurship unit. It is clear from the study that students initially struggled to define or describe social justice and constructs related to justice or community-orientation. Moreover, students in the study had difficulty connecting their understanding of their values and positions on social responsibility and notions of how social justice can lead to social change. As discussed in Chapter 2, social justice often may be regarded by critics or skeptics as a medium for liberal agendas within public schools. Conscious effort was made to situate the students’ conceptualization of social justice or justice-orientation as a person’s social responsibility. Through peer-to-peer deliberation as part of the issues-centered classroom discussions centered on social determinants of health as outlined by the U.S. Department of Health and Human Services Healthy People 2020 and collaboration on the social entrepreneurship project in the
MUVE, I sought to allow the students to construct what that community responsibility meant to them personally based on any sort of values or positions they held.

The post-survey data and the interviews provided me with an understanding of how the intervention influenced the students’ perceptions, values, and positions about social responsibility, social justice, and civic engagement. After the issues-centered classroom discussions and the collaboration on the social entrepreneurship projects in the MUVE, increases were evident when asked about focusing on the root causes of social problems, being actively involved in community issues, being concerned about state and local issues, and participation in political or social causes to improve the community. Interestingly, when the students interviewed were asked to define social justice, they were able to readily able to describe their conceptualization of social justice in ways that were not standard textbook definitions. Indeed, their definitions of social justice were primarily described by elements of their values and positions on social and community responsibility. While some students did in fact highlight inequalities based on race, gender, and socioeconomic factors, others focused on issues that broadly affected larger segments of people. Although the students were all able to provide a quick definition of social justice, some expressed that they still did not really understand what that meant or that their definition of social justice was influenced each other’s conceptualization of social justice, social responsibility, and civic engagement, the construction of that knowledge and meanings are results of learning through social interactions. It appears that social justice can be viably perceived through the lens of social and community responsibility rather than grounding it in political ideology.

As discussed earlier, it may be more beneficially to reframe the interpretive lens of the study as social deliberation rather than exclusively as social justice. Even though I attempted to
allow students to construct their own understanding and conceptualization of social justice, the result was that students espoused vague, nebulous definitions of social justice that did not help them form meaningful ways of enacting social change. The social entrepreneurship ideas that the groups devised can be more readily attributed to the deliberation on social issues and the compromise and collaboration process following the deliberations as the students groups identified a social issue to address. Furthermore, social justice aligned explicitly with the liberal-left ideology may prompt criticism and concern if used in the classroom as an objectively presented frame for a topic. Instructional design that allows for excessive focus on the potential ideological indoctrination of social justice undermines the value of social deliberation of issues that can help foster important analytical and critical inquiry skills in youth.

The issue of indoctrination broaches the question of whether schools should be neutral, especially when confronting controversial social issues in class. Guidelines for leading issues-centered curriculum, such as Wraga’s (1986) used in this study’s intervention, certainly attempt to maintain a neutral, respectful learning environment that encourages multiple student perspectives to be shared and debated. Peter Levine (2007) contends that neutrality on issues may have an unintended “civic cost” such that “if students who are taught that there are many opinions about every issue may draw the conclusion that there is never a right answer and that it doesn’t matter which side one takes in a political debate” (p.143-144). He continues by arguing that youth are “then unlikely to take any side with conviction or to act on their own political beliefs” (Levine, 2007), which can result in decreased commitment to civic engagement. As with many aspects of civic education and learning (e.g., issues-centered curriculum, civic engagement), neutrality or indoctrination is a complex concept that educators are faced with and is certainly one I struggled with in this study.
Social Entrepreneurship as an Alternative Conceptualization of Civic Engagement

As discussed extensively earlier in this chapter, the conclusion that civic learning opportunities positively affected these students’ civic engagement is an important finding from this study and builds upon prior research by Westheimer and Kahne (2004) and Kahne and Sporte (2008). In this study, social entrepreneurship is considered a civic learning opportunity. Social entrepreneurship is strongly situated in action, albeit in a business sense, with underlying motivations for addressing social issues. With the social entrepreneurship increasingly a trendy idea in business, especially among the generation of the workforce currently in their twenties and thirties, it presents a practical way for advocates of civic education to re-frame and re-conceptualize civic engagement into some more concrete. By having the students create social entrepreneurship ideas in collaboration with their peers, they develop relevant 21st century skills essential to active civic engagement, namely higher-order critical thinking, problem-solving, communication, and collaboration. Intuitively, it would seem that civic engagement can be successfully re-conceptualized in other ways given how this study demonstrated that social entrepreneurship as a civic learning opportunity can lead to greater levels of civic engagement.

Limitations of the Study

There are limitations to this study that are important to bear in mind when considering the results and findings. Discussions of these limitations provide the context for the challenges I faced when designing the social entrepreneurship unit, implementing the intervention in a classroom setting, collecting the data, and analyzing the results. These limitations also suggest future extensions of this research.

Constraints on the part of me as the researcher meant the selection of the study population as a selection of convenience rather than any representative sampling criteria. As a
justification for exploring MUVEs as a potential technological platform for collaboration and other skills outlined in the *Framework for 21st Century Learning*. I intended to bring students together that were geographically distant from each other. In this way, I could examine how distributed student teams could utilize internet technology for a variety of learning outcomes. My involvement with the dual-enrollment program, with students from ten different high schools spread throughout the county, was relatively easy to arrange. Consequently, the study population was relatively homogeneous. Although the students came from a broad range of public schools and areas, including two urban, low socio-economic schools, several affluent schools, and a mix of blue-collar, rural school districts, the fact that the students were typically high-performing students in their home schools negated the school disparities somewhat.

My role in the dual-enrollment program also served as a potential limitation. While I was not considered the teacher or instructor for the class, my involvement was significantly greater than that of an independent researcher. In fact, the students knew who I was since the beginning of the academic year and with the social entrepreneurship intervention occurring in the last month of the program, the students regarded me almost as one of the teachers of the class. Indeed, I had presented to the students on evidenced-based practice in healthcare and helped to organize and lead a series of outdoor team-building activities. The familiarity of how the students perceived me could of have influenced how the students’ answered the survey questions and answered the interview questions. However, it is difficult to ascertain how the students’ perception of me as the researcher influenced how they answered the survey or interview questions. Conceivably the students may have developed an idea of what they thought were the answers I was looking for in the surveys and may have been less forthcoming about their answers during the interviews.
As in any research study, whether quantitative, qualitative, or mixed, the methodology chosen has its strengths and weaknesses and needs to be considered when drawing conclusions from the findings and comparing them to other similar studies. Although studies of civic education and learning commonly utilize a mixed methods approaches with validated surveys instruments, and many of these studies suggest that students’ self-report of their commitments to civic engagement are valid predictors of future actions, dependence on self-reported surveys as part of the research methodology raises questions of validity and reliability. Additionally, self-reported data can be subjected to overestimation or underestimation by the respondent and can be done consciously or not. For example, because the surveys used in this study sought to elicit information regarding the students’ values, positions, and perceptions of individual and social responsibility, civic engagement, and justice-orientation, the students’ responses could reflect a desire to avoid appearing more or less sensitive to community needs. This possibility exists despite the anonymity of the survey results.

Furthermore, there is the possibility that the students themselves may interpret the questions on the pre- and post-survey differently such that a student could have come into the intervention with an overestimated self-assessment of their social responsibility, understanding of social justice, and commitments to civic engagement and realize through the intervention that in reality, they knew less than they initially thought. Consequently, their self-assessment on the post-survey could have been lower than their self-assessment on the pre-survey. However, I did not analyze those types of changes in this study. It is certainly an interesting avenue for future research on not just civic engagement but teaching and learning in general. The length of the study also represents a significant limitation and was again a result of constraints I faced as the researcher. Questions could be raised regarding the short time frame of the intervention. Lastly,
since all but a few students have had direct experience in a MUVE, the students’ positive attitudes toward working in the MUVE may have had an initial engagement effect because of its novelty.

**Implications for Practice**

Since this study adopted a design-based research process to generate evidence and suggestions for practical application in classrooms by teachers, the implications of the study’s findings for practice is especially important. The implications focus on both civic education and the use of ICTs, specifically MUVEs, in school curricula. Reflecting on the prior findings in the literature, and the results in the context of this study, has led me to the following implications.

Merely structuring and teaching social studies classes to cover basic knowledge of how government operates and the rights and responsibilities of citizens are insufficient if activist civic engagement is the goal. An important finding of this study that has implications for practice is that school-based civic learning opportunities can positively influence civic engagement in youth. Coupling school-based civic learning opportunities with issues-centered lessons can help to develop the “21st century skills” outlined in the *Framework for 21st Century Learning*, important outcomes like critical thinking, problem-solving, and collaboration with peers that educators have sought to develop in our youth for many decades prior to the 21st century. Incorporating issues-centered lessons and instructional practices can be done without wholesale changes to the school’s overall curriculum and still achieve positive outcomes related to civic engagement. The social entrepreneurship unit provided an example of how issues-centered curriculum can promote important skills articulated by the *Framework for 21st Century Learning* such as critical thinking, problem-solving, and collaboration. Though dependent on the school
and administrators, many teachers have the flexibility to design meaningful ways to meet the
curriculum standards of their schools and social studies departments.

However, the challenges to classroom teachers developing school-based civic learning
activities, issues-centered curriculum, social deliberation, and other non-traditional, experiential
learning (e.g., simulations in MUVEs) cannot be taken lightly. Teachers willing to experiment
with new teaching techniques, technology, or even content are sometimes seen as experimenting
on the learning of children. In an era of high-stakes testing and accountability, administrators and
teachers may not approve of deviations from normal teaching practices or the established
curriculum. In some cases, social studies curriculum may require teachers rigidly to follow
standard school, district, or county-wide lesson plans with specific content, activities, and
outcomes. Issues-centered curriculum may also face considerable opposition if controversial
topics are deliberated and explored, especially if the perception exists that students are being
indoctrinated with beliefs and values contrary to those of the parents, school board,
administrators, community members, or other teachers. It is understandable that educators may
find it difficult to transfer the intervention in this study in its entirety due to a number of reasons.
Teachers may be unwilling to broach sometimes controversial, uncomfortable, and ideologically-
laden topics that arise from issues-centered classroom lessons and instead focus on the politically
safer alternative of superficial coverage of those subjects or avoidance of the subjects all
together. Furthermore, this study utilizes technology that may not be available or permitted in
some schools. The digital divide remains a substantial challenge facing educators today, and the
reality is that not all schools would have the resources to support technology like MUVEs.

With technology, an important implication is that ICTs as a pedagogical tool may only be
appropriate, effective, and value-added if it provides teaching and learning that cannot be done in
the traditional sense. Larry Cuban (2001) in his analysis of reforming schools through new technology, pointed to three goals of technology in schools: 1) make schools more efficient and productive that they currently are, 2) transform teaching and learning into an engaging and active process connected to real life, and 3) prepare the current generation of young people for the future workforce (p.13-14). Longstanding issues of how to effectively accomplish those goals through the implementation of new technologies in schools remain today. Simply utilizing technology for lessons, instructions, and student work that can otherwise be done just as well without the technology may be a waste of school resources, although student engagement is a potential benefit one could argue for the use of new technologies. Instances such as communication and collaboration among students separated by large geographic distances, spatial learning using GIS mapping, or multimedia production of National History Day documentaries are cases where technology may be appropriate and not merely discretionary use of technology. Enhancement of teaching and learning with technology, even those where the use of technology may be an option rather than a necessity, benefit from well-designed professional development.

Professional development for experienced classroom teachers, pre-service teachers, and even administrators can help introduce and strengthen curricular design and instructional practices related to issues-centered models of teaching social studies content. Simply providing pre-service and practicing social studies teachers with the findings from research, whether from this one or from other studies in the field, are not enough to change teaching practice or curriculum, whether developed by third-party companies or government agencies (e.g., a state’s department of education), a school’s curriculum specialists, or even the classroom teachers themselves. Through professional development, classroom teachers can acquire strategies to
incorporate many of the findings from this study in their practice without compromising or altering their school curriculum or the content knowledge that their students may see on standardized assessments.

Mainstream school reform initiatives may be insufficient to develop civic engagement in students. The evidence from the study’s survey data and the interviews reveals that if educators value the development of youths’ social responsibility and increased civic engagement with their local community and society as a whole, serious consideration must be given to how to expose, scaffold, and refine school-based civic learning experiences for students. Civic engagement represents a complex, highly cognitive ability, one that requires well-designed curriculum and well-training classroom teachers that can effectively promote and scaffold the skills outlined by the Framework for 21st Century Learning. Scaffolding is critical to creating broader and deeper conceptualization and operationalization of civic engagement in youth. According to Westheimer and Kahne (2008), without sustained school-based civic learning opportunities, there is very little chance of increased engagement. Providing the school-based civic engagement opportunities, such as the social entrepreneurship project, early in adolescents’ education and not just during their last year of secondary education, can potentially have much greater and lasting effects on their commitments to civic engagement (Avery, 2002; Hess, 2004; Thornton, 2004).

Instead, this type of intervention, which combines issues-centered curriculum, social deliberation, a school-based civic learning opportunity, and educational technology, is more appropriately suited for what Peter Levine (2007) refers to as “themed” school or program (p.189). Themed schools or program, similar to the dual-enrollment program in this study, emphasize a particular subject matter or concept (e.g., healthcare, the arts, engineering) that allows for common topics of discussion that are relevant and are of particular interest to the
students. Levine (2007) argues that the advantage of a concentrated theme or topic “allows students to collaborate on lengthy and demanding projects, which are more difficult to sustain in standard school” and “succeeding cohorts of students could sustain a single project, such as a particular advocacy campaign or a series of performances, over many years” (p.190). Although themed programs or schools raise questions about harmful civic consequences (e.g., conformity of civic attitudes and values, absence of civic engagement, deeply apolitical environments), Levine (2007) argues that the benefits are worth the risks. These programs can “provide strong civic education by encouraging their students to collaborate on creative, technical, or pre-professional projects of their choice that have social themes (p.190).

In this era of high-stakes testing and accountability that now include the broad reforms of the Common Core State Standards Initiative, Race to the Top, and the Investing in Innovation federal funding, classroom teachers hardly need reminding that students' acquisition and demonstration of content knowledge and skills should be a goal of instruction. Indeed, looming standardized tests that administrators and policymakers will use to judge teachers' and schools' performance likely places the acquisition of content knowledge top among teachers' instructional priorities. Moreover, many professional development programs, such as those funded by the federal government, emphasize the acquisition of content knowledge in civic education. However, while not denying that a strong knowledge base is important, this study, building upon prior research discussed earlier in this dissertation, suggests that content knowledge alone is insufficient for increased civic engagement in youth. Teaching to tests through the memorization of facts, concepts, dates, or other information will have minimal effect on preparing our students for active, participatory, and engaged citizenship. Rather, it is essential that students know how to use content knowledge for solving problems and making decisions in a democracy. A major
tension is that the propensity for sustained civic action is not something that can be reduced to a standardized item on a single-shot mass examination, which is where the policy context currently compels schools to focus.

**Suggestions for Future Research**

Scholars argue that new technology is changing the ways youth consume and produce information and ideas, socialize and interact with each other, participate in civic life, and become members of formal and informal groups. Additionally, how youth perceive, value, and position themselves on civic ideals such as individual or social responsibility, social justice, and civic engagement also constantly changes. As opportunities for online civic socialization and communication expand and become more accessible, it remains unclear how civic education can build upon these online opportunities and experiences. Future research can examine how youth utilize online affinity spaces and the effects of these online spaces on their civic mindset. Specifically as an extension of this study, future work could investigate and compare different technological platforms that may be effective at creating different civic learning opportunities for youth to apply their civic knowledge and skills.

It would also be interesting to examine specifically the role of different cultural and socioeconomic groups and how issues-centered curriculum and civic learning opportunities influence the research questions investigated in this study. Specifically, how are their perceptions, values, and positions on social responsibility, social justice, and civic engagement different from the youth studied in this dissertation? For example, Kahne and Middaugh (2008) examined high school students in California and found that low-income students receive far fewer classroom-based civic learning opportunities than their more affluent peers in higher socioeconomic schools. This finding is superficially supported by this study, where students
from the two lowest socioeconomic schools in the dual-enrollment program indicated significantly less rigorous civic education in their schools and did not incorporate issues-centered curricular models or opportunities for active civic learning opportunities. Since this study did not specifically set out to explore the differences between cultural, socioeconomic, or other subsections of the population, more work needs to be done to understand it.

Finally, the skills as articulated by the Framework for 21st Century Learning applies well to civic education in that the skills are essential to actionable civic engagement for social change. However, most research on civic education is narrow in scope. More attention can be given to how these skills a transferable to other academic subjects, or if improvement in the skills needed for civic engagement translates to improved student performance on high-stakes standardized assessments.

**Conclusion**

The constantly evolving nature of how individuals within a society interact, negotiate, and make meaning of information and construct their understanding of social and individual responsibilities means that civic education is an area rich in opportunities for curricular and instructional improvements. As society and the ways people communicate and learn from each other changes, those involved in teaching social studies and researchers interested in civic education and learning ought to at least consider different ways of fostering civic skills, values, and positions that can potential increase the civic engagement in youth. A better understanding of how schools and classroom teachers can incorporate ways to become better citizens for the common good in a democratic society is not only important for those interested in social studies education but is important for all educators who believe schools are tasked with the important
responsibility to prepare and develop students to become competent, responsible, engaged, and participatory citizens.

Although this dissertation provides an initial model of how issues-centered curriculum and ICTs can be utilized to develop civic learning outcomes (e.g., civic engagement) and “21st century skills,” there is much important work to be done. More research needs to be done to provide a clearer understanding of how technology can be used effectively to enhance civic learning. Furthermore, we need to find ways to help classroom teachers effectively identify and utilize current and future research to inform and change their teaching practices so that it actually contributes to positive reforms. Yet equally important is the need to reflect critically on what is being taught and how it is being taught. Assuming that educational technologies will lead to better student learning outcomes can be a misuse of resources that may be better utilized in other ways. The findings in this study are exploratory and not definitively conclusive. Importantly, the limitations of this study’s population and the limited and unique context in which the social entrepreneurship intervention occurred must be considered if a similar experiential learning activity is to be implemented in other contexts, especially more traditional, heterogeneous school settings. Finlay, Wray-Lake, and Flanagan (2010) argue that there needs to be a restructuring of courses that teach civic knowledge and skills in order for them to achieve desirable civic outcomes in youth. Providing a set of school-based active civic learning opportunities for youth, particular those that are vocationally driven and anchored to students’ community and related social issues, can meaningfully support the development of students’ commitment to civic engagement. The finding from this study can inform those interested in restructuring high school civics educations so as to enhance the impact of civic education efforts.
Schools are uniquely positioned to help cultivate the cognitive skills needed to solve complex social issues that directly or indirectly affect us all. However, much work is needed to disseminate research and evidence to help inform teacher practice, develop classroom teachers capable of developing crucial higher-order skills of critical thinking, problem-solving, and collaboration in youth, and to incorporate more experiential, civic learning opportunities in schools despite the pressures of high-stakes testing and accountability and the increasing marginalization of the social studies. Whether it is issues-centered curriculum, social deliberation, social entrepreneurship, MUVEs, or any other non-traditional ways of teaching and learning in the social studies, the important thing to remember is that educators and schools should work to develop the skills and learning outcomes the Framework for 21st Century Learning and other similar guidelines emphasizes. Encouraging students to engage in critical analysis of social issues and to civically engage in addressing problems in their community can be meaningful learning experiences for the youth of today and the future.
REFERENCES


APPENDIX A: Social Entrepreneurship Student Learning Plan

Concept: Social Justice and Social Entrepreneurship

Topics: Social Determinants of Health and Inequalities That Affect Community Health

Homework assignment due today: Read David Bornstein’s book How to Change the World: Social Entrepreneurs and the Power of New Ideas (2007) and review Healthy People 2020

Grade Level: 12

Student Learning Objectives Linked to Dual Enrollment Healthcare Program

Student will be able to demonstrate:

- awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value
- understanding of how patient care and other professional practices affect other health care professionals, the health care organization, and the larger society
- knowledge of the impact of demographic factors on access-to-care and epidemiology of disease
- commitment to expectation that healthcare providers are accountable to the communities they serve.
- knowledge of the health care needs of the community
- knowledge of the health care resources available in the community
Primary Learning Objectives Linked to Standards

C3 Standards for Civic Processes, Rules, and Laws

Students individually and with others will:

- Analyze historical, contemporary, and emerging means of changing societies, promoting the common good, and protecting rights.

PA Civics 5.2.12.B Conflict and Resolution

- Examine the causes of conflicts in society and evaluate techniques to address those conflicts.
- Analyze strategies used to resolve conflicts in society and government

C3 Standards for Participation and Deliberation

Students individually and with others will:

- Apply civic virtues and democratic principles when working with others.
- Use appropriate deliberative processes in multiple settings.
- Analyze the impact and the appropriate roles of personal interests and perspectives on the application of civic virtues, democratic principles, constitutional rights, and human rights.

Additional Learning Objectives Linked to Standards

PA Civics 5.2.12D

- Evaluate and demonstrate what makes competent and responsible citizens
C3 Standards for Civic Processes, Rules, and Laws

Students individually and with others will:

- Evaluate multiple procedures for making governmental decisions at the local, state, and national levels in terms of civic purposes achieved.
- Analyze how people use and challenge local, state, and national laws to address a variety of public issues.
- Evaluate public policies in terms of intended and unintended outcomes and related consequences.

C3 Standards for Communications Conclusions and Taking Informed Action

Student will individually and with others use writing, visualizing, and speaking to:

- Construct arguments that use precise and knowledgeable claims with evidence from multiple sources, while acknowledging counterclaims and evidentiary weaknesses. Adaptations of arguments and explanations that feature evocative.
- Construct explanations using sound reasoning, correct sequence (linear or non-linear), examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation given its purpose (e.g., cause and effect, chronological, procedural, and technical).
- Present adaptations of arguments and explanations that feature evocative ideas and perspectives on issues and topics to reach a range of audiences and venues outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, reports, and maps) and digital technologies (e.g., Internet, social media, and digital documentary).
C3 Standards for Historical Sources and Evidence

Students individually and with others will:

- Analyze multiple and complex causes and effects of events in the past and present.
- Distinguish between long-term causes and triggering events in developing a historical argument.
- Integrate evidence from multiple relevant historical sources and interpretations into a reasoned argument about the past and present.

C3 Standards for Human Populations and Human-Environmental Interaction

Students individually and with others will:

- Evaluate the impact of economic activities and political decisions within and among urban, suburban, and rural regions.
- Evaluate the influence of long-term climate variability of human migration and settlement patterns, resource use, and land uses at local-to-global scales.
- Evaluate the impact of human settlement activities on the environmental and cultural characteristics of specific places and regions.

C3 Standards for Economic Decision Making

Students individually and with others will:

- Analyze how incentives influence choices that may result in policies with a range of costs and benefits to different groups.
• Use economic tools to construct an argument for or against an approach or solution to an economic issue.

**Student Learning Activities:**

**Lesson 1 – A Systems-Based Practice Approach to Healthcare:**

• Bell ringer Activity and Review of Assigned Out-of-Class Readings (15 minutes)

• Overview of the Recent History of Healthcare in the US (30 minutes)

• ACGME competency: Systems-Based Approach to Healthcare Discussion and Deliberation in Small Groups (60 minutes; select students are asked to change groups in 10-minute intervals to allow new perspectives into each group)
  
  o What information do healthcare providers need in order to provide the best care possible for their patients?
  
  o Hospital systems are increasingly asking their healthcare providers to understand the complexities of the communities they serve. How might aspects of community influence the way healthcare providers treat patients?
  
  o In what ways are healthcare resources (e.g., from hospitals, clinics, information, time with physicians or advanced practice clinicians) made available or allocated to different groups of people within the community?

• Whole-Class Debrief and Exit Quiz (15 minutes)
• Homework Assigned: Research two social issues that you feel most affect the health of people in the community.

Lesson 2 – Social Determinants of Health and Inequities:

• Bell ringer Activity and Review of Assigned Out-of-Class Readings (5 minutes)

• Overview/review of various conceptions of social justice (30 minutes)
  o literacy, including health and digital literacies
  o quality and access to education
  o social norms and attitudes
  o exposure to crime, violence, and social disorder
  o economic status and stability
  o environmental conditions
  o civic and political participation

• Small Group Case Study Analyses from How to Change the World: Social Entrepreneurs and the Power of New Ideas (Bornstein, 2007) (60 minutes)
  o What were the social issues the social entrepreneurs wanted to address? How might these issues be important to overall community health?
  o How would you describe the attitudes and dispositions that made them successful in working toward social change?
What were the steps and processes that the social entrepreneurs took to make the implementation of their ideas successful?

- Orienting to the MUVE and Review of Group Assignment (30 minutes)
  - Students will log into the AvayaEngage Live Server and try the following:
    - Navigate the space, communicate with the peers using the VoIP capabilities, and try to access multimedia access points in the MUVE.
- Homework: Review Group Assignment and Brainstorm Social Entrepreneurship Ideas

**Lesson 3 – Collaboration on Innovations for Social Change (In the MUVE)**

- Review of Group Assignment and Expectations for Group Work/Behavior in the MUVE (20 minutes)
- Student Group Work in the MUVE (90 minutes)
- Whole Class Debrief (10 minutes)

**Lesson 4 – Collaboration on Innovations for Social Change (In the MUVE)**

- Review of Group Assignment and Expectations for Group Work/Behavior in the MUVE (5 minutes)
- Student Group Work in the MUVE (105 minutes)
- Whole Class Debrief (10 minutes)
Lesson 5 – Collaboration on Innovations for Social Change (In the MUVE)

- Review of Group Assignment and Expectations for Group Work/Behavior in the MUVE (5 minutes)
- Student Group Work in the MUVE (105 minutes)
- Whole Class Debrief (10 minutes)

Lesson 6 – Collaboration and Presentation on Innovations for Social Change (In the MUVE)

- Review of Expectations for Group Presentations in the MUVE (5 minutes)
- Presentations of the Social Entrepreneurship Ideas (105 minutes)
- Whole Class Debrief (10 minutes)

**Character Development**

Students will identify how laws and society have changed over time and understand the differences and similarities of perception, attitude, and social structure.

Students will develop their analytical skills.

Students will develop their public speaking skills through class discussion.

Students will develop citizenship skills, including understanding of the U.S. government, social system, and their effects on society.

Students will develop understanding of how rules and laws affect society.
**Student Assessments**

Students will complete a bell ringer activity at the beginning of class, worth 5-10 points each. (formative)

Students will be actively participating in group discussions and deliberations, worth a total of 25 points (formative)

Students will be informally observed regarding their understanding of the material. (formative)

Students will review prior class information. (formative)

Students will complete a daily exit quiz, worth 10 points each (formative)

Students will complete a social entrepreneurship project, worth 100 points. (summative)
APPENDIX B: Social Entrepreneurship Student Assignment Guidelines

Culminating Project

(100 points)

Due: Tuesday, May 20, 2014

As one of the final assessment of your understanding of healthcare, social issues, and the role that clinicians and other providers play in the health of the community and society, you will work in small groups to develop a social entrepreneurship idea that address some aspect of a social issue that affects the Lehigh Valley community and interests you. Successful completion of the project and presentation will require some out of class work.

Only complete projects will be accepted!

Authentic Assessment Questions

You will need to be able to answer the following questions to develop your social entrepreneurship ideas.

- Think about your experiences (e.g., shadowing, presenters, case studies, interviews, etc.) in the healthcare system this year. What social issues came up, especially those related to patients’ health and well-being? Write those social issues down.

- Identify a social problem or issue in the local community that interests the group as a whole. Be prepared to provide a rationale why you and your group choose to focus on that issue.
- What are the root causes of those social issues?
- Brainstorm with your group about how you might go about addressing the issue within the context of the hospital and healthcare system.

**Artifacts to be Graded:**

You will be graded on your presentation of your social entrepreneurship idea. Remember, entrepreneurship involves business planning and marketing of your idea. It is up to you to determine how you want to best “sell” your idea. I am giving you quite a bit of flexibility and freedom to decide, in your groups, how to best present your idea. **Be creative!**

**Important Dates:**

*Friday, May 9, 2014*

Meet in class – Systems-Based Practice Approach to Healthcare Lesson

*Tuesday, May 13, 2014*

Meet in class – Social Determinants of Health and Case Studies of Social Entrepreneurship

*Tuesday, May 15, 2014*

Meet in the AvayaEngage Live virtual environment – Group work on your social entrepreneurship ideas

*Friday, May 16, 2014*
Meet in the AvayaEngage Live virtual environment – Group work on your social entrepreneurship ideas

Monday, May 19, 2014
Meet in the AvayaEngage Live virtual environment – Group work on your social entrepreneurship ideas

Tuesday, May 20, 2014
Meet in the AvayaEngage Live virtual environment – Presentation of your social entrepreneurship ideas!

Additionally information and/or changes to the directions will be at the discretion of the instructor.
APPENDIX C: Pre- and Post-Survey Questions

The following questions were asked only on both the pre- and post-surveys. Questions were based on Likert-type scales with a value of 6 representing “strongly agree,” 5 representing “agree,” 4 representing “slightly agree,” 3 representing “slightly disagree,” 2 representing “disagree,” and a value of 1 representing “strongly disagree.” Items in bold-faced type indicate differences between pre- and post-surveys that were significantly different. All survey items were retrieved and adapted from the National Center for Learning and Citizenship’s (NCLC) database of survey measures of civic engagement. Each set of questions indicates which the sources attributed by the NCLC’s database.

Civic Efficacy

- I feel I have the power to make a difference in the community.
- I believe I have enough influence to impact community decisions.

*(source: The UC Berkeley Service-Learning Center)*

Civic Organization Skills

- I can organize others to take action on a problem.
- I can develop ideas about how to take action on a problem in society.
- I know who to contact to get something done about a problem in society.
- I can persuade others that a problem in society needs to be solved.

*(source: Carnegie Foundation for the Study of Teaching Political Engagement Project, California Civic Index)*
- **Critical Thinking and Problem-Solving**

  I can explain my ideas about social and political issues to others.

  - I can weigh the pros and cons of social and political issues from different positions.
  - I can gather information about social and political issues from different sources.
  - I understand articles in the newspaper about social issues and politics.

  (source: Carnegie Foundation for the Advancement of Teaching Political Engagement Project)

- **Social Problem Solving Skills acquired during a civic-related experience**

  I have learned how to examine social problems.

  - I have learned ways of addressing community problems.
  - I have learned how action by groups can solve social problems.
  - I have learned about individuals’ responsibility to their community.

  (source: CEDARS - Wilkenfeld)

- **Justice-Oriented Citizen**

  When thinking about what needs to be done, I often focus on the root causes of social problems.

  - In the next three years, I will work to promote justice.
  - I think it's important to work for positive social change.
  - In the next three years, I will work with others to evaluate and try to change unjust laws.
  - By organizing and participating in protests, people make society better.
(source: Kahne, Chi and Middaugh)

- **Social Responsibility**
  
  Doing something that helps others in the community is important to me.
  
  - like to help other people, even if it is hard work.
  
  - Helping other people is something everyone should do, including myself.
  
  - It is my responsibility to help improve the community.
  
  - I am aware of important needs in the community.
  
  - Helping other people is something that I am personally responsible for.
  
  - Being actively involved in community issues is my responsibility.
  
  - Being concerned about state and local issues is an important responsibility for everybody.
  
  - In the next three years, I expect to participate in political or social causes to improve the community.
  
  - Everyone should be involved in working with community organizations and local government on issues that affect the community.
  
  - In the next three years, I expect to be involved in improving my community.

(source: Kahne, Chi and Middaugh, The UC Berkeley Service-Learning Center)

- **Youth Responsibility**
  
  - Young people can play an important role in making their communities better.
  
  - It is good for democracy when young people are obligated to help people in the community.
  
  - Young people have a responsibility to help people in their communities.
- Young people have a responsibility to help solve environmental problems in their communities.
- Young people should be involved in working with community organizations and local government to improve their communities.

(source: Kahne, Chi and Middaugh)
APPENDIX D: Post-Survey Questions on Students’ Experience in the MUVE

The following questions were asked only on the post-survey after the completion of the social entrepreneurship unit. *Note:* Questions are based on Likert-type scales with a value of 5 representing “very true,” 3 representing “somewhat true,” and 1 representing “not true at all.”

1. The virtual environment kept me engaged with the work environment.
2. I was able to work well with my team members while in the virtual environment.
3. I felt engaged in the group work while in the virtual environment.
4. I felt that my lack of experience with technology impeded my engagement in the virtual environment.
5. I was able to use the presentation tools in the virtual environment easily.
6. I was able to upload and download content in the virtual environment.
7. Virtual environments are useful tools for working with other students.
8. Doing the project in the virtual environment was better than if using other types of technology (e.g., email, Moodle, Skype).
9. The virtual representation of my team gave me a greater sense of their presence that other educational technology tools.
10. Overall, I liked using the virtual environment for collaboration.
11. Overall, the project in the virtual environment was a worthwhile learning experience.
APPENDIX E: Interview Questionnaire

1. Tell me about your experience with the unit and the project.

2. What does civic engagement mean to you?

3. How would you describe social justice?

4. How would you describe social entrepreneurship?

5. Explain how the class unit and project influenced your understanding of social justice and social entrepreneurship.

6. How important is it to you to work towards improvements in your community or society?

7. Describe what you think might be important knowledge, skills, or tools to be able to work towards positive change in your community or society?

8. Describe how might you pursue ways to change your community or society?

9. Tell me about your experience in the virtual environment.

10. Describe what you feel might be the benefits of using virtual environments for learning and teaching.

11. Describe what you feel might be the drawbacks or risks of using virtual environments for learning and teaching.

12. Tell me about communicating and working in teams in the virtual environment.
APPENDIX F: Social Entrepreneurship Student Project Descriptions

Group 1

Title: Local Foods Education

Social Value: Develops awareness among low socioeconomic populations that may, for a variety of reasons, choose poor, unhealthy, and less nutritious food options instead of local and homegrown options (i.e., gardening, farmers’ market, etc.) that are of comparable costs.

Corporate Value: Reduces hospital costs in the long-term by decreasing risks of chronic diseases and other health problems in the community. Meets ACA mandates for proactive, preventative care in the community.

Description: Working with the network’s nutritionists, the program partners with the two Allentown city schools to educate about local and homegrown food options.

Group 2

Title: Coffee Stand for Fair Trade and Sustainability

Social Value: Creates greater exposure and knowledge of Fair Trade issues in the coffee industry and provides financial assistance to a clinic that serves low socioeconomic populations.

Corporate Value: Revenues generated from sales of the coffee would provide funding for the traditionally underfunded Women’s and Children’s Clinic that serves low socioeconomic populations in the City of Allentown.

Description: A student-run coffee stand in the hospital that sells Fair Trade certified coffee with informational materials on the packaging, napkins, and cups to inform customers of fair trade and sustainability. The revenue generated from the coffee stands supports the Women’s and Children’s Clinic.

Group 3

Title: Community Garden

Social Value: Provides space for local, organic food growth, especially for low-income individuals and families in urban locations.

Corporate Value: As a cost-share program, the community garden generates revenue from those paying into the system, with progressively higher costs based on income.
Description: The community garden proposes that a large plot of land owned by the hospital network be converted into a community garden. It would be a cost-share program where individuals and families that have financial difficulties would pay a low, nominal fee while those with higher incomes would contribute more. Opportunities exist for individuals to offset some of the fees by working in the community garden. Each co-op member would receive a guaranteed amount of fresh vegetables each week.

Group 4

Title: Mobile Education for Health Illiteracy

Social Value: Addresses underserved and at-risk populations that have difficulties accessing healthcare, either due to lack of transportation or health illiteracy or both.

Corporate Value: Provides an alternative venue for resident physician and medical student training for underserved and at-risk populations in the community.

Description: Mobile education unit staffed by residents to visit immigrants at their homes to show them resources they can access through the internet to better understand their healthcare options.

Group 5

Title: Veteran’s Education and Potential Careers in Healthcare

Social Value: Addresses long-standing issues regarding veterans and on-the-job training and support.

Corporate Value: Broadens the medical and nursing students training while at the hospital network and serves as a means of recruiting veterans into employment in the network.

Description: Medical and nursing students, as part of rotations at the health network, take part in a monthly seminar for veterans through the Lehigh Valley Workforce Investment Board. The role of the medical and nursing students would be to provide mentoring and a support network for veterans to encourage them to pursue and retain jobs in the healthcare industry.

Group 6

Title: Community Walk-a-Thon

Social Value: The event raises money that will be used to provide loans and financial assistance to high school seniors in the Lehigh Valley with significant financial need so that they can attend college or a trade school.

Corporate Value: A requirement of the loan or financial assistance is for the receiving individual to provide 100 hours of volunteer hours at one of the health network’s clinics.
Description: Replicating the Leukemia and Lymphoma Light the Night Walk and other similar charity walks, this event plans to be held on the health network campus.

Group 7

Title: Bike ride share program

Social Value: a) Encourage the physical and mental health of employees, b) reduce environmental and noise pollution c) fund after school physical exercise program

Corporate Value: a) Decreases health insurance costs to the network and b) addresses community preventative health

Description: Bicycles would be available for employees as a ride-share program. Working with Populytics, the company’s health insurer, the participating employees receive reimbursements through lower health insurance premiums and provide a financial donation to local schools with high proportions of low socioeconomic families to fund after school physical exercise programs.

Group 8

Title: Every Baby Deserves a Good Start!

Social Value: Provides gently used baby clothing, bottles, and other newborn items to be made available to new parents who cannot afford basic necessities for their newborn children.

Corporate Value: By providing items that low-income new parents may not be able to afford may reduce future health problems in the infant, leading to lower costs to the health network.

Description: Corporate fundraising efforts will provide the Mother and Baby units at the hospital with a standard kit for uninsured and low-income parents whose newborns are delivered at the hospital.

Group 9

Title: Dance Marathon for Community Health

Social Value: The funds generated from the event would help patients that cannot afford basic medical care to see a physician, nurse practitioner, or other health care provider for wellness visits.

Corporate Value: Raises visibility of the health network’s non-for-profit mission to serve the health needs of the Lehigh Valley community. Generate funds to provide better care for patients who cannot afford basic medical care.
Description: Replicating Penn State’s Dance Marathon, the plan proposes holding a 24-hour dance marathon involving local high schools. The event would be held in conjunction with Nite Lights, an annual fundraising event for the health network.
VITA
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EDUCATION
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