Teaching for Thinking:

Critical Thinking in Diverse Secondary Social Studies Classrooms

by

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Abstract

This paper examines effective strategies for teaching critical thinking in diverse secondary social studies classrooms. An investigation of the historical context of the topic revealed oppressive patterns toward women and people of color within social studies education, assimilationist educational objectives, and heated debate over the goals and methods of social studies education. A review of the literature demonstrated that warm demander pedagogy seems to be the most effective method to promote a positive academic environment for students from diverse backgrounds and abilities. It also showed that a supportive administrative environment that promotes teaching toward critical thinking is essential for students to develop critical thinking skills and behavior. While several specific teaching strategies showed promise, none demonstrated conclusively that they effectively promoted critical thinking skills in diverse classroom contexts, therefore further research will be necessary to develop clearer strategic implications for classroom teachers.
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Preface

I want to extend my sincere gratitude to those who have provided support to me while writing this paper. Thanks to Sonja Wiedenhaupt for reading my drafts and providing me with valuable and in-depth feedback, also to Anita Lenges, and Sherry Walton for their early guidance and instruction. I also want to thank Nick Owen who read over drafts and helped me to better understand APA format and better frame my paper for an audience outside the program. I also want to thank Richard Beith (Jr.) for mediating my frustrations and supporting me when I had to spend entire days and weeks researching and writing. Thanks to my parents, Emanuel and Elizabeth Jane Agren and my siblings Jennifer, Kimberly, James and Haley who have always supported me in my education and life pursuits and who have always been there to listen and discuss with me. I also want thank those caring and committed teachers, especially Lester Krupp, who have inspired me to pursue a career as an educator.
CHAPTER ONE: INTRODUCTION

Scope and Rationale

At its most basic level, this paper seeks to answer the following question: What are effective strategies for teaching critical thinking in diverse secondary social studies classrooms? I chose to focus this question specifically on diverse secondary classrooms because I plan to teach in secondary classrooms and given recent demographic trends, I expect that my students will represent a variety of backgrounds, values, and abilities. I decided to focus on critical thinking skills because these skills have been identified as essential to the study of social studies by recently imposed Washington State standards by which I will have to abide in my practice (Washington State Social Studies Skills EALR Section 3). Therefore, this question has relevance not only to myself, but to all other secondary social studies teachers in the United States, especially in the state of Washington, who must abide by curriculum standards which state that critical thinking is an essential skill to be learned in social studies classrooms. I also strongly believe that education for all citizens in critical thinking is essential for a functioning democracy, especially one with a variety of backgrounds, beliefs and abilities represented.

In this first chapter, I will describe the framework I have developed to answer this question and identify the premises that I will use evaluate the literature. I will also make clear the importance of this study to the educational field. In the second chapter, I will explore the historical context of my question, especially pertaining to the development of social studies as field of study, the development of critical thinking as an essential
element of social studies education, and how these histories have influenced the way the diversity is dealt with in secondary social studies classrooms.

In the literature review, I will first explore factors that affect social studies classrooms and a teacher's ability to effectively teach critical thinking in diverse classroom contexts, including issues faced in diverse classrooms; student attitudes, preferences, and emotions; structural factors in educational institutions; and issues present in testing critical thinking. I will then go on to look at studies that investigate the effectiveness of specific teaching strategies that address critical thinking and culturally responsive teaching in diverse classrooms.

Finally, I will conclude with an assessment of the literature review, identify the ways in which my question has been answered or left unanswered, describe implications for classroom practices, and make suggestions for further research.

Diversity in the Classroom

Education in the 21st century is facing significantly different obstacles than those of previous generations in the United States. There is now an unprecedented amount of diversity in US schools, and this diversity is being widely recognized by researchers, educators, and politicians. This diversity is significant in a variety of aspects: ethnicity, language, ability, gender, sexual orientation, political viewpoints, and socioeconomic status. Here I will discuss examples in education related to these issues for the purpose of illustrating their influence on the classroom environment and their significance for educators.
Statistics are often cited indicating the growing numbers of Latino and Asian Pacific American students in United States schools, and how the growth of these groups represents a cultural shift in the United States. Immigration and reproduction of these populations within the United States have contributed to the rapid growth of these groups and growing public concern over how these populations change the landscape of the United States' cultural milieu and educational infrastructure (Peng & Cheng, 1998; Valenzeula, 1999). Students from immigrant families and homes where English is not the primary language have special needs when it comes to being able to participate in a classroom where English is the language of instruction. Beyond the language barrier, and along with African-American and Native American students, there is a need for immigrants and students of color to be informed about the dominant cultural values, skills, codes, and ways of knowing to succeed in the dominant society, while allowing these students to retain the skills and values necessary to maintain ties to their own cultural way and sense of being (Delpit, 1995). This is especially important in a society where attitudes towards these students can be quite hostile, as demonstrated by media coverage of recent immigration protests around the country. These children need to be given the opportunity to obtain the tools necessary to be successful in the dominant culture while maintaining the tools that connect them to their home cultures and identities.

Another significant demographic issue in schools in the United States, one that often intersects with issues of ethnicity and immigrant status, is the growing number of
students who are living in poverty. According to 2006 data from The National Center for Children in Poverty: 40% of children in the United States come from low-income families, while 18% of these children live in outright poverty (http://www.nccp.org/fact.html accessed May 8th, 2006). Beyond the facts that these children may be coming to school undernourished, may not have a place or time to do homework, or may be plagued by poverty-related emotional issues, these children often do not share the same cultural values and skills that children from higher socioeconomic backgrounds do (Payne, 1996). This becomes a particularly problematic issue considering that most teachers come from middle class backgrounds and may not be as well-equipped to understand the needs of low-income students or the differences in their cultural values and skills (Brice-Heath, 1983; Payne, 1996). These children also need to be taught in ways that not only respect their sociocultural background, but in ways that allow them to gain the information and skills that will allow them to succeed in the dominant culture.

Yet another element of diversity in schools in the United States, one that also intersects with the previously mentioned elements, is gender and sexual orientation. Of course, schools in the United States serve both male and female students. Despite the notion that these groups may sometimes respond better to different educational approaches or subject-areas, boys and girls have different experiences in school because in many ways the school culture is set up to treat these students differently (Orenstein, 1994). A poignant example is in the social studies, where images of Euro-American men dominate textbooks, leaving females lacking in an abundance of positive female historical
figures to learn about and identify with. A less visible issue related to gender, yet no less important in public schools, is that of sexual orientation. Many schools prefer to ignore this issue entirely if possible, at the detriment of those students who may identify as gay, lesbian, bisexual, transgendered, intersex, queer, or questioning of their sexuality (GLBTIQQ), who may fear being open about their gender or sexual orientation in a potentially hostile environment. It is vital that these students feel safe in the school environment, as well as find positive GLBTIQQ role models such as authors, artists, historians, politicians and other professionals through exposure in the social studies classroom.

Students with special physical and developmental needs are present in each one of the elements previously discussed. These students could have issues ranging from auditory or visual impairment to cerebral palsy and conditions like dyslexia, attention deficit disorder, and autism. These students require a learning environment that accommodates their particular needs, whether that requires an aide who can interpret or take dictation, or changes to the curriculum on the part of the teacher that serve the needs of all students in the classroom. It is also important that these students are provided with positive role models to emphasize their worth in a society that often stigmatizes people with different types of ability.

Social studies education has a particular role when addressing students from these different backgrounds. It is imperative that all students are given the best opportunities to participate in democratic society, and therefore it is important that effective social studies
education is available to all students regardless of background, identity, values or ability. As pointed out by numerous authors on the topic of identity and education (Delpit, 1995; Igoa, 1995; Kohl, 1994; Mooney & Cole, 2000; Tatum, 1997), in order for an education to be accessible, a student needs to see his or her experiences reflected in and respected by the educational environment. According to these authors, it is a personal connection with the student's environment that allows learning.

In addition to helping all students build a positive cultural identity within the context of social studies education, it is also important to ensure that all students, including those who are typically in positions of power and privilege in US society, are empowered to critically examine inequities and the ways in which they are reproduced in society (Stanford, 1997). Students must examine social inequities because by becoming aware of them, they can be empowered to address them and consciously shape their attitudes to create a more equitable and egalitarian democracy. This includes examining inequities experienced at social, economic, and political levels for the purpose of creating classroom environments and eventually a society in which principles of equity and equality are goals.

In researching the literature for this study, I discovered several terms that refer to strategies and frameworks for addressing diversity in classrooms. The term most often used was “culturally responsive teaching”, which refers to a teacher's ability to maintain a classroom environment in which educational approaches are adjusted to the culturally-defined needs of students. Other terms used include “culturally relevant pedagogy,”
“teaching for multicultural democracy” and “equitable instruction.” While each of these terms has a distinct definition, for the purposes of this paper I have taken them to fall into the general category of means to address diversity in classrooms.

Critical Thinking Skills

The Washington State curriculum standards imposed by the Washington State Office of the Superintendent of Public Instruction break up the social studies skills Essential Academic Learning Requirements (EALRs) on critical thinking (Section 3) into six basic skills that students must be able to perform: to define and clarify a problem (3.1.1a), to judge information related to a problem (3.1.1b), to solve problems and draw conclusions (3.1.1c), to analyze cause and effect relationships (3.1.1d), to think chronologically (3.1.1.e), and to take different perspectives (3.1.1f ). Each of these basic skills has different levels, or benchmarks, which are to be achieved by students at different grade levels. These are the types of skills and terminology I will use to judge whether a specific research study addresses an element of critical thinking.

Beyond the definition and importance placed on critical thinking by the Washington State Office of the Superintendent of Public Instruction (OSPI), critical thinking has been historically noted as an important skill for citizens of a democratic society. The development of critical thinking skills prepares students for the types of challenging problems that students will routinely experience throughout their lives, especially in a democratic society in which citizens are expected to make well-reasoned decisions in public elections regarding initiatives, constitutional amendments and
representatives to public office (Newmann, 1991a). It is also an assumption of a capitalist economic worldview that people always make the most rational economic decisions, weighing the costs and benefits of every economic behavior based on information available to them (Stiglitz, 1997). If the economic participants we bring up in our education system do not have the critical thinking skills to effectively evaluate information about their economic choices, then the power of the economy will lie unequally and unfairly in the hands of the firms that rent labor and produce goods and services. This is especially significant in this era in which there is a coordinated and concerted effort by corporations to manipulate the public into purchasing decisions through pervasive advertising, especially directed at young people.

Critical thinking skills seem to be particularly important in our current era, often referred to as the “information age”. With an abundance of information at the disposal of students through the Internet, television, and other information technology, the real problem is no longer access to information, but the ability to distinguish different sources and types of information, determining the reliability of different sources, and identifying and understanding the concept of bias. Part of my personal interest in teaching critical thinking skills comes from my desire to begin to transform the “information age” into an “understanding age”.

Finally, it is important to recognize that many of the studies which I have examined for the literature review refer to what I call critical thinking by a variety of different terms. Most often, critical thinking is also known as “higher order” thinking
which is usually defined broadly as a challenging and expanded use of mental capacities, as opposed to “lower order” thinking which is usually defined as routine, mechanistic, and limited use of mental capacities (Newmann, 1991a). Other terms used to refer to expanded uses of mental capacities (in line with the skills defined by OSPI above in the context of social studies) include “thoughtfulness”, “historical thinking”, and those terms listed in the higher levels of the hierarchy of educational objectives called Bloom’s Taxonomy, including: “application”, “analysis” and “synthesis”. Despite the various shades of meaning represented by these terms, for the purposes of this paper I have taken them to be understood as various elements of critical thinking as defined by the Washington State OSPI.

Critical Thinking and Moral Cognitive Development

Social studies education provides a unique opportunity for students to study their own identity in the context of their family and personal history, the historical context of their life in terms of national and world histories, and the contemporary social factors that govern their lives. Social studies, broadly defined by the National Council for the Social Studies, includes such disciplines as anthropology, archeology, civics, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology (NCSS, 2007, About section, para. 3). It is typically broken down for the purposes of K-12 instruction into history, geography, economics and civics. By looking through the lenses of these disciplines, students are able to gain a more complex understanding of themselves and their role in society, and therefore develop a moral background from
which to make important decisions throughout their adult lives. Following Kohlberg's theory of moral development, there are four basic stages of this growth: 1) simple egocentric judgments in which children believe that their perspective is the same as another's (characteristic of children from infancy to 6 years), 2) self reflective judgments in which children recognize the self as a possible target of another's perspective (characteristic of children from age 6 to 12), 3) the mutual or third-person perspective in which children can begin to engage in recursive perspective-taking, i.e. “I know that you know that I know...” (characteristic of children age 9 to 15) and finally, 4) the stage in which a person understands that a network of perspectives makes up a social system (Feldman & Elliot, 1990). This final perspective is a goal which not all adults obtain, and no doubt, the broader attainment of such a perspective, in which people are able to regard other perspectives than their own as valid, could have far-reaching benefits for a multicultural, democratic society.
Social studies education, if applied in a way to help students develop an understanding of a multiplicity of perspectives within a society, could be an important tool in creating a more egalitarian democracy. This goal of social studies education is congruent with Washington State Critical Thinking Skills EALR 3.1.4f, “Reconstruct and express multiple points of view and integrate a historic, geographic, civic, or economic perspective.” For the purpose of developing a more egalitarian democracy, it is particularly important that social studies be focused on being able to effectively teach all students, allowing all students to have a positive moral development experience in their education.

Secondary schooling is a particularly important time for the identity formation process to occur. As students gain independence from their parents and start to think of themselves as individuals, it is important for that student to be given the tools to inform that identity. Considering the unique nature of the social studies to give context to identity, help students develop a more advanced moral perspective, and to develop important critical thinking skills, the secondary social studies classroom becomes a powerful place, full of lifelong learning potential.

Controversies in Teaching Critical Thinking in Diverse Classrooms

The controversies discussed in the literature on teaching critical thinking primarily feature the conflict between traditional schooling methods of rote learning and various more newly developed methods. Despite the decline in the popularity of traditional teaching methods since the 1970's, traditional styles of teaching have recently been
undergoing a resurgence as teachers face meeting the requirements of widespread standardized testing and an overall decrease in instructional time. This pressure has forced some educators to abandon teaching strategies that are perceived to require more time and require the coverage of topics that are beyond the scope of mandated curricula and standardized tests (Pass, Riccomini & Switzer, 2005). This trend is particularly damaging for progressive educators, as a strong body of research has only begun to develop on a variety of teaching strategies, including those that focus on critical thinking as a primary goal. There are several schools of thought that emerge from the existing literature about how critical thinking should be addressed in social studies classrooms. As asserted by the National Council for the Social Studies, the primary goal of social studies education is to create effective citizens. The question this assertion leaves to educators and researchers in the field is: what is required to create effective citizens? Some believe that the general ability to think is the most central to being an effective citizen, while others think that lessons should focus on critical analysis and problem solving. It has been argued that both of these views can be perceived to encompass critical thinking, which in turn can promote political efficacy and participation (Pass, Riccomini & Switzer, 2005). While debate still exists over which approach is most significant there is no evidence indicating that these approaches are mutually exclusive.

Some believe that the best way to get social studies students to engage in critical thinking is through the discussion of authentic, relevant and controversial public issues with their peers (Hess, 2002; Hess & Posselt, 2002). The proponents of this approach
believe it to be the most relevant and applicable to critical participation in a democratic society, though most agree that actual employment of this strategy in classrooms can be time consuming and difficult for teachers to manage. Others believe that students best engage in critical thinking skills when they are given a resource of various organized historical materials, and encouraged to answer questions and investigate these materials individually or in groups (Saye & Brush, 2002; Swan, 1994). This approach is based on a research model of social studies education. In the literature reviewed for this paper, this strategy was tested and examined through the use of a hypermedia database. This strategy and context was of particular interest to researchers because of the significant influence of hypermedia information on young people, and the importance of developing ways to teach students media literacy within the context of social studies education (Saye & Brush, 2002; Swan, 1994).

Another approach is the direct instruction of social studies concepts, allowing students to then apply the concepts to historical examples on their own. This technique is generally conceived as a counterpoint to more traditional methods of social studies instruction in which students are given a narrative version of historical events and are then expected to remember the important points and cull their own understandings of the social studies concepts implicit in the narrative (Kleg, Karabinus, & Carter, 1986). This direct concept instruction approach is based on the idea that the students learn more effectively if the concepts in the lesson are clearly defined, allowing students to engage in critical thinking in the actual application of the concepts. Other specific strategies for
critical thinking that give primary consideration to how a person thinks include the Dixon-Hegelian method and teaching triarchically.
The Dixon-Hegelian method is based on a understanding that learning occurs through a process of developing a thesis, or an idea about something, testing this idea and being confronted with an antithesis, or conflicts with the initial idea, and finally developing a synthesis combining and integrating the previous thesis and antithesis (Dixon, et al., 2004). The synthesis then acts a new thesis in the cycle of the student's continued learning and development. Proponents of this approach claim that it is effective because it takes into account a learning style observed in people in natural learning contexts. The other strategy that claims to take advantage of natural learning tendencies is teaching triarchically. Triarchic teaching combines three approaches to student learning, designed to promote critical thinking skills and overall scholastic achievement. The three approaches are derived from the theory that human intelligence is based in analytical, practical and creative modes of thinking, and that teaching must include these methods in order to make learning most effective (Sternberg, Torf, & Grigorenko, 1998). While using this strategy, teachers encourage students to first analyze information, by judging its credibility and importance, then use their creative capacities to determine and develop ways to apply the information to a problem, and finally find ways to make sure that the solution is practical and actually test it. While the theory that this strategy is based on claims that people learn differently from the theory posed in the Dixon-Hegelian approach, it is not clear whether these approaches are actually mutually exclusive in practice.

Aside from specific teaching strategies employed by individual teachers in
classrooms, there also exists support for the idea that school-wide administration and organization are more significant factors related to finding observable critical thinking skills and behavior in students. There seems to be more research available in this area, possibly because there is more demand at the administrative level for research on this topic. Examples of these structural factors include the organization of class schedules to provide longer blocks of instructional time, and administrative leadership and support in promoting critical thinking as school wide goals (King, 1991; Ladwig, 1991; McCartney & Schrag, 1990; Onosoko, 1991; Queen, Algozzine, & Eaddy, 1996; Raudenbush, Rowan, & Cheong, 1992). The literature review presented in this paper should provide some answers as to which of the above mentioned approaches to critical thinking are most effective, and which have the most significance for promoting these skills in diverse classroom environments.

Diversity in schools has become a more and more significant issue as children of color have entered schools in greater numbers, accounting for about 50 percent of the school age population, while the teacher workforce remains predominantly White and female, with about 90 percent of teachers being White, and 74 percent female (Marx, 2001). Despite the fact that school populations are becoming more diverse, the assumption of the White, middle class student as the norm is retained, creating a disconnect between what teachers are prepared for and what type of student the curriculum is designed for. Unfortunately this dynamic leads to a deficit perspective taken in regard to students of color, which can be damaging to students and ineffective for
teaching in diverse classrooms. Among leading scholars in this field, there is little
disagreement over the fact that teachers need to be better prepared to deal with diverse
classrooms as the norm (Brice-Heath, 1983; Delpit, 1995; Peng & Cheng,
1998; Valenzeula, 1999). Controversies related to teaching methods for diverse
classrooms typically relate to whether teachers should focus more on developing a
classroom environment that respects all student backgrounds and allows them to be
successful based on their own cultural values, or whether the focus should be on directly
teaching students the codes of power that will allow them to assimilate and be successful
in the dominant culture. Related to this debate is also the issue of whether students are
best taught by teachers that share the same socio-cultural background as the students.
However, it is not possible to control what types of people choose to become teachers,
despite efforts to encourage more people from diverse backgrounds to enter the field.
Therefore, it seems most appropriate to focus on efforts that will ensure that all students
are provided with a safe, respectful and academically challenging environment regardless
of differences in the cultural backgrounds between teachers and students. The literature
that I analyzed for this paper explored effects of developing positive rapport with students
and classroom cultures in which all students feel safe and respected, or more direct
attention on developing higher levels of tolerance in all students and direct teaching in
how to function in a multicultural democracy.

Statement of Limits

My investigation is intended to address the question posed at the outset: What are
effective strategies for teaching critical thinking in diverse secondary social studies classrooms. As indicated by the language of the question, my analysis will be limited to studies applicable to secondary level schooling environments, broadly defined as fifth through twelfth grade. I will also examine strategies specifically designed for use in social studies classrooms, or those more general strategies that have clear and obvious relevance to the teaching of social studies. I will be assessing these strategies for their effectiveness in promoting critical thinking and applicability to diverse classrooms. Finally, I will look as some specific studies which more generally address issues of diversity in secondary schooling environments to compensate for the lack of literature addressing all of the above elements in tandem. It is important to note that my ability to answer to the overall question is limited to a review of existing literature. This paper will also include a brief historical background on issues of diversity in schools and on the development of social studies as a discipline taught in public schools for the purpose of providing a context for the question at hand.

What is “Effective”?

In researching a question that looks for “effective strategies” it is essential to be able to answer the question: what does it mean for a teaching strategy to be effective in the secondary social studies? In my research, I will be defining an effective strategy for critical thinking by whether or not the evidence is persuasive regarding a positive effect on student learning in any of the above listed critical thinking skills defined by the Washington State Essential Academic Learning Requirements, or by the criteria and
measures presented by the researchers. I will also be paying special attention to whether the research indicates that the strategy is effective for diverse learners in any of the various aspects of ethnicity, language, ability, gender, sexual orientation, and socioeconomic status, as well as looking at strategies aimed at specifically dealing with diverse classrooms.

Chapter Summary

In this chapter I have stated my goal to find effective strategies for teaching critical thinking in diverse social studies classrooms. This question is significant to the field of education because of recent demographic trends increasing the diversity of students, and because the high speed and amount of information available today through mass media requires that all young people are prepared to think critically in order to participate in a democratic society. For the purposes of this paper, critical thinking will be defined by Washington State Essential Academic Learning Requirements regarding social studies skills in critical thinking. I will consider research relevant to the topic of diversity as long as it takes into account a variety of students in terms of ethnicity, language, ability, gender, sexual orientation, political viewpoints, and/or socioeconomic status. This paper will first explore the history of diversity and social studies in public schools, and will then examine the literature available on teaching critical thinking and addressing diversity in social studies classrooms. Finally, I will discuss conclusions and recommendations for future research.
CHAPTER TWO: HISTORICAL CONTEXT

Cultural Norms and Values in Social Studies Education

Social studies education in the United States has been a tenuous topic since the widespread inception of public schools, then referred to as “common schools”, in the 1830's and 40's (Spring, 2004). The purpose of the common school movement was to require state and local governments to administer educational institutions that would achieve public goals, thereby remedying what were popularly perceived as social, political and economic problems such as: crime, poverty, ethnic tensions, immorality, and idleness (Spring, 2004). These problems were particularly pertinent as the relatively new democratic government struggled with the implications of turning over the control of the country to a mostly uneducated and heterogeneous citizenry.

In the years leading up to the establishment of the common schools (and in all the years following) there was heated debate over if and how the values of the democracy should be taught in schools. Some believed that these values should be predetermined and handed down from generation to generation through the public school system; some thought that no specific values should be taught in schools, allowing parents to choose and teach their values to their own children; still others thought that a basic, common set of values would emerge through logic if all children were taught the basic skills of reading, writing, and arithmetic (Spring, 2004). Essentially the argument dealt with what political and religious worldview should be taught in schools and how. This debate has continued to be contentious issue to date, as children from a variety of backgrounds come
together to learn a common social studies curriculum in US public schools. Perspectives on this debate are formed by individual perceptions about which issues are the most pressing social problems, and how these problems can best be addressed by the public school system. Major conflict over educational content in recent years usually occurs between religious and secular groups who argue over how much religious and moral content should be present in public schools. The major curricular battlefields for this conflict are usually the social studies, language arts, science, and health content areas. Highly politicized interpretations of content material can find their way into curriculum and national educational policy through appointments of individuals to powerful positions in educational institutions, ranging from classroom teachers to the federal Secretary of Education to publishers of school texts, as well as through sweeping social change in the broader cultural milieu (Hunter, 1991).

The origin of the term and specialized practice of “social studies” dates back to the early twentieth century, when a major concern for education was assimilating the recently arrived groups of immigrants and native-born ethnic and racial minorities to the cultural norms and values predominant among “old” immigrants of Anglo-Saxon descent (Crocco, 2003). Around 1904, educator Thomas Jesse Jones developed a course he named “social studies”, the first of its kind, for the purpose of teaching mainstream Anglo American cultural norms and values to Native American and African American students. He operated on the culturally-biased assumption that these groups needed education on the “essentials of civilization” necessary for their participation as citizens in a democratic
society. It was with this biased perspective that Jones served as chair of the Committee on Social Studies in 1912, and as the specialist on Negro education at the Federal Bureau of Education in 1913, where wide-reaching policy decisions were made regarding social studies education based on an assumption of the racial superiority of Anglo-Saxon Whites. These policy decisions including the institution of “The Cardinal Principals of Secondary Education,” which institutionalized the objectives of health, command of fundamental processes, worthy home membership, vocation, citizenship, worthy use of leisure, and ethical character into the secondary public school system (Spring, 2006). All of these objectives were defined by White Anglo Saxon cultural norms and values, treating all other cultural practices as immoral, backward, or uncivilized (Crocco, 2003).

Over the following decades, African American, female, and immigrant leaders such as WEB DuBois, Carter G. Woodson, Lucy Salmon, Jane Addams, Lucy Sprague Mitchell, and Mary Beard challenged the racist, sexist, and class-biased notions that were being perpetuated by the mainstream social studies curriculum. Eventually, social forces caused the focus of social studies education to shift away from a strictly assimilationist perspective, including perspectives put forward by psychologists aimed at helping students from a variety of backgrounds adjust to their future positions in society. Of course, old patterns continued, reinforcing stereotypical assumptions about race, ethnicity, gender and class (Crocco, 2003). This shift occurred most prominently between 1940 and 1980, spurred in part by the social upheaval and tension produced by World War II and Cold War politics (Spring, 2004). As with the previous assimilationist era of American
education, leaders from African American, labor, and women’s groups challenged the prescribed social positions exhibited in social studies curriculum, and demanded that the social gains achieved during World War II not be rolled back. Work was then undertaken to recognize the achievements of women and African Americans in society outside of their typically prescribed roles within social studies education.

Red-baiting during the McCarthy era made progress more difficult for women and ethnic minorities in social studies education, as anyone challenging the status quo was easily blacklisted or turned away out of fear of the “red menace” (Crocco, 2003). A major breakthrough occurred in May of 1954 with the groundbreaking *Brown v. Board of Education of Topeka* decision by the United States Supreme Court, ending school segregation and culminating decades of struggle by African American and Latino communities (Patterson, 2001; Spring, 2004).

Around 1945 the National Council for the Social Studies (NCSS) became a guiding force in making social studies curriculum inclusive of the experiences of people of color and women through its publications, which were edited by prominent proponents of multicultural education including Van Til, Hilda Taba, and Allison Davis. In 1954 the NCSS heartily endorsed the *Brown vs. Board of Education* decision, going on to sponsor “racism clinics” throughout the United States in the 1960’s and 70’s. All this attention to issues of diversity in social studies education was based on the objective of compensating for a history of inequitable curriculum in order to heal the psychological damage done to women and people of color. There were challenges to the strategies of this movement,
however, as many saw the efforts as tokenism of the histories of women and people of color, reinforcing the historical victim role stereotype of women and ethnic and racial minorities in US society (Crocco, 2003).

From the 1980's to the present, a movement has been underway to change the paradigm of social studies education to not only include women and people of color, but to rework the racist and sexist undergirding of social studies education through a perspective-taking approach. Despite these efforts, dramatic increases in immigration since the immigration reforms of 1965 have increased the pressure to move back to an assimilationist perspective in social studies curriculum (Crocco, 2003; Spring, 2004). This tension can be seen as characteristic of a political pendulum swing in dealing with cultural values and norms in social studies education.

Inclusion of content material related to homosexuality and sexual orientation has also been a contentious issue, especially following the publicized hearings to the Texas Board of Education about inclusion of content related to homosexuality in 1994, and the controversial decision by the Boy Scouts of America in 2000 to ban membership of homosexuals (Spring, 2006). Only since 2002 have prominent social studies education journals seriously and openly addressed issues of homosexuality and sexual orientation in social studies education. This is due in part to the growth of gay and lesbian studies departments in US universities, and a growth in the literature on the social history of homosexuality and attention to the psychological needs of gays and lesbians in schools (Crocco, 2003).
Despite these overall shifts and movements in the scholarship and policies regarding social studies education, changes in what actually goes on in social studies classroom curriculum have been inconsistent. Individual states, school districts, and teachers have interpreted the goals of the curriculum in their own ways, allowing for wide disparities in the content and methods used in social studies education from classroom to classroom. While overall, social studies curriculum has become more inclusive of diverse cultural norms and values over the past century, the shift has by no means occurred in every classroom to the same degree. It is important to recognize the racist and sexist origins of social studies education in the United States so that we can have a clearer vision of the direction we want to take as we realign the discipline to meet the needs of the diverse citizens of the United States.

Efforts Toward Inclusion of Diverse Learners

Beyond inclusion of different cultural perspectives in social studies curriculum, a major change in US education in the last century has been to differentiate teaching practices to include a wider variety of learners in terms of ability level. Federal regulations define children with disabilities as any children with the following conditions:

1. Mental retardation;
2. A hearing impairment including deafness;
3. A speech or language impairment;
4. A visual impairment;
5. Serious emotional disturbance;
6. An orthopedic impairment;
7. Autism;
8. Traumatic brain injury;
9. A specific learning disability;
In 1975, the Education for All Handicapped Children Act was signed into law, requiring that where appropriate, children with disabilities were to be integrated into regular classrooms. This law was passed with the hope of reducing the stigma associated with children with disabilities and allowing them to develop social skills along with their peers and increase academic achievement of disabled children overall. This law was amended in 1997, at which time complaints were voiced that appropriate services were not being provided for more than half of the children with disabilities in schools in the United States. It was also noted that as many as a million children with disabilities were entirely excluded from the public school system, and that many disabilities were going undiagnosed. While the mandated inclusion of students with disabilities was a positive and well-reasoned goal, it can be argued that there was not enough support or funding provided for classroom teachers who then had to work in classrooms of students with varying levels of ability, with little or no training on how to effectively address such a classroom environment (Spring, 2006).

Inclusion of students for whom English is a second language (ESL) or who have limited English proficiency (LEP), has also been a contentious issue, especially since the sweeping immigration reforms of the 1965 Immigration Act, which nullified the restrictive immigration quota system implemented in the Immigration Act of 1924. This change in law resulted in a new wave of immigration, particularly of people from Mexico and Latin America. Significantly, this wave of immigration coincided with a push by
Native Americans, Mexican Americans and Puerto Ricans to make schools implement bilingual education programs in order to preserve their linguistic cultural traditions. This push had limited success however, as groups who opposed bilingual education asserted that the official language of the United States should be English, and that immigrants should be required to assimilate to speaking the predominant language (Spring, 2006). However, a victory was achieved in the passage of the Bilingual Education Act of 1968, which approved federal funds to be distributed to public schools in order to provide bilingual education programs for LEP and ESL students (Rethinking Schools, 1998).

The inclusion of bilingual education programs in US public schools have encompassed three main types of bilingual instruction. Maintenance bilingual programs were designed to maintain a student's ability to speak, read and write in his or her native language while gaining abilities in English. Transitional bilingual programs were intended to only provide support in the student's native language until he or she could participate in English-only education, with no attention to helping the student maintain ability in the native language. Two-way bilingual programs included both English-speaking and non-English speaking students for the purpose of helping all students in the classroom become bilingual (Spring, 2006). Despite the employment of these various methods of bilingual instruction, the law had required no particular methodology to be used in the practice of bilingual education, but equal opportunity laws required that educational programs met the following standards:

- Research-based programs that are viewed as theoretically sound by experts in the field;
– Adequate resources -- such as staff, training, and materials -- to implement the program; and
– Standards and procedures to evaluate the program and a continuing obligation to modify a program that fails to produce results. (Rethinking Schools, 1998, p. 9).

The bilingual education movement suffered a distinct blow with the passage of the No Child Left Behind Act in 2001, which clearly defined bilingual education not as a means to preserve the native languages of public school students, but as a means only to make the transition to English-only instruction more effective. This law essentially eliminates all federal funding for maintenance and two-way bilingual education programs, and even went as far as to change the name of the federal Office of Bilingual Education to the Office of English Language Acquisition (Spring, 2006). While this debate will no doubt continue in the future, for the time being, only transitional bilingual education programs can be funded by the federal government in public schools in the United States.

Critical Thinking as an Aim of Social Studies Education

Thomas Jefferson is often cited for his pioneering views on education. He could be called the first “education president” of the United States, passing some of the first legislation in both his home state of Virginia and on the federal level aimed at improving educational prospects for the citizens of the United States and paving the way for the comprehensive public education system that exists today. Jefferson strongly believed that a well-educated citizenry was necessary in order to have a successful democratic republic. Thus he began, as quoted from a letter he wrote to George Wythe in 1786, his “crusade against ignorance” (Carpenter, 2004). While Jefferson lived before the term “social
studies” was used, and even before common schools became a widespread institution, his advocacy of citizenship education has served as the ideological foundation for the development of what we now call social studies education. Although he never made any specific recommendations of pedagogical approaches to citizenship education, his writings suggest that he advocated teaching that included strategies in which students constructed and reconstructed learning through experience, reinforcing communication skills and critical thinking. He saw these skills as especially important, not only to make a representative democracy work, but also as a defense of democracy against governments overstepping their powers (Carpenter, 2004).

Despite Thomas Jefferson's advocacy of critical thinking and citizenship education as a means of creating an effective democracy in the early years of the United States, he was not the first recorded person to push forth such an ideology. Plato is famous for writing out dialogues between Socrates and his students to exhibit the questioning techniques employed by Socrates to help students uncover their own thinking and eliminate hypotheses through the identification of contradictions (Plato, trans. 1976). These dialogues were written around the turn of the fourth century BCE, just before the development of the first recorded democratic system of government, and the dialogues are still in use for teaching the Socratic method of questioning. Socrates is said to have spent his life seeking answers to the following six questions: What is virtue? What is moderation? What is courage? What is justice? What is piety? What is good? and it was through these questions that Socrates hoped to learn about human nature and potential,
and how to improve human societies (Phillips, 2004). This goal can be seen as a goal similar to that set forth by Thomas Jefferson in his writings about educating citizens for a democracy as it focuses on developing critical thinking skills as a means to improve a democratic society.

John Dewey, the famed twentieth century American educational reformer and philosopher, also saw critical thinking as a means to achieve the goals of a democratic society. Dewey wrote that experience was the most significant element of education and that humans naturally learn from experience, whether that experience serves to better educate the individual or cause that individual mental and emotional harm that discourages further education. He termed these negative experiences “miseducative.” He saw educational institutions that focused on rote learning and taught knowledge as a finished product to be the producers of such miseducative experiences, and believed that these institutions served to produce an individual “… robbed of native capacities which otherwise would enable him to cope with the circumstances that he meets in the course of his life” (Dewey, 1938, p. 48). Instead Dewey thought that education should allow students to explore their role in the world, ask questions, test moral and social judgments, and participate in communities that would teach positive social functioning (Dewey, 1938; Spring, 2004). While Dewey's recommendations for education began to receive attention during the progressive era, the Cold War following World War II pushed his and other progressive models of education aside, instead shifting to a focus on competing with the USSR by rote learning in math and science education (Spring, 2004). While it is
not clear why performance pressures on the United States educational system has tended
to cause reversion back to rote learning methodology, I hypothesize that it may be
because of the tendency for these social movements to place a high level of importance on
social control, which rote learning seems to promote.

Beyond teaching critical thinking as a means to educate citizens for participation
in a democracy, critical thinking is also an essential element for participation in capitalist
society. As I mentioned earlier in this paper, the conditions of a capitalist economy
require that individuals make economic choices that are most beneficial to them. Since
the inception of the institution of the high school, around 1821, there has existed a debate
over whether the emphasis in secondary education should be on allowing students to
develop practical skills for application in occupations later in life, or on more holistic
instruction to provide students with mental capacities and wisdom to help them be
successful in all areas of their lives. The former was thought to include occupational
instruction and rote learning, whereas the latter was considered to include instruction in a
variety of fields, with an emphasis on higher-order thinking (Spring, 2004). While at a
time the difference between these two goals of secondary instruction may have seemed
insurmountable, the continuing integration of the world economy has created a need for
students to understand not only a particular, specific field in which they plan to work, but
also the workings of the global economy and how their field may be affected by other
industries in order to make economic choices that will be most beneficial.

The importance of learning beyond discrete skills and specific occupations goes
further than its relevance to the integration of the world economy, as an all-together shift in the nature of the United States economy has been underway for several years. In 1987 the Task Force on Teaching released a report entitled, *A Nation Prepared: Teachers for the 21st Century*, which asserted that because of shifts in global markets, the United States would no longer be able to compete in production of goods, and therefore education in the United States should become focused on creating workers for knowledge-based industries. It went on to state that in order to produce this shift, schools needed to stop focusing on rote memorization of discrete information and move toward teaching higher-order thinking skills to all students (Spring, 2006). No doubt, these developments have greatly increased the utility of an education based on developing critical thinking skills in addition to developing specific occupational skills.

**Chapter Summary**

The historical context of my question includes the treatment of issues of diversity within institutions of public schooling over time, the development of social studies as an academic discipline taught in public schools, and of critical thinking as integral aspect of this discipline. As an educator seeking effective strategies in this field, it is important to be aware that these histories are rife with injustices and contradictions, and that the original purposes of social studies education were to increase social control over people who did not fit into the Anglo-American, protestant mainstream ideal. It is also important for educators to understand the laws and political precedents set by the United States government regarding students with disabilities and students with limited English.
proficiency in order to make informed decisions about how to implement changes in their classrooms. Making critical thinking within social studies accessible for diverse students can be seen as a positive movement against histories of oppression, and against a mainstream political climate in which all students may not feel welcome or safe. The importance of critical thinking to participation in a democratic society and global economy demonstrates that if diverse students are denied the opportunities to develop critical thinking skills they are also being denied access to democracy and the ability to make well-reasoned economic decisions. In moving on to the review of the literature, it is important to keep in mind what purposes of social studies education are being served by the research, the ways that diverse students are included in the classroom environments studied and what cultural assumptions are present in the content taught.
CHAPTER THREE: CRITICAL LITERATURE REVIEW

Factors Affecting Secondary Social Studies Classrooms

This first set of studies provides insight into what issues are present in various secondary school environments. Some deal with social studies classrooms specifically, while some deal more broadly with general schooling environments and elements related to critical thinking and diverse classrooms. This section will also explore issues in testing for critical thinking. It is important to examine these studies first to clarify what issues secondary social studies teachers face when trying to effectively teach critical thinking in diverse secondary social studies classrooms. Once it is clear what teachers face when trying to meet this goal, strategies can be analyzed for their relevance to the issues present in the classroom. It is also important to look into how critical thinking is conceptualized by researchers, and how it might be most effectively measured in these environments.

Issues Faced in Teaching in Diverse Classrooms

In approaching an exploration of effective strategies for teaching critical thinking in diverse classrooms, it is important to take a look at some of the issues present in diverse classrooms specifically. The following studies look at how teachers experience the difficulties of teaching in diverse classrooms.

This case study, conducted in 2001, set out to explore the problems experienced by a first-year, White teacher working with students of color (Marx, 2001). This study was spurred by the researcher's concern over high rates of teachers leaving the profession after
the first year, a trend that was especially evident in schools with diverse student demographics. The researcher therefore sought out a first year, White teacher in a school with diverse student demographics. The researcher found such a teacher at a Texas middle school which featured the following student demographics: 65% African American, 25% Latino/a, 7% Asian, and 3% White. 80% of the teachers at the school were White. The researcher gathered data through open-ended interviews with the teacher, classroom observations, discussions with the observed teacher's mentor teacher, and observations of the school environment outside of the classroom. After data was collected and transcribed, it was analyzed for themes and patterns. Finally, the results were shared with the cooperating teacher so that her responses could be used for further triangulation of the results.

As the researcher conducted this study, a theme that became overtly apparent was the lack of support that the teacher received from her professional peers and school administrators. For example, the teacher was told that she would be observed by the principal and evaluated on her performance. The teacher expected to get feedback from this experience in order to improve her teaching. When the observation day came, the principal only stayed for five minutes and did not seem to pay particular attention to her instruction or interactions with students. Upon receipt of her evaluation, she found that the principal marked her highly in all areas, leaving no commentary or suggestions for improvement. This left the teacher feeling frustrated and abandoned by the administration in terms of helping her improve her practice. She also stated that she felt the only way
that she could get feedback was in the case of a dire emergency. Another example was that of the mentor teacher assigned to help get her through her first year, who regularly made negative comments about the school and students, never providing advice or support in relation to the problems experienced by the first-year teacher. As the semester wore on, the cooperating teacher became more vocal in the interviews about her frustration with the work environment and the lack of proactive measures by the school administration to help deal with classroom management issues and attitudes among the staff that sought to blame students for the low performance of the school. The management issue that seemed most problematic at the school was the fact that discipline issues were addressed after the fact, and very little attention was given to proactive prevention efforts. This left the teachers feeling that they spent a disproportionate amount of time dealing with discipline issues instead of teaching. It was also noted by the researcher that despite the administrators' consistent references to students and teachers about rules in the student handbook, none had been distributed to either teachers or students. It was hypothesized by the researcher that such a focus on punishing negative behavior as opposed to defining and rewarding positive behavior would reinforce negative behavior for students. The negative behavior then exhibited by students of color at the school would reinforce racial stereotypes for both teachers and students, thus fueling a cycle of blame, misbehavior and punishment. At the end of the school year, the cooperating teacher decided to transfer to another school district, along with several other teachers from the school.
Overall, this study found that administrative communication and support played a significant role in how well this teacher was able to navigate the challenges of teaching to a predominantly low-income, non-White student body. Distraction by ill-defined administrative policies, and the student-blaming attitude of the staff took time and energy away from the teachers that could have otherwise been used to support student needs and promote positive behavior. This case study provides insight into some of the issues that face teachers who work in low-income, ethnically diverse schools, and the importance of having clearly articulated goals at an institutional level to help teachers spend more time teaching. Weaknesses of this study included the researchers lack of a complex understanding of the school politics, staff, and overarching goals, therefore much of her assessment of the school environment was based solely on the perceptions of the cooperating teacher she worked with. However, this study is a revealing portrait of the kinds of frustrations and emotional turmoil that such a school environment can cause for a first year teacher in a similar situation, and certainly provides some possible hypotheses for issues faced by first year teachers working with students of color, especially those related to peer and administrative support.

The next study (Marri, 2005) sought to examine both how skilled social studies teachers teach for and about multicultural democracy in their classrooms, as well as what obstacles these teachers face in working toward classroom-based multicultural democracy. This study is discussed in more detail later on in this chapter, so here I will review the obstacles that three skilled social studies teachers identified in their work
toward classroom-based multicultural democracy. After an extended period of classroom observation of three teachers considered skilled in classroom-based democratic education, the researcher conducted individual interviews to allow the subjects to explain their perceived difficulties in trying to teach such classes. All three teachers reported four common problems that they experienced in their work. First, they mentioned the relatively homogeneous class contexts of their school districts as a barrier to helping students understand perspectives from other economic or cultural backgrounds because students had little first hand experience with issues of diversity. Second, the teachers all mentioned limited conceptions of diversity on the part of their students, and on the part of the teachers themselves, mostly in terms of only perceiving diversity on racial or ethnic terms, overlooking other factors like gender, sexual orientation, socioeconomic status, ability and religious or political beliefs and values. Third, the teachers mentioned an avoidance in promoting social action in the schools, making it difficult for teachers to promote such action without support from the broader community. Finally, the teachers mentioned not being able to address and add skills for democracy to the curriculum because of the limitations created by other curriculum coverage requirements. While this study provides insight into what these specific teachers experienced in their respective classroom environments, it only represents those teachers who were identified as exemplary in their dealings with multicultural democracy in their classrooms, and it does not necessarily represent what less successful teachers may face. In addition, these teachers taught in relatively homogeneous schools which likely faced different issues than
schools with highly diverse student bodies.

Student Attitudes, Perceptions, Preferences and Emotions

In order to evaluate the effectiveness of teaching strategies that will engage students, it is important to look at what student attitudes, perceptions, preferences, and emotions may already exist that could affect the classroom environment. As discussed earlier, accessible education should take into account a student's personal connection with the learning environment, so that the student can feel respected enough in their particular background, abilities, and beliefs to participate and learn (Delpit, 1995; Igoa, 1995; Kohl, 1994; Mooney & Cole, 2000; Tatum, 1997). This is not only important for students coming from diverse backgrounds and ability levels, but for all students who must feel secure enough in their learning environments to take risks when it comes to critical thinking, especially if the students are expected to be active participants.

Perry, (2002) conducted an examination of student emotions related to test taking and other academic tasks and experiences. This study also explored how these emotions affect learning. These researchers found relationships between student effort and emotions of hope and enjoyment, and more hope and enjoyment reported when students engaged in self-regulated tasks. They also found that hopelessness and boredom were related to the highest levels of irrelevant thinking and lack of motivation. The questions the researchers sought to answer included: What emotions do students experience in academic contexts? How do these emotions affect learning? And what can be done to foster positive academic emotions? To answer these questions, the researchers developed
five different measures and implemented them by random assignment to middle and high school age students as well as undergraduate university students. The data collected included: a diary response study in which students were asked to recall a typical academic episode and what emotions they experienced during that episode, seven studies featuring an adapted version of two previously developed inventories of interest and learning strategies, and four individual interview studies with students following classroom instruction, an exam, or a daily period of studying.

Data was analyzed in this study using a multidimensional scale developed by adapting scales from previous studies on the topic of student emotions. The results were categorized by learning-based emotions, classroom-related emotions, and test-related emotions. Within each of these categories, student responses were coded and measured in the following sections and compared: enjoyment, hope, pride, relief, anger, anxiety, hopelessness, shame, and boredom. This index was then compared to student achievement, and correlations were developed between various academic emotions.

Another scale was developed to find possible correlations between variable of student learning including types of motivation, study strategies, resources, and regulation behaviors which were compared to academic emotions such as enjoyment, hope, anger, boredom, and anxiety. Emotions were measured based on subject self reporting, and were then compared to determine relationships between these emotions and student achievement as well as student learning variables.

Through this analysis, the researchers found that academic emotions related in
significant ways to variables of student learning and achievement. The relationships were similar comparing school-age students and university students. Researchers found that students reported effort in relation to hope ($r=.49$, $p<.001$) and enjoyment ($r=.43$, $p<.001$), and hope and enjoyment reported during self-regulated academic tasks ($r=.46$, and $r=.43$, $p<.001$, respectively). Boredom was related to the lowest levels of motivation ($r=-.50$, $p<.001$) and highest levels of irrelevant thinking ($r=.72$, $p<.001$). Positive emotions such as enjoyment, hope, and pride were found to be consistent predictors of high achievement upon examinations of student grade point averages. The researchers also found that anxiety is less closely related to achievement ($r=-.19$, $p<.01$) than hopelessness and boredom, dispelling the idea that test anxiety significantly lowers student achievement on standardized tests. These results indicate that students who are given autonomy and the ability to self-regulate learning will likely also have more positive emotions related to academic tasks. It also indicates that including a culture of learning from errors and communicating with peers will likely be tied to less anxiety, hopelessness and boredom in the academic environment.

The weaknesses of this study that I was concerned with were the lack of reporting on the numbers of students that participated in the study and the lack of demographic information provided about the students. For something as subjective as student emotion, it would be important to discuss how student emotions may vary from group to group. This would be an especially important consideration to apply this study to practice in diverse classrooms, although the findings seem to be congruent with the claims made by
authors on the topic of personal connections with the classroom environment (as discussed previously). Overall, enjoyment, hope, and pride would seem to be exactly the types of emotions you would expect to find in a classroom environment where students achieve personal connections and respect from the teacher, their peers, and themselves. Unfortunately however, the researchers in this study did not look into aspects of classroom environment that could have contributed to the emotional responses of students.

The following study examined student preferences for instructional techniques in citizenship education classes, which can be seen as a significant aspect for students to feel engaged and connected with the learning environment (Dynneson, 1992). The question that this study sought to answer was “What are students' preferences for instructional techniques in citizenship education classes?” The researchers explored this question by selecting four groups of high school seniors from different socioeconomic backgrounds and geographic areas of the United States. The groups were from Arkansas, California, Minnesota, and Texas. Unfortunately the researchers reported no other information about how these study participants were selected, the exact demographics of these groups or the sample size for each of the four groups. The researchers then administered a seven-questions survey to the study participants. Each question but one included a Likert scale for students to indicate their response, ranging from “strongly agree” to “strongly disagree”. The one other question asked students to rate their preferences, one to eight. This question was framed as follows: “I prefer to study citizenship through the following
activities: a. Studying traditional American values. b. Studying contemporary issues and community concerns. c. Studying history, government, and civics. d. Working on a community project with community leaders. e. Problem-solving activities. f. Activities using legalistic processes. g. Activity based on personal interests. h. Studying global issues and concerns.” (Dynneson, 1992, p. 197). Each of these categories was further explained on the survey citing examples for each. This question was the one primarily used to rate student preferences for classroom activities.
After analysis of the surveys through a simple tallying of the student responses, researchers found that students strongly preferred activities based on current events and activities related to personal needs and interests. They also found that students least preferred activities related to legalistic processes and community participation. Overall, students tended to have similar preferences across the four groups surveyed, including preferences that were unpopular with teachers. Students reported a low preference for studying American traditions and values and problem-solving activities, which surprised these researchers despite the news media focus at the time on American values within the Persian Gulf War which was occurring at the time of the survey. It is important to note that this lack of preference could also have been caused by students getting burned out on the high amount of attention paid to the topic. The researchers instead expected that the media’s focus on American values at the time would have been reflected in the students’ responses in a positive way. Unfortunately the researchers did not include the tallies or percentages developed from the student responses so a closer examination of the data is not possible.

Overall, these researchers concluded that that students need more personally meaningful activities in citizenship education classes in order to maintain student interest. While this study could be significant in telling teachers generally what kinds of instruction their students may be more interested and engaged in, the fact that this study did not report the differences in student interests related to demographic factors and ability levels takes away some of the utility of the study in being able to help teachers
make better assumptions based on these factors in diverse classrooms. With something as subjective as student preferences, these will no doubt vary from student to student, especially in relation to cultural background, abilities, and even geography. However, the study provides educators with some significant starting points to determine what may be interesting to students as they develop curriculum for citizenship education classes.

Hess and Posselt (2002) examined the discussion of controversial public issues (CPI) in social studies classrooms for student experience, backgrounds and ability to participate. They were guided by the following three questions: “How do secondary social studies students experience CPI discussions and what factors account for this experience? How do students' race, gender, and preferred classroom communication styles influence how they experience classroom discussions of CPI? Do students improve in their ability to participate effectively in CPI discussions in a semester-long course that focuses primarily on such discussions? If so, how?” (Hess & Posselt, 2002, p. 289). To explore these questions, the researchers conducted a case study at a high-performing school in a “somewhat diverse” Midwestern high school. This school offered many extracurricular opportunities, and was located in a community described as a “hotbed for free speech and thought.” In this school, the researchers observed two similar social studies classes. One was taught by a male teacher with 33 years of teaching experience, and one taught by a female social studies teacher with seven years of experience. These teachers were known to work together at the school to teach similar social studies classes and shared similar philosophies on the importance of using CPI discussion in social studies education. They
both believed that this experience was very important in developing a vibrant democracy.

A total of 46 students in the two classes participated in the study: 19 from the male
teacher's class, and 27 from the female teacher's class. Some students did not participate
because their parents did not sign the required human subjects review paperwork. Both
classes together represented a nearly even gender distribution with 22 females to 24 males
overall. The racial/ethnic composition consisted of four African-American students, one
Asian-American student, one Latino student, and one Japanese foreign exchange student.
The rest of the students identified as White. This composition was approximately
proportionate to the rest of the school population. All of the students were in the 10th
grade but one, and all were 15 or 16 with the exception of one 17 year-old. This course
was unusual because it was required for graduation, and it featured a teacher-designed
formal process for assessing and grading students' discussion skills. While the classrooms
represented in this study represent some diversity in terms of student demographics, it is
not helpful in determining the preferences of a wide variety of students because the
majority of students are White, and because the study occurred in an unusual classroom
and community context.

This study collected, examined, and compared five types of data. First, the
researchers administered pre- and post-course questionnaires. Students answered
questions about their demographic orientations, their general participation in and
response to in-class discussion, views toward responsibility and fairness of requirements
to participate, and several open-ended questions about likes and dislikes regarding
classroom discussion. The post-test asked the same questions as the first, but included further questions about whether the students would vote when they turned 18, and what they thought they learned from the course. Beyond the questionnaire, the researchers also collected data via classroom observations, interviews with students and teachers, videotapes of graded discussions, and classroom artifacts, including handouts and the teacher's grade books. Following the preliminary findings from these data sources, researchers chose a representative sample of three students to examine and interview in depth to develop hypotheses about some of the findings.

The researchers found that student attitudes toward the course were strongly related to how much they valued discussion as a practice, and that their abilities to participate effectively in the discussions improved as a result of courses that placed primacy on these discussions. It is also important to note that the behavior and perceptions of peers is related how much value the student placed on discussion and whether they believed that learning how to effectively participate in discussion would be translate into a valuable skill outside of school. This research is significant because it demonstrates that discussion, an instructional method often associated with the development of critical thinking skills (Hess & Posselt, 2002), is highly related to student perceptions of its effectiveness. In other words, it is possible to hypothesize from this study that if students are not personally engaged in the classroom environment, do not believe that discussion is important, or are not supported by their peers in participating in discussion, students will likely not participate as strongly in discussion and will not
develop the critical thinking skills needed in the process. However, it is important to note that because this study did not include a highly diverse student population, and did not note how students with different backgrounds may have responded differently, it is not clear that this hypothesis would be applicable to a diverse social studies classroom.

Going beyond general student attitudes, preferences and emotions regarding school activities, student perceptions of historical significance also have the potential to play a significant role in how a student is able to relate to subject matter and how well they will be able develop critical thinking skills. The following study sought to answer the question: “What phenomena do students understand as historically significant and what is the reasoning for their choices?” (Sexias, 1994). Historical thinking, which deals with the ways in which knowledge of history is thought about, especially relative to perceptions of chronology and historical significance, is present in the Washington State EALRs 3.1.1-4d and e, particularly 3.1.3d “Analyze and evaluate the impact of ideas, events and/or people…” and 3.1.1e “Think chronologically”. This study, while paying attention to students' understandings of chronology of events, was particularly focused on how students understand historical significance or impact (of which, chronology turns out to be a measure of significance for students, to be discussed later on).

This study included 14 tenth-grade student volunteers from three different social studies classes in Canada. One of the classes was a selective outdoor program, while two were general, mainstream classes. All students in the classes were presented with the opportunity to participate in the study. A total of 38 students volunteered, but the
researcher reported fewer volunteers from the mainstream classes. This trend was explained as the result of a high proportion of students with limited English proficiency (LEP) status in the mainstream classes and their hesitancy to participate in a study conducted in English. Therefore none of the students who participated in the study could be classified as LEP students. This is problematic because the design of the study (conducted only in English) caused the population willing to volunteer for the study to be less diverse. However, students from the mainstream classes did still participate, making the study more likely to represent a wider range of academic ability levels.

First, the total number of volunteers was surveyed for student interest in social studies, in order to get a sample of students for the interviews that had diverse attitudes toward social studies. A total of 14 students were chosen from the volunteers to represent the different views of social studies ranging from “boring” to “very interesting”. The interviews were conducted using a short list of questions and a technique in which no meanings were assumed to be understood, which required the researcher to ask probing and clarifying questions. Interviews were taped and transcribed. No quantitative analysis of the data were made or attempted, though responses were coded for their relationship to each student’s perception of important events and developments, and those that each student thought were important for one to learn about.

This study found that several patterns emerged in the student responses to the question of the three most important developments of the past 500 years. Of 108 total responses on the initial survey, half of the students stated World War I and II (WWI and
WWII) (30 responses), several stated European expansion to the Americas (14 responses),
and several mentioned the fall of communism (ten responses). It is important to mention
that the curriculum did not cover WWI, WWII, or the fall of communism up to this point,
which indicates that students developed the perception about two of the most highly rated
significant historical events outside the classroom. Beyond the most frequent responses,
15 of the students mentioned events that were personally interesting (each being the only
person to list an event as significant) such as: a major disaster that affected the student in
some personal way, a favorite sports team winning a game, or a personally interesting
current event of some type. Another group of responses, which were mentioned two to
nine times each, were those that were directly taught in the school curriculum, most
frequently taught in the immediately previous year. In the interviews, students most
frequently offered explanations of significance in which the significance was determined
by a chronological narrative linking of present to past. For example the student would
explain that a historical event was important because of the ways that it affected modern
day life. These were seen by the students as those historical events that had the most
impact on the contemporary world. Other explanations of significance included: historical
knowledge important for its own sake, personal interest in a specific topic, interest in
records set in particular categories (such as first, biggest, fastest, etc.), and finally, as an
obligation to ancestors.

Overall, this study is relevant to effective strategies for teaching critical thinking in
secondary social studies classrooms because it demonstrates what indicators of historical
significance and chronology students may be bringing with them into the classroom. The fact that students were most frequently able to connect significant events from present to past through narrative indicates that narrative may be an important aspect of understanding chronology for students before they enter the classroom. However, this study demonstrates that it cannot be assumed that this is the way that all students perceive historical significance, as they were also found to determine significance through personal interest, obligation, et cetera. It also cannot be assumed that these same results would be true for students of color, or students with LEP as they were not proportionally included in this study.

Overall, these studies on student attitudes, preferences, perceptions and emotions give us some information about how students perceive specific classroom tasks, what topics and methods they are most interested in, and what historical events students think are most significant and why. These hypotheses may give educators some helpful ideas about how to develop curriculum that students will respond well to. In all, these studies suggest that students may put the most effort into academic tasks when they feel hopeful and enjoy tasks, and when they are given the opportunity to participate in self-regulated tasks (Perry, 2002); that students may be most interested in current events and activities related to personal needs and interests (Dynnesson, 1992); that student participation in discussions of controversial public issues may depend on how students value discussion as a practice, and how their peers value and participate in discussion (Hess and Posselt, 2002); and finally, that students may come to class with preconceived notions of historical
significance, and may be most prone to determining the significance of events based on
the chronological narrative describing why an event has influenced the present (Sexias,
1994).

Influence of Structural Factors on Teacher Effectiveness

Essential to the question of effective strategies for teaching critical thinking in
diverse social studies classrooms is institutional context and structure. Structural factors
usually refer to institutional policies, attitudes and procedures within which teachers and
students must operate. It is important to evaluate the environment in which strategies may
be implemented, ways in which the institutional structures may promote or challenge
critical thinking and diversity, and recognize what factors may contribute to the ability of
teachers to teach effectively in their classrooms. The following studies lend insight into
how class scheduling and the structural integration of language arts and social studies
may affect overall student achievement in social studies classrooms, as well as how school
leadership affects classroom emphasis on critical thinking and what institutional barriers
exist to promoting higher-order thinking objectives.

The following study examined the effects of 4x4 block scheduling on student
achievement in various subjects (Queen, Algozzine, & Eaddy, 1996). Block scheduling is
a method of organizing class periods in which students have four, 90 minute classes for
one semester and four other 90 min classes the next semester for a total of eight classes a
year. This is significantly different from the traditional class scheduling scheme where
students have six to eight classes a day for 30 to 60 minutes for the whole school year.
For example, in a typically-scheduled school, a student’s schedule may include a 30-60 minute period each of math, science, language arts, social studies, physical education, health and an elective for an entire year. In the 4x4 block scheduling system the same student would have a first semester schedule of four 80-90 minute periods including math, language arts, physical education, and an elective, while the second quarter would have social studies, science, health, and another elective. An alternative, though less popular configuration features students switching schedules day to day instead of from semester to semester. Typically, a school will adopt the block system of scheduling in order to offer students a wider variety of classes throughout the year (sometimes in order to meet standardized test requirements), to cut teacher workload (by cutting the number of students they have during a given period), to reduce the time wasted by both teachers and students in switching and preparing for classes, or to help deal with the pressures of increased class sizes. Some schools also choose to adopt this system of scheduling because it has associated by some educational theorists with more opportunities for students to build community with each other and to work more collaboratively.

The participants for this study included the parents, faculty, students, administrators and staff members of three high schools in Lincoln County, North Carolina. The researchers observed the schools during the implementation phase of the 4x4 block scheduling program and the following three years. These observations included classroom observations of teacher instruction, teacher-student, and student-student interaction; interviews with faculty, administrators and parents about the merits and
disadvantages of the system; investigation of students' standardized test scores in a variety of subjects; and a survey to collect student, parent, and teacher opinions of the program. Overall, the researchers set out to determine in what ways block scheduling was most effective, and if it seemed to be more effective in some subjects than in others.

Through an undescribed analysis of the above data, this study found that while the majority of teachers, parents, and students believed that the plan was successful (70-80%), 30% of classroom teachers were observed misusing the extra class time by increasing the length of lectures instead of allowing for more student interaction and involvement (one of the schools' stated goals of the scheduling program). The only subject in which test scores increased significantly among schools with block scheduling was social studies, while no significant increase was found in other subjects. Unfortunately, these researchers provided no measure of how these scores were deemed “significant.” This is a concern because their perception of significance may not be accurate when examined statistically. However, the researchers also observed that social studies classroom teachers seemed to use more of the class time for promoting student discussion and extended in-class projects. Despite the lack of analysis provided by the researchers, the findings of this study are significant because they demonstrate that social studies may be a unique subject because it may require longer class periods to teach effectively. However, it could also simply indicate that the teachers of other subjects did not use the extra class time as often for academically enriching activities. What may be most significant about this study, as researchers whose work will be discussed later in this
chapter argue, is the indication that short class periods may be a significant barrier to the kind of instruction necessary to promote critical thinking in social studies classrooms, especially regarding discussion and in-depth study.

This next study examined how teachers were able to affect social studies curriculum, methods of integration of English and social studies, and teacher preparedness in social studies classrooms and departments in the New York City (NYC) public school district (Crocco & Thornton, 2002). This topic is particularly significant to the discussion of effective strategies for teaching critical thinking to diverse students because in order to actually be effective on a wide scale, teaching strategies will eventually need to be implemented by classroom teachers. It is important to understand what kinds of challenges teachers may face if they attempt to employ these strategies in their classrooms and examine exactly how much power they may have in deciding which teaching strategies they employ. This study also somewhat examines the integration of social studies and English curriculum as a strategy for teaching these subjects.

The questions that these researchers sought to answer were: “How are decisions made on what subject matter to teach in the classroom? How does the character of the teaching force affect social studies curriculum and instruction in institutional settings? What does the integration of social studies and English actually look like? [and] How prepared are teachers to plan and teach such curriculum?” To explore answers to these questions, the researchers collected four types of data. First, they submitted questionnaires to school principals in the NYC Public School District featuring both
multiple choice and open-ended questions about school background data, details about social studies and English curriculum and instruction, and opportunities for professional development for faculty. The researchers also conducted interviews with teachers and school spokespersons, participant observations in classrooms, and documentary research in primary and secondary sources. The researchers primarily sought to compare those schools which had recently been restructured to those operating with a more traditional curricular framework.

While using the survey questionnaires as the primary data source, and other data to triangulate the survey responses, the researchers determined that teachers were the primary decision makers about what was being taught in the classroom and which teaching methods were employed. However, it was hypothesized by the researchers that this may actually have had a negative impact on students in some cases where teachers were not adequately prepared to teach the subjects they were hired to. This study found that teachers charged with integrating English with social studies curriculum into one interdisciplinary class were not adequately trained in interdisciplinary instruction, and in-class observations indicated that social studies curriculum for students varied greatly from school to school. This finding was primarily determined because many of the teachers themselves responded that they had never been trained in interdisciplinary education, and some even noted that they they were only trained in one of the two subjects they were charged with teaching in an interdisciplinary fashion. The researchers also found that newly restructured schools in the district had a younger and less
experienced teaching staff, with more teachers teaching social studies without a
certification in the subject, and fewer mentoring opportunities for new teachers. The
researchers found that several of the teachers at these schools complained that they were
not given enough guidance in how to teach their subject. It was implicated by the study
that these factors potentially affected student achievement in the area of social studies, as
indicated by standardized test scores reviewed by the researchers. However, it was not
clear that a lack of teacher preparation was the cause, as there may have been a variety of
unmeasured variables at work, particularly considering the fact that restructured schools
tended to be in more poor and diverse neighborhoods. Weaknesses of this study also
include the fact that this study only focused on the NYC public school district, and that
the issues presented may simply be representative of the kinds of restructuring efforts
imposed by this particular district. It also made several assumptions regarding student
achievement based on standardized test scores, which were designed for the aims of the
more traditional schools and may not have reflected the specific curricular aims of the
restructured schools. The most significant application of the findings of this study are that
if restructured schools are to impose interdisciplinary teaching as a method of instruction
to promote critical thinking and to address the needs of various types of students, teacher
training and experience with this particular method may be significant barriers, and that
these may also be significant factors in the ability of teachers to employ effective
strategies and make positive changes to the curriculum.

Another study, which looked more deeply into structural factors affecting the
teaching of higher-order thinking in secondary classrooms, sought to discover what the causes of varied emphasis on higher-order thinking were (Raudenbush, Rowan, & Cheong, 1992). The researchers’ stated aim was to discover which of three hypotheses were most accurate in assessing the cause of the problem. The hypotheses the researchers sought to test included the following: 1) that conceptions of teaching and learning rooted in the secondary school curriculum encourage teachers to pursue higher-order objectives primarily when teaching high-track students and advanced courses, 2) that many teachers lack adequate preparation to teach higher-order thinking, and 3) that aspects of school organization discourage teachers from pursuing higher-order objectives. These hypotheses were developed after an extensive review of previous literature and research, after which the researchers found that the literature could be grouped into those that supported one or more of each of these hypotheses. For the purposes of their study, the researchers in this study defined higher-order thinking as the application of knowledge for the purpose of problem-solving, and the comprehension of relationships, patterns, and principles. This definition relates to the Washington state social studies skills EALRs 3.1.1a, 3.1.1b, and 3.1.1c, all of which relate to problem solving, and 3.1.1d which relates to determining relationships.

For this study the researchers sought the responses of secondary teachers in 16 purposefully chosen, diverse high schools in California and Michigan on a survey of teachers’ self-reported incidence of teaching higher-order thinking in various classes. The researchers determined the diversity of the sample through analysis of the schools’
various contexts including: state policies, district resources, school organization, and student demographic composition. The researchers received responses representing 303 classroom teachers, and 1205 different class periods. The average class size represented in the teachers’ responses was 25.69 students with a standard deviation of 6.47, ranging from freshman (1) to senior (4) with a mean of 2.34 and a standard deviation of 1.00. The teachers had a range of 1 to 40 of experience with a mean of 20.02 years. 70% of the teachers had master’s degrees, 91% of the teachers were White and 61% of the teachers were male. These statistics on the population chosen for research in this study indicate that they reasonably represent widespread demographic trends in the US public school system. This indicates that the results of this study may be generalizable to some extent.

The researchers analyzed teachers’ answers according to levels represented within the three hypotheses: those answers that were a function of the characteristics of the students that the teacher encountered, those answers that were a function of working in a particular school, and those answers that were common among schools. The answers were then analyzed based on their relevance to the particular discipline taught: mathematics, science, social studies and English. Teachers in each of these content areas were given specially tailored surveys for their subject in which they were asked to report information on each of the classes they were teaching. Social studies teachers were asked to respond on a four point Likert scale about the following classroom elements determined by the researchers (from the literature) to be typically associated with higher order thinking: a. formulating and presenting arguments to a group, b. critically evaluating historical
accounts or arguments, c. analyzing historical and social science theories, and d. using historical concepts to interpret current social issues. Teachers were also asked to identify the track of the class as one of the following: vocational, general, college-bound (non-honors), honors, and mixed. In the sample, only 4% of the teachers described their classes as mixed, indicating the appropriateness of the categories presented. The teachers also responded about what degree they felt prepared to teach each class.

As far as the three hypotheses that these researchers sought to test, the one that the researchers believe was most accurately proven was the relationship between higher-order thinking emphasis and tracking. Teachers of highly-tracked classes consistently reported more emphasis on higher-order thinking when teaching these classes. In social studies (but not in any other subject area) teacher preparation and school organization did affect emphasis on higher-order thinking, but not to the extent that was present for tracking. For social studies, 20.4% of the variance in emphasis on higher-order thinking was within teachers, meaning that these teachers varied their emphasis on higher-order thinking from class to class during the day, mostly due to different tracking levels. 67.5% of the variance in emphasis was from individual teacher to teacher (again, mostly due to teachers who specialized in teaching to specific tracks), while 12.1% of the variance was among schools (indicating structural factors related to the school environment and administration). For both social studies and English classes, the researchers found that tracking was a substantial predictor of emphasis on higher-order thinking skills for both honors and college-bound classes compared to the non-honors or non-college-bound
classes. Teacher preparedness was also found to be a significant predictor of whether a class emphasized higher-order thinking skills (with overall 61% of teachers feeling very well prepared to teach their classes), however there was no effect found for a teacher holding a master’s degree specifically. Leadership and support from the principal in higher-order thinking emphasis was not found to have a particular positive effect on teacher-reported levels of higher-order thinking, but teacher control over the curriculum was a significant indicator of emphasis on higher-order thinking. Staff collaboration was also not found to have any particular effect on higher-order thinking emphasis. Another significant finding of this study, which was surprising to researchers, was that higher-order and lower-order objectives were not mutually exclusive. It was found in all subjects but English that the teaching of basic skills went along with higher-order thinking, instead of in opposition to it.

While this study was clear in its objectives, purposeful in its selection of subjects, and detailed in its analysis of data, the fact that the study was constructed around the self-reporting of teachers without any triangulation based on observations or any other measures leaves the findings open to question. As far as I can tell from the information provided by the researchers, the study only proves a relationship to teacher perception of higher-order thinking and not its actual existence in the classroom. However, as far as proving that teacher emphasis on higher-order thinking is related to tracking seems to be well-supported by this study. This finding shows that tracking may be a significant obstacle in a teacher’s ability to teach to higher-order objectives, which should be taken
into consideration when assessing further research on effective strategies for teaching critical thinking. The research did not make it clear however, whether the relationship between levels of emphasis on higher-order thinking objectives were related to the teachers’ attitudes toward the students, the differences in curriculum for differently tracked students, students attitudes toward higher-order thinking in differently tracked classrooms, or some other variable.

Another study that examined barriers to promoting critical thinking in social studies classrooms was conducted as part of a larger project, whose data was used to conduct four smaller studies (Onosoko, 1991). Here, I will describe the overall methodology of data collection for this project, which will be referred to as I discuss the smaller studies in detail later on. The project, which was conducted over the course of six years, began in 1985 and focused on two primary questions: “To what extent is it possible for American high school social studies departments to promote higher order thinking?” and “How are the apparent barriers overcome in the more successful departments?” (Newmann, 1991a). The study was designed to avoid measures of critical thinking (here termed “classroom thoughtfulness”) that would measure only highly specific examples of student knowledge, skills, and dispositions. Instead they sought to determine observable qualities of classroom activities that would be most likely to help students achieve higher-order thinking objectives. The following list of six fundamental dimensions of thoughtful classrooms was developed through a study of the literature on critical thinking, and a preliminary survey of classrooms: 1. Sustained examination of a few topics, rather than
superficial coverage of many topics. 2. Lessons that display substantive coherence and continuity. 3. Students are given an appropriate amount of wait time to think and prepare responses to questions. 4. The teacher asks challenging questions and structures challenging tasks relative to the ability level of the students. 5. The teacher acts as a model of thoughtful behavior. 6. Students offer explanations for their conclusions. These six dimensions were used to rate classrooms on a scale from one (very inaccurate description of classroom) to five (very accurate description of classroom) for each dimension. These ratings were then combined (as an average) to form a single indicator of classroom thoughtfulness through which to compare classrooms. To control for inter-rater reliability, each classroom was observed by different pairs of raters from a team of six researchers. The raters agreed exactly on 64 percent of the ratings, and they differed by one point or less on 96 percent of the ratings. After calculation of scores by different pairs of researchers, the scores were averaged to come up with a rating of one to five for each teacher and each department.

The participants in the project included 16 social studies departments in 16 different demographically diverse high schools. The schools were selected through nominations, phone interviews, and site visits, in which the researchers sought three different sample groups. The first sample group, called the “select departments,” was intended to represent schools that placed special emphasis on higher order thinking, but maintained a traditional high school structure. The second group was intended to represent schools that placed no particular emphasis on higher order thinking while
maintaining a traditional high school structure, called the “representative departments.”

The final group, called the “restructured departments,” was intended to represent schools that had recently made significant changes in the organization of instruction in order to emphasize higher order thinking. Overall, five of the departments studied were categorized as select departments, seven were categorized as representative departments, and four were categorized as restructured departments. The researchers sought to observe the teachers with the most emphasis on higher order thinking, but in order to make sure that the samples would be representative of the access to higher order thinking for all students, the researchers sought nominations of classes from the schools' department chairs. Classes were chosen to be observed that would have the highest levels of higher order thinking in each of the following categories: one class with a substantial proportion of students with lower and middle levels of achievement, one history course with a diverse range of students, and one other class that best illustrated higher order thinking emphasis (which was usually a class of highly achieving, tracked students). Therefore, each department had at least three classrooms observed over the course of the study, observed four times per year. As well as recording ratings, researchers also took descriptive field notes, and observed six other lessons taught by two other teachers in each department in order to ensure more data available for triangulation and representative sampling of the nominated departments. Almost 500 lesson observations, in-depth interviews with 56 teachers and with 16 social studies department heads were conducted during the course of this project. The interviews were two hours each and were
intended to probe the written responses of teachers and department heads on questionnaires which explored conceptions of and commitment to higher order thinking as an educational goal, the factors perceived as necessary to higher order thinking, and the kind of leadership devoted to higher order thinking within the school. Students in the three main classes in each school were also interviewed, surveyed, and tested in the representative and restructured schools. In each of the studies based on this project, the data was analyzed differently, so the details of the data analysis will be described in the context of each of the smaller studies later on.

The first smaller study related to the above project was devoted to analyzing the barriers to the promotion of higher-order thinking in social studies (Onosoko, 1991). The main questions that this study set out to investigate were: “Why is it so difficult to make classroom activities more intellectually challenging?” and “What barriers foil teachers' efforts to promote students' thinking?” In this study, the term “barrier” was used to refer to the obstacles that prevented the observance of higher order thinking in the classrooms sampled. The primary data from the project utilized in this study were the questionnaire and interview responses of teachers, department heads, and school principals. First, the teachers were ranked according to the scores their lessons received on the dimensions of classroom thoughtfulness. Those teachers who scored in the top 20 percent of the 56 teachers interviewed were classed as “outstanding” teachers for this study. Based upon all of the available scoring data for all classes, all interviews and questionnaires, all informal observations from the research team, and exploration of the research literature on social
studies education; barriers to the promotion of higher-order thinking were identified. The identification of the most dominant barriers were therefore based on a combination of the teachers' perceptions and the researchers' observations, which were then further confirmed by evidence available in the literature.

This study found six interconnected barriers to the promotion of higher order thinking through the analysis. First, it found that an attitude toward teaching as the simple transmission of knowledge prevented teachers from creating classroom environments where students could construct their own understandings. In these classrooms where higher order thinking was rare, teachers simply presented factual information which students were instructed to memorize and present at a later date. This finding was not directly mentioned by the teachers in the interviews or questionnaires, but was observed by the researchers. Second, broad, superficial content coverage in the curriculum was identified by 39% of the teachers as a major barrier to the promotion of higher order thinking, and was also identified by observers in the lowest scoring classrooms. Third, 45% of teachers mentioned that the lack of motivation, thinking skills, knowledge, or capacity on the part of the students was a major barrier to promoting thinking. This result was interpreted by the observing researchers as low expectations of students on the part of the teachers (not necessarily a lack of ability on the part of the students) contributing to a lack of promotion of higher order thinking. Fourth, large numbers of students crowded into the classroom were identified by 41% of the teachers as a major barrier, which was backed up by findings in the literature, but not by researcher observations, as researchers
observed that classes with larger numbers of students did not necessarily indicate lower levels of classroom thoughtfulness. Fifth, lack of teacher planning time was listed by the most teachers as a major barrier, at 48%. Again, this was supported in the literature, but not in the researcher observations, as classes lead by teachers with less planning time did not demonstrate lower levels of thoughtfulness. Finally, a culture of teacher isolation was identified by researcher observations and by the literature, but not by the teachers in the surveys and interviews.

Overall, this study seems to identify six possible barriers that would be useful to look at if trying to develop a program at a school to promote higher order thinking in classrooms, but the measures say more about the perceptions of the teachers, researchers, and authors in the field rather than actually providing any actual conclusions as to what actually prevents the promotion of classroom thoughtfulness. However, if trying to develop a diverse social studies classroom environment which promotes higher order thinking, I argue that these barriers would be necessary to consider in order to ensure the best possible results, especially those that both the teachers and researchers in this study perceived as significant. The findings of this research are supported in another study resulting from this project (Ladwig, 1991), which I will later discuss in more detail, in which no association was found between classroom thoughtfulness and the organizational features of class size, total number of students, and amount of planning time provided to teachers.

The second smaller study directly related to the above project was conducted in
order to analyze the different leadership efforts present in the sampled schools to discover those that were most effective in promoting classroom thoughtfulness (King, 1991). This study used a more empirical approach, though based primarily on qualitative data, and seemed to be more effective at making reliable conclusions regarding leadership factors that facilitate classroom thoughtfulness. The method of this investigation involved the comparison of those departments that were scored as the most successful in promoting classroom thoughtfulness, and those that were the least successful. The top schools were defined as those that achieved classroom thoughtfulness scores more than one standard deviation (.38) above the average (3.40) for all schools scored. The bottom schools were defined as those that scored less than one standard deviation below the average for all 16 schools. The top schools were all part of the sample defined as the “select departments” in the original categorizing of the schools, while the bottom schools were all part of the sample defined as the “representative departments” of the original selection categories. The survey responses and interviews of the teachers, department heads, and principals from each of these schools were analyzed in order to find consistent patterns to differentiate between the top and bottom groups of schools in terms of leadership in the promotion of higher order thinking. This study lends insight into effective strategies for teaching critical thinking in diverse social studies classrooms because it provides an idea of how administrative leadership contributes to the ability of teachers to provide education that facilitates the development of critical thinking skills.

This study found that a pattern emerged in which leadership in the top schools was
systematic in directing program development in the promotion of higher order thinking. While each top school took a slightly different approach, varying by conceptions of thinking and models for instruction, all shared the following features: congruence within departments in terms of a common conception and vision for higher order thinking, team conducted curriculum development and lesson design activities, and continuing discussion among department staff over how well they were collectively meeting their higher order thinking objectives. The bottom departments lacked these features. Overall, this study seems to demonstrate that when social studies departments are led in ways that promote department-wide goals related to higher order thinking and congruent methods of reaching these goals, they tend to be more successful in promoting higher order thinking than those departments that do not share such program development.

Another study that looked specifically into school leadership in promoting higher order thinking focused on how principals and department heads affect what goes on at the classroom level (McCartney & Schrag, 1990). This study used data collected by another researcher whose complete study is discussed in more detail later on in this chapter (Newman, 1990). Overall, this study took the ratings developed by the complete study to rate levels of promotion of higher order thinking in the five schools selected for this study. All five schools in this study were intended to be exemplary of higher-order thinking promotion. These researchers then interviewed the principals and social studies department heads in these schools, creating a profile of each administrator in terms of roles, policies, work-related preferences, frustrations, and visions for promoting higher
order thinking. The data collected from these interviews was then assessed in relation to the school rankings to determine which traits in principals and department heads were most conducive to an atmosphere promoting higher order thinking, and compared to a list of six hypotheses developed by the researchers. The six hypotheses were: 1. That a systematic, department based, program addressing higher order thinking is required for high scores. 2. Success in promoting higher order thinking requires substantial resources set aside for this purpose. 3. Success in promoting higher order thinking depends on strong departmental leadership. 4. The principal must play an active role in supporting the department head on efforts related to higher order thinking. 5. District-wide programs regarding critical thinking don't work if department heads and individual teachers don't feel a sense of ownership over the program. 6. Successful schools require a culture of cooperation within the institution focused on teaching to higher order thinking. This study allows us to look further into the administrative atmospheres that can contribute to or hinder the ability of teachers to promote critical thinking in social studies classrooms.

The researchers found that all the hypotheses presented were proven except for one. The hypothesis for which there was no support was number two, which claimed that success in promoting higher order thinking requires substantial resources set aside for this purpose. Two high scoring schools demonstrate this well in that one has a very large amount of resources allocated for this purpose, while the other has almost none, yet both achieved very high scores. These researchers maintain that the most significant features are a culture of sharing among teachers and leadership from principals and department
heads, a finding which is supported by the previously discussed study, as well as the one that follows.

The third smaller study related to the above mentioned project was conducted to discover what organizational features were most influential in determining classroom thoughtfulness in secondary social studies departments (Ladwig, 1991). All 16 departments included in the larger project were analyzed for this study. There were direct, quantitative indicators available for the following organizational features: amount of scheduled time teachers had for planning classes and sharing ideas with their peers, the number of students in each class, the total number of students that the teachers taught, and the number of courses for which teachers planned. Qualitative data was available for the organizational features of departmental common commitments to higher order thinking objectives, curricular revision for higher order thinking, and efforts to develop higher order thinking programs through observations, interviews, and post-observational researcher ratings of each department's emphasis on higher order thinking.

For all measures in which the researcher had direct quantitative data, there was no association found between the amount of planning time, the number of students in class or in total, or the number of courses taught and the overall classroom thoughtfulness score. As a matter of fact, some of the highest scoring classes had the highest numbers of students and the least amounts of planning time. The average number of students in the top scoring group of departments was 28.56, with an average of 4.89 50-minute planning periods per week, while the average number of students in the bottom scoring group of
departments was only 22.75, with an average of 5.67 50-minute planning periods per week. This directly contradicts the findings by the first smaller study of this project, which indicated that these were perceived by teachers as significant barriers to promoting higher order thinking. Instead this study found that what seemed to be most significant were the departmental common commitments to higher order thinking, and programming and curriculum revision for higher order thinking. In all of the top three departments, a staff commitment to the promotion of higher order thinking had been explicitly developed. Eight out of the nine teachers interviewed from this group of schools mentioned this aspect in their interview. From the teachers in the four lowest scoring departments, only one teacher out of twelve mentioned higher order thinking as a common vision of their department. Overall, this study indicates that a very significant structural factor to promoting higher order thinking in classrooms is a common departmental commitment to the promotion of higher order thinking, including the development of curriculum and programming towards this purpose. This finding exists despite the fact that teachers and researchers (as part of the same project!) may perceive other factors such as class size and planning time as more significant. This study and the previously mentioned studies that support similar findings indicate that these practices within social studies departments and schools could be very effective at helping teachers to develop and practice effective strategies for teaching critical thinking. Unfortunately, however, it is not clear by these studies that these same efforts would be effective if dealing with a diverse student body, but nothing in these studies specifically rules out the
possibility. Therefore, more research of this kind would have to be conducted to make it clear that these strategies would also be effective for diverse schools.

Testing Critical Thinking

While critical thinking is an important objective in social studies education, it is one that is notoriously difficult to measure, because of both the subjectivity of analysis and the dependence of critical thinking upon content knowledge. It is virtually impossible to separate critical thinking skills from content knowledge while maintaining an objective measure of skills. The following studies explore these difficulties by analyzing methods of testing or determining general indicators of critical thinking. These studies lend insight into the problems present in measuring critical thinking to be applied in the analysis of studies I will discuss later on.

This first study sought to examine whether differences in test format affect what critical thinking tests actually measure (Norris, 1995). This study arose out of debate over whether multiple choice testing formats can effectively measure critical thinking when compared to constructed-response formats. The specific question that this study sought to answer was “Do differences in format affect what tests of critical thinking measure?” The researchers used six preexisting tests of critical thinking skills, including the Test on Appraising Observations, the Cornell Critical Thinking Test, the Test of Inference Ability in Reading Comprehension, the Test of Inductive Reasoning Principles, the Watson-Glaser Critical Thinking Appraisal, and the Norris-Ryan Argument Analysis Test. Within these tests, 15 different factors in various combinations were present for measuring
critical thinking abilities. Each individual test contained a combination of three to six of these factors. Six of the factors were presented in constructed-response format, and nine were presented in multiple choice format. The factors were divided into two groups: simple factors and compound factors. The simple factors as listed by the researchers, were as follows: multiple-choice (m-c), constructed-response (c-r), narrative context, non-narrative context, credibility judgment required, credibility judgment not required and common critical thinking. The compound factors were comprised of combinations of the simple factors as well as other elements, and were listed by the researchers as follows: m-c/common alternatives, m-c/specific alternatives, c-r/justification requested, c-r/justification not requested, m-c/narrative, m-c/non-narrative, c-r/narrative, and c-r/non-narrative. The researchers administered the tests to high school students to determine whether these formats affected what these test actually measured.

The participants in the study included students in grades 10, 11, and 12 from a large high school in St. Johns, Newfoundland. Students volunteered with approval from a parent or guardian and participated in testing each day after school for two consecutive weeks. The total number of student volunteers was 181, but complete data was collected for only 172 of them due to absences. Of the 172 students, 75 were female, and 97 were male, while 71 were in 10th grade, 51 were in 11th grade, and 50 were in 12th grade. The overall grades of the students ranged from failing to 98%, taken by the researchers to indicate a broad level of academic abilities represented, although one could argue that grades do not always accurately reflect student ability, and instead may simply measure
motivation and interest. No other demographic data was collected on the students, so it is unclear on the ethnic and cultural makeup of the students involved in this study, nor any clear indication that the sample did indeed represent a broad range of academic abilities.

Each test was scored according to the procedures described in the manual developed for each test. Correlations and descriptive statistics were developed to analyze the results based on the 15 previously described factors. These statistics were then entered into a computer program, to determine the goodness of fit between the correlations observed based on three indices. From this data, twelve models were hypothesized to explain the correlations among the factors. Among these models, only one was able to pass the tests of perfect fit applied to the observed correlations between the factors and the correlations implied by the hypothesis models. In this hypothesis, only five factors were present: common critical thinking, narrative context, non-narrative context, credibility judgment required, no credibility judgment required. This indicates that these types of measures are most significant in determining how the student scored on the test of critical thinking. The fact that this hypothesis did not contain the factors of multiple-choice or constructed response excluded these factors as explanations for the correlations. This finding was regarded by researchers as the most significant in this study, because it suggests that there is no significant difference in critical thinking measures based on either of these factors.

Weaknesses of this study include the lack of data collected on student demographics, no attention to whether the six tests used were appropriate for the age
group and grade level of the students tested, and the fact that there was little discussion of the reasoning behind the development of the hypothetical models. The study also gave little information on the demographic composition of the students tested, making it unclear whether these results could be generalized to apply to measurements of critical thinking in diverse classrooms. Another weakness was that it only used preexisting measures of critical thinking, none of which were content-specific, making it difficult to determine how the results may have been different had any tests been specific to critical thinking related to social studies content. Despite these weaknesses, however, this study indicates that the difference between the use of the multiple-choice tests and constructed-response tests may be insignificant compared to whether credibility judgments are required in a response or whether there is a narrative context to the question. Therefore when looking at studies which attempt to measure critical thinking, it is more important to note whether the student is being asked to make credibility judgments in a question, and whether the question has a narrative context, than if the the question is multiple choice or constructed response. This is significant because much of the debate around measures of critical thinking centers around whether multiple choice or constructed response formats are most appropriate. This study indicates that this debate may be irrelevant.

The next study was part of the larger project described earlier in this chapter from which several studies were conducted based on the same data. This particular smaller study sought to determine common indicators of higher order thinking that could be used
generally to test for effectiveness in a variety of social studies classrooms, and throughout a variety of instructional methods (Newmann, 1991b). Compared to the last study discussed, this study looks beyond simply testing an isolated student's ability to score well on a measure of critical thinking, and seeks to discover how students' performance on measures of critical thinking relates to the classroom environment. The problem that fueled this study was the great diversity witnessed by the researcher between approaches, goals, and content present in social studies classrooms. It is because of this divergence from classroom to classroom that the researcher believed it was pertinent to develop general measures and indicators of both instructional quality and student achievement. As well as describing the process used for testing students in the larger project, this study also looks into the various factors present between the instruction provided to the students, the student demographics, and the actual performance of the students on the measures of critical thinking.

While this study was part of the larger project described above in which 16 schools participated, this study only specifically involved 11 of those schools and a total of 70 classrooms. The schools excluded from this study were the select departments, and instead focused on the representative and restructured schools. This exclusion existed because plans for assessment did not coordinate with the time frame assigned for studying the select schools. The exclusion of these schools can be seen as a flaw in the collection of the data for this specific study, as it does not represent the full range of schools selected to make the overall project representative. A total of 1387 students participated in
the administration of the test for this study. Of the total number of students, 48% were male and 52% were female, while 14% of the students self-identified as African American (teachers reported a slightly higher 17%). While the study did not determine the identity of students who were both non-White and not African-American, the majority of the non-White students in the study were identified as African American. Parent education levels were measured on a five point scale and averaged between two parents (1=less than high school diploma to 5=graduate or professional degree) with a mean of 3.03 (sd=1.10). The students grade point average mean was 5.63 (sd=1.58), on a scale of 1=mostly below D to 8=mostly A. The student ability levels were rated by the teachers of each class, where teachers were asked to rate the students on a scale of 1-3 on whether the students in the class were in the 3=highest, 2=middle, or 1=lowest achieving thirds of the school overall. The average ability level of the students in the study was 2.05 (sd=.53). This demographic information demonstrates that the educational environments observed in this study did have some level of diversity in terms of student race identity, ability level, and parent education, but some caution should be taken before generalizing the results for all diverse classrooms as it is not clear exactly how representative these schools were.

The test designed for this study consisted of a two-page document given to participants that described a hypothetical court case involving the search of a student's purse by a high school assistant principal due to various circumstantial factors. Following this description, background information was provided about principles used by courts to
decide similar past cases about the constitutionality of student searches. Students were then asked to decide whether the hypothetical student's constitutional rights were violated and to write a persuasive essay explaining and defending their views using the information provided in the document. The students were given 50 minutes to complete the task. This measure was intended to avoid testing memorized facts from social studies class, but instead as a measure of student competence in thinking about social studies concepts. This test did not intend to measure historical causation, analysis of cultural differences, economic data interpretation, solving moral dilemmas, or critiquing the use of political power because of the limits of the study. Student essays were scored from one to five based on a standardized assessment of persuasive writing. Three elements on which the assessment focused included whether the student had taken an informed stand on the issue, provided persuasive reasons, and elaborated on the provided reasons. In order to determine inter-rater agreement different pairs of raters read 29 percent of the test completed. Raters agreed exactly in their assessments in 65 percent of the cases and either agreed exactly or missed by one point in 98 percent of the cases. The above student demographic information was tested for correlation against student scores, as well as the score based on the six indicators of classroom thoughtfulness described previously for the larger project.

This test seemed to be well-designed for its stated purpose of measuring critical thinking because the design did not require students to recall previously learned content knowledge and therefore would not inadvertently measure memory of content knowledge
instead of critical thinking skills. The high inter-rater agreement statistics also contribute to my confidence that the tests were an accurate measure of critical thinking skills. However, the test only served to measure one very specific element of critical thinking, and only in one very specific context, making it a fairly narrow measure.

Due to a lack of funding for this research, a pretest was not administered to the participating students by which to judge the post test data. However, for the students in the representative departments, the researchers did have access to two tests administered in the fall to ninth grade students. The first of these tests was a test of social studies knowledge comprised of both multiple-choice and short-answer questions, and the second involved an essay in which students described something of importance to them. Since these tests did not address the same content or skills measured in the designed post-test, these tests were designated the “weak” pretests. Another set of pretest data was available to researchers for the students in the restructured schools, which was a test administered to all students in which students were asked to persuasively defend their position on a constitutional issue in reference to a specific case provided. This test was virtually the same as the one designed by the researchers, with the same rates of inter-rater reliability. This test was designated as the “strong” pretest. Three data sets were constructed based on these issues. The first data set consisted of all students in both the restructured and representative schools without considering any of the pretest data. The second data set consisted of all the ninth graders in the representative schools for whom data on the weak pretest was available. The third data set consisted of all the students in the restructured
schools for whom data on the strong pretest was available.

Overall, after the development of a correlation matrix including the student demographic data and the classroom thoughtfulness scores for each data set, the researchers discovered that the post test scores were most strongly related to pretest scores, class ability, and student grades. These results suggest that scores on this particular test had more to do with students previous achievement rather than thoughtful instruction. In other words, this specific test did not demonstrate the critical thinking skills developed by students in classrooms scoring high on thoughtfulness indicators. It could also suggest that the indicators developed by these researchers did not measure classroom practices that would affect student achievement on this kind of test. The fact that student pretest scores, class ability level, and grades were significantly related to high test scores also indicates that teacher expectations for student performance could affect the promotion of critical thinking skills in the classrooms, or that the specific skills required for this test were not focused on by teachers in lower level classrooms with students of lower ability levels (Newmann, 1991b). The implications of this study would have been clearer had the researchers been able to provide a variety of tests on different elements of critical thinking and social studies concepts, provided consistent pretests for all participants, and measured students from the select schools as well as from the representative and restructured schools. Overall, this study illustrates the fact that even well-designed tests of critical thinking that purposely avoid measuring previously memorized content knowledge may still only measure the ability level of the students
tested and not reflect the focus on critical thinking in the classroom environment.

Overall, these studies suggest that there are significant issues present in the ways that critical thinking is measured. The first study shows that multiple choice and constructed-response questions are not as relevant to the testing of critical thinking as questions that require students to make credibility judgments and provide a narrative context. The second study shows that even measures of critical thinking that are designed in content specific ways that take care not to measure memorized content knowledge still may only serve to measure the student's previous ability level. In other words, it is important to assess whether a test of critical thinking is actually constructed in a way that will measure critical thinking skills, not content knowledge or facility with a specific type of test. As I move on to examine specific strategies to promote critical thinking it will be important to keep in mind these concerns about critical thinking measures, and use them to assess validity of specific strategies. To determine whether a strategy actually promotes critical thinking in diverse social studies classrooms, it must be clear that the researcher used a measurement in which these factors were accounted for.

Effective Teaching Strategies

The following studies investigate specific strategies that address some of the issues discussed previously and fall into two main categories: those strategies that address critical thinking, and those that address culturally responsive teaching in a diverse classroom environment. Unfortunately, little literature was available on specific strategies
for social studies classrooms that addressed elements of both critical thinking and teaching to diverse students in the same study. However, some of the studies overlap in these respects, so I have placed them in the category which they seem to address most effectively.

Strategies for Teaching Critical Thinking

The following case study examined two teachers nominated by their administrators as “effective teachers” and analyzed their respective classroom strategies for effectiveness (Pass, Riccomini & Switzer, 2005). The specific question that this study sought to answer was: What is the nature of effective instruction in secondary classrooms in the United States? The participants in this study included two male secondary social studies teachers who were nominated by their administrators as “effective teachers.” One of the teachers, known as teacher A, was considered by the researchers to be a novice, was 22 years old at the time of the study and identified as White. The other teacher, known as teacher B, was considered by the researchers to be experienced, was 60 years old at the time of the study, and identified as African American. Both of these teachers taught in classrooms that were in relatively homogeneous communities, with a predominant number of students from White, rural, and middle class backgrounds.

Several types of data were collected in this study. First, a researcher observed the classrooms at least once a week for twelve weeks, with independent observers visiting each classroom at least twice a week (one independent observer was used for each classroom for consistency). The three observers then compared notes for triangulation of
findings. A pretest/post test design was administered to the students to determine whether the students felt that their teachers were effective and to measure actual effectiveness of the teacher's instruction. The teachers maintained a daily log of their classroom activities and provided the researchers with an educational philosophy statement. Additionally the teachers and randomly selected students were interviewed individually, and the students participated in a questionnaire both before and after the period of the study about whether they felt the teacher was effective and on their levels of motivation and interest. No other information was provided regarding data analysis.

Strategies found to be employed by these teachers included: whole class discussions, brainstorming sessions, student presentations, short lectures, and occasional films. The researchers also noted that both teachers demonstrated a willingness to get to know students, designed activities to fit various learning styles, created relaxed but task-oriented classrooms, gave prompt feedback, and used inquiry-based student-centered learning to help students develop critical thinking skills. Despite the fact that the researchers surveyed and interviewed students, student perceptions of the teachers are not included in the findings. Instead, the researchers made generalizations about these teachers in terms of the strategies that were used in the classroom and their demeanor toward students which researchers observed to contribute to promoting higher order thinking and positive relationships with students. While this study does not clarify what it means by effectiveness, and does not offer any measures to assess the development of critical thinking skills, it does give some idea of some strategies employed by teachers
who are perceived to be effective by their administrators and classroom observers. Again, these strategies found to be employed by teachers deemed “effective” by observers and administrators include: whole class discussions, brainstorming sessions, student presentations, short lectures, and occasional films. It will be up to other studies to clearly determine what type of “effectiveness” these strategies may promote, and if they have anything to do with promoting critical thinking in diverse classroom contexts.

The following study examined the qualities of social studies classrooms which promoted higher-order thinking in five demographically diverse schools, and was the larger study on which a previously discussed study was based (Newman, 1990). The question for which researchers sought an answer was: “What are the qualities of thoughtful social studies classrooms?” These researchers defined “thoughtful” social studies classrooms by a scale featuring 17 dimensions of classroom thoughtfulness. These dimensions were as follows: a sustained examination of few topics, lessons that displayed substantive coherence and continuity, students given appropriate time to think before answering questions (wait time), integration of student personal experience into the lesson, a teacher who carefully considers explanations and reasons for student conclusions, a teacher who asks challenging questions and assigns challenging tasks, a teacher who presses individual students to to justify or clarify assertions in a Socratic manner, a teacher who tries to get students to generate original and unconventional ideas and solutions, a teacher who shows an awareness of the fact that authoritative sources are not always accurate or absolute, a teacher as a model of thoughtfulness (indicated by
acknowledgment of difficulty, appreciation for student ideas, and illustration to students of the teacher's thinking process), students assuming the role of questioner and critic, students offering explanations and reasons for their conclusions, students generating original ideas and solutions, student contributions that are articulate and germane, a high proportion of students as active participants, and students illustrating a genuine interest in the topics discussed (as indicated by raised hands, facial expression and body language, interruptions motivated by involvement, and length of student responses). These dimensions were developed based on recommendations from a previous study which examined the literature on critical thinking and combined the dimensions into an inclusive list.

The five demographically diverse schools were nominated by readers of academic journals for having high school social studies departments that were known for their facilitation of higher-order thinking, emphasis on teaching students at all ability levels, emphasizing the study of topics in depth, and presenting historical interpretations as dynamic. Out of an original sixty schools nominated, all were visited and five were chosen based on adherence to the principals indicated in the nomination criteria. A variety of schools were chosen, but notably none of the schools were small, rural schools, or schools with a drop out rate above 25% (which was the average national drop out rate at the time of the study). This indicates that this study does represent schools that may have the highest amounts of low-achieving and low-ability students, which is important to note if we are going to attempt to apply the findings of this study to diverse classroom
contexts. Each school had three social studies classrooms observed three times each for a whole day of classes. Two of the classes from each school were selected for observation based on high adherence to the nomination criteria. One other class from each school was chosen based on less strict criteria to ensure a better representation. The total number of class periods observed was 165. The lessons were rated in a five point scale based on each of the 17 criteria listed above. Descriptive notes were also taken. Classroom artifacts, including assignments and student work were also collected, but it was unclear whether the researchers examined this work for evidence of critical thinking on the part of the students. Two observers were used in each classroom to ensure the inter-rater reliability of the data.

In these classrooms the researchers found a high occurrence of students exhibiting the following classroom behaviors (as rated by the dimensions): assuming the role of questioner and critic, articulate and germane student contributions, and a high amount of verbal participation from students. Some of the dimensions of higher order thinking were found very rarely in these classrooms including: Socratic questioning, integrating student experiences into the lesson, teacher encouraging the generation of original ideas, teacher questioning the authority of written materials, and students engaging in thoughtful discourse with other students. The researchers found a strong positive correlation between four of the dimensions and overall high scores on classroom ratings of thoughtfulness. These four dimensions, with an overall significance of (p<.05) were: teacher asking challenging questions (r=.74), teacher showing an awareness that not all assertions are
reliable \((r = .79)\), sustained examination of few topics instead of broad coverage of many \((r = .73)\), and students offering explanations for their answers \((r = .73)\). Which indicate that these factors may be the most important in creating an overall classroom environment that promotes higher order thinking. Another finding was that there was no correlation between overall classroom thoughtfulness ratings and grade level, proportion of students of color, general achievement levels of students in the class, and whether the course was required or elective, which indicates that the 17 dimensions and measures take account of classroom environments that are available to all students. These findings indicate that the above mentioned strategies may be useful in teaching critical thinking to diverse classrooms. However, the fact that the study featured only classrooms that were highly recommended as those that promoted higher-order thinking indicates that the study may not have been representative of a wide variety of classroom contexts, as illustrated by the fact that none of the schools were small, rural or had a dropout rate above 25%. The researchers also did not measure the critical thinking skills of individual students, as they instead measured observable classroom behaviors. This study would lend more insight into recommendations for effective strategies for teaching critical thinking in diverse classrooms if the researchers had observed a wider variety of schools, specified whether student work was examined for evidence of critical thinking, and tested individual students on measures of critical thinking to demonstrate that the dimensions and behaviors observed actually translated into critical thinking skills.

The following study examined the application of triarchic learning theory in third
and eighth grade social studies instruction (Sternberg, Torf, & Grigorenko, 1998).

Triarchic learning theory involves a combination of analytical, creative and practical methods, constituting a critical thinking approach to learning. The question that the researchers sought to answer in this study was: “How effective is the triarchic theory of human intelligence in promoting student achievement in a classroom setting?”

The participants in the study were 213 third graders from two different schools in North Carolina, constituting a total of nine classes, 107 girls and 106 boys. These schools were predominantly low-income and featured a demographically diverse student body. The eighth grade portion of the study included 141 students from a Johns Hopkins University summer school program for gifted youth. These students were predominantly white, middle-class students from all over the United States. The study included two control groups at both grade levels, including traditional, memory-based instruction (which focused on the tasks of memorizing, remembering, recalling, recognizing and repeating information), and analytically-based critical thinking instruction (in which students were asked to memorize and analyze information). The treatment group for each age group received triarchic instruction using a combination of analytical, creative, and practical methods. According to this teaching method, instruction and assessment are intended to include tasks that require students to analyze (in which students judge, evaluate, compare, contrast, and critique), create (in which students invent, discover, and imagine), and practice (in which students implement, use, apply, and seek relevance). Performance at all levels for all groups was measured through multiple-choice tests.
designed to measure memory recall and performance in creative, analytical, and practical aspects. For the third grade group, all students were taught a state-required social studies unit on citizenship, communities, and relationships between people and their governments. The content for the unit was taught in three different ways based on the treatment of the group. The eighth grade group was taught introductory psychology including the topics of neuroscience, development, perception, motivation, consciousness, learning, memory, language, intelligence, affect, personality, psychological disorders, therapy and social psychology. Again, the content was taught in three different ways based upon the treatment of the group.

The study found that triarchic learning theory was most effective in all measures including multiple-choice, memory-based assessment. While this finding is hopeful and suggests that a triarchic learning approach may be an effective strategy to incorporate critical thinking into diverse classrooms, the sample for the eighth grade group is problematic because it did not include students from diverse backgrounds, which may have influenced the results in a way that might not be duplicated in a more diverse group. This issue is partially absolved by the fact that the third-grade group was made up of students from diverse and low-income backgrounds, and demonstrated the same results. However, the fact that there is a well-documented achievement gap (Shannon & Byslma, 2002) for students from under-privileged backgrounds that grows as students proceed through schooling shows that further research would be needed to demonstrate that triarchic learning theory is also effective and appropriate for diverse secondary
classrooms. Another issue is that the assessment included only multiple choice questions that measured how well students memorized the material. As pointed out by a previously mentioned study on critical thinking measures (Norris, 1995) multiple-choice tests do not seem to be effective measures of critical thinking skills. Beyond that, the test does not even claim to measure critical thinking skills, but only how well the students memorized the material. If the goal of educator is to simply help students memorize material, then this study seems to show that a triarchic approach to teaching would be effective. However, if trying to promote critical thinking as skill, as this paper is intended to investigate, then this study provides little information as to whether Triarchic instruction would be effective in supporting this goal.

Another study that examined the effectiveness of a particular theoretic approach to teaching critical thinking was conducted in 2004 (Dixon, et al., 2004). This study examined the merits of the Dixon-Hegelian method for teaching critical thinking strategies to gifted students. The Dixon-Hegelian method involves an approach in which students are first given an opportunity to develop an idea, perspective, or solution about an issue or a problem (thesis), then prompted to discuss these issues with their peers or with the teacher who provide alternative ideas, perspectives, and solutions that conflict with the students' original thinking (antithesis). The teacher then works to help students develop new ideas that incorporate elements of both the original ideas and the ideas presented by others (synthesis). Through this thesis-antithesis-synthesis model, these researchers believe that students should be able to develop the ability to think critically
about problems and issues beyond their first thoughts and assumptions. The researchers set out to find what merits this method provided for gifted students.

The case study conducted involved a combined fourth and fifth grade classroom of gifted students at a school in a mid-size Midwestern city. There were a total of 22 students in the class, led by an experienced teacher trained in the Dixon-Hegelian method. The class content was integrated social studies and language arts and the specific lessons observed involved interdisciplinary fiction texts. The teacher reported on her observations and experiences, while the researcher observed the class sessions.

The researchers determined that the Dixon-Hegelian method was an effective model for creating an appropriate framework for students to engage each other in critical thinking activities. The observer and teacher reported observing students engage in critical thinking behavior, as the teacher fostered self-efficacy in the students by challenging their initial ideas about the texts and encouraging them to develop their own ideas by synthesizing their initial ideas and the ideas presented by the teacher and their peers. There was no other analysis of the specific merits of the strategy. Overall, the language that the researchers used indicated that they may have been convinced from the beginning that the Dixon-Hegelian method was effective, and may have been less critical of the teaching method because of this. Unfortunately, because this was a qualitative study, there is no way to verify the effectiveness of this method, as it was beyond the intended purpose of the study. Also, because the group studied was a small classroom of gifted students with an experienced teacher, there is no way to comfortably generalize this
study to other groups of students, and it could be argued that this group of students may have been more disposed toward critical thinking behavior regardless of the teaching strategy. However, the study does suggest that the Dixon-Hegelian method has the potential as an effective method to teach critical thinking and peer-learning, but more quantitative research is needed to prove that this method would be effective with other levels of teacher experience and different student demographics and ability levels.

The next study looks at how the introduction of multiple historical perspectives influenced the perspective-taking skills of middle school students learning about World War II (Ogawa & Field, 2001). The skill of perspective-taking is included in the Washington State Social Studies Critical Thinking Skills EALRs under 3.1.3f, “Reconstruct and express others' points of view, highlighting a historic, geographic, civic, or economic perspective” and in 3.1.2f, “Assume and portray others' points of view.” Perspective-taking activities in education have been attributed with helping students gain a more realistic understanding of historical events and allowing students to grasp the magnitude and complexity of these events for people who lived through them. These activities have also been perceived to help students develop more empathy for contemporary perspectives different from their own (Ogawa & Field, 2001). In this way, empathetic perspective-taking in social studies education can be seen as a way to promote understanding and mutual respect in diverse classroom environments. These researchers however, stated that the measurement of empathy in students was beyond the focus of this study and instead chose to focus on the more limited and rational scope of explaining
actions, attitudes and concepts involved in historical perspective-taking.

The subjects of this study included seven, sixth-grade middle school students who were part of a required history course at Greenfield County Middle School in northeast Georgia. The students selected were said to proportionately represent the broader demographics of the school which were as follows: 72% White, 27% African American, and 1% Latino, with no Asian students represented and no program for students with limited English proficiency. The students selected were also said to represent a wide range of academic abilities, though no measure was provided to demonstrate that this was the case. Of the seven students, three were female and four were male.

The researchers employed a qualitative case study methodology and used three primary data sources to ensure triangulation of results. The researchers interviewed the classroom teacher and the seven case-study student participants, observed and participated in classroom activities for three consecutive weeks, and collected copies of students' written assignments.

During the period of study, two oral history narrators visited the classrooms to discuss their experiences of World War II (WWII). One was an American WWII veteran, Mr. Martin and the other was a Japanese WWII veteran, Mr. Yamada. Mr. Martin discussed having served in the European theater on a battleship and answered student questions. Mr Yamada discussed being assigned to a tank and having a family member injured in Hiroshima when the atomic bomb was dropped. He also answered student questions. Their visit took place within the context of a three week history unit on WWII,
during which the teacher implemented lectures, discussions, and activities, and assigned reading in textbooks and handouts. Students were first instructed in the European theater of the war, and then on the Pacific theater. For both theaters, the teacher used both physical maps of the regions and concept maps illustrating the main points to understand about each conflict. In regard to the Pacific theater, the teacher also presented a textbook comparison lesson in which students were asked to compare the content of a United States history textbook depicting the atomic bombing of Hiroshima and Nagasaki with a translated version from a textbook taught widely in Japan. Students were also told stories about the bombing of Hiroshima from the city of Hiroshima website, which featured stories about students about the same age as the students in the class. When the two oral history narrators visited the class, students had been prepared to write oral history projects based on the stories of Mr. Martin and Mr. Yamada, and had each written two questions to ask the visitors. These questions were typed and presented to the guests before their visit to the class. When the visitors arrived and each gave brief introductions, the students took turns asking their questions. After the visit, students participated in a reflective writing exercise to describe what they had learned from the experience. At the end of the unit, students gave individual presentations to illustrate what they had learned or found most interesting about the unit and what it meant to them.

The researchers presented the results of this study in the form of individual student profiles of each of the seven students selected for study. Case one demonstrated no understanding of multiple perspectives before, during or after the unit despite the fact
that he demonstrated an in-depth understanding of the factual and technical aspects of the war. Case two also demonstrated an in-depth understanding of the factual and technical aspects of the war, but during the unit demonstrated some knowledge of multiple perspectives by discussing the different ways in which the bombings of Pearl Harbor, Hiroshima and Nagasaki could be perceived. Case three demonstrated a vague understanding of WWII upon entering the unit, and developed a significant understanding of multiple perspectives throughout the unit, as demonstrated by her final presentation in which she discussed and depicted the both the Holocaust and the bombings of Hiroshima and Nagasaki and how different people were affected by these events. Case four was described as having low academic ability, and demonstrated misunderstanding of WWII prior to the unit, confusing it with the Cold War. While this student gained in his accurate understanding of the war throughout the unit, he still demonstrated misunderstandings in his final interview. He did, however demonstrate understanding of multiple perspectives in his final project for which he drew a picture which showed Hitler as both “good and bad” by depicting him as both an artist who loved nature and a dictator who committed genocide. Case five was identified as a high ability student who demonstrated an in-depth understanding of the war but with some misconceptions. She demonstrated multiple perspectives in her response to the guest narrators by not identifying more positively with either, saying that they were both balanced in the things that they did, and in her final project for which she discussed the plight of Holocaust victims and the perspective of the Nazis. Case six was described as a student of average ability who initially demonstrated a
culturally biased perspective about WWII and the Holocaust. Throughout the unit he seemed to avoid challenging his notions about the Holocaust, but did demonstrate knowledge of multiple perspectives in his final project on the bombing of Hiroshima. Finally, case seven was described as a student of average academic ability, who at the beginning of the unit expressed confusion that both Jews and Nazis could be from Germany. She demonstrated knowledge of multiple perspectives in embracing the views of both of the guest narrators, and significantly increased her knowledge of the war in both theaters.

While the above cases give us some information about how these students responded to the unit, and how they may have increased their knowledge, they were too brief to give us a clear understanding of how their knowledge of multiple perspectives changed throughout the unit. It is particularly significant that there was no information provided to determine whether certain students may have come to the unit more prepared to engage in multiple-perspective taking. They did demonstrate however, that the students' prior knowledge or depth of knowledge on the war did not necessarily affect whether they were able to demonstrate an understanding of multiple perspectives. In fact, the one student who demonstrated no understanding of multiple perspectives throughout the unit seemed to have the most in-depth understanding of the factual and technical aspects of the war. While perspective-taking is an important element of critical thinking for students to develop, more research will need to be conducted to determine if the strategies employed by this teacher are the most effective at promoting this skill. Further research will likely
need to include more students and more quantitative measures of perspective-taking behavior, as well as more measures to determine whether certain students may come to the classroom more predisposed to perspective-taking.

Since the advent of the Internet and the rapid development of other computer-mediated technology, more and more questions have surfaced about how these technologies can be effectively used to promote critical thinking and information literacy in the classroom and how the abundance of information provided by these technologies can be effectively analyzed and utilized by students. The following study (Saye & Brush, 2002) examined how hypermedia resources and scaffolding in a classroom environment might assist learners in deeply engaging in content and recognizing alternative perspectives in a social studies unit on the civil rights movement. This focus relates clearly to the Washington State Critical Thinking Skills EALR 3.1.4f, “Reconstruct and express multiple points of view and integrate a historic, geographic, civic, or economic perspective.” The question that the researchers sought to answer was: “How might embedding hypermedia resources and scaffolding in a classroom environment assist with learner obstacles in problem based study such as: the failure to deeply engage in content and the failure to recognize alternative perspectives on a problem?”

To answer this question the researchers chose one collaborating teacher with an expository-based teaching style and little experience or instruction in using technology resources in the classroom to implement an experiment over the course of an academic year. This inexperienced teacher was chosen in order to replicate a typical classroom
environment. The teacher implemented the resource to multiple 11th grade social studies classes, all with a general level US history curriculum. The researchers wanted a typical rather than ideal setting, in order to assess the practicality of the method for the average teacher and classroom environment. In all of the classes, the experiment was embedded in a unit on the Civil Rights Movement of the 1960's in which a Decision Point! media resource database program was used. Decision Point! was designed as an interactive database of multimedia resources on the Civil Rights Movement which included scaffolding tools to help support students in collecting, analyzing, and evaluating evidence and conclusions. The database used in the experiment was organized into three strategy strands of groups of people working during the Civil Rights Movement: people posing legal challenges in the courts, people organizing and participating in non-violent protests, and people involved in Black Power organizations. Within each of these strands was listed seven to eight events associated with the group's strategy. Each strand also featured explanations, time lines, and relevant primary source documents. The database was developed with the teacher's input, and the teacher decided how long the students would use it, the level of teacher interaction, and the assessment of student grades. All students were asked to respond to the same problem for the project: “What strategies should be pursued in the 1968 struggle for a more just, equal, society?” Students were divided up into teams to explore the problem, devise an answer, construct a presentation, and write an essay outlining their reasoning. In order to provide a comparison for the researchers, the teacher taught one of her classes in her normal expository style using
textbook resources. This non-treatment group was given the same project assignment and were asked to respond to the same problem as the students using the *Decision Point!* software.

The study was conducted for a second year as well in order to alter the database for further insight. The researchers changed the study slightly in this second year by putting more emphasis in the database on placing the events in a larger context, providing more hyperlinks, and giving the students an opportunity to create a multimedia slide show for their presentations.

Findings showed that the students did not make significant gains in deep engagement with content, and only some students demonstrated increased knowledge of alternative viewpoints. This finding was based on a comparison of the projects presented by the students who were taught using the *Decision Point!* software and those who were taught using the teacher's typical methods and resources. The researchers did find that the essays of the *Decision Point!* students were of higher quality and received higher grades, but did not describe what constituted higher quality or explain why the essays received higher grades. In both years of the study, students did not demonstrate a deep knowledge of a wide range of information about the civil rights movement. However, the second year did seem to perform better than the first year, which could have been explained by more teacher experience with the program. In both years, some student groups demonstrated knowledge of multiple viewpoints in their presentations. Overall, the researchers recommended more modeling and scaffolding from the teacher and more time with the
database to create deeper and broader understandings of the Civil Rights Movement. While this study did not demonstrate that this program was particularly useful in helping students to develop critical thinking skills about historical events, it did lead to questions about whether teacher experience and involvement is an important factor in developing students' abilities to think critically about information received from hypermedia resources.

Another study that examined how students learn from computer-based learning programs sought to answer the following question: “Can certain types of hypermedia structures help develop students' abilities to see relationships among historical events without leading them to believe that there are unilaterally 'correct interpretations' of these?” (Swan, 1994, p.122). This study is significant to my question because it seeks to explore how students develop interpretations of historical through a computer-based strategy. This study, like the previous one, also seems to relate most clearly to the Washington State Critical Thinking Skills EALR 3.1.4f, “Reconstruct and express multiple points of view and integrate a historic, geographic, civic, or economic perspective” because the focus of the study is to investigate how to teach students about a variety of perspectives in regard to historical events.

The students who participated in this study were in a combined seventh and eighth grade classroom in a public school in rural Vermont. All of the students were White, middle-class, and between the ages of 12 and 14 years old. This limited demographic sample presents significant problems in the ability of educators to apply the results of this
study to more diverse classroom contexts. The hypermedia program, *Set on Freedom* was used as the treatment in the study, and was designed to be used for a Civil Rights Movement unit covering the period of history from the Brown v. Board of Education decision in 1954 to the demolition of Resurrection City in Washington, D.C. in 1968. The database combined textual information, video footage, still photographs, primary source documents, maps, and a time line describing the people, places, issues, and events of the period. The program was intended to explicitly present multiple perspectives on the Civil Rights Movement by including the reflections of a variety of people, with often conflicting interpretations of the most important issues, events, and historical figures. The information in the database was organized into four different general perspectives for students to navigate: people, places, events, and viewpoints.

Groups of three and four students were asked to explore the application for a period of one hour and a half. These sessions were videotaped. All students were also interviewed on videotape both before and after using the application. Students were asked to tell the interviewer what they thought “civil rights” meant, what they knew about the Civil Rights Movement, and whether the Civil Rights Movement was meaningful for them. At both interviews, students were provided with printed lists naming 12 people, places, issues, and events related to the Civil Rights Movement and were asked to identify them and draw links between those that they saw as related. Two different versions of these sheets were used at both the pre- and post interviews, alternating between half of the students to control for students’ different prior knowledge of the items on each
This study found that students seemed to have overall positive reactions to using the hypermedia database, and were so engaged in reading and otherwise using the database that the researchers were disappointed by the low level of verbalization between students as evidenced by the videotaping. The interviews showed that students had clearer conceptions of the Civil Rights Movement after using the program. In the initial interviews, most students described the movement as a general movement for the rights of all people, often with women’s rights more often mentioned than rights for African Americans. After using the program, the majority of students identified the Civil Rights Movement as primarily a struggle for African Americans to gain equal rights. In the final interviews, students were also more likely to give specific examples of rights that were being fought for. Students also mentioned that the Civil Rights Movement has more meaning for them after using the database. The researchers also mentioned that students repeatedly mentioned specific images from the database being significant to their understanding, indicating that the images alone might be an important aspect to look into for future work with the database. Unfortunately, no raw or coded data was provided by the researchers on these points, so it is not possible to tell the exact nature or importance of these shifts in student understanding through using the database. On the response sheets, the researchers noted that the students made more correct responses during the final interview than during the first. The average number of correct responses on the first sheet was 4.89 (sd = 2.05) increasing to 6.05 (sd = 1.96, p < .01) on the second sheet.
Students were also able to show more connections between people, places, and events on their response sheets after using the application, moving from an average of 1.00 connection (sd = 1.33, p < .10) to an average of 2.74 connections (sd = 1.99). While these measures no doubt indicate that students gained a deeper understanding of the civil rights movement from the database, they do not clearly demonstrate that the students actually developed a better understanding of multiple points of view, or that they gained any other critical thinking skills from the experience. Finding connections between people places and events does not constitute the ability to “integrate a historic, geographic, civic or economic perspective” as described in Critical Thinking Skills EALR 3.1.4f.

While this study suggests that the hypermedia application *Set on Freedom* increases students' ability to understand the importance of the Civil Rights Movement, derive meaning from it, identify people, places, and events related to it, and develop connections between different aspects of it, it is unclear whether this program works better in these respects than traditional instruction because the study featured no control group by which to measure effectiveness. It is also unclear whether this application helps students to develop any critical thinking skills. The study was also conducted on a relatively homogeneous group of White, middle-class students, so it remains unclear whether the same effects could be expected with a more diverse group of students. The study also does not address, as the previous hypermedia study did, the effects of teacher scaffolding and other classroom contexts that could affect the outcome. Overall, both of these hypermedia studies suggest that there could be some merit in using these programs
to increase students' understanding of content related to historical movements and events, but more research is needed to clarify the most effective way to use these programs in classrooms, whether they actually promote the development of critical thinking skills, and whether they would be effective in a variety of classroom contexts.

The next study goes further to explore the value of teacher scaffolding to assist students in thinking critically about content. This study examined effective ways to teach and scaffold students to actively use visual maps for comprehension of social studies content (Scevak & Moore, 1990). The questions that these researchers explored include: “How do students use maps for comprehension purposes?” and “Can students be trained to use maps as effective aids to comprehension of typical textbook information?”

The study participants included 32 Australian 11th grade students aged 16 and 17 from an urban school setting. The students were randomly assigned to both control and training groups. The control treatment featured a pretest, lesson and post-test on textbook information without map training, while the training group featured a pretest, lesson and post-test on textbook information with map training. The map training featured instruction on summarizing text information directly onto a map, students drawing their own schematic representations of locations and events on a map, and integrating and inferring from information provided on a map. Students were taught to integrate and infer information from the map through modeling of the skill, asking students probing questions about the map content, then encouraging students to ask their own probing questions about map content. Integrating and inferring information on a map can be seen
as an activity related to Washington State EALRs 3.1.1b and c: “Judge information related to a problem,” and “Solve problems and draw conclusions.” Both sets of students were given the same immediate post-test on the content information from the lesson, as well as a test three weeks after the training to see if students were able to apply the learned strategies to a new text and map set. Unfortunately, it was unclear if the questions on the post-tests addressed skills beyond memorizing content information, making it difficult to determine whether students actually developed skills in integrating and inferring map information.

The study found that students trained in strategies such as writing information directly on the map, drawing schematic representations, and integrating map information and text information scored higher on post-tests (even after an extended period of time) than students in a control group who used maps but were not trained in specific strategies. The trained students performed better on both tests, showing that they both retained and comprehended the information better in the initial lesson, as well as the ability to use the learned map use skills in a test on a different topic. The retention of skills was evidenced by students writing on the maps in the ways that were taught in the training session. For both groups, the pretest scores had been approximately equal. The most significant difference in the second test was that the trained students demonstrated more understanding of the historical events in question and recalled details more accurately. However, there was no difference in the understanding of the specific content-related concepts between the two groups. This indicates that the trained students were better able
to memorize and remember content, but did not necessarily develop a better understanding of the concepts presented in the lesson. None of the non-trained students added written information to their maps on the test, while 80% of the trained students did, indicating that the trained students learned to use maps in a more active, participatory way. While this study showed that training students to more effectively use maps and demonstrated that these students were better able to recall information and understand main ideas, the study did not provide significant evidence that the critical thinking skill of inference and problem-solving were developed during experiment. So while the strategy of directly teaching students about map interpretation was useful in helping students to more actively interpret maps and use them as a memory device, it did not necessarily help students to be better at making inferences from visual information. For example, this strategy may have been more effective in helping students to develop critical thinking skills of inference and problem solving if it had included more emphasis on these skills beyond the narrow map-focused application. While interpreting maps is an important tool for understanding and critically thinking about social studies content, the skill of interpretation must be applied to several different mediums in order to make it meaningful. Further research will be required in this area to determine if the development of these map interpretation skills within a broader context of general interpretation and problem-solving could contribute beyond the simple recall of content information to the development of actual critical thinking skills.

The following study examined the differences between directly teaching historical
concepts versus teaching narrative history with the expectation that students would infer concepts (Kleg, Karabinus, & Carter, 1986). These researchers sought to investigate whether there was a difference between directly teaching historical concepts rather than teaching through narrative history where students would be expected to infer historical concepts on their own. The study included 66 “gifted” eighth grade students in a middle school in a mid-size Midwestern town. The students were randomly divided into a control group and a treatment group. Of the control group, there were four 12-year-olds, 28 13-year-olds, and two 14-year-olds, composed of 12 girls, 21 boys, one self-identified Black student and 32 self-identified White students. Of the treatment group, there was one 12-year-old and 32 13 year-olds, composed of 16 girls, 17 boys, two self-identified Black students and 28 self-identified White students and three students identifying as some other race.

The researchers did not perform a pretest on the content. Instead, they tested all participants on a standard IQ test, and found that the scores were approximately equal with an average score of 127.82 for the control group and an average score of 127.69 for the treatment group. This indicated that there were similar ability levels across both groups, but unfortunately did not provide any information about how well the students may have understood the content before the study began. Both groups were then given a standard school district curriculum lesson on ethnic and multicultural history from the same teacher. The treatment group was taught the following concepts using examples and non-examples and a definition (constituting what these researchers defined as a direct-
instruction framework): prejudice, discrimination, scapegoating, stereotyping, minority, attitude, and xenophobia. The control group was taught following the “traditional” approach, by which students were expected to infer the above concepts from casual association between concepts and examples, relying primarily on narrative telling of events from either the textbook or the teacher. Unfortunately the researchers did not provide any other details about the specific ways that students were engaged in the lessons.

After the lessons were conducted, a post-test was administered to both groups. The post-test contained 50 questions, 24 of which asked students to define concepts, while 26 asked students to apply knowledge of concepts to situations. Of the total number of questions, 30 were on concepts covered in the lessons, while 20 dealt with related concepts that were not taught to either group. This design allowed researchers to measure both how well the students learned the actual concepts taught in the lessons, as well as whether students would be able to identify related concepts based on learned concept-identification skills.

This study found that students who received direct instruction on historical concepts through the concept attainment-type program of examples and non-examples scored significantly higher on the post-test of conceptual understanding. The raw test scores were 28.39 out of 50 for the control group, and 36.52 out of 50 for the treatment group. The treatment group scored higher on both the directly taught concepts (22.27 out of 30) and the not-taught, related concepts (14.24 out of 20) compared to the control
group (16.64 out of 30 and 11.76 out of 20, respectively). All of these scores were found to be significant increases in the understanding of these historical concepts related to multicultural history (p<.001).

Overall, this study is significant because it demonstrates the value of teaching historical concepts for both recall and for applying conceptual understanding skills to other, related concepts. This latter development demonstrates that these students were developing critical thinking skills, by being able to apply knowledge from a previously learned concept to a new problem. This was able to occur because the teaching was clear about what the concepts were and why they were important, providing students with a defined model of how concepts relate to content, instead of expecting students to pick up the concepts on their own. The problem I have in being able to apply this study to diverse classrooms, however, is that the study only included students that the researchers defined as “gifted”, only included a small handful of students from non-White backgrounds, and didn't report any measure of socioeconomic status. This study would have to be repeated with similar results in a more diverse classroom setting to demonstrate its utility for diverse social studies classrooms in which students represented a wider variety of ability levels, socioeconomic backgrounds and ethnic/racial identities. Another factor is that a confounding variable existed in that the treatment group contained more students of color (five as opposed to one) who may have already been more familiar with the multicultural history concepts from their life experience. Therefore, it is possible that the content of the lesson could have affected the positive outcome in the treatment group. Overall, it is
important to note that while promising, these results cannot be generalized to other populations of students until more research is conducted with more diverse groups of students and with a greater variety of social studies concepts.

Hess (2002) conducted a study to examine how skilled teachers teach the discussion of controversial public issues (CPI) in their social studies classes. The questions that the researcher sought to answer in this study included: “How do secondary social studies teachers who are skilled in the use of CPI discussions teach their students to participate effectively in such discussions?”, “What role do instructional strategies, issues, materials, and assessments play in this teaching process?” and “What accounts for these teachers' approaches to CPI discussions?” (Hess, 2002, p.14).

To find participants for her study, the researcher solicited recommendations from professional development leaders of CPI discussion workshops for teachers who the leaders identified as skilled in the use of CPI discussion in their classrooms. The recommendations were verified by other CPI discussion experts who had observed the teachers in their classrooms. Three teachers were selected from the nominees: Joe Park, a high school social studies teacher for 22 years, who at the time of the study had been teaching for the last five years of his career in an alternative high school in a University community; Elizabeth Hunt, a teacher of middle school language arts and social studies for 17 years, who at the time of the study was teaching in a suburban community; and Ann Twain, a teacher of middle school social studies for five years as a suburban magnet school.
The researcher used grounded theory to analyze the following three types of data: classroom observation field notes collected by the researcher, semi-structured, open-ended interviews with the teachers, and teaching artifacts from the actual classroom discussions such as assessment rubrics and reading materials. The researcher observed all class days in which the teacher planned on having discussions or on days the teacher prepared students for discussion, as well as other class days that the researcher could get a feel for how the non-discussion elements of the class were conducted. The data was then analyzed in four steps. First, the researcher transcribed teacher interviews as well as the audiotapes and videotapes of classroom discussions. She then coded the data, developing visual displays and conceptual memos, wrote portraits of each teacher's strategies and frameworks, and integrated categories and properties of each. Finally, the teachers were invited to review the data and gave feedback on the findings.

The researcher found six basic elements that these teachers had in common in their teaching of CPI discussions. First, the teachers taught for, not just with discussion. In other words, the teachers did not just use discussion as a strategy to get students to engage with content, but the teachers actually regarded the development of discussion skills as an academic goal of the class. So discussion was both a desired outcome and a method of teaching students critical thinking skills, social studies content, and interpersonal skills. Second, the teachers worked to make the discussions a forum for the students to express themselves. They focused on making sure that the students felt a sense of ownership over the discussion. Third, the teachers selected discussion models and
facilitator styles that were congruent with their reasons for using discussion and their definition of what constituted an effective discussion. For example, if the teacher stated that student ownership was a goal of the discussion, the teacher chose a facilitator style in which the teacher played a minimal role in the discussion, allowing students to take the leadership roles. Fourth, decisions about whether and how to assess students’ participation in CPI discussions posed a set of persistent dilemmas for these teachers, the most significant of which was the tension between authenticity and accountability. In other words, the problem presented when students were given the freedom to lead their own discussion and present their own ideas, but where the teacher had to remain accountable to the content of the class and the beliefs, rules and values of the school and the wider community. Fifth, teachers' personal views on the CPI discussion topics did not play a substantial role in classroom discussion itself. However, teachers' views strongly influenced the definition and choice of the issue for discussion. Finally, all three of the teachers received support for their CPI discussion teaching from the school administrators, the overall culture of the school and the school's mission. Therefore, their CPI discussion teaching was aligned with, not in opposition to, what was expected in the schools.

These findings suggested ways that these teachers used discussion in their classrooms, but did not provide information about whether discussion was effective in helping students develop critical thinking skills, despite the fact that the researcher and the teachers asserted that it did. Further research is required in these classrooms that
would measure teachers' strategies for teaching CPI discussions in relation to actually
observed and assessed critical thinking behavior on the part of students.

The following study was conducted to determine what issues were faced in the
classroom application of a teaching strategy called in-depth instruction (Rossi. 1995). The
questions that the researcher set out to answer were: “1. How and why is knowledge
selected, organized, and utilized in the in-depth classroom and what meaning do students
give it? 2. What is the nature of the social interaction in the classroom, and what meaning
do students give it?” and “3. What practical teaching dilemmas do teachers face in the
everyday practice of in-depth study?” The researcher identified four components of in-
depth study with which to assess classrooms and define in-depth study. These
components were: “1. The use of knowledge that is complex, thick, and divergent about a
single topic, concept, or event using sources that range beyond the textbook. 2. Essential
and authentic issues or questions containing ambiguity, doubt, or controversy. 3. A spirit
of inquiry that provides opportunities, support, and assessment mechanisms for students
to manipulate ideas in ways that transform their meaning. 4. Sustained time on a single
topic, concept or event.” These criteria for in-depth study can be seen as congruent with
the following Critical Thinking Skills EALR: “3.1.4a Identify a central issue; formulate
appropriate questions; identify multiple perspectives; compare and contrast; validate data
using multiple sources; determine relevant information; paraphrase the problem.” Overall,
both in-depth study and the EALR just mentioned primarily deal with the critical
thinking skills required for students to make meaning out of a large quantity of
information by identifying, analyzing and seeking out information to understand the specific components of an issue and entertain the problems that the issue presents.

The participants in this study included two high school social studies classrooms, the Crawford classroom and the Martin classroom, where the curriculum corresponded closely with the four components of in-depth study listed above. The Crawford classroom was an elective class on future studies that explored issues related to technology and ethics. The Martin classroom was a contemporary issues class. The Martin classroom was the only one reported in the study because of space limitations in the journal in which it was published. The Martin classroom included 26 students, 12 female and 14 male, from mostly White, upper and middle class homes in a traditionally structured high school in a Midwestern city with a population of about 200,000. While this classroom was chosen for the report because it represented what was seen as the most typical classroom for practical application, the limited diversity of the student population makes the study difficult to apply to more diverse classrooms in different demographic areas for the purposes of answering the initial question. Other than the students, participants included the teacher, with 26 years of experience and a masters degree, who was responsible for planning and conceptualizing the public issues course, the researcher as participant/observer, and five students in the class designated for interviews. The selection of students to interview was not random, and was instead based on teacher recommendations in order to represent the diversity of the class in terms of race, gender, social class and ability.
The data collected in the study included interviews with the teacher (four formal and ten informal), two interviews with three students, one interview with two other students, field notes from classroom observations, course descriptions, student readings, worksheets, assignments, exams, students written work, and a student survey. The researcher observations and interviews focused on how the class dealt with the issues presented in the content, and how the students and the teacher interacted with each other and engaged in the content. The researcher was particularly interested in student reactions to class dialogue, projects, and the actual content that they were learning. The survey at the end of the course asked each of the 26 students about their responses to the class discussions, group projects, and the knowledge gained during the class. The interviews were guided by a small number of open-ended, descriptive, or structural questions, with follow-up questions used to probe responses. Each teacher interview was about 60 minutes, while the student interviews were each about 30 minutes. Analysis included coding chunks of data in order to form groups and search for patterns between groups. This analysis produced a descriptive and interpretive classroom portrait which the researcher discussed in the report through representative vignettes witnessed in the classroom and memos about initial and tentative assertions, which were then shared with the classroom teacher for feedback. The vignettes mostly dealt with teacher-student discourse patterns about content-related issues and the ways in which the teacher encouraged students to engage in the content. In these vignettes the researcher attempted to point out ways in which the teacher was directly influencing the ways in which the
students were engaging with the material.

The researcher described three basic findings from this study. First, he found that in-depth study requires a different role for the teacher and the student regarding a knowledge base for learning. In this classroom context, the teacher no longer acted as the source of knowledge, and instead provided guidance and direction for the students' own inquiries. Second, he found that in-depth study requires different patterns of social interaction than those found in more conventional social studies classrooms. In this classroom, genuine dialogue between teacher and students and among students on substantive issues was expected. Finally, the researcher found that in-depth study depends on the interplay of contextual factors, including the support of the administration and other teachers as well as the availability and support for teaching materials other than the textbook. The author goes on to argue that in-depth study is critical for producing thoughtful citizens, avoids the counter-productive notion that every trivial piece of information should be taught, and addresses the need to engage students intellectually in important social issues. This study demonstrates that the strategies necessary to employ in-depth instruction in a classrooms necessitates a shift in social roles as achieved by this teacher, but does not say much about whether this strategy is effective in promoting critical thinking because it provided no measure of it.

If the dimensions listed for some of the above studies on classrooms with high thoughtfulness ratings (Newmann, 1990; Newmann 1991a) are applied to this study, it is clear that these findings are congruent with those dimensions, which demonstrated that
students were exhibiting behaviors associated with critical thinking. The dimensions represented in this study include: sustained examination of a few topics, the teacher as a model of thoughtfulness, a teacher that asks challenging questions, and students engaged in thoughtful discourse (Newmann, 1990; Newmann 1991a). Overall, this study offers a portrait of what student-teacher interaction and engagement with content might look like in a classroom that promotes critical thinking. Unfortunately, more research will be required to further specify whether this type of classroom environment actually promotes the development of critical thinking behavior in individual students, and whether these strategies would be effective with students from a wide variety of demographics.

This section has explored specific strategies for teaching critical thinking skills in social studies classrooms with some attention to the possibility of applying these strategies to classrooms representing students from diverse backgrounds and abilities. While some strategies have shown promise, none appear to have been proven undoubtedly effective because none of the studies provide reliable measures of critical thinking skills which indicate that students actually developed the skills. Some demonstrate that students developed a greater ability to memorize content material (Saye & Brush, 2002; Scevak & Moore, 1990; Sternberg, Torf, & Grigorenko, 1998; Swan, 1994) or exhibited more behaviors thought to be associated with critical thinking (Hess, 2002; Newmann, 1990). However, these observations will need to be backed by well-designed measures of critical thinking that require students to employ critical thinking skills in a way that is not affected by the student's prior mastery of content knowledge. Those studies which showed
promise in actually promoting critical thinking skills were performed with narrow student demographics (such as only gifted students), making it problematic to recommend them for general practice in diverse classrooms (Dixon, et al., 2004).

Strategies for Culturally Responsive Teaching in Diverse Classrooms

The next section will examine studies that look specifically at how to teach in a culturally responsive manner in diverse social studies classrooms. While these studies may not directly address critical thinking, the strategies presented could be combined with critical thinking strategies addressed above to create a social studies classroom where both critical thinking and diversity are addressed. It is important to note that the goal here is not to just create a classroom where all students can learn effectively, but to instill skills, values, and beliefs in students that will promote participation in a multicultural democratic society.

The following study (Marri, 2005) examined how three skilled secondary social studies teachers taught for and about multicultural democracy in their US history courses. The questions that this study sought to answer included: “How do three skilled social studies teachers teach for and about multicultural democracy in their US history courses?” and “What factors serve as obstacles in working toward classroom-based democracy?” Participating in the study were three high school teachers from a Midwestern school district. The teachers included a White, male, seventh year teacher in his 30's teaching a unit on the Civil Rights Movement at an alternative high school with students identified as high-risk; an African-American, female, tenth-year teacher in her
40's teaching a unit on the 1920's and World War II at a suburban, predominantly White school; and a White, female, tenth-year teacher in her 30's teaching a unit on the Vietnam War to a class of predominantly White students. These teachers were classified as “skilled” by this researcher because they provided equitable opportunities for students to learn from multiple sources, used multiple perspectives in their teaching, encouraged students to expand their learning beyond the classroom, and were involved in professional development. Additional consideration for inclusion in the study was a willingness to be observed and interviewed, travel distance to the school, and time available for interviews.

The teachers were not informed of the specific theoretical frame being applied to their teaching, so that they would not modify their teaching practices as a result. They did know, however that their teaching was being examined for their attention to promoting multicultural democracy in their classrooms. The researcher observed a minimum of twenty, 50 minute class periods for each teacher. The researcher used a CMDE theoretical frame to assess the teacher's strategies, with the intention of creating categories of inclusive and democratic teaching practices. The CMDE frame consists of the three following elements: critical pedagogy (engaging students in social problem solving), building of community (creating a climate of mutual respect), and thorough disciplinary content (including the content that represents the discipline's cannon as well as those ideas that challenge it). The researcher used this lens in observing the classroom and determining in what ways these elements were addressed or left unaddressed. The researcher interviewed each teacher three times: once at the start of the unit, once midway
through the unit, and once after the completion of the observations. No student-generated work was collected.

All three teachers incorporated teaching codes of power, providing learning opportunities for effective citizenship, and extending the curriculum beyond official knowledge into personal knowledge. The practice of teaching codes of power includes teaching students the information they need to know in order to succeed in mainstream society, but also includes the explicit understanding that the understandings needed to succeed in mainstream society are not the only ones that exist and that in many cases they exist in order to exclude oppressed peoples. As the teachers included in the study interpreted, providing learning opportunities for effective citizenship involved teaching students skills necessary to participate in a multicultural democratic society including discussion skills, knowledge of the structure and purposes of government, and analysis skills to help students understand and interpret important public policy issues. Finally, extending the curriculum beyond official knowledge into personal knowledge involved taking official curriculum goals as provided by the school and infusing it with components that would make it more relevant and important to diverse students and their future in a multicultural democracy. The researcher concluded that teaching for multicultural diversity is a difficult and complicated task, and that more effort toward this goal is probably not likely unless more evidence is found that these strategies and frameworks are actually effective at teaching for multicultural democracy in terms of skills developed by students. However, she conceded, determining the effectiveness of
these strategies was beyond the scope of this study, as it was only intended to determine what practices were being used by these teachers. I argue that while this study did not directly measure student skills related to critical thinking or to developing multicultural democracy, the strategies employed by these teachers are congruent with the recommendations of authors on the topic of diversity in schools (Brice-Heath, 1983; Delpit, 1995; Peng & Cheng, 1998; Valenzeula, 1999), and hopefully more research will be undertaken in regard to these strategies to discover their level effectiveness and to make them easier to employ by more educators.

The following study sought to determine whether a specifically designed curriculum could increase students' abilities to be tolerant of diverse beliefs (Avery, Sullivan, & Wood, 1997). An ability to develop tolerance for diverse beliefs would be especially helpful to teachers in classrooms with an emphasis on discussion or with a diverse body of students. In this study, the researchers were testing a four-week curriculum which included following topics: sources of intolerance, victims of intolerance, basic human rights, censorship issues, case studies, international rights and responsibilities, beliefs and believers, and taking action to increase understanding of rights of expression. In the lessons in which these topics were covered, students looked into specific instances in which these concepts were present, interviewed members of their families about intolerance, reviewed banned adolescent literature, and read case studies from Amnesty International about young people around the world who had experiences in which they had to fight against intolerance.
The participants in this study included the civics students of three schools in Minnesota: one inner-city high school (with 44% students of color), and two rural junior high schools (with 1% students of color). All students were given a pretest in which the students were asked to identify a least-liked group of their choosing (such as Nazis). Based on the group the student chose, the students were asked to respond to several statements about that group on a five-point Likert scale ranging from “strongly agree” to “strongly disagree”. For example, one statement from the survey, using the example of Nazis was “The government should be able to tap the phones of Nazis.” After responding to the Likert scale, students were asked to write out explanations for their responses. Of the 338 students who took the pretest, 23 were selected for interviews because they demonstrated either extreme intolerance or extreme tolerance of their least-liked group. The same test was administered after the four-week curriculum to determine whether students’ levels of tolerance or intolerance had changed.

The researchers found that without instruction, like adults in other studies, these adolescents overall showed low to moderate levels of tolerance. For the pretest, 40% of students showed a very low level of tolerance toward the least-liked group, while only 10% showed a high level of tolerance for that group. The post-test showed that the tolerance curriculum increased student levels of political tolerance while not affecting the students’ overall like or dislike of the group, though the researchers provided no data on how the students like or dislike of the group they chose was measured. In the post-test 72% of the students chose the same least-liked group to assess.
One particular flaw in this study is that there was no control group to judge whether student levels of tolerance would have changed with a standard civics curriculum. Another flaw is that the researchers provided no data on how the shift in student levels of tolerance was determined to be significant. However, it is at least possible to cull from this study that there is a possibility that a particular curriculum directed at addressing issues of intolerance could have had an effect on student levels of tolerance. This result would be significant to teaching critical thinking in diverse social studies classrooms because increasing student tolerance of diverse beliefs would make discussions about controversial public issues easier to have among students with respect to diverse political beliefs and loyalties, as well as create an environment where students could be enticed to look more deeply at perspectives different from their own to enhance critical thinking skills.

The following two studies look at effective teachers of students of color, and attempt to find common traits among these teachers to discover what qualities are most desirable. This first study was conducted to look at the traits present in effective teachers of Eskimo (the term used by the researcher) and American Indian students in Alaskan schools (Kleinfeld, 1975). The questions that this study sought to answer were: What are the characteristics of effective teachers of rural Athabascan Indian and Eskimo students and are these characteristics also helpful in classrooms with urban White and Black students? The researcher stated that her primary rationale for this study was to identify characteristics of effective teachers of diverse classrooms and apply these characteristics
to her instruction of pre-service teachers.

The researcher sought to begin an ethnographic analysis to wholly assess classroom and school environments. Her primary method was observation of approximately 40 teachers in two all-native boarding schools and five integrated urban high schools in Alaska. She primarily focused her attention on ninth-grade classrooms, as this was the point where many Eskimo or Athabascan students had to move away from their small, all-native village schools and begin attending large, integrated urban high schools or leave their families to attend all-native boarding schools. This transition had been previously observed as a very traumatic one for many Eskimo and Athabascan students, resulting in high drop out rate among these students. As the researcher developed concepts of effective cross-cultural teaching, she began videotaping teachers to gain a deeper analysis of their classroom behaviors. The researcher used an informal indicator of effectiveness which measured Eskimo and Athabascan participation on two levels. First, because it had been previously observed that a method of resistance for Alaskan Native students to culturally insensitive teachers was to create a classroom atmosphere of stony silence, the researcher took verbal participation as one indicator of an effective teacher of these students. The other indicator was related to how well the teacher was able to promote higher-order thinking, so she evaluated students' verbal participation by levels of Bloom's taxonomy. She also held structured interviews with each teacher concerning instructional methods and issues experienced when teaching to Eskimo and Athabascan students.
The researcher further documented the high-stress transition for Eskimo and Athabascan students as they entered high school, and how much of this stress was due to the loss of the intimate personal contacts and relationships they had experienced in village schools. She also noted that the culture of the integrated urban high schools was especially problematic because the emotional detachment of the teachers and fellow students was perceived as an indication to these students that the environment was hostile to their presence. There were also incidences observed where outright racism and prejudice was present in the school environment, and although these incidences were rare, they promoted an overall feeling of discomfort and suspicion among Eskimo and Athabascan students. Many teachers were either ignorant or implicated in these issues, promoting classroom environments where Eskimo and Athabascan students were either given special treatment, spurring the ridicule of their White peers, or ignored all together, promoting further withdrawal of these students.

Based on her observations, the researcher developed a typology of teachers of Eskimo and Athabascan students constructed between two axes: from active demanding to passive understanding, and from professional distance to personal warmth. Crossing these axes, she came up with four types of teachers distributed among the four quadrants: traditionalists (type 1, between active demanding and professional distance), sophisticates (type 2, between professional distance and passive understanding), sentimentalists (type 3, between passive understanding and personal warmth), and warm demanders (type 4, between personal warmth and active demanding). In her observations, the most effective
teachers of Eskimo and Athabascan students were those who could be classified as warm demanders. She found the least effective, most harmful teachers to be traditionalists. The warm demander teachers tended to be successful with both urban White and African American students, as well as the Eskimo and Athabascan students in both urban, integrated classrooms, and all-native boarding schools. These teachers were found to offer a significant amount of time at the beginning of the year establishing the classroom environment, developing rapport with students, and helping the students to get to know each other before diving in to rigorous academic work. When the teachers got to the point where their students were comfortable in the environment, they began to make active academic demands of the students while maintaining rapport with gentle teasing, warm facial expressions, and other forms of emotional support. The students of these teachers tended to interpret these demands not as bossiness, but as genuine concern and a reciprocal obligation of a personal relationship. These teachers concerned themselves with both developing relationships with students as well as helping them to learn.

This study seems to indicate that this method of teaching is particularly effective in the classroom environments in which she observed, but it is unclear whether these teachers would be successful in other environments. This study is especially significant to my question because not only does it look at whether the classroom environment is an emotionally supportive place for a variety of students from different cultural backgrounds, but it also indicates that this pedagogy promotes higher-order thinking in classroom participation as measured by Bloom's taxonomy. Another significant aspect of this study,
especially when compared to the following studies, is that this strategy was effective regardless of whether the teacher shared a common cultural background with students, whereas the following studies examine situations where the cultural backgrounds of teacher and student are similar.

The next study also discovered warm demander pedagogy as a successful strategy, specifically in teaching to African American students (Ware, 2006). This study looked at the practices of two African American teachers in urban schools and compared these practices with those recommended in the literature. The researcher specifically sought to discover how each teacher described her instructional practices and beliefs, how her practices and beliefs were or were not congruent, and whether the shared cultural background of the teachers influenced her instructional practices.

Using a case study framework, the researcher began by choosing a veteran teacher, Ms. Willis, to develop a pilot study. This study included interviews with the teacher and participant observations of her classroom. The researcher then chose a second subject by which to compare her findings from her pilot study. The second teacher, Ms. Carter, was chosen as the comparative subject, and was also interviewed and observed. Ms. Willis was a teacher of 16 years of experience, who taught in third, fourth, and fifth grades, came from a family of educators, and was deeply committed to professional development efforts. The school in which Ms. Willis taught was in an economically depressed area of an urban school district. Ms. Carter was a new teacher of two years of experience, who taught at a middle school of mixed-income students, from primarily African American
families. She also came from a family of educators, and grew up in a rural area.

The primary finding of this study was that both of these teachers, nominated by their schools as successful teachers of African American students, implemented some form of warm demander pedagogy. The researcher observed these teachers as warm demanders in the following contexts: authority and discipline, care giving, and in their approach to academic tasks. The researcher also found that both teachers felt a strong racial and ethnic identity and sought to present this identity as a source of pride in their classrooms, contributing to the self-esteem of their African American students. Despite the fact that this finding may be discouraging to teachers who may teach in classrooms with students from different cultural backgrounds than theirs, it serves to demonstrate that this was one aspect of their practice in which these teachers could take an especially important role as a model of positive ethnic identity achievement. As the previous study demonstrated, positive demander pedagogy seems to be effective regardless of the difference in ethnic identity between the teacher and the students. This researcher points out, however, that a shared cultural identity with students may be an important variable in determining whether a teacher even attempts to develop a warm demander pedagogy because of the ability of the teacher to better identify with the lifestyles of the students. Nonetheless, both of these studies demonstrate that warm demander pedagogy can be an important factor in creating a classroom environment where all students feel welcome and respected and thus have a fair opportunity to learn.

The following study further sheds light on the effectiveness of the warm demander
pedagogy in other classroom contexts, especially when dealing in urban classrooms in socioeconomic depressed areas with students from a wide variety of ethnic backgrounds and ability levels (Stanford, 1997). Though the researcher does not use the same terminology of the above studies who called a set of specific teacher characteristics warm demander pedagogy, this study addresses virtually the same characteristics. The question investigated in this study was: What are the beliefs and practices of four successful urban African American teachers? Based on a review of the literature, this researcher defined successful teachers in this context as those who promote student academic success, promote the building and reinforcing of a positive cultural identity, and those who empower students to critically examine inequities and the ways in which they are reproduced in society.

The teachers selected for this study were selected because they were African American recipients of Chicago's Golden Apple Foundation award for excellence in teaching, who taught in severely economically depressed areas of Chicago. The recipients of this award were determined by nominations of parents, community members and colleagues, letters of recommendation, teacher observations, nominee interviews and essays, and student interviews. The final decision was then made by the foundation's selection committee, of which the researcher was a part. In addition to teaching in economically depressed areas, the communities in which these teachers worked also had such exacerbating factors as substandard housing, rampant gang violence, and drug problems. The four teachers selected for the study represented a range in age from 34 to
56 years, a range in experience from 10 to 27 years, two elementary school teachers, a middle school special education teacher, and one high school science teacher. For this study the researcher reviewed the taped interviews with the students and teachers, as well as the essays the teachers wrote about their teaching philosophies and practice and all of the other data collected in the selection process.

The researcher searched for common elements in the philosophies and pedagogies of these four teachers and found that four primary characteristics emerged. These characteristics also matched with those found after a review of the literature on effective pedagogy for African American students. First, she found that all three teachers had a strong sense of identity with the communities in which they taught. These teachers were essentially teaching in communities similar to the ones that they grew up in, which contributed to this sense of identity with the community. Second, the teachers also demonstrated a commitment to producing a classroom with a community of learners, using such pedagogies as cooperative and collaborative learning and promoting active engagement with learning tasks. Third, these teachers all focused on the whole child in their practice, looking beyond only cognitive development to also attend to the student's social and emotional well-being. Finally, all of these teachers created an atmosphere of personal accountability in the classroom, where students were expected to learn, participate, and engage in academically challenging tasks. This attention to personal accountability also extended internally into the teacher's own role, as they took it upon themselves to be responsible for teaching their students, and overcoming the difficulties
of teaching to such challenging circumstances. It is important to note that while all of the teachers included in this study were African American, all of their students were not. Their students included those from a variety of ethnic and socioeconomic backgrounds, as well as from a variety of ability levels. Overall, this study backs up the characteristics found in the previous two studies of warm demander pedagogy, and further reinforces the generalizability of this approach to a variety of classroom contexts.

The next study observed the strategies employed by San Diego State University outreach program engaged in the task of teaching and mentoring culturally diverse tenth-grade students (Rodriguez, et al., 2004). This study also employed strategies that could be perceived as elements of warm demander pedagogy, but uses the term “culturally relevant pedagogy” to describe these practices. The researchers sought to determine how the program was effective in promoting identity development and academic achievement in the high-risk students involved in the program. The students involved in the program were nominated and recruited into the program by a network of teachers, school counselors, and outreach program counselors from around California, Arizona, Nevada, and New Mexico as well as the outlying regions of American Samoa and Hawaii. About 50 students were accepted into the program every year for the four years observed in this study, for a total of 193 students. The gender balance of the total number of students in the program was 53.5% female and 46.5% male. The ethnic breakdown of the total number of students was: 45.75% Latino or Mexican American, 17% Native Hawaiian or Pacific Islander, 21% African American, and 12.25% Native American, while 4% of the
students identified as some other ethnicity including Southeast Asian American and students with mixed heritage. A total of 40% of the students reported their first language as other than English. The majority of students in the program came from low-income backgrounds, and were planning to be the first members of their families to attend college or university. The teachers, teaching assistants and counselors in the program changed slightly over the four years studied, but the majority of the staff were Latino, and those that did not identify as Latino represented other non-White ethnic groups similar to the demographics of the students in the program.

The program took place during the summer over a six-week time period on the San Diego State University campus and required students to reside on campus in dormitories. The stated goals of the program were to provide opportunities for underprivileged students to increase their academic achievement (especially in math and science) and to help students attain positive identity development through interaction with positive role models and dedicated teachers. The teachers and counselors sought methods that would affirm the diverse ethnic identities of the students, and advance their competence in scientific reasoning and thinking. From Monday through Thursday students attended courses in biomedical sciences, statistics, technology, and literacy. These classes focused on providing hands-on learning experiences, opportunities for the students and teachers to interact with each other and instruction intended to affirm the languages and cultural values of the students in the class. Classroom practices as well as evening study sessions were focused on promoting positive interaction and cooperation
among the students. Fridays were devoted to college preparation seminars and educational field trips. While each class was taught by a credentialed teacher in the appropriate area, each class also had a certified teaching assistant. While not in class, students were under the care and supervision of trained and experienced residential staff, who worked to build community among the students and developed extracurricular activities.

The data collected over the four years study included the Test of Integrative Process Skills (TIPS), an assessment of mathematical and scientific thinking that was administered on first day of the program each summer and on the last day before students left the program, and group interviews of students intended to determine the program's effectiveness in promoting positive identity formation. Participation in the interview groups were voluntary and usually included eight to ten of the students from each cohort group. The interviews were all conducted by the study's primary researcher with the assistance of a research assistant.

The study found an overall increase in the comparison of students' pretest and post-test TIPS scores in each year of the program studied. In 1998, the scores increased from 20.21 (sd=6.16) to 24.00 (sd=6.67), in 1999 from 20.16 (sd=5.22) to 25.30 (sd=5.73), in 2000 from 20.34 (sd=5.25) to 24.66 (sd=5.39), and in 2001 from 20.25 (sd=5.65) to 23.82 (sd=6.63). The comparisons for the pretest and post-test scores were found to have significance of p<.05 for each year. These results make sense because of the strong focus on achievement in math and science in the program. While these results do not relate directly to application in social studies classrooms because of the differences in content,
they do demonstrate the element of warm demander pedagogy discussed above in which teachers promote achievement in academics. In the group interviews, researchers observed student discussion of how the program helped them to feel empowered and respected, and that the multicultural elements of the program taught them that cultural differences could be a positive aspect of education instead of a source of conflict. Several students talked about the program making them feel safe and making them feel more compelled to express themselves because of the encouragement and support of the faculty. Some students also said that the program seemed to promote a sense of peace and mutual respect, and that they experienced less conflict among students than they had experienced in previous educational contexts. These comments illustrate that the faculty of the program were successful in creating an educational environment that promoted mutual respect and allowed students to feel safe and comfortable expressing themselves. This is another aspect that relates directly to methods present in warm demander pedagogy, and further demonstrates the utility of this strategy in promoting a positive educational environment and academic achievement for diverse students. Further research of this kind would be helpful in determining the specific ways in which this strategy could be successfully applied to social studies classroom contexts. Overall, this section has pointed out some ways in which teachers have attempted to address issues of diversity in their classrooms. The most promising approach that emerged here was that of warm demander pedagogy, in which teachers promote a classroom environment which fosters the mutual respect of all participants, ensures that students feel welcome and safe,
and yet provides high academic expectations on the part of the students. My hope is that future studies will be able combine this approach with strategies for critical thinking in social studies classrooms so that educators can get a clearer picture of the practices that would be most effective for teaching critical thinking in diverse social studies classrooms.

Chapter Summary

This chapter examined a variety of studies that in some way addressed the question of effective strategies to teach critical thinking in diverse social studies classrooms. I began with studies that clarified the problems facing educators in both teaching to diverse students and in promoting critical thinking skills. These studies pointed out that some problems facing teachers in these areas include: a lack of administrative leadership, communication and support structures, relatively homogeneous class contexts, limited conceptions of diversity, avoidance in promoting social action in the schools, inability to address and add skills for democracy to the curriculum, feelings of hopelessness and boredom on the part of students, student preferences in regard to specific instructional techniques, student attitudes toward the discussion of controversial public issues, instructional time available to teachers, teacher experience and training, the teacher’s ability to affect the curriculum, and the amount of student tracking practiced in the school. Then, I addressed studies that looked specifically at measures of critical thinking. These studies made it clear that measures of critical thinking must take account of credibility judgments and narrative contexts, and avoid measures of prior content knowledge and previous student achievement in order to be effective. Then I looked at
studies that dealt with specific strategies for promoting critical thinking in social studies classrooms. While it was difficult to clearly determine which specific strategies were most effective, several strategies showed promising results, including: teachers asking challenging questions, teachers showing an awareness that not all assertions are reliable, sustained examination of few topics instead of broad coverage of many, students expected to offer explanations for their answers, direct instruction in historical concepts, and reorganizing the roles of teacher and student so that students can participate as sources of knowledge and participate in substantive discussions. It is clear that due to the lack of adequate measures of critical thinking in these studies more research will need to be conducted to provide definite implications for teachers to include these strategies in their practice. Finally, because none of the previous studies dealt with issues of teaching to diverse classrooms in a significant way, I examined studies that specifically dealt with effective strategies for teaching to diverse groups of students. The most promising strategy that emerged from those studies was that of warm demander pedagogy, in which teachers actively promoted a warm and respectful classroom environment where students felt safe and comfortable emotionally, but were also challenged to engage and succeed in academically demanding work. While these studies provided some helpful suggestions about how to create a classroom environment that respects and encourages all students to be successful, more research will need to be conducted to clarify the ways in which these strategies could be combined with the promotion of critical thinking specifically in social studies classrooms.
CHAPTER FOUR: CONCLUSIONS AND IMPLICATIONS

As I demonstrated earlier in this paper, recent demographic trends in the United States have made it necessary for all teachers to be prepared to teach to classrooms in which students represent a wide diversity of backgrounds, beliefs and abilities. Teachers must also be able to teach these students in a way that prepares them to participate in a multicultural democratic society and gives them the critical reasoning tools to function in a hypermedia-driven world where students are expected to make well-reasoned and rational decisions in the marketplace and in the workplace. The social studies classroom is an ideal place for these things to happen because of its history as a place to learn citizenship skills, to learn about cultural identities, and to develop skills in order to learn about the world from a variety of different sources. It was with this understanding and motivation that I sought to answer the question: What are effective strategies for teaching critical thinking to diverse social studies classrooms?

In my overview of the history of social studies education, the treatment of diversity in education, and the development of critical thinking as an essential element of social studies education, it became clear that these histories have significantly influenced where we are today in regard to these issues. It is important to be aware that these histories demonstrate patterns of injustices and contradictions, and that the original purposes of social studies education were to increase social control over people who did not fit into the mainstream ideal. While progress has been made over the course of time in regard to these issues, the available body of research demonstrates that there is still much
work to be done in discovering what strategies are most effective for teaching diverse students, and how to introduce critical thinking skills to students who have been historically denied the opportunity to develop such skills.

In the literature review, I summarized the literature on the topics of critical thinking and diversity in order to develop a better understanding of what effective instruction in these areas might look like. To begin, I discussed studies which uncovered the challenges facing teachers in terms of teaching to diverse students, dealing with student attitudes, preferences, perceptions and emotions, and in promoting critical thinking. These studies illuminated the fact that these issues are complex, and that several issues exist that might act as barriers to teachers seeking to promote critical thinking in diverse social studies classrooms. These issues included a lack of administrative leadership, communication and support structures both in terms of dealing with issues related to diverse classrooms and in promoting critical thinking (Ladwig, 1991; Marx, 2001). Relatively homogeneous class contexts, limited conceptions of diversity, avoidance in promoting social action in the schools, and inability to address and promote skills for democracy in the curriculum were also identified as issues specific to teaching social studies classes which aimed to focus on critical thinking skills for a multicultural democracy (Marri, 2005). Feelings of hopelessness and boredom on the part of students (Perry, 2002), student preferences in regard to specific instructional techniques (Dynneson, 1992), student preconceptions of the importance of certain historical events (Sexias, 1994), student attitudes toward the discussion of controversial public issues, and
instructional time available to teachers (Hess & Posselt, 2002; Queen, Algozzine, & Eaddy, 1996) were also all found to be barriers in the promotion of higher order thinking skills in social studies classrooms. Another study found that a lack of teacher experience and training, and the teacher’s ability to change the curriculum (Crocco & Thornton, 2002) influenced how well a teacher was able to effectively cover the content in a way that incorporated an interdisciplinary approach. Finally the amount of student tracking practiced in the school (Ladwig, 1991; Raudenbush, Rowan, & Cheong, 1992) was shown in more than one study to be a significant indicator of whether students demonstrated critical thinking behavior, as higher tracked students tended to demonstrate more critical thinking skills. It is important to note that all of these issues were not demonstrated to be present in all classrooms, and several were special to only specific types of learning environments. However, this list demonstrates a range of issues experienced by educators in regard to a focus on critical thinking and diversity.

Overall, the strongest implications for practice seemed to be creating school environments with leadership toward common goals of promoting higher order thinking, and teachers employing warm demander pedagogy in diverse classrooms. School-wide and departmental leadership was shown by several studies to be a significant factor in whether classrooms scored highly on measures of higher-order thinking promotion in classrooms, despite researcher and teacher perceptions that student numbers and planning time were more significant (King, 1991; Ladwig, 1991; McCartney & Schrag, 1990). Therefore, as a structural factor within schools and departments, research indicates that
efforts toward creating school- and department-wide goals of promoting higher order thinking, developing curriculum and programs to meet these goals, and providing an atmosphere of collegiality in developing this atmosphere will likely produce classroom environments where higher-order thinking is effectively promoted. There were also several studies that demonstrated that teachers who are effective in promoting a classroom environment where a variety of students feel both valued and compelled to participate at higher cognitive levels, employ elements of a warm demander pedagogy (Kleinfeld, 1975; Rodriguez, et al., 2004; Stanford, 1997; Ware, 2006). Therefore as a teaching strategy for promoting a diverse classroom environment where all students can participate in higher order thinking and feel valued, warm demander pedagogy is likely the most effective. While both recommendations would seemingly be effective for promoting higher order thinking in diverse classrooms environments when used in tandem, more research is necessary to prove that this is so, and to take account of any issues that may arise in classrooms when both of these strategies are used.

Based on these findings, I definitely plan to employ warm demander pedagogy in my classroom, and I plan to do everything possible to demand and promote a school environment and administrative emphasis which places primacy on the promotion of critical thinking skills. In terms of employing a warm demander pedagogy in my classroom, it seems important to first get to know the students and the values of the communities and cultures they represent in order to demonstrate respect for the students and teach in a way that does not compromise the emotional or cultural well-being of the
students. As demonstrated by the studies, his task may be easier in communities which the educator is already a part, or if the educator already has personal familiarity with the type of community. For those teachers who come to the classroom with little familiarity and understanding of the cultures that the students are coming from, the process of coming to know that culture could in itself provide the teacher with valuable intercultural communication experiences which can be shared with students as a model of learning to positively deal with differences. In terms of administrative leadership, it is important to note that affecting the prevailing climate of a school can be an intimidating and challenging task, especially for a new teacher at the bottom of the school hierarchy.

However, if even the newest teacher takes on the task of positively communicating with colleagues and taking steps to encourage and advocate for the promotion of critical thinking at a school wide level, these efforts can be seen as moving another step closer to creating a school environment in which students can gain important critical thinking skills which will serve them well throughout their lives.

It is also important to note that while the studies that prompt my recommendation for school-wide and departmental leadership in promoting critical thinking specifically looked at secondary social studies classrooms, it is possible that a similar approach could be useful for other content areas and grade levels. It is also significant that the studies which discovered warm demander pedagogy as an effective strategy for teaching in diverse classrooms were not specific to teaching secondary social studies only. Elementary classrooms and various secondary content area classrooms were included in
these studies as well. Therefore, these studies could have practical implications beyond the secondary social studies classroom environment and provide insight for a wider audience of teachers from a variety of grade levels and content areas.

As far as other classroom strategies for either promoting critical thinking or addressing a classroom of diverse students, the following studies were not as convincing, as fewer studies clearly demonstrated their effectiveness, but they should not be disregarded. The most promising of these specific strategies included teachers asking challenging questions, teachers showing an awareness that not all assertions are reliable, sustained examinations of a few topics instead of broad coverage of many, expectations that students explain their reasoning (Newmann, 1990; Newmann 1991a), direct instruction of social studies concepts (Kleg, Karabinus, & Carter, 1986), and reorganizing the roles of teacher and student in order to encourage students acting as sources of knowledge and participation in substantive discussions (Rossi, 1995). These strategies may not have had several studies touting their benefits, but the studies that were conducted on these strategies demonstrated clear evidence that they at least promoted behaviors in students strongly associated with critical thinking skills with subjects that represented a reasonable variety of abilities and backgrounds. Therefore these studies likely help promote critical thinking skills in classrooms and I plan to incorporate them into my own practice.

Studies which provided only questionable measures of critical thinking, demonstrated utility only in the promotion of memorizing facts, or in which study
subjects represented only homogeneous student demographics included: using hypermedia resources to promote learning (Saye & Brush, 2002; Swan, 1994), teaching triarchically (Sternberg, Torf, & Grigorenko, 1998), teaching with the Dixon-Hegelian method (Dixon, et al., 2004), the inclusion of multiple perspectives (Ogawa & Field, 2001), directly teaching the use of visual aids (Scevak & Moore, 1990), 4x4 block scheduling (Queen, Algozzine, & Eaddy, 1996), discussion of controversial public issues (Hess and Posselt, 2002; Hess, 2002), and teaching for tolerance of diverse beliefs (Avery, Sullivan, & Wood, 1997). These strategies definitely may have merit for teaching to diverse classrooms or teaching critical thinking in social studies classrooms. However, these studies either did not provide conclusive evidence or clear measures indicating that their strategies were effective in promoting critical thinking, did not study a diverse enough student population to show that these strategies could be effective in diverse classrooms, or used narrow, specific samples and case studies that were not generalizable outside of the immediate context. Therefore, further research needs to be conducted on these strategies in order to determine their effectiveness for teaching critical thinking and promoting diverse and inclusive classroom environments.

In all, the above findings lead me to conclude that in my classroom practice I should first work to promote an environment in which all students feel safe and respected by getting to know my students and making sure that my teaching does not disrespect their cultural values, then challenging and expecting all students to achieve high levels of academic success. Throughout this process, I will ask students challenging questions,
expect that all students to provide reasoning behind their assertions, show an awareness that not all assertions are reliable (even from authoritative sources), develop curriculum in order to provide a sustained examinations of a few topics instead of broad coverage of many, focus on direct instruction of social studies concepts instead of expecting students to develop conceptual understandings through narrative, and reorganize the roles of teacher and student in order to encourage participation in substantive discussions and students as a source of knowledge. While employing these strategies and practices in my classroom, I will work with my colleagues and administrators to promote an overall school environment which places priority on developing curriculum to focus on critical thinking skills across content areas and provides opportunities for teachers to communicate and collaborate on critical thinking teaching strategies.

Unfortunately, the fact that so few studies even addressed issues of diversity in social studies classrooms goes to further illustrate the historical themes presented in chapter two of this paper, whereas social studies has traditionally been grounds for assimilation rather than promoting respect for a multiplicity of backgrounds, beliefs and abilities. The fact that I found virtually no studies that examined teaching critical thinking in classrooms with students from a variety of ability levels demonstrates how this essential level of reasoning is typically reserved for higher tracked students. In fact, I tended to find more studies in my research that specifically looked at teaching critical thinking to gifted or high functioning students in exclusive and socioculturally homogeneous classroom environments (Dixon, et al., 2004; Sternberg, Torf, &
Grigorenko, 1998). This makes it clear why one study found that measurable levels of critical thinking seemed to correlate most with students’ prior levels of academic achievement than the instructional strategies employed in the classroom (Newmann, 1991b). While I hope and strongly recommend that these issues with the current body of research and the current state of social studies education are ameliorated, recent political trends suggest that this may just be wishful thinking. Recent debate and legislation through the No Child Left Behind Act have spurred renewed interest in promoting assimilationist and English-only education, while at least one state government has attempted to pass legislation barring the interpretation of history in the classroom (Jensen, 2006).

Overall, more research is required to determine how critical thinking can be effectively taught in diverse social studies classrooms. Research in this area is significantly behind the demographic and social trends necessitating it, unfortunately leaving many teachers with no other choice but to resort to trial and error. It is also unfortunate that the two strategies on which significant evidence is provided may be difficult for teachers to attain on their own. Warm demander pedagogy requires that teachers have prior experience or time available to help them get to know the students they are teaching, and certain warm and caring yet demanding personality characteristics that some may be more or less capable of developing, though I am hopeful that teachers will committed enough to take the lengths to attain these. Developing school wide and departmental leadership toward critical thinking is another task which individual teachers
may have little control, especially in the first years of teaching when rapport with the 
adadministration is low. I can hope, however that teachers will be encouraged by the 
effectiveness of these strategies as examined in this paper, and will meet the challenge of 
employing these strategies to create school environments and social studies classrooms 
where critical thinking can be effectively taught to students with a variety of 
backgrounds, beliefs and abilities.
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