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## The Manifestation of Critical Thinking and Metacognition in Secondary American History Students Through the Implementation of Lesson Plans and Activities Consistent with Historical Thinking Skills

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THE FLORIDA STATE UNIVERSITY

COLLEGE OF EDUCATION

THE MANIFESTATION OF CRITICAL THINKING AND METACOGNITION IN  
SECONDARY AMERICAN HISTORY STUDENTS THROUGH THE  
IMPLEMENTATION OF LESSON PLANS AND ACTIVITIES CONSISTENT WITH  
HISTORICAL THINKING SKILLS

By

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## ABSTRACT

The intent of this study was to determine the effect teaching students to think “historically” in high school American history had on their metacognitive skills and ability to think critically. According to many researchers, encouraging students to employ historical thinking skills is key to engaging students in history. History, according to Wineburg, “holds the potential, only partially realized, of humanizing us in ways offered by few other areas of the school curriculum” (2001, p. 7). Although critical thinking is widely described as a desirable proficiency and studied extensively by researchers such as Diane Halpern and Robert Ennis, its definition has been vague, inclusion in curriculum has been sporadic at best, and its addition into history curriculum has been even less (Halpern, 1989). And while research tells us that metacognitive skills are teachable to students, most teachers know little about how to include such teaching in course curricula.

Using the concept of historical thinking as a guide to classroom methodology, teachers may be better able to illustrate examples of critical thinking and metacognition, thereby helping students develop these highly touted abilities through opportunities within the contexts of a history classroom. This study provided teachers at three high schools American history lesson plans to incorporate attributes of historical thinking with students during the 2006-2007 school year. Students took a pre and post critical thinking assessment to determine any change in abilities. Additionally, some participated in think-aloud sessions to assess their abilities to metacognitively process the historical information. During the same time these teachers gave another class of students the pre and posttests. These comparison group students were provided with another treatment not associated with the historical thinking treatment.

The intention of this research was first, to discern if a connection existed between historical thinking and critical thinking and metacognition and second, to determine if guiding students in the practices of historical thinking had any relation to enhancing students’ critical thinking abilities and metacognitive skills. Data from both sets of tests and interviews were analyzed to ascertain differences between classes and individual students. The results of this study indicated that differences between experimental and



comparison groups were not statistically significant ( $p > .05$ ). However, from the think-aloud sessions students from the experimental group demonstrated sophisticated conceptual understanding of complex historical content based on examination of multiple and conflicting sources.

The results of this study are not generalizable to all high school students enrolled in an American history course. The study does contribute to the growing field of historical thinking, demonstrating that the complexities of such thinking skills may not have been easily transferable outside the history classroom to non-domain specific critical thinking skills. Yet qualitative data suggested sophisticated understanding of multifarious content by participants who received the treatment of lesson plans consistent with historical thinking.

## CHAPTER 1

### THE RESEARCH PROBLEM

The purpose of this study was twofold. The first goal was to determine whether utilizing lessons aligned with historical thinking affected students' ability to think critically as measured by the Cornell Critical Thinking Test. Second, this research examined the extent to which instructing students with lessons consistent with historical thinking affected their metacognitive skills as analyzed through think-aloud sessions with participants. The hypothesis was that the systematic implementation of lessons and activities consistent with engaging students in historical thinking, the independent variable, would increase students' critical thinking and metacognitive abilities, the dependent variables. Gender and school type were also examined as additional independent variables to more thoroughly explore the data. Further explanations of all variables as well as the rationale for the study follow.

Although critical thinking is widely described as a desirable proficiency (Ennis, 2004; Halpern, 1989; Kuhn, 1999), its inclusion in curriculum has been sporadic at best (Kuhn, 1999), and its addition into history curriculum has been even more sparse (Halpern, 1989). Moreover, while research tells us that metacognitive skills are teachable to students (Sternberg, 1998) most teachers know little about how to include such teaching in their courses. The idea of teaching students to reflect upon their own thinking is typically not part of teachers' repertoire. Most high school teachers continue to teach from a single secondary source, the textbook. Additionally, teachers most often employ classroom lecture conveying factual knowledge, but little in the way of fostering active learning and encouraging students' thinking abilities (Bain, 2004; Kuhn, 1999).

Encouraging students to employ historical thinking skills beyond knowledge-based didactic learning, specifically inquiry and analysis into the past, is key to engaging students in history (Wineburg, 2001). History "holds the potential, only partially realized, of humanizing us in ways offered by few other areas of the school curriculum" (p. 5). Using the model of historical thinking as a guide to classroom methodology, teachers may be better able to illustrate domain-specific examples of critical thinking and metacognitive strategies, thereby helping students to develop these highly touted abilities.

The intention of this study was to demonstrate whether the lessons provided to teachers could help students achieve such objectives.

### **Definition of Variables**

Three main variables require definition to frame the conceptual nature of this study: critical thinking, metacognition and historical thinking. For purposes of this study, critical thinking was operationally defined as “reasonable and reflective thinking focused on deciding what to believe or do” (Ennis, Millman & Tomko, 2005, p. 1), and additionally as a general skill-set involving goal directed behavior which stems from analysis of the nature and context of a problem (Dreyfus & Jungwirth, 1980). Metacognition was defined as thinking about one’s thinking through a cyclical process of analyzing, self-monitoring and evaluating one’s response to information in an effort to more clearly understand new knowledge (Sternberg, 1998).

Historical thinking, for this study, was defined as a “process of using historical information including deciphering content, perspective, point of view and perceived facts” (Chowen, 2005, p.11) via inquiry into and analysis of multiple (often primary) sources for deliberative conclusions (Exploring the National Standards, 1995). All three concepts critical thinking, metacognition and historical thinking are related. However, distinctions, which will become evident through the review of the literature, are important in understanding the nature of this study. Briefly, the domain-specificity of historical thinking involves distinct skills which may or may not be associated with more general critical thinking and metacognitive skills. An intention of this study was to seek evidence of the transferability of certain historical thinking skills toward more general thinking skills. Implications of such transferability would demonstrate value in teaching students skills consistent with historical thinking beyond the history classroom. Demonstration to the contrary would reveal that transfer of skills from domain-specific historical thinking, activated in the lessons and activities developed for the study, to general critical thinking skills may not be easily achieved.

The additional independent variables of gender and school type were also examined in this study. Their place in this study was to examine any other differences in achievement found not only between experimental and comparison groups, but also

among groups within the experimental group as a result of engagement in the lesson plans and activities. In a meta-analysis of the relationship gender has to student achievement, Catsambis (1991) found no significant difference in learning opportunity between male and female students, and with equity in opportunity, no significant difference was found regarding achievement. A longitudinal study of student achievement in public versus private schools similarly found no differences among those students in overall academic achievement (Sassenrath, Croce, & Penaloza, 1984). These terms, essential to this research, will be further explained and contextualized in the subsequent chapter, but first an explanation of the rationale of this study is necessary.

### **Rationale**

The federal No Child Left Behind Act of 2001 requires states to enact assessment of language arts, reading, math and science, but neither social studies nor specifically, history falls under its purview (US Department of Education, Standards and Assessments Review Guide, 2004). Currently, history in the schools is widely seen as less important than other key areas in which students are evaluated in the current climate of standardized testing. There are debates as to whether or not history should be included as a discipline on these tests (Tenam-Zemach & Landorf, 2006). Some scholars believe that the purpose and consequences of these tests are fundamentally wrong, and therefore keeping history off the table is best for the discipline (Chowen, 2005). Those opposed to standardized testing see these tests as predominately asking students to regurgitate a prescribed set of facts, thus forcing teachers to teach to the test and losing content deemed unnecessary by some far-removed committee who designs test items (Tenam-Zemach & Landorf, 2006). Their argument often extends to the way in which the test results are used to allocate money to schools. Still others believe that history is not a discipline easily tested in standardized test form, since most test items leave little time or room for details necessary for historical explanation (McCracken & McCracken, 2001).

Other scholars argue that inclusion helps keep history relevant in our schools. Although some supporters of standardized testing in history advocate inclusion simply to ensure that history is taught, other advocates of testing in history often see standardized tests as quality assessments which test skills far beyond simple rote memorization. For

these individuals, research of critical thinking and metacognition as it relates to teaching history content is appropriate.

In spite of federal legislation, education is usually viewed as being under the purview of states. In states such as Texas, “early indications from the state education offices [have] implied that the [standardized] test would be based on critical thinking skills in history, not rote memorization and recall” (Chowen, 2005, p. 56). In Florida, the Florida Comprehensive Assessment Test (FCAT), developed in the early 1990s, includes questions designed to assess student knowledge, as well as questions to encourage students to utilize problem solving and reasoning skills to arrive at correct answers. Some of the questions on this test involve readings directly from history (fldoe.org, 2006). Many individuals, however, feel that higher-order thinking questions are few and far between, and they criticize the questions’ true relationship to disciplinary thinking. The situation in Florida is also complex given the state’s A++ educational plan. Among other facets of Florida curriculum, this plan addresses how students should know and understand the past. The plan encourages a fact-based history curriculum rather than “constructed” learning, indicating a tendency to favor factual knowledge, which is more easily testable and teachable (Tenam-Zemach & Landorf, 2006).

History’s role in the curriculum has been a subject of debate since the development of the modern high school in the late nineteenth century (Hertzberg, 1981). The discipline’s position has become more tenuous since standardized testing became the norm at the turn of the twenty-first century. At this time most state standardized tests in America do not include history as a portion of the test; however, some assessments ask students to answer questions from other content areas such as language arts, science and mathematics. The critical thinking and metacognitive processing skills required for completing such test items as these might be bolstered by engagement in historical thinking.

Far beyond history’s potential contributions to improving standardized testing scores is history’s relationship to a liberal education and civic life. Teaching students to think historically, that is, employ practices often utilized by historians, may better equip them to become critical thinkers and to be engaged in the processes and issues of democracy, arguably more significant than success on a standardized test. Such practices

include examining multiple sources with the intent of pursuing a more objective truth regarding historical events or persons, engaging in investigation into the various issues by which historical events occurred, and deliberative reflection of previously held evidence for a more complete picture of the time or people examined as well as the environment in which the focus of the investigation occurred (Exploring the Standards, 1995). Such hermeneutic investigation offers students methods for deciphering fact from opinion and detecting bias (Stanford Encyclopedia of Philosophy, 2005). Additionally, engaging students in employing multiple perspectives to examine history content may combat a tendency to seek news and information which verifies our position rather than informs us in an effort to develop a perspective based on evidence. Moreover, according to Wineburg (2001), “[t]here is a growing recognition by educators and policymakers that questions of historical reasoning carry implications that go well beyond the curricular borders of history” (p. 51). With a growing call to emphasize higher order thinking skills (Chowen, 2005), a need to examine pedagogical practices promoting such skills becomes more relevant with each passing year.

Along with consideration of higher order skills assessed more frequently in schools, one must also consider the encouragement of thinking skills as vital to socialization of students and perpetuation of democratic ideals. In *Democracy and Education*, educational philosopher John Dewey (1916) illustrated the link between the words communication and community and how vital communicative thinking is to education. Dewey believed that teaching effective communication among the members of a community, however small, was key to developing a thriving democratic society.

More recently, Seixas (1993) noted a community of inquiry in which goals and actions of historians are connected with those of teachers and students. These connections move students to a more cognizant understanding of history and its relevance. Moreover, a more broadly outlined process of cultural socialization is further gained from inquiry into the past in such a manner. However, teachers avoid teaching communicative inquiry regarding history because of its tenuous and hypothetical nature (Evans, 2004), resulting in students’ inability to engage in the thinking, and therefore, socialization process. Students, however, could gain communication skills developed through the reasoning,

analysis and deliberative skills central to historical thinking, which in turn, contribute to intellectual maturation and the perpetuation of the values of democracy.

This study was designed to gather sufficient and relevant data to contribute in a meaningful way to the body of research on the properties of lessons and activities consistent with historical thinking and the degree of transferability of particular skills to metacognition and critical thinking.

A brief history of how American curriculum, specifically history curriculum, has encouraged and discouraged skills associated with historical thinking including reasoning, inquiry, deliberation and purposeful learning via primary and secondary source analysis, demonstrates the ambiguity teachers and students have felt toward engagement in history. The following chapter reviews relevant literature regarding the history of using inquiry in schools, which is a tenet of the operational definition of historical thinking. Additionally, chapter two examines literature which related to aspects of current historical thinking methodology, metacognition and critical thinking to contextualize this study within current scholarship.

## CHAPTER 2

### REVIEW OF RELEVANT RESEARCH AND THEORY

#### **Inquiry in the Schools: Fostering Thinking Skills**

According to Bode (1927), as far back as the earliest recorded formalized education in Ancient Greece, the methodology of issue or problem-centered curriculum was projected as appropriate, and even preferred for pedagogy. Teaching about pertinent social issues was viewed as a principal way to develop an educated populace and perpetuate democratic values. Although sometimes at odds with historians and history education advocates who view issue-centered curriculum and the ill-defined social studies as encroaching on the discipline of history (Ravitch, 1987), examination of issues has contributed to the development of historical thinking, albeit from a different perspective. History educators have continued to focus on the study of the past as central to any analysis of issues, while social studies advocates prefer history as a tool to examine the central theme of the issue itself. During the early twentieth century, even as the social efficiency movement was emerging through the writing of educational theorists such as David Snedden, who favored an educational system which operated to teach functional job skills to make students employable and industry prosperous, literature was emerging espousing a problem-centered approach (Evans, 2004). This approach, at first glance, varied tremendously from Snedden's ideas, but both desired to move away from teaching traditional academic curricula toward teaching purposeful skills. The changes in curriculum were beginning to manifest, but agreement of what changes to implement were debated. Which skills were best to teach became the center of debate (Kliebard, 2004). Those espousing an issue or problem-centered approach looked inevitably to students as future problem solvers, while others saw that most students would become part of the industrial machine of America and skills for that goal were most beneficial to America.

In the United States, many people were outraged over harsh working conditions exposed by writers such as Upton Sinclair and other muckraking journalists earlier in the century. Those who were opposed to targeting employment skills as our schools' focus, favored public education which addressed the challenges and shortcomings of American



society with the intent to create a sufficient system whereby graduates of public education were armed with ideas and skills to ameliorate societal ills. After the First World War, many people began to reflect on the social problems which may have contributed to allowing those in power to orchestrate such calamitous devastation.

In concert with larger curricular trends in the late nineteenth and early twentieth centuries, a slow movement away from history toward social studies occurred and historians were pushed outside the realm of curricular development (Ravitch, 1983). An issue-centered approach to teaching social studies emerged and has since waxed and waned in popularity while remaining scarce in implementation within the schools. And while similarly not implemented in many classrooms issues analysis serves as a core of history education. As evidence, part of the National Standards for History includes as one of its five standards, *Issues Analysis and Decision Making* ([www.sscnet.ucla.edu/hchs](http://www.sscnet.ucla.edu/hchs)). Issue analysis, according to the authors of the Standards, is employed not from simply present issues or problems, as espoused by Bode (1927) and Dewey (1916), but historically. Yet, even as today's historical thinking standards specifically address issue analysis through examination of primary sources from multiple perspectives (Exploring the Standards, 1995), most teachers fail to incorporate this type of approach in their classrooms, instead favoring memorization and recitation of facts from the lowest rung of Bloom's Taxonomy and analysis of issues without historical context. Moreover, the use of primary source analysis as part of successful pedagogy is also limited and often misguided. If teachers use various sources beyond the textbook at all to foster inquiry and examination of multiple perspectives, it is often with little foresight and of little benefit for the students (Brophy, 1988). The next two sections of the chapter will explore relevant aspects key to historical thinking and the manifestation thereof including methodology consistent with classroom deliberation and primary source analysis.

### **Deliberating Issues in the Classroom: an Overview**

A 1916 report issued by the Committee on Social Studies, a part of the Commission on the Re-organization of Secondary Education sponsored by the National Education Association, was the culmination of a major challenge to the supremacy of history as the paramount discipline within what was quickly becoming a broad social

studies curriculum. Various influential committees from the late nineteenth and early twentieth centuries, such as the Committee of Ten (1893) and the Committee of Seven (1899), examined history education and deliberated as to what ought to be the dominant focus of the discipline (Hertzberg, 1981).

Charles Eliot, President of Harvard University, led the Committee of Ten toward advocating a history curriculum based on the ideas of Western civilization's great thinkers from Ancient Greece to the Enlightenment, while recognizing the importance of relevance in history education for education of citizens in practical knowledge of democratic institutions. The Committee of Seven retained some of the same members but differed somewhat in its focus, regarding history as "a synthesizing subject," (Hertzberg, 1981, p. 12) which could serve to engage students' critical thinking abilities toward investigation of past systems and policies with an eye toward development of students into contributing members of a democratic community (<http://www.historians.org/pubs/archives/CommitteeofSeven/index.cfm>). However, in light of monumental changes in American society regarding employment, immigration and world affairs at that time and shortly thereafter, the development of citizenship became even more paramount in what was to become more broadly, social studies education (Kliebard, 2004).

Curriculum reformers such as Dewey (1916) also began to focus less on history content and more on more general social studies as a way to develop citizenship in students. History was seen as less relevant to the needs of students, especially those not moving toward college, than courses of social studies such as economics, sociology and civics. The 1916 Report of the Social Studies Committee of the NEA Commission on the Reorganization of Secondary Education recommended, among other things, the development of a *Problems of American Democracy* course, based largely on the sociology course offered at the Hampton Institute of Thomas Jesse Jones, then chair of the Committee (Lybarger, 1983). Ronald Evans (1989), in an article reviewing the history of issue-centered approaches, acknowledged that the Committee's report, while creating a major impact on history curriculum, was not the first to advocate this approach. It was not perhaps the "big bang" approach as perpetrated by many social studies methods textbooks (Saxe, 1992). In fact, Evans (1989) indicated "some of the changes it

recommended [partially endorsing an issue-centered approach] were already underway” (p.178) through recommendations of the comprehensive reports presented by the Committee of Ten and later the Committee of Seven.

Although not the first espousal of an issue-centered approach, the Committee’s report did further the idea of focusing American social studies curriculum on issues concerning Americans and America’s role in the world. It should be noted that the focus was less on teaching students from a historical perspective through the issue-centered approach of the social studies. In fact, historians and history advocates were largely marginalized from this time forward. Social studies became a way in which to examine issues ahistorically. History became but a tool of the issue analysis rather than the center. Although some aspects of social studies were borrowed from history analysis, such as consideration of multiple perspectives of issues in such a way as to gain deeper understanding beyond the triviality of knowledge-based learning, the chasm was widening between the social studies and history. It was the recommendation of the *Problems of Democracy* course which perhaps had the greatest impact on changing the nature of social studies. As Donald Oliver (1957) addressed, other changes in the report shifted the focus of content examination to social problems as they currently existed with little mind toward their historical implications. He welcomed the findings and recommendations of the Report as a reversal of the type of thinking favored by Eliot and the Committee of Ten who, he charged,

apparently assumed that history was the only social science that could make a contribution to secondary education; that four years of history arranged chronologically was necessary; and that the appropriate techniques of teaching such content should consist mainly of feeding the learner codified historical literature and seeing to it that all the material was properly consumed. (p. 273)

Additionally, Oliver contended that the report from the Committee caused reexamination of a traditionalist approach, imparting consideration of the frame of reference and the way in which the student learns best as important in the selection of materials in social studies (Oliver, 1957). The *Problems of Democracy* course, as recommended, sought to incorporate many disciplines of social science including:

history, economics, civics, sociology, and anthropology as part of the study, thereby relegating history to just one of the disciplines of social studies, a far cry from its prominent place as the center of the social studies.

Boyd H. Bode was an early advocate of the issue-centered approach in which many disciplines of social studies were incorporated in the examination of issues. In various publications, Bode repeatedly challenged the notion that school should be a place by which sheer memorization constituted learning. In *How We Learn* (1940), he further articulated that appropriate education challenges one's mind to consider solutions to imperative concerns. "The value of [education] does not reside in the *content* of what is studied, but in the *form*" (p. 90), and that form must encompass the notion that new experiences provided in education "do not come into an empty mind, but rather find a kind of reception committee awaiting them" (p. 143).

From his perceptions, learning then becomes an extension of one's prior experiences, and in an issue-centered approach these experiences of the students and teacher become the heart of a curriculum. Students are encouraged to construct knowledge from multiple perspectives rather than discover it- a basic tenet of constructivism and the cognitive revolution. It is important to note here that, as Evans (1989) indicated, the issue-centered approach, as with all educational movements, must not be viewed as a simple chronology. Various methodologies were advocated and renounced throughout, and to believe that as one movement began to develop another faded into obscurity is absurd. It is true that the issue-centered approach began to win favor among certain theorists. However the fact that, for example, by 1928 only about one percent of public high school students were enrolled in the *Problems of Democracy* course (Evans, 1989), hardly suggested ubiquitous influence. That said, members of the education philosophy community and social studies theorists such as Dewey and Beard did begin to write and speak to the concerns of a strictly "fact"-based, teacher-centered approach to education. According to Dewey (1916),

[t]o say that education is a social function, securing direction and development in the immature through their participation in the life of the group to which they belong, is to say in effect that education will vary with the quality of life which prevails in a group. Particularly it is

true that a society which not only changes but which has the ideal of such change as will improve it, will have different standards and methods of education from one which aims simply at the perpetuation of its own customs. (p. 81)

Additionally, Dewey (1916) acknowledged that a democratic society is in a constant state of progress and readjustment. Quality education therefore must regard teaching students to become part of that process as integral to perpetuation of the democratic state. From that assumption, an approach to education in which students engage in examination and deliberation of social problems becomes valid. Harold Rugg advocated an approach similar to certain aspects of Dewey in that he favored a student-centered approach, which manifested into a curriculum “organized around real social problems” (Kliebard, 2004). History however was not dead. Charles Beard (1934) advocated not only examination of issues which affect human life, but students taking action toward ameliorating those issues through critical thought and deliberation. His work, *An Economic Interpretation of the Constitution* (1913), sought to bring issue analysis directly to historical content and employed engagement in primary sources to reevaluate the time period in which United States constitutional history began.

By post World War II, the enrollment in the Problems of Democracy course had increased substantially, but still loomed at only twenty-five percent of those enrolled in the traditional American history course. By the time the 1956 *Report of the National Council for the Social Studies (NCSS)* materialized, the United States had emerged from the most severe depression in its history as well as World War II. At this time the Cold War was established and tensions were consistently high between the United States and the Soviet Union, and the themes outlined in the 1956 National Council for the Social Studies (NCSS) Report reflected the tentative nature of the political climate. Of the twelve themes described in the report, many were short on specifics and kept history away from social studies’ focus but maintained a sentiment that the thrust of social studies be on teaching students ways in which they could address and improve the human condition. Oliver (1957) addressed each of the twelve themes and pointed out the lack of clarity within the Report while recognizing that in light of the social climate of the day, an issue-centered curriculum was still foremost in the minds of the Report’s authors.

Additionally, he surmised that the Report sought to perpetuate that history taught would be best presented through this paradigm. History had already fallen out of favor in the 1930s when historians and history organizations such as the American Historical Association, “practiced a policy of benign neglect toward secondary schools...” (Link, 1984, p. 14). By the 1960s a wide gap existed between history teachers and historians and social studies advocates sought to fill the vacuum within America’s public schools. (Zilversmit, 1989). Most history classrooms, however, remained immune to the Report’s themes and continued to focus on covering content rather than an examination thereof.

By the late 1950s and early 1960s, the education climate had changed in America, and federal funding was pouring into schools with an expressed objective to educate public school children in such a way to close the perceived gap developing between U.S. and Soviet technology and to make up for the mediocre public education system as illuminated by reports of the day. New mandates were therefore unleashed to allow students to investigate and discover rather than memorize and recite. The “new social studies” as it became known was ushered in and professors of education and school administration pursued changes in social studies curriculum (Evans, 2004). In 1955 Maurice P. Hunt and Lawrence E. Metcalf published the seminal text *Teaching High School Social Studies* in which the authors described their view on the nature of teaching and learning. The text examined how social studies, and specifically history, could be used as a vehicle for deliberation of ideas toward change. Hunt and Metcalf lamented an expository curriculum in the face of societal problems in this way:

It is not unusual to find students from a culturally disadvantaged environment attending a social-studies course in which no attention is given to problems of caste and class as root causes of poverty. These students are expected to solve their problems by learning a trade. Teachers frustrated by this kind of situation often turn to a search for new techniques rather than significant content in order to increase student motivation. (p. 27)

Throughout the text, the authors advocated a social studies curriculum that critically addressed issues of social import and creative resolution of ideas based on historical understanding used as a tool for deliberation.

Around the same time, Jerome Bruner became influential as one who advocated a more scientific approach to learning as discovery. He advocated “doing” social science as opposed to the traditional expository means of information transfer, and incorporated ideas of addressing societal as well as disciplinary issues as the content thereof. Engle and Ochoa (1988) later succinctly expressed the ambition of this new approach to social studies as “the replication of social science scholarship” (p. 101). The new pedagogical manner to learning fit well with an issue-centered approach of discovery learning, and it was seen once again as appropriate and even preferable practice for educating America’s children, but it left history outside of the center of the social studies.

These approaches, however, did leave an opening for the revival of history through an emphasis on analysis of sources to understand the essence of an event or issue in history. While conflation of issue analysis between social studies advocates such as Engle and Ochoa at this time and historical thinking advocates such as Wineburg, Nash and Seixas, coming nearly a generation later, may be convenient in considering the development of historical thinking, one must realize the differences in perspective between contemporary issue analysis and analysis of issues from a largely historical perspective as implied in the history standards. That said, the basic tenets of each advocate much of the same active learning and reasoning skills employed including source examination and multiple perspective analysis.

Standards in historical thinking have emerged with issue analysis as one of its tenets, albeit from a historical perspective, as historians, history educators and learning theorists began to seek more effective ways of knowing history (Zaccaria, 1978). Standards developed suggested teachers and students engage in analysis of substantial issues confronting society and its government (Exploring the Standards, 1995), thus demonstrating the pervasiveness of issue-centered methodology even in the face of an era of school accountability and fact-based standards’ assessment. Bain (2005) suggested that instead of eschewing inquiry-based approaches in history for its focus away from historical content, “placing inquiry in the heart of [history] education” (p. 180) is the most appropriate way of achieving historical thinking.

Since the publication of the aforementioned pedagogical texts, publications focused on an issue-centered approach have waned. Far more criticism and questioning

of the approach have appeared. Some like Shirley Engle (1989) continued to advocate an issue-centered approach to social studies curriculum, but others like Shaver (1989) began to question the possibility of an issue-centered approach emerging as a substantial methodology in social studies classrooms, explaining that the implementation of the jurisprudential, issue-centered approach which he had advocated with colleague Donald Oliver some twenty years earlier would require substantial “re-thinking” of social studies curriculum, an event not very likely in the public school environment.

The idea of historical thinking, as defined for this study, acknowledges the contribution inquiry-based examination can make for students and teachers who employ appropriate investigation of historical events and who delve deeper toward understanding, yet recognizes the obstacles therein which make its implementation challenging. The primary struggle over the presentation and analysis of issues includes historians viewing a historical perspective as fundamental to examination of issues, while social studies advocates such as Engle and Ochoa often eschewed historical aspects in favor of issue-of-the-day analysis. Wineburg (2001) asserted that, “when history is approached courageously and at its deepest levels, no new curriculum is needed...” (p. 230), and the enduring issues to which we so dearly need students to be exposed are present in analysis of events and figures, always cognizant of historical perspective.

Through examination of an issue-centered orientation in social studies, one can discern that while it seems a legitimate approach to social studies education, it lacks certain factors which make it difficult for practical and widespread implementation. And relegation of history to a mere tool of analysis rather than the central focus misses the point of historical analysis and decision making as outlined by historical thinking standards. Regarding history education, this approach lacks a historical perspective with which students may realize a more complete picture of an issue. A student examining an issue will likely simplify its origins and impacts on people of the past without recognition of how that issue was viewed and handled by historical figures (Wineburg, 2001). Similarly, if a student ignores issues of history, he is less likely to recognize opportunities to consider continuity and change in his own environment. With appropriate execution and preparation, including historical perspective, however, an approach which considers



issues analysis can be a legitimate approach to history education as an integral part of historical thinking (Chilcoat & Ligon, 2004).

To ignore the friction between social studies and history advocates regarding issue analysis is to misinterpret an important aspect of historical thinking. Yet to ignore the similar goals between issue analysis and historical interpretation is equally erroneous. As Bode (1940), Dewey (1916), Shaver (1989) and Engle (1947, 1988, and 1989) have expressed, this methodology has the potential to greatly impact students and their democratic environment. Employed properly, teachers are able to engage students in relevant, meaningful learning in which reflection upon contextualization of content is encouraged. Such practices represent a methodology far removed from that in which soon forgotten facts of history are poured into the heads of students with the hope of even minimal retention. As students examine and debate real issues of the past and engage in historical inquiry, they develop a better understanding of the content as well as the various perspectives from which the content is viewed. In our pluralistic society, it is difficult to argue against the notion that an objective of the democratic institutions in the United States is to better understand the myriad perspectives and to strive for societal improvement through a more complete understanding of history, both as a distinct time removed from our present lens and as an important set of circumstances integral to our lives today. An approach including issues analysis, appropriately implemented, can begin to move toward inclusion and harmonious progress consistent with historical thinking methodologies which have emerged in the wake of recent decades of scrutiny of America's public education system.

### **A History of Reasoning in Schools: The Struggle toward Historical Thinking**

One of the many findings in the 1983 seminal education review, *A Nation at Risk*, indicated that American schools were doing a poor job of teaching thinking skills to students (United States Department of Education's National Commission on Excellence in Education, 1983). It was reported that the focus of the public education system was on "what to know rather than how to know."

Since that time, American public education has swung toward a back to basics approach to address other poor performance indicators from the study. This approach,

while addressing the lagging basic skills of reading, writing and mathematics, neglects the findings of the *Nation at Risk* study regarding thinking skills which outlines a desire to see more critical thinking activities encouraged in schools.

The Bradley Commission on History in Schools, formed in 1987 with the intention to explore practices of history teachers and make recommendations to improve history teaching in public schools, examined the discipline in response to concerns over the quality of history content taught in schools (Patrick, 1989). The Commission sought to move history back to the forefront of the social studies and thinking skills back into history curriculum by including ideas such as deliberation and inquiry with a paramount focus on history. The Commission found that the history curriculum would serve students better if it nurtured habits of mind consistent with historical thinking, while acknowledging the difficulty implementation of such recommendations would be in the overcrowded curriculum of social studies (Patrick, 1989). Within the recommendations of the Bradley Commission was “the importance of teaching history in such a way that it promotes free inquiry” (Zilversmit, 1989, p. 50) and issue analysis. Nurturing historical thinking, according to the Commission, included engaging students in reflective and deliberative techniques to examine historical topics, comparative techniques, and analytical techniques for students to examine historical evidence to discern patterns of “social and political interaction” (2005). Yet, as the laser-like focus of education legislation has been to improve test scores that measure mostly basic skills, teaching students problem-solving skills has yet to find its place in most public schools’ curriculum (Tenam-Zemach & Landorf, 2006).

Since the beginning of the American curriculum debate in the late nineteenth century, the inclusion of reasoning skills has been a contentious issue. The Committee of Ten, whose original charge in 1893 was to create uniform college entrance requirements, opened up a far greater debate. In *The Struggle for the American Curriculum*, Kliebard (2004) described the debate as discussion over “the extent to which a single curriculum, or type of curriculum, would be feasible or desirable in the face of, not only of large numbers of students, but, more importantly, of what was often perceived to be a different type of student” (p. 12). Within this debate came disagreement over not only who would be taught, but also what content would be taught. Charles W. Eliot, chairman of the

committee, preferred a classical curriculum that favored teaching reasoning skills to students through a study of longstanding philosophical and historical works and figures. Eliot saw that reasoning power should be the central function of schools, recognizing that what transpired in schools at that time was not related to any reasoning at all, and should be remedied.

A generation after the Committee of Ten generated its curriculum standards, others were more closely examining both the intent of American education and the reality of what was being taught in the schools. Progressive educators sought to de-emphasize teaching by rote memorization of factual knowledge and incorporate more reasoning skills students could use to become effective citizens in an increasingly pluralistic American democracy. By the 1980s educational historian Diane Ravitch and political appointee Lynne Cheney opposed inclusion of curriculum which focused on reasoning skills as opposed to a content-centered curriculum. Rather, they felt that teaching these powerful skills should not be the central purpose of history education, preferring instead to focus on teaching the facts of history through a grand narrative. Although Ravitch varied in her stance and also believed that education means “the disciplined use of intelligence, allied with cooperation and good will,” (Ravitch, 1983, p. 330) her conception of intelligence surely reflected a focus on content knowledge in history. She further lamented the lack of history content knowledge of new teachers of history and suggested in a 1998 article the contribution this deficit plays in effective implementation of content-rich history including analysis of historical dilemmas from significant moments of the past (Ravitch, 1998).

At this time even conservative political pundit Rush Limbaugh weighed in on this debate through a diatribe against the National Standards for United States History. Concern over what history to teach came to a fever pitch during the early 1990s when the National Standards for History Committee moved toward publication of the National History Standards they fashioned. These standards were developed by respected history education professionals, Gary Nash, Charlotte Crabtree and Ross E. Dunn, and were intended to assist educators in teaching history in schools by engaging students in historical thinking. The Standards, however, caused a great stir among politicians and pundits alike who argued over the content, or, as they saw it, lack of it.

According to Nash et al. (2004), the process of developing the standards was meticulous. The researchers took years and included teachers, historians, and pedagogical experts. Their charge was to rethink what was being taught in history classrooms in America. It was clear that the discipline of history was struggling. It was being left out of many discussions of important subjects and students were disinterested in the content as it was generally presented. The History Standards were controversial from the start, however. Lynne Cheney, the former chairperson of the National Endowment for the Humanities, pronounced in a *Wall Street Journal* editorial, that the Standards signaled “The End of History.”(Nash et al., 2004) Her attack was set off by her belief that the Standards portrayed America as a place built on greed, racism and ill repute. Cheney was not the only one concerned enough to speak out. Rush Limbaugh again joined in the tirade, announcing that historical revisionists took hold of the development of the Standards and inserted their political correctness, leaving out any history that would instill national pride in favor of presenting an America which has, throughout its history, mistreated, attacked and taken advantage of the less fortunate. Limbaugh and Cheney believed these new Standards were misleading and hurtful to the students who were to be subjected to them in class.

By most accounts however, the Standards were misread and misinterpreted by those who opposed them (Evans, 2004; Kliebard, 2004). The idea behind the National History Standards was not to pointedly present America in a harsh light, but to get teachers to present information to students in the most unbiased way possible and to try to engage students in historical analysis of evidence from multiple perspectives. By doing so, students would be able to gather evidence and analyze it to make more informed decisions about our past. Although it is true, as Cheney and Limbaugh pointed out, neither George Washington nor the Constitution was explicitly mentioned in the Standards, however the spirit of investigation into what made America the nation it is today was explored in great detail, thereby leaving much of the process of contextualization and investigation in the hands of the professionals-the teachers.

Importantly, chapter two in the National Standards, which addressed specifically historical thinking, was not criticized. Upon reviewing chapter two, the Organization of History Teachers announced, “[w]e are pleased to endorse this section of the report

without any suggestions for revision.” Representatives from the Council of State Social Studies Specialists proclaimed, “[T]he thinking Standards are the most important part of the document.” They concluded “[h]istorical thinking is wonderful in the document.” (Nash et al., 177-178) It was certainly the hope of those who helped develop the standards that by giving teachers a framework in which evidence analysis and evaluation were paramount, teachers would begin to rethink the methodology of teaching rote factual memorization and challenge their students to become historical thinkers. As controversy around the standards grew, it was specifically the teaching examples in the standards that were considered problematic. The “facts” they presented did not always represent America at its best. Ignoring the ideas of historical thinking completely, Limbaugh implored his audience to understand that, unlike the views of those creators of the National Standards of United States History, history was not an exploration, rather, “[i]t’s what happened. It’s no more” (p. 166).

More recently, historian Robert Strayer (1998) puts the intent of history education succinctly. Strayer contends that we must:

understand that much of human culture is a dialogue with history, often contested with others who see the past very differently. In the endless creation of our constantly changing cultures, we continuously make use of bits and pieces from the past—events, symbols, and recollections—to construct a meaningful and livable world for ourselves and to serve our own interests in the here and now. (p.31)

This assertion suggests that the essence of public education is to help students develop thinking and reasoning skills to better equip them for society rather than fill them with facts that will likely have little use after graduation. In the last fifteen years however, we have seen a shift toward accountability of schools and students. To measure accountability, standardized testing has become ubiquitous in American schools. From this tendency, we see inclination away from teaching thinking and reasoning skills to teaching an agreed-upon bevy of facts and concepts to be tested periodically, as determined by legislators who are advised by national, state and local education administration. To that end, we have seen many classroom studies (cited below) which examine the way in which teachers teach. These studies have often intended to discern

whether the research showing the importance and “teachability” of critical and historical thinking, for example, is transferring from the pages of research journals and academic conferences into the classrooms.

One in a series of books examining the structure and design of thinking and theory is Linda McNeil’s *Contradictions of Control: School Structure and School Knowledge* (1988). In it, McNeil reported her observation of four high schools for an in-depth examination of the way in which teachers taught their content. What she noticed in some schools was perhaps not surprising, but disheartening nonetheless. In the intense observations and interviews of teachers from these four high schools, McNeil revealed that many do not effectively teach their students thinking and reasoning skills, and in fact often deliver a sterilized content with the purpose of disregarding controversial material in the classroom in favor of classroom control. What McNeil found was a systematic process of keeping students from controversial content through four primary methods. First, McNeil saw teachers who engage in fragmentation of the content. These teachers purposefully gave disjointed bits of information in order to keep students somewhat confused and therefore keep them from asking probing questions regarding the content. Teachers also omitted content considered controversial to keep students from engaging in critical thinking about the topic. Additionally, McNeil found that teachers engaged in a mystification of content to exaggerate its complexity, thereby discouraging inquiry and deliberation, key components to engaging in historical thinking. Finally, teachers in the study were found to oversimplify content to diminish questioning of the content (1986).

An example of oversimplification may be seen in a teacher who explains simply that communism is bad and capitalism is good, which helped make the United States the victor in the Cold War, with no critical investigation thereof. McNeil hypothesized that the technique of oversimplification, and the others she observed, demonstrated the lack of commitment from some teachers to challenge students in reasoning skills and purposeful learning in favor of a controlled and orderly classroom. With no earnest examination of these topics, students surely got a cursory education with little benefit beyond a classroom test and the measure of success as a passing grade. It is important to note that the research McNeil conducted was neither with inadequate teachers nor in schools where poor teaching was especially pervasive. Her study, while only with four schools, may be

a cause for alarm as to the practices our students face in the classroom, and the lack of purposeful learning required of them.

Gaea Leinhardt, Catherine Stainton, Salim M. Virji and Elizabeth Odoroff (1994) also conducted extensive research into the practices of teachers. In their research they reported a pattern of “mindlessness” in schools. The authors indicated that although students can learn to reason, deliberate and engage in historical thinking at a very early age, most social studies classrooms fail to challenge them to do so, relying on rote memorization of facts and mindless lecture, in which students are passive learners. Beyond their research Wineburg (2001) and Barton (2005) have more recently affirmed these findings in their research with elementary and middle school students. Leinhardt et al. (1994) explained that a typical social studies classroom continues to be a place where students absorb data for later use on a test, with little or no higher order thinking applied to the information presented. From consideration of classical historians and their learning methods, interviews with current teachers and analysis of one “excellent” teacher, the authors attempted to investigate the pervasiveness of “mindlessness” in history classrooms.

From observations of various classrooms, Leinhardt et al. (1994) concluded that there are three “naturally occurring sites” in which teaching and learning reasoning in history can develop. First is in students’ writing. Writing samples allow students to express reasoning skills and apply those skills to the material. Second is in the textbooks. Textbooks can, if effective, provide examples of mindful reasoning in history and use these examples as a model for students to develop these skills. Moreover, through the use of primary sources in a lesson, students are also encouraged to engage with the content, often beyond what secondary sources allow. Through effective use of primary sources, students can better comprehend the time period which they are examining. Lastly is in the classroom itself. In a classroom in which deliberation and exchanges of thoughtful ideas are explored, a student can learn to reason by following the model presented. Unfortunately, although these potential sites may be easily accessible, the authors found that reasoning and deliberation of issues in social studies classrooms is the exception rather than the rule.

## **Primary Sources as Related to Historical Thinking**

Primary sources are much heralded as effective teaching in and of themselves. Often thought of as first-hand accounts of historical events, primary sources can be much more than that including data derived documents such as tax rolls or census data. Books, magazines, newspapers, journals, diaries as well as other media such as paintings, photographs or music may also be considered primary sources (Barton, 2005). Like all tools in teaching however, they too are ineffective without foresight as to the intentions of their use and implications of the results. Employed properly, they have the potential to engage students toward realizing the past with newfound understanding, as well as to encourage active learning (Levy, 2004). Yet at the same time the use of primary sources illuminates the fact that we cannot know the past as easily as we know our own time. This realization provides an anchor to students that although we can and do judge the past, we must not judge it in terms of the present, rather in spite of our present (Wineburg, 2001). The complexities in dealing with the past become more evident through the use of sources directly from the time period and directly involved in the event or involved with the person of inquiry.

The benefits from employing primary sources in a social studies classroom are numerous. Students using effective primary sources gain an understanding fundamental to quality history education- a grasp of multiple perspectives. As students realize multiple perspectives while analyzing historical events, they are better attuned to their own perspectives and biases as well as those of others (Wineburg, 2001). When a student questions the absoluteness of facts from a textbook, he seeks a more complete understanding of the time in question. In addition to seeing multiple perspectives from use of primary sources, students may also gain a better comprehension of history as a reconstruction of the past. While examining a textbook, for example, a student familiar with utilizing primary sources to understand a historical event may be better able to further investigate into the facts as presented (Barton, 2005).

Wineburg (2001) developed a research study designed to examine reactions of two prospective teachers who read various primary sources related to Abraham Lincoln. The sources, included excerpts from debates held with Stephen Douglas and a personal letter Lincoln sent to friend Mary Speed. The investigation of seemingly conflicting



sources illustrated the difficulty in viewing Lincoln as he has come to be seen, the “Great Emancipator.” The study demonstrated the challenge even adults have in seeing the relative nature of historical facts and the complexity in examining historical events and figures without consideration of multiple perspectives and contextualization.

Understanding history within the context of its own time and place allows students to be more apt to avoid presentism. Wineburg (2001) also looks to primary sources, used effectively, as a tool to get students to become cognizant of “otherness” of the past; that is, to show students that the people of the past did not believe as we believe, think as we think and have the same motivations as we do today. Developing that aspect of historical cognition not only points to the complexity of historical thinking and its relation to other forms of cognition, but also brings to the fore the question whether development of historical thinking skills is at all transferable.

Another benefit of using primary sources involves the methodology applied in its usage. Drake and Nelson (2004) explained a history research kit which not only exposes students to primary sources, but allows them to develop their own sense of the types of sources which are important when examining a historical event, figure or issue (Drake & Nelson, 2004). The resource kit involves a cognitive apprenticeship type of methodology in that students examine the teacher’s first order document, which he or she considers vital to analysis of the content. The teacher then introduces various second order documents which shed more light either through reiterating or contradicting the first order document. The students examine these documents, and begin to develop new mental arrangements, or schema, from the investigation. As a final step, students are then charged with finding their own sources, which further helps them develop an understanding of the content, thereby engaging them in meaningful learning in which they take ownership of their learning.

Using only secondary sources (usually a textbook) for historical fact and analysis proves to be ineffective to provide students fodder for discourse regarding the issues of history (Crismore, 1984). The value-neutral style of textbooks leaves students cold in the natural curiosity they have to learn about their world (Bloomer & Hodkinson, 2000). Teaching without utilization of primary sources for historical inquiry may simply mislead students into thinking that the words written in the text are without fallibility, while

pedagogical explorations with primary sources as a core of knowledge can bring the past to life and help students see the past more clearly and objectively (Levy, 2004). If used appropriately, access to the past with primary sources can be more engaging, and the stories of the past more real.

There are, however, misuses of primary sources, which can undo meaningful learning. Often textual primary sources are written in a manner which makes comprehension difficult. Deciphering archaic language becomes a challenge in itself, and it is imperative that the teacher is proficient in the content to assist in source analysis (Kinder & Bursuck, 1991). A teacher employing primary sources must not consider teaching students that a primary source is somehow more truthful than other sources just because of the writer's proximity to the event (Barton, 2005). In fact, the teacher might use primary sources as a lesson to students that often sources were (and are) created with a motivation other than presenting the truth as it was experienced. Like all media, a primary source must be scrutinized and corroborated to verify its worth. Drake and Nelson (2004) called this activity the corroboration heuristic, and describe its necessity as students examine primary sources. Another misconception when using primary sources is the idea that using a primary source within a social studies lesson equates to effective pedagogy. In fact, its use means nothing of the sort. Teachers must learn to use primary sources as an effective tool, but not as a replacement for content knowledge and an engaging lesson plan of active learning (Wineburg, 2006). It is, however, through the tools of primary sources that students are better able to see the past as it was and gain a more realistic sense of historical events as they occurred. It is also important to note that not all primary sources are necessarily better than secondary sources.

Barton (2005) outlined several myths about primary sources as a caveat to practitioners. Often teachers feel that primary sources are more reliable than secondary sources. Barton, however, reminds readers that primary sources are often very partisan. Therefore, teachers should rely on no single source, but use corroboration techniques for consultation. Barton also asserted that many feel that primary sources are necessarily an argument from the past. In fact, often the most useful primary source information for historians may be pure factual information such as tax rolls or census data. Additionally, Barton argued that the presence of primary sources in a classroom is not a panacea for

history. Teachers must take into account how to use these primary sources. The mere presence of a primary source in class does not guarantee purposeful learning by the students, and simply adding more and more primary source documents to the curriculum with no appropriate objectives will not benefit students (Barton, 2005).

From the aforementioned research, one can better see that engaging students in historical thinking is not an easy process. Teachers must understand the intent of historical thinking and act accordingly to engage students. Often through the sourcing and corroboration heuristics, teachers along with their students can determine the validity and necessity of each source for themselves, and this is precisely why teaching students to more effectively analyze the documents they study is vital to true understanding of history and to historical thinking. Initially, students may not be receptive to this type of historical inquiry, as it goes against most of what they are used to as a passive student, receiving information for later regurgitation. It is, therefore, largely up to the teacher to become competent with the sources himself to present historical events and actors in an engaging way and to ask appropriate probing questions to move students into the methodology. The research done regarding historical thinking has attempted to determine if historical thinking is taught effectively in our social studies classrooms. Below is a brief overview of some research done to examine this issue.

Many teachers such as Bain (1998) have performed action research within their own schools and classrooms to discover if historical thinking can be taught and if it has impact on student learning. In one such study, Bain taught his ninth grade world history students by focusing on teaching critical thinking skills. He taught his students to utilize primary source materials as a means to interpret history instead of the traditional textbook method. His assessment of their skills centered on written accounts of what each student learned. These accounts were kept in a journal and periodically read by the teacher. By the end of the semester, many of his students were writing extraordinary things for ninth graders. Their responses were not only articulate and well thought-out, but noteworthy in the content of their statements. Many students expressed the idea that they had, for the first time, understood the meaning of what they had learned. Many indicated their newfound ability to scrutinize sources and not to take information at face value, to corroborate sources using heuristic methods, defined as a self-educating process of

learning, inquiry and discovery. These students had engaged in historical thinking. And although not readily generalizable, this type of information gives some credence to the positive effects of using primary sources and inquiry in history classes to improve critical thinking in students.

Noted researcher in the field of education psychology, Sam Wineburg, largely focused much of his research on the importance of historical thinking in students. “If we want students to read historical texts differently from their driver’s education manuals, if we want them to comprehend both text and subtext...we will have to reexamine our notions of what it means to acquire knowledge from text.” (Wineburg, 2001, p. 83) Throughout *Historical Thinking and Other Unnatural Acts* (2001), he discussed teachers fostering students to become “historical beings” while recognizing the deep complexity and specificity of history knowledge as opposed to other knowledge domains. Developing historical beings meant that students should be taught the ability to navigate through different interpretations of historical events and use primary source corroboration and sourcing techniques to get a larger sense of the event in question. This directly opposes typical methodology in which the textbook is the only source, with little or no questioning of its content as a benefit to student’s learning. It is the “wise practitioner” of history who can teach his students to become historical beings and true learners of history and practitioners of critical thinking. Wineburg’s journey into research studies (some of these his own studies) makes clear the role of the wise practitioner of history in the classroom and what sets her apart from most teachers. Interestingly, Wineburg acknowledged that engagement in historical thinking is unlike other forms of thinking and may not be generalizable as a type of thinking and knowing skill set transferable to other domains. The metacognitive and critical thinking attributes desirable for students may not be developed through engagement in historical thinking.

By stating that historical reasoning can be developed within any typical classroom with common tools such as an effective textbook, topic-minded deliberation and primary source analysis, researchers such as Leinhardt et al. (1994) send a message that the failure to engage students in reasoning is a problem that can be surmounted. In fact, using common techniques in a more effective way can help students learn effective reasoning skills. For example, teaching dates and chronology is not always ineffective, but the

chronology taught must have an effect of synthesizing the material instead of presenting meaningless dates without perspective. In addition, classroom discussions that are consistently off-topic serve little purpose in teaching students mindful reasoning in history, while appropriate deliberations that may use analogies, but remain tied to the topic, can be effective. Finally, copying notes is not likely an effective way to provoke thought and reasoning in students, but establishing a knowledge base for further reasoning is appropriate. Although there are appropriate places to better involve students in historical thinking, success in doing so is often easier said than done. In a study conducted by Medina, Pollard, Schneider and Leonhardt (2000), it was discovered that transmitting historical processing to students was very difficult for teachers. They found that an effective purposeful in-service teacher training targeted to specifically employing the process in which historians engage may better help teachers transmit historical knowledge and skills targeted as engagement in historical thinking. Lessons presented for this study are a way in which teachers may be able to gain a better understanding of engaging students in historical thinking practices.

Although Medina et al. (2000) have shown the difficulties presented in transmitting historical knowledge, Leinhardt et al. (1994) discovered that expert teachers know and do things differently than other teachers, and it is these methods that allow their students to learn reasoning skills within the classroom. Although not succinctly defined, these teachers have heightened knowledge of their subject matter and develop lessons more likely to engage students in examining content (Sternberg, 1995). They also understand how to transmit their knowledge in such a way as to allow students to employ reasoning processes of analyzing multiple sources to build an interpretive case of the historical subject (Leinhardt et al., 1994). Expert teachers also recognize the interpretive and narrative aspects that dovetail with scientific analysis. When a teacher presents the scientific inquiry skills to analyze history as well as presenting the narrative along with the skills to interpret motives, she is developing reasoning skills in her students that benefit them far more than the memories of entertaining stories from the history teacher, or the memories of mindless note-taking for memorization for a future test (Leinhardt et al., 1994).

At the same time that education legislation is bent on the back-to-basics approach with less regard for teaching critical and historical thinking, many education researchers point out that these skills are the exact thing on which we should focus in order to facilitate success in students. Levstik and Barton (2001) argued:

[T]eaching history as facts leaves students unprepared to move beyond the story as presented. Including inquiry approach methods and fostering critical thinking allows them to move beyond the story to see multiple perspectives—thereby understanding multiple perspectives in their own lives and in current issues, helping them to better participate in the democratic process. (p. 192)

Additionally, teaching students the thinking and reflective skills of metacognition may facilitate long-term success in students. In our rapidly advancing technological society the need in the future is for those who can think critically about problems and employ metacognitive, self-reflective techniques, as opposed to those who have factual knowledge with little application and problem solving skills. It is the role of public education to prepare students for that world as well as possible, which means a focus on critical thinking, metacognition, and problem solving skills instead of rote memorization. Engaging students in historical thinking may be an appropriate platform to that end. In short, shifting focus away from what to learn to how to learn in education may serve to benefit the entire system. In order to enhance the intended cohesion of critical thinking and metacognition with that of historical thinking, further operational explanations are necessary; first of historical thinking, then of metacognition and critical thinking as they relate to historical thinking.

### **Historical Thinking**

Incorporating cognitive learning theory with a discipline such as history proved more complicated than learning a more concrete skill such as cooking where the learner simply follows the recipe with little creative or conceptual input. Historical content often requires an understanding of a culture and a time far different from today's, with participants and events alien to today's students. The motives, values, beliefs, perspectives and experiences are all vastly different, and ignoring those differences is

detrimental to learning to think historically. Providing students opportunities to see connections among historical content is part of the complexity which makes historical thinking challenging.

Helping students to make connections in history, in an effort to make historical content part of their cognitive experiences, and metacognition part of their learning, has been demonstrated as a key to providing meaningful learning in the discipline of history (Voss & Silfies, 1996). Although this type of investigation into learning theory was, and in many ways still is, a misfit with the new standards era of education beginning in the early 1980s, researchers interested in connecting cognitive learning theory with history forged innovative ideas to do so. Ultimately, incorporating learning and thinking skills with pedagogy has become the essence of historical thinking. Although not defined succinctly by principal advocates such as Sam Wineburg, one can gather methodological processes teachers can follow and practice to engage students in the processes of historical thinking. To conflate excerpts from various researchers in the field of historical thinking, one may define historical thinking as a “process of using historical information including deciphering content, perspective, point of view and perceived facts” (Chowen 2005, p.11) via analysis of multiple (often primary) sources and inquiry into historical content for deliberative conclusions. Historical thinking may be considered the active doing of history; that is engaging in the acts of historians.

In 1987, the Bradley Commission outlined specific recommendations incorporating cognitive learning theory and metacognitive strategies into history education. The idea of historical thinking was advanced into prominence. Furthermore the 1994 standards set forth by the National Center for History in the Schools outlined five standards they believed to be integral to students’ learning of historical thinking (Nash et al., 1994), and it is largely from these standards where I have gathered aspects to operationalize the definition of historical thinking for the purposes of this study. First, is chronological thinking, the idea that students must know the relationship of time between historical events and figures to discern a cause and effect dynamic. Second, is historical comprehension whereby students are encouraged to examine appropriate sources in such a way as to better understand the environment surrounding the particular event or figure in question. Third, is historical analysis and interpretation through which students move

further into delineating events based upon analysis and sound examination. Fourth, are historical research capabilities in which students learn to corroborate sources for broader understanding of a historical event or figure to be examined. Fifth, is historical issue analysis and decision making whereby historical issues come under investigation to discern not only origins of perennial issues of concern, but also to develop an understanding when examining an issue as it manifests today (Nash, et al., 1994).

Through these standards as well as the Bradley Commission's report, history education began to become more cohesive in its goals, and perhaps not since the Progressive era sixty years prior was history back as a force in social studies education. While articles in research journals (Kliebard, 2004) expressed these new standards and advocated implementation, challenges remained in the teacher's ability to translate content knowledge and pedagogical theory into classroom practice. Not only is the challenge to absorb and understand various theoretical ideas and historiography, but to discern how those ideas translate to the craft of teaching to benefit the students and provide them with effective history education given the time and resource limitations presented in most school systems.

In the text *Historical Thinking and Other Unnatural Acts* (2001), Wineburg took the reader through various educational and historiographical trends and techniques, but more importantly illustrated by example these techniques in practice. Students are challenged to move beyond the names and dates of history toward a deeper understanding through various methods, experiences and a cognizant move to elude the trap of presentism- the use of current values, beliefs and understanding to pass judgment on people from the past through the lens of the present. For example, students engaging in history may examine original sources from the early Cold War, such as George Kennan's "Long Telegram," and compare his words to the summaries given to the American public by President Truman and his administration. From this dichotomy, students may then consider the sources and context of each, research further any corroborative sources for both perspectives, and discuss potential motivation of the authors. In order to truly teach students the origins of the Cold War, one can certainly see how a thorough examination of events such as the beginning of the Cold War warrants this type of intensive examination. Students who analyze the material in this way may be better prepared to use



these research skills to investigate other historical events, thereby developing a deeper understanding of the content to move from novice to expert learner. Some critics such as Diane Ravitch (1983) argue that such analysis is beyond the ability of typical American public school students, and therefore irrelevant without content knowledge as the cornerstone of learning. Sam Wineburg counters this argument with a revealing study of the possibilities of teaching history with historical thinking skills as a foundation.

The Schools Council History 13-16 Project, founded at the University of Leeds in Britain in 1973, began as a project to reconsider the “nature of history and its relevance in secondary schools,” (Wineburg, 2001, p. 41) but became much more than that. In fact, the outcomes demonstrated that secondary students, once thought to be capable of only didactic learning and too immature for real historical investigation, could understand history in a sophisticated manner. The project drew some theory from Paul Hirst, who believed that the discipline of history required a different way of knowing from all others. Hirst argued that all knowledge forms exhibit four characteristics: a common set of concepts (including a common vocabulary), a distinctive way of relating these common concepts, distinctive ways of establishing truth, and unique forms of inquiry and tools to do so (Wineburg, 2001). With Hirst’s theory, founders of the project felt that the discipline of history approached teaching history as “a form of information, not a form of knowledge,” (p. 42) since its students could not evaluate the knowledge they learned. In essence, history students had few skills to evaluate their historical knowledge; even if they were full of facts of events and people, they could do little to translate those facts into practical ways of understanding. In short, learning theory and higher thinking and processing skills were often disregarded in history classrooms. The three-year project discovered, however, that this does not have to be the case. The methods of reconstructing curriculum by injecting enriching projects and philosophical topics of the nature of historical evidence and reasoning had a marked effect on students’ ability to understand the dynamic flow of history as a discipline when compared to a control group. This study demonstrated what it meant to be “wise practitioner” of history, and consciously or not, has had an impact on social science education (Wineburg, 2001). Wineburg did, however, express concern over the difficulty of getting students to think about history differently. In order to do so, teachers must understand the cognitive

processing of students, as well as possess content knowledge to engage the students. Creating engaging lesson plans based on the principles of historical thinking is a much more difficult process than didactic teaching with a single textbook source. Based on the findings of Wineburg (2001), Sternberg (1998) and Driscoll (2005) in cognitive psychology, however, the effort may be worth the extra struggle when students become historical thinkers with tools to discover meaningful learning; both the students and the discipline of history may be better for it. Although recent research regarding effective history pedagogy has made great strides, we still are faced with challenges to move the theory into practice, and see students engaged in historical thinking as the rule in classrooms rather than the exception.

### **Challenges Remain**

Many veteran teachers may have tremendous content knowledge, yet they may not be familiar with information necessary to employ historical thinking techniques as part of classroom methodology. Some have seen historical analysis as a way to get students to more deeply understand historical content and relate that content to other events of similar persuasion, and they are excited by the notion that others in the field have similar ideas and have expressed them prolifically in the past decade. These educators have come to know historical thinking perhaps without the formal education. Younger teachers however, may understand what historical thinking is without understanding how it fits in to their teaching. As I witnessed student teachers in their first weeks and months in front of a classroom, I was dismayed to see them forgoing the sound historical thinking pedagogy of which they had recently demonstrated mastery, in favor of a didactic learning style befitting an archetypal history teacher- one who sees his students as empty vessels to be filled with the facts of history with no analysis thereof. If the default teaching style is still this type, then it must be foremost on the minds of history teacher educators to break the cycle and make sure the innovative methodologies they are learning in teacher preparation coursework translate into practice. Further, a challenge within the discipline of history education is to ensure both novice and expert teachers have the ability to draw upon various methods of teaching beyond those they experienced as students themselves, which more often than not, continues the practice of

history as a discipline of names and dates, not analysis, interpretation, and discovery. Moreover, teachers, both novice and expert, must contend with political agendas which eschew history and other social studies in favor of programs which promise improved reading scores. These programs are often seen by school administration and political officials as better and more obvious answers to literacy, but they ignore the potential impact engaging students in reading and analysis of historical documents might have on students' reading capabilities (Wineburg, 2006).

Although qualitative research by Sam Wineburg (2001), Keith Barton (2005), Peter Stearns (2000), and Gaea Leinhardt (1994) has demonstrated positive effects of utilizing methodologies consistent with historical thinking, the resiliency of traditional pedagogy remains. Many history educators have expressed concern over the methodologies in the classroom which often consists of didactic learning from a single source (the textbook), with support from a lecture mimicking the contents thereof. In his article, *Getting Specific about Training in Historical Analysis: A Case Study in World History*, Stearns (2000) indicated his disappointment in the skills of college undergraduate students. Although he expected that they should have the ability to make inferences from historical content and draw comparisons using multiple sources using critical reading skills, he found most students did not meet his expectations (Stearns, Seixas & Wineburg, 2000). One could conclude that if college undergraduates were lacking these skills, they may not have been given proper opportunities to develop these skills in k-12 schooling. Britt, Perfetti, Van Dyke and Gabrys (2000) lamented in another article from the same text, *Knowing, Teaching and Learning History*, the lack of historical thinking skills in students as measured by the 1994 National Assessment of Educational Progress (NAEP). In that assessment only ten percent (10%) of twelfth graders tested at or above proficient levels in "their ability to use historical evidence to support positions and to write arguments that reflect an in depth grasp of issues and that refer to sources" (p. 438). The authors continued to say that in today's classrooms students are given little opportunity to learn the basic tenets of historical thinking and are instead pressured to follow the state standards-based line pushed by state and local policymakers. Few are presented with issues to analyze, multiple sources to compare,

conflicting narratives to resolve, original sources to examine and intriguing lessons with which to engage with history (Stearns, Seixas & Wineburg, 2000).

Catherine Cornbleth (1996) echoed similar sentiment from her analysis. She discovered a simplistic notion of history in the students from her study. She found few students with sophisticated understanding of historical events. Most possessed just factual knowledge of events and could not draw comparisons or make inferences from content. The experiences of these students shaped how they thought about history, specifically, American history, but their personal experiences were not nurtured to enhance their historical understanding. There remains a noticeable disconnect between the two, resulting in students who do not have the experience of making connections between their thinking skills and history content.

A recent observation from my experience has unfortunately echoed the aforementioned findings. In a brief study I conducted during the spring 2006 semester, I interviewed and observed four undergraduate students enrolled in an American history survey course to discern the extent of historical thinking skills they possessed and to discover if these students were constructing meaning from the content presented. I found these students were lacking in their skills and experience regarding analysis of historical evidence. In fact, these students had had some experience using primary sources, but had little practical knowledge of their use. One student acknowledged her belief that her use of these sources seemed only to supplement the usual textbook and lecture courses while in high school. Without effective use of these sources, often students are simply reading text in a language far afield from their usual vernacular, thereby contributing to students' lack of engagement in history. Effective use of primary sources can have the exact opposite effect, resulting in engagement and deeper understanding of historical data. The next section of this chapter examines general learning strategies, dispositions and understanding of historical data in the context of learning theory and engagement in history.

### **History Education and Cognitive Learning Theory**

At the time *A Nation at Risk* surfaced in 1983, history education research had vacillated between advocating a back to basics approach advanced by Ravitch and

Cheney, to a more progressive, problem-solving approach (Evans, 2004). Both approaches had the goal of improving history education, albeit from different perspectives and with different criteria for determining good history curriculum. Research into developing applicable pedagogical methods to engage students to know and understand history, heretofore rarely tried in American education, began to emerge beneath the radar of mainstream media. Drawing on inquiry methods, elements of progressive education and cognitive psychology, pedagogical methods began to take shape as a coherent approach (Evans, 2004). By the late 1970s history educators such as Zaccaria began to investigate history education with the rising tide of cognitive psychology which was providing learning theorists with more appropriate explanations of how students construct concepts, generalizations and mental models in order to process information and learn. Cognitive psychology provided educators with ideas about the processes which occurred as learning took place. As learning theorist David P. Ausubel established, meaningful learning resides not inside the text of classroom material, but within the learner's experiences (Zaccaria, 1978). Other cognitive researchers embraced the concept of schema theory to further explain how we learn. According to Marcy P. Driscoll (2005), schema theory explained the tenets of learning new information which included "enable[ing] [the learner] to predict learning from textual materials, because the schemata a person already possesses are a principal determiner of what will be learned from a text" (p. 127). The learner of history is able to extract meaning by relating his own experiences to the material at hand. Additionally, many cognitive learning theorists began to consider the complexity of meaning by considering how we think about our thinking. This idea, referred to as metacognition, is especially integral to learning historical content since gaining knowledge and understanding of historical content is a process of constructing meaning from prior experiences, thereby generating new knowledge. With abstract historical concepts, one's recognition of one's thinking becomes a significant way to gain that understanding. It is therefore appropriate to briefly focus upon the idea of metacognition as a tool to learning and understanding history as it assists students to "take control of their learning by defining learning goals and monitoring their progress in achieving them" (Ashby, Lee & Shemilt, 2005, p. 176).

## **Metacognition and History Education**

Metacognition is a basic learning strategy with distinct levels and “duties” to actualize for more effective learning through reflection and self-monitoring (Donovan & Bransford, 2005). It is a process by which knowledge is realized and expertise is achieved. Schraw (1998) cites Garner (1987) in the distinction that cognitive skills are necessary to perform a task, while metacognition is the understanding of how the task was performed. Metacognition refers to what we know about our knowledge including the gaps in it. In history education, teachers can facilitate these skills in students, thereby increasing the meaningful learning of historical content (Donovan & Bransford, 2005). When reading a historical text, a teacher cognizant of improving metacognitive skills in his students may focus intently on the reading, interpreting words in context and pausing often for students to write their ideas of the narrative including their confusion and prior knowledge. Additionally metacognitive strategies can be employed in history as a way in which students consider appropriate questions to pose and investigate while analyzing history content. Moreover, utilizing metacognitive strategies allows for knowing “why caution is required in understanding people of the past” and “what to look for in evaluating historical account of the past...” (Lee, 2005, p. 32). Upon completion, a debriefing of sorts is enacted to discuss results of the reading as it relates to future and past readings. And the discipline of history benefits from this type of cognition since the “facts” of history acquire coherence only from continual interpretive processes and judicious filtering of noteworthy historical data toward integration into significant patterns (Hollander, 1982). These patterns are most closely associated with metacognitive processing.

Most research regarding metacognition recognizes three basic elements of this process. The first element is developing a plan of action, second is maintaining and monitoring the plan, and the third is the evaluation of that plan (Sternberg, 1998). The process can be seen as a strategy and plan of action which cycles from enacting the plan, evaluation of that plan, and back to a new plan of action. The nature of metacognition suggests that it is a beneficial process by which learning is enhanced. In fact, the journey from novice to expert in any domain, including history, requires metacognition whether it is recognized as such or not. Metacognition is therefore a vital aspect of learning.

Without it, students, including those studying history, may not achieve and succeed in the classroom and are not equipped with appropriate strategies to continue lifelong learning. Learning processes to include metacognition can be taught in history classrooms. As students learn skills to make them more successful in learning historical content, an intrinsic motivation to learn becomes evident, thereby prompting deeper learning.

Messick (1994) outlined three learning styles including *meaning*, *reproducing* and *achieving* which are tied to metacognitive strategies. The student who subscribes to the *meaning* learning strategy has an intrinsic motivation to succeed in academic interests, while the student with a *reproducing* learning strategy is motivated by a fear of failure. The *achieving* learning strategy student operates with an extrinsic motivation toward success. Although students apply learning strategies from early on in their schooling, a more developed and fixed learning strategy comes with maturity. Learned strategies of metacognition as related to learning style allows for significant learning gains (Messick, 1994). Research done on adult learners, in fact, provides much of the knowledge about learning strategies.

In a 1996 study, Leinhardt and McCarthy-Young found evidence that expert learners of history have reading skills and strategies which set them apart from others, in that they engage in corroboration and contextualization processes as a reading and learning strategy (Leinhardt & McCarthy-Young, 1996). The strategies employed by expert readers were learned and became fixed learning styles by which these experts had more intrinsic motivation for success. In a 1996 study, Cornbleth examined students from three high schools in New York. She interviewed students with the intent to discern how they process information cognitively and construct knowledge from prior experience. She found students' perception of American history curriculum depended largely on prior experience. Students in a low-income urban school had different perspectives of the history of America than those from an upper-middle class suburban school. The experiences these students had directly reflected their learning of history. How these students thought about their thinking about history also differed. In fact, Cornbleth discovered patterns of thinking from her interviews in which students from different socio-economic and ethnic groups differed greatly in metacognitive strategies and skills. The vastly different experiences and expectations of the various groups affected what and

how they learned (Cornbleth, 1996). Although Cornbleth did not focus on her participants' teachers, one can discern a belief that a teacher who recognizes these differences in experiences and understanding may be more likely to impact his students' learning by being more able to build upon their prior knowledge, and engage them in metacognitive strategies to develop intrinsic motivation. Constructing lessons with this in mind is the essence of the marriage of cognitive learning strategies and history education. To do so, however, requires deep understanding of the content as well as strategies to engage students in meaningful learning (Leinhardt et al., 1994). One intent of this study was to gather data from think-aloud interview sessions with student participants to examine their learning strategies and metacognitive abilities.

Teachers employ many learning strategies to get their students to learn, and the success of these strategies is contingent on many factors, including the knowledge of the teacher regarding metacognition and learning strategies. As Sternberg (1998) indicated, a teacher who is in touch with his students' ability regarding metacognition has a much better chance of modeling and teaching those strategies to his students than does a teacher with little regard for those processes. For example, a teacher who recognizes the importance of taking learning strategies into consideration may consider semantic mapping to help students connect ideas and concepts to assist in retention. A teacher might also ask her students to perform self-reflective reading strategies during a lesson to monitor progress and understanding. With this strategy, a student has less chance to get lost within the reading, since periodically she is "checking" her understanding. Although Garner & Alexander (1989) recognized that students fail to regularly employ such strategies as re-reading text and developing comprehension techniques, referred to by the authors as "re-inspection and text summarization." When teachers model this behavior from the primary grades, such strategies can become more commonplace, leading to more effective metacognitive strategies employed by students.

These strategies for teachers can become very effective in curricular decisions such as lesson planning and test preparation. If a teacher is able to build upon students' prior knowledge and encourage critical thinking within an assessment, she can encourage motivation and a desire to engage further into the content. When the motivation is prevalent, the metacognition becomes more developed, and that cycle of achievement



grows (Metcalf & Shimamura, 1994). When that scenario is realized, we, in education, can be more secure in the hope that we have done well in developing an educated and thoughtful citizen; arguably the ultimate purpose of public education. Suggested learning strategies, which apply cognitive processing and the understanding thereof, recall strategies advocated by historical thinking strategies. Allowing students opportunities to consider historical evidence and reflect on the information whether in the form of conflicting narratives, corroboration of sources and consideration of authorship, certainly marries cognitive psychology and history education.

### **Relating the Research**

Interviews I conducted recently as part of a qualitative analysis of college undergraduate history students revealed to me some basic assumptions teachers have about their students and assumptions students have about history teachers and history curriculum. The themes which emerged became an apt reiteration of the disparity between history education research and pedagogical practice in the classroom.

From the data, it appears that history curriculum and pedagogy have developed substantially in theory, but little in practice. The students I interviewed had encountered much of the same didactic learning and knowledge-based factual assessment as ever, and through observations in this study as well as with student interns teaching high school history classes, the belief remained. The students also shared a disdain for didactic learning, yet remarkably and in spite of some teachers' efforts, all of them retained some enjoyment for learning history.

Some of those interviewed discussed favorite history lessons or activities. Invariably, these lessons included active learning and deep engagement in the material. Not one student stated that a particular lecture or textbook passage was memorable. Drake and Nelson (2005) discussed many such engaging lesson activities designed to reach students through incorporating prior experience, by drawing a picture of history to elicit discussion, or examining photographs or paintings. Additionally, students were encouraged to search for primary sources related to a particular period or event in history through development of a history research kit. In all of these lessons and ideas, students were engaged and active in their learning. One student whom I interviewed remembered

field trips to Civil War battlefields in Virginia. The teacher engaged students by examining battle plans from the conflict, reading primary source documents from the battle such as diaries and medical records, and investigating evidence from both sides to discern an objective assessment of the outcomes. From this experience the student recalled not only particulars of the battles, but the battles' relation to the entire war and thereafter. She believed her teacher's love of Civil War history and demonstration thereof made her learn that period of American history more thoroughly than any other period. Her experience moves this chapter to the crux of relating history education research to practice. From the interview account, this teacher who loved Civil War history possessed attributes necessary to parlay research to practice. Knowingly or not, he included a real knowledge of the content, a motivation to engage students in deeper knowledge of the content, an understanding of students' cognitive processing and motivation to move students beyond single source textbook learning. This particular student reciprocated his passion for the content and found the engagement intriguing.

The pattern described in that interview reflects Drake and Brown's (2003) assessment that, "[h]istory teaching is a co-investigation in which the teacher and students shape and reshape their interpretations about the past" (p. 471). Apparently, the enthusiasm was contagious in his classroom and the activities in which the students engaged certainly coincide with the authors' assessment of history.

Historical thinking as a complex form of understanding history content includes some features which can effectively move students toward a deeper understanding of history content, and as Wineburg (2001) stated, "history holds the potential, only partially realized, of humanizing us in ways offered by few other areas in the school curriculum" (p.5). Yet as we observe history classrooms and interview students in those classrooms, we see and hear minimal changes toward incorporating historical thinking. As a teacher I certainly remember more experienced teachers conferring about the swinging pendulum of school reform, and perhaps some are reluctant to follow every new trend in education, as the pattern has often been to disregard new developments as quickly as they came about. The advice often given by experienced teachers was to just keep teaching as he or she always had and more than likely, that teaching style will come back into favor at some point. The suggestion was to ignore any new ideas. This suggestion is a dangerous

one which still permeates many teachers' thinking. Although with new national and state mandates, dismissal of requirements is difficult in math and reading, in history education much is the same. Regardless of new teaching ideas or testing mandates, many teachers would rather not participate unless absolutely required to do so, and even then, it is often with protest. As Ronald Evans (2004) indicated, the traditional history classroom teaching style is remarkably resilient regardless of literature through which researchers work tirelessly to improve education strategies and techniques to improve history education. So much literature is available to teachers it may be overwhelming to try to infuse it all into lessons, but ignoring all such literature is irresponsible teaching practice. Sometimes the research is conflicting, and perhaps teachers are awaiting a cohesive research-based methodological framework with which to develop their own plans to jump on board. Historical thinking and the literature from Wineburg (2001), Stearns (2000), and Drake (2005) is a cohesive idea teachers may choose to embrace. Incorporating new techniques of cognitive psychology with inquiry into historical evidence and engaging lessons built on a constructivist paradigm may serve the purposes of effective history education as it is less of a movement to dramatically change teaching, and more of an inclusive methodological approach to incorporate student learning styles with investigation into the meaning and analysis of historical content.

### **Metacognition and Critical Thinking as Related to Historical Thinking**

Most research regarding metacognition recognizes three basic elements through which this process results. The first element is developing a plan of action, second is maintaining and monitoring the plan, and the third is the evaluation of that plan (Sternberg, 1998). The process can be seen as a cycle of plan of action to evaluation and back to a new plan of action. The nature of metacognition suggests that it is a beneficial process by which learning is enhanced. In fact, the journey from novice to expert in any domain requires metacognition, whether it is recognized as such or not.

Sternberg (1998), focused an article on the ways in which metacognition can enhance the development of expertise, and the way a teacher can be an advocate or a hindrance to his students' academic development. In his review of other articles in volume 26 of *Instructional Science*, Sternberg argues that teachers fall into three basic

categories regarding their knowledge of the role of metacognition. Some teachers fully take into account students' patterns of metacognitive functioning, while other teachers do not acknowledge those patterns at all, and still others fall somewhere in the middle. A preferable paradigm is for teachers to recognize their own as well as their students' metacognitive activities. A teacher who has this ability recognizes that students will be more motivated to pursue domains in which they excel.

This is not to say that students in classes in which the teacher does not recognize metacognitive functioning in her students will not acquire new knowledge. However, doing so will encourage students to build upon prior knowledge and experience, and recognize what they know and what they do not (Sternberg, 1998). It is important to note here that all students regardless of prior knowledge and experience are able to build new schematic connections. Additionally, this growing expertise students achieve comes from developing a large breadth of knowledge, interconnected schemas, and automated sequences of problem-solving steps developing conceptual rather than only procedural knowledge (Prawat, 1989). The path to expertise never ends, but is ongoing and cyclical, and the cognitive process of interpretation and deliberation of historical evidence is part of that path toward historical thinking.

The literature addressing critical thinking, metacognition and historical thinking skills, and their effectiveness with high school students is encouraging indeed. Ennis (1969) succinctly expressed that, "[c]ritical thinking is reasonable and reflective thinking focused on deciding what to believe or do" (p. 29). Diane Halpern (1989), one of the most widely recognized researchers in the area of critical thinking, believed that developing a critical thinking attitude is important "because even if we teach students how to do it, they must take it upon themselves to implement it" (p.37). The ubiquitous nature of the term and concept of critical thinking as well as its misuse should not preclude one from striving to implement lessons and activities, which move students toward independent, thorough, reflective and critical thought. The ideas contained within the concepts of both metacognition and critical thinking are worth investigation and the relation within disciplines is an appropriate medium therein. Halpern's research has concluded that critical thinking and metacognition are closely related. In fact, she outlines the four characteristics of critical thinking. First is a willingness to plan; second

is a flexibility and open-mindedness on the part of the student; third is persistence; and fourth is the metacognitive skill of self-reflection and self-correction. She acknowledged that metacognition is related to critical thinking through its self-reflecting aspect. That is, those with metacognitive skills have the ability to plan, act, and then learn from successes and mistakes. This process is vital in historical thinking as students pore through historical documents to decipher a more objective truth.

In a series of two articles relating to critical thinking in the periodical *The Journal of Curriculum Studies* (1999), an extensive overview of what critical thinking is as well as what it is not is addressed. Additionally, the authors review ways in which teachers can incorporate critical thinking into their classrooms. In the series, the authors reminded readers to understand that critical thinking is not a definitive process that can be taught like the steps in the mathematical order of operations. Critical thinking, according to the authors, is a “multi-form enterprise,” and the steps required to engage in critical thinking are determined by the nature and context of the problem. Therefore, there is little evidence that transferability of one’s ability to think critically occurs (Baslin et al., 1999).

In 1980, a major study to demonstrate whether or not one can transfer critical thinking ability was published in the journal *Science Education*. In it, researchers Dreyfus and Jungwirth (1980) discovered that even with commonalities between situations, the transfer of critical thinking ability from one context to another was unlikely. Researchers also suggested that viewing critical thinking as a separate skill is erroneous. In fact, critical thinking is embedded with a student’s understanding of the particular context, and transferability is not part of that process (Grant, 1988). Embedding critical thinking within history via employing historical thinking skills may bring to light how the benefits of teaching history in such a way is also a way to teach students to think critically and utilize reflective metacognitive processes. Moreover, it may add to the body of knowledge regarding the transferability of critical thinking skills from domain-specific to non-domain-specific content. Student improvement in critical thinking skills developed from engagement in historical thinking may suggest transferability from the history classroom to non-domain specific critical thinking.

Halpern (1989) defined critical thinking as thinking that is purposeful, reasoned and goal directed. It involves solving problems, formulating inferences, calculating

likelihoods and making decisions. Her research brought together the concepts of critical thinking, reflective metacognition and historical thinking. Through utilization of these three related concepts in the classroom and outside, teaching becomes an integral component of life in that it truly allows the learner to develop understanding of the world in which he lives. Although researchers such as Baslin, Case, Coombs and Daniels (1999) have argued that critical thinking is not a skill per se, other researchers have set aside semantics and tried to extrapolate ways in which we can teach students to think critically. Grace E. Grant's (1988) research into secondary classroom teachers revealed two basic elements to a knowledge base necessary to teach critical thinking. She indicated first that teacher knowledge must involve not only pedagogy, but also subject matter knowledge, knowledge of students, and knowledge of self to be successful in teaching students to think critically within a discipline. Additionally, teachers must incorporate appropriate teacher actions to facilitate critical thinking. Grant found that teachers who employ methodologies inherent in historical thinking strategies were better able to engage students in critical thinking. With an understanding of what critical thinking is, according to research, as well as what critical thinking is not, one can see a relationship between the process of critical thinking, the reflective and systematic process of metacognition and the methodological approach of historical thinking in order to engage students in more purposeful learning.

Naturalist and poet Diane Ackerman of Cornell University has recently taken on the task of trying to explain the way in which we process information and use critical thinking and metacognition. She has joined a multitude of researchers in this fascinating field, but being a poet and naturalist brings a different perspective to the investigation. Her insight is important to the topic of engaging students in historical thinking in that her findings revealed the importance of requiring students to participate in more inquisitive thought through curriculum presentation. In her research, Ackerman has found that our ability to ruminate, reflect and deliberate separates our abilities from those of other animals, and although the differences between our brains and those of our primate cousins are small indeed, it is the aforementioned abilities that are so important to foster. Ackerman indicates that teaching students to cultivate their deliberative abilities is so very vital to an education. According to Ackerman, "our great genius is our gift for

reflection,” and teaching our students to nurture those abilities is key to a child’s education (Ackerman, 2005). In light of Wineburg’s assessment of the importance of the discipline of history as a “humanizing” part of curriculum, the marriage of appropriate history pedagogy with critical thinking and metacognitive reflective techniques becomes perhaps the way to a more complete, purposeful education experience, one in which students get the benefits of learning to question, reason and deliberate, widely considered essential elements to education (Ackerman, 2005; Wineburg, 2001; Sternberg, 1998; Halpern, 1989; Grant, 1988). However, the question of transferability remains central to this and many related research studies. Although many teachers hope to instill in their students the skills of a historian, that is, historical thinking skills, engagement in those skills may lead to only domain-specific results. The study seeks to contribute to research regarding the significant challenges of teaching skills to know and understand history as related to using those skills to become reflective and critical thinkers.

## CHAPTER 3 PILOT STUDY

### **Constructing Meaning from Content**

As a significant part of this study, I sought to examine how students come to understand history content. The goal of this pilot study was to develop methods to inquire about students' thinking processes as related to consideration of historical content. It was expected that rehearsal in a pilot study would better prepare the interviewer to encourage participants in think-aloud interview sessions during the primary research study to provide insight into how they think about their thinking regarding history. This examination of the metacognition of students is complex, and rehearsal to facilitate that process seemed appropriate for better results in the main study. By the conclusion of the pilot study, I gained a better understanding of students in a required course and how they recognized and absorbed the content. Additionally, through interviews and observations of classroom content, I established a clearer vision of the intentions and methodology necessary for seeking such elusive and abstract concepts as students' metacognitive functioning.

Often students are exposed to effective methods of inquiry to promote a deep understanding of historical events, but typically, they are enrolled in a class in which covering content is paramount to any understanding. In an effort to gain a better perception of the experiences of a student enrolled in a history class, this pilot study was conducted before beginning the primary study. From this qualitative analysis of college undergraduate students, additional questions emerged from the often insightful responses from the participants. This experience provided a more complete understanding of the high school American history students who would be encountered in think-aloud sessions conducted in the larger study.

### **Pilot Study Method/Sample Selection**

The research for this pilot study was conducted in the classroom of Mary Smith (a pseudonym). Ms. Smith, a doctoral student at a southeastern university, was experienced in college teaching. Ms. Smith expressed an interest in the research topic and volunteered her class for this study. The class was ideal- an undergraduate history course in which



many of the students were freshmen and very few were history majors. The intention was to seek out students who were not necessarily history majors, who might not have a great interest in the discipline of history, and who might be relatively unfamiliar with the idea of historical thinking or constructing meaning through interpretation of historical content. The intention was to identify participants who had never been asked about their use of primary sources in class, or how those sources and methods helped them better understand history content. The expectation was that these participants would be fairly comparable to typical high school American history students which will be the focus of the larger study. Due to time, financial and logistical constraints, it was not possible to implement the pilot study in high school classes. With the course and instructor selected, class observations began. The course met in fifty-minute allotments three times a week. Three classroom observations and four interviews were conducted.

At the time the pilot was conducted, eighty students were enrolled in the undergraduate American history survey course designed to explore American history to 1865. Four students (one male and three females) volunteered to participate in this study. All interviews and observations were conducted in the spring semester of 2006. The purpose of the interviews was to discover the ways in which students construct meaning from historical content. Students' responses were examined and clarified for comprehension. Interviews were tape-recorded to ensure accuracy and later transcribed. Field notes were also taken during each interview describing nonverbal cues and posture. Each interview was then coded and resulting themes were identified. Additionally, periodic interviews with the instructor were also conducted to clarify certain questions the researcher had regarding her intentions, plans and procedures for the class. The names of the instructor and the participants have been changed to protect their anonymity.

## **Observations/Interviews**

### **First Observation**

The first observation occurred on a typical day, according to Ms. Smith, with about seventy students present. The classroom was large with tables set up in two large

rows on either side of the room. Two large columns occupied much of the wide aisle in the middle of the room, obstructing views from the teacher to her students and from the students to the front of the room. In front of each row of tables was a video screen. A teacher standing in front of the room to one side would be considerable distance from students at the far end of the room. Clearly the dimensions and arrangement of the classroom created an added challenge to instruction.

Shortly before the scheduled class meeting time Ms. Smith came into the room to set up her notes and PowerPoint. I quickly approached her to remind her of the observation and to solicit her opinion of her classroom. I asked her a few questions about the room while she expertly loaded her visuals for the class and arranged her notes for the lecture to follow.

“I’ve gotten used to it,” she claimed.

She continued relating about her difficulties seeing all her students at one time in such a large space and her tendency to naturally favor one side of the room over another at times. I then asked her about strategies to deal with such a large class and in this difficult environment. She replied, “I have to move around a lot. If I stand in one place, students can’t see me and I can’t see them.”

The conversation then moved to the objective. I reminded her that I would be observing the content presented in class as well as student participation and seeming interest and engagement. I asked if this would be a day in which we could also use a few minutes of class time to explain the research to the students. She cordially agreed to allow a few minutes before she got started with her lesson. It would give her a few extra minutes to get her lesson together, she joked. I noted that she was well prepared. Her acquiescence was just self-deprecating. Being ill-prepared was not part of this class, as I would soon see.

In my explanation I suggested that any interested students see me after class, and that we would discuss a schedule for interviews. I then sat in the back of the room as class began. The first day’s topic revolved around the three wars in which Britain was engaged before the American War for Independence. Ms. Smith used sophisticated yet appropriate language in her lecture. During this first observation I was also looking to see if the instructor used various sources and activities to engage students beyond didactic

lecture and textbook teaching. As she discussed the colonists' emerging ideas regarding liberty and unity, she put on the screens a political cartoon published by Benjamin Franklin during this time. The popular cartoon was a segmented snake labeled as each of the colonies with the title, "Unite or Die." Ms. Smith described and explained the source to the class while most students took note of the source, if only passively.

After class students interested in participating approached. About fifteen students were willing to help me. I collected consent forms and wrote down names and contact information of those interested. Several students stayed for a few extra minutes to ask questions and reiterate their interest. Their names were later marked to indicate their heightened interest in the project.

One student, Jeanine indicated that she was free to talk at that time. We moved to a small conference room one floor down, which had previously been reserved in case of such an occurrence, and sat down at one end of the long conference table. I introduced myself and explained in more detail the intentions of the study. Jeanine then explained that she was an undergraduate student in the social science education department, and she thought participating in this study would be "interesting." As per department protocol, she was scheduled to begin her education coursework and field experience during the summer, but as a transfer student had yet to really become involved in her program. As the interview progressed, we discovered Jeanine had some experience using primary sources in high school, but saw little of it in college history courses.

"In high school, we did, like the Gettysburg Address, and that gave us more than the little section in the textbook, and [in class here at the university] she [Ms. Smith] wanted us to read some documents about indentured servants, and now we're reading the autobiography of Benjamin Franklin, but we're not using it very much in class" [Jeanine-Interview]

When asked about her experience in learning *how* (emphasized in interview) to analyze primary sources, she indicated that she had no training of that sort.

## **Second Observation**

One week later I observed for the second time, and I again asked the instructor questions regarding her teaching style and lesson planning for the class. Ms. Smith indicated that her choice of sources she used in her classroom had much to do with sources she was comfortable using and had been used in other classes when she was a student. Additionally, she included sources she felt were “just naturally useful and appropriate sources,” such as Thomas Paine’s *Common Sense* or certain *Federalist Papers*. She believed these sources were important for students to experience. She expected students to understand these sources and read them in a scholarly way, but she realized that many college students have little experience or motivation to delve deeper into these sources.

During her lecture about the beginning of the American War for Independence, Ms. Smith spoke of the controversy surrounding who, if anyone, tipped off the Concord Militia to the plan for attack and arrest of rebel leaders. This point she indicated was “largely debated among historians, and we must put a star in our notes because we only *suspect* [emphasis in teacher’s tone] that it was [Thomas] Gage’s [The Massachusetts Governor, and a Loyalist] wife.”

From her comment I observed some students “starring” their notes as suggested. While the teacher used this content to inject an opportunity for students to engage in deeper thinking about the history content, there was little investigation of the implications of this controversial hypothesis. While discussing the “shot heard ‘round the world” the teacher decided not to ask or speak with students about how the colonial uprising had, and still does, inspire other peoples to fight for independence from imperial powers. The second observation demonstrated the teacher’s intent to move beyond historical knowledge to engage students and help them understand the role of historians and the changing nature of history. However, the need to cover content seemed to prevent deep discussion and investigation.

## **Third Observation**

This lecture included content related to the founding of the United States, the influences thereof, and the early attempts to establish a system of government. Ms. Smith

lectured on the establishment of the Articles of Confederation. She included quotes from some members of these early delegations. “We must all hang together, or assuredly we will all hang separately,” she recited, quoting from Benjamin Franklin indicating some delegates’ desire to unite the new nation.

In addition to quoting the aforementioned and others regarding the founding of the nation, she also used some effective quotes from Thomas Paine emphasizing the importance of certain governmental structure. Her quotes during this class helped to explain her opinion of important versus less important historical content. During the portion of her lecture outlining the very end of the American War for Independence, she stated, “I do give you the last battle name [Yorktown] just in case it comes up in Trivial Pursuit.”

Her indication here is clearly a window to her opinion regarding the triviality of learning only the names and dates of history without attaching any meaning of significance to the events. After class two students were able to participate in an interview, so I decided it would be appropriate and interesting to interview two students at once in a mini focus group setting. The two students had never officially met one another so introductions were carried out. Carrie referred to herself as a “special, non-degree seeking student.” She was not taking the course for credit, as she already has a master’s degree in social work, but rather for her own personal experience. She was now a housemother in a sorority on campus and decided to take a course of her interest. It was her first college class “since the sixties.”

Kathy was a freshman theatre major. Although this was her first college history class, she had the experience of Advanced Placement American history in high school. Kathy indicated that this course was one of a few courses from which she had to choose to fulfill her major requirements. And this course seemed “easiest” since she was “pretty good at history in high school.”

From interviews with four students and the observations of the class I attempted to discern patterns regarding the students’ construction of meaning from the content of history presented in class. Each interview included questions relating to that day’s lecture as well as questions relating to the importance of learning history and students’ experiences using and analyzing primary source material. In regard to the latter question,

I must note that three of the four participants were somewhat experienced in use of primary sources from advanced history classes in high school. In my experience as a social studies teacher, I believe this would not be typical of the majority of students in general education history courses in high school. This difference is, therefore, a limitation of the pilot study. The four volunteers may have been more likely to participate since they did have some prior success in advanced history courses and therefore would feel more confident about participating in the study. My speculation regarding this limitation did not however preclude my gaining insight into the way these students in this class processed historical information and constructed meaning from it. Further, it did not prevent me from learning how students' acknowledge and understand their own thinking.

## **Findings**

Unquestionably, themes emerged from the interviews and observations of the teacher and her students in this *American History to 1865* survey course. Participants reflected on the notion that the study of history was important, though reasons why varied. Additionally, all participants demonstrated that they were able to construct meaning, though this mental operation was not necessarily fostered by classroom content. The participants also employed strategies to deal with complex and even conflicting historical information, but again, those strategies were not necessarily fostered within the class that was the subject of the pilot study. Finally, participants' use of and experience with analysis of primary source materials was limited. All had used primary sources both in high school and college to some degree, but the participants' understanding of their importance varied substantially.

When the time came to analyze the interview transcripts and observation data, it seemed as if many of the more intuitive questions asked in the interviews failed to get at the heart of how students constructed meaning from historical content. For example, students answered with clinical responses to the question of why study history. It was as if the students were attempting to provide a response that was appropriate rather than forthright. However, upon further reflection I realized how the open-ended questions often brought the most insight from the participants. From this discovery I was better able to ignore the rigidity of the planned interview questions and look further into the

experiences expressed by the participants. And it was from willingness to be open to the data that themes emerged.

### **Theme 1: Why Study History?**

The four students interviewed reflected a cross section of prior experiences, expectations of the course, and understandings of historical analysis; however, all indicated certain ideas about the importance of knowing and understanding history. Adam had not only taken advanced placement history courses in high school, but also had the benefit of parents who both taught history. His insight included a keen perception of the importance of learning history. He reflected that knowing history is the basis of knowing our past so we can better move forward. We can “learn from other people’s mistakes and discoveries,” to help us do so. Additionally, he indicted his realization that history is not static, but a constant play with many actors and always something going on.

Jeanine, who intends to become a history teacher, said history “helps you understand today better.” She also concluded that the events of history were not inevitable and to understand the events of history as such prevents deeper understanding and interpretation thereof. Incidentally, because of her sophisticated responses, I expressed happiness in her decision to become a teacher of history, particularly because of the need for more teachers cut from the same cloth of understanding the complexity of history and historical thinking. Kathy and Carrie, in a joint interview, communicated similar views of the importance of learning history. Noteworthy was the agreement shared by the two respondents that history repeats itself. This notion indicates a novice approach to understanding history; one which ignores contextualization of historical events and the uniqueness of circumstances in which events occur. Along with their idea that history repeats itself, they also explained why they thought learning history was important in this brief exchange:

*Kathy:* I think it’s [learning history] important because you always hear that history repeats itself, and you should be aware, you know, about what’s going on in your present situation, and what the past is made up of. I guess I’m not really sure why knowing history is important, but it’s good not to be ignorant I guess.

*Carrie:* That’s a good answer, I like a lot of what Kathy said. History repeats itself, also learning how people behave in leadership roles, the

downfalls and uh, I think it better helps us to understand where we are now and the difference in our country. As we learn the background of different places and people. Kathy, you did good and you're only a freshman...[laughter from all]

## **Theme 2: Communication of Historical Content**

In this research, one of the most important determinations I hoped to make was to what extent the content presented, including lectures, side comments from the teacher, questions from the teacher, sources used in class (such as images and quotes), and sources used outside class (both primary and secondary) allowed students to build upon pre-existing schema to better understand complex historical content. This constructivist approach to learning, the theory that students are better able to learn complex ideas and theories if they are able to connect this new knowledge to existing experience and knowledge, is embraced by many scholars of history education. The goal here was to observe and inquire how a constructivist approach or lack thereof affects the participants' learning. Through the three observations and informal interviews with the teacher, I witnessed patterns of teaching and learning which both were consistent with and deviated from a constructivist approach.

The largest portion of each class observed consisted of a lecture, with students taking notes, and the outline of the lecture on the projection screens. According to the teacher, it is an efficient way to get across the vast amount of historical information. Ms. Smith indicated in one of the interviews that without lecture, there would be no way to get through *American History to 1865* as the course name suggests. However, she readily admits the impossibility of covering all of the material completely, and she chooses to ignore much of the military history since "there are great courses here (at the university) that cover military history exclusively. So if that is an interest, I suggest taking one of those courses for that perspective." [Interview with Ms. Smith]

Beginning with the first observation it was clear that Ms. Smith was more than adequate as a lecturer. She had content knowledge and a delivery which fostered smooth sharing of content and transitions from one topic to the next. The chronological treatment of the material also allowed her lectures to build cause-and-effect relationships in historical events and the players thereof. During the four weeks of observations, she



covered approximately seventy-five years of content beginning with the colonial wars fought between Britain and its colonists and the other European imperial powers of France and Spain-sometimes with the help of Native American tribes. She continued with the beginnings of rebellion from the Colonists. It was here that she incorporated various sources for students to analyze. Students were assigned to read *Common Sense* by Thomas Paine. Ms Smith also used various images such as political cartoons and portraits of colonists who were influential in America's gaining independence. Additionally, students were assigned to read the *Autobiography of Benjamin Franklin* to which the teacher referred in her lectures.

### **Theme 3: Constructing Meaning**

From the observations of the content presented, I sought to discover if the students interviewed were able to construct meaning beyond the knowledge level by engaging in higher order thinking. For example, I wanted to discern whether students were moving toward an understanding of the time period and the circumstances which led to the formation of the United States as an independent nation. Additionally, I sought to determine if the students were using tools such as metacognitive strategies to consider the content. In the interviews, participants utilized various ways to construct meaning from content. Adam, for example, expressed the idea that history is ever changing and that the meaning one puts to certain content is dynamic. "I could take this class twenty more times and learn more and learn differently every time, different things..."

Additionally, he explained that in order to get that deeper understanding of the content, one must take an interest and be able to "put yourself in another person's perspective." Other participants echoed such sophisticated recognition of an effective way to approach history as well. In one interesting exchange, Carrie, the non-degree seeking student, and Kathy, the theatre major, reflected upon how experience may change one's perspective, understanding and ability to construct meaning from the content.

*Interviewer:* Now you just finished reading *Common Sense* in class [Noticing the smirk on Kathy's face]...did you read it? [Nervous laughter from Kathy]

*Carrie:* It's okay, we won't tell on you [Laughter]

*Interviewer:* Well Carrie, did it give you any insight into the foundational values of our country? And did it give you any insight into where our fundamental laws come from?

*Carrie:* Yes...it was a wonderful source to tell you what the climate was at the time, and it really told you how much the leaders worked to get the people behind them. I mean Ben Franklin brought him over here (from Britain) and told him, 'Let's write this, publish it and get it out there. I thought it was a wonderful source, but then again I'm at a point where I read things differently.

*Interviewer:* How so?

*Carrie:* Well, Kathy you may differ with this but I just think with life experience, you're better able to relate, um, what was happening then and what's happening now. Like looking at our individual rights right now and relating what's happening now to what we're learning in class is very interesting to me, and I don't know if younger students feel that way. I look around in class sometimes and see students not paying attention, just waiting for class to be over, and thinking about other things. Ya'll are at such a busy time in your life [Looking at Kathy] that I'm not sure ya'll even care about our individual rights right now...it's just my perspective. I don't know. [To Kathy] Is that fair?

*Kathy:* Um...I think it's a good generalization, but like some of us are really involved. But you're right; we try to learn things for Monday, and...

*Carrie:* Because you might get tested on it.

*Kathy:* Exactly.

Carrie and Kathy continued to discuss experience, which led to some common ground. Both expressed a nostalgic memory of field trips in history class, which gave them a feel for history beyond what they learned in a classroom, from a textbook or lecture. From this interview exchange we see that constructing meaning in social studies can be a result of providing experiences, and it is these experiences which embed in memory and become experiences from which we can build upon further.

*Carrie:* I had a fourth grade teacher who took us on a field trip once or twice a week.

*Interviewer:* Wow!

*Carrie:* Yeah, I know she was really into field trips. I hadn't thought about it in years, but seeing and then learning was great for me. And that's probably what I'm saying now; I see therefore I learn. But I just wish there were more ways to integrate, and we do that with the pictures and readings we get in class. But I think so much of history is based on 'if you see things, you can learn it and get interested in it.

*Interviewer:* You just mentioned interest. Do you think you have to have an interest to engage in historical thinking?

*Carrie:* No, but as I was thinking about the field trips, I think a lot of times seeing brings the interest, so it's unfortunate that we can't see and then learn, ya know? When I took my little guy (her son) to see all of the little ships and historical places, he was miserable. But then I hear him talking to his grandpa and asking, "Do you know about the three ships?" And I thought, Wow! So it's a shame we can't always see these things, but it's very difficult in school to do that.

*Kathy:* As far as going on field trips and stuff, I really agree with that because I was in history club in high school for two years and we just went everywhere. I went to high school in New Jersey, and we would always go to Virginia to the battlefields and stuff, all over, and it helped me I think.

Constructing meaning was also discussed with Jeanine. She acknowledged the disadvantages of gaining historical meaning from a textbook or a lecture, indicating that textbooks do not cover everything, and even textbook authors are biased in their choice of events to cover and also the perspective from which to cover them.

The participants in this study demonstrated the ability to construct meaning from historical content. Carrie and Kathy emphasized the benefits of seeing history, while Adam and Jeanine considered perspective to be important in order to construct meaning from history. It is noteworthy that none of the participants seemed to learn best from lecture. Active participation via field trips or source analysis was preferable for them, yet most of the history classes they have been a part of incorporated a didactic teaching style and assessment which used neither students' critical thinking nor inquiry skills.

In addition to constructing meaning from historical content, I was interested in any strategies these students used to understand complex historical information. Did they consider events as inevitable or a series of ad hoc circumstances? Could they construct meaning from conflicting narratives? Had they been presented with such forms of cognitive dissonance? If so, how were they taught to deal with it?

In all four interviews, participants were presented with a situation in which two opposing viewpoints of historical events or historical figures were given. Each participant was then asked how he or she would deal with figuring out which one, if any, was more reliable and therefore a better explanation of the event or depiction of the person. Adam, whose parents are both social studies teachers, had a sophisticated response. He indicated that in order to discern a more objective truth from the narratives presented he would

consider the audience for whom it was written as well as the time period of the source itself. Jeanine added that when considering sources it is best to be able to corroborate the source with others. From comparing evidence to multiple sources, one is better able to determine which source is more objective. Carrie and Kathy included the idea that to best consider conflicting sources one may need some prior knowledge. As an example, Kathy indicated that as she gains experience and knowledge she feels as though she is better able to see through certain biases she experiences.

## **Discussion**

The idea of constructing meaning from historical content and constructivism in general have roots in the notion of building new knowledge based upon prior knowledge and experience, that is, adding to one's network of schema by making new and multiple connections within our experiences. The participants interviewed for this pilot study shared some sophisticated ideas about what it means to construct meaning from historical content, and to think historically. They were able to articulate their understanding of the importance of analyzing multiple perspectives and inquiring beyond the facts to answer questions related to why certain historical events happened as they did as well as searching for corroboration of sources to discern a more credible account of events. As inferred by Wineburg (2001), these abilities and acknowledgements are related to thinking historically. When asked, most even indicated their preference to do so rather than learning from a single source textbook and/or lecture in which the instructor is simply listing facts with no analysis. In this study prior experience was evident in student responses. All were able to articulate the belief that having an interest and some prior knowledge of a subject makes one better able to learn new, related material. Adam, whose parents were both history teachers, and who had taken advanced history courses in middle and high school, understood that history is not inevitable and that to understand historical content, one must grasp multiple perspectives.

Carrie, whose last history class was almost forty years ago, had had many more experiences from which to draw to contextualize meaning from the historical content presented in the class. Not only had she lived through more historical events than the other participants, she also provided evidence that she had built upon those experiences to

better understand historical events which took place long before she was born. Evidently her understanding of history was not determined by the history she had lived through, but by the fact that she had used her experiences to build upon her knowledge toward deeper understanding of the material. Carrie said she felt a connection when she read Benjamin Franklin's autobiography. In it, Franklin peppered the pages with pieces of wisdom, some of which we still hear today. These phrases about saving money, the need for unity or waking up early to start one's day rang true for her probably more so than for the other, much younger students. Her experiences had demonstrated the utility of living by some of those phrases and the relevancy of his words had become important to her.

Evidence from class observations, student and teacher interviews and lecture notes revealed a disconnect between the participants' ability to cognitively process sophisticated historical information and the class structure which required them to do little of it. Ms. Smith structured her course to include vast amounts of historical information in the shortest amount of time, but the content presented rarely encouraged students to engage in any type of analysis. The pressure to include all of American history from the time of the earliest of the sixteenth century settlers to 1865 made it nearly impossible to present the content without the efficient lecture style class. Such a style encourages few questions from students and treats them as if they are empty vessels to be filled with the knowledge of history.

In reality, all teachers do have to exclude some things. Ms. Smith chose to exclude much of the military history and, as stated earlier, encouraged students to enroll in one of the university's military history courses. Ms. Smith's inclusion of certain sources was not based on trying to get students to engage in conflicting narratives, but rather to expose them to the usual suspects of primary sources. The use of sources such as *Common Sense* was not effective for many of the participants. Kathy had not even read it and Jeanine felt it was just extra reading. The students were not made to analyze the documents; it was just used as a supplement to her lecture as if to say, "this is the guy we've been talking about." Additionally, the portrait of Paul Revere was used only to put a face to the name without any analysis of the portrait to investigate who Revere was and what his place in the formation of America was.

It was in the reading of the *Autobiography of Benjamin Franklin*, however, where students did get more than simply a lecture supplement. The teacher used Franklin's ideas and beliefs in each class observed. For example, she explained how his influence in the printing business allowed him to publish his ideas often and distribute them widely. His political cartoon urging the Colonists to "Unite or Die" was reinforced by references to his autobiography in which Ms. Smith discussed the importance of colonial unification for economic and governmental survival. This however, is an example of the instructor providing a relevant source, but not allowing the students to use their skills and knowledge to analyze it, in favor of completing the analysis for them. This corroboration of sources and material seemed somewhat effective anyway however. Both Carrie and Kathy indicated in interviews their understanding of Franklin's importance to the independence movement in America albeit not from the teacher's encouragement of analysis.

In an interview with Ms. Smith conducted subsequent to student interviews, she indicated her disappointment in her students in their naiveté regarding teacher involvement with the course content. She told me of a situation in which a student came to her after taking a test and expressed disappointment in her test questions. Since he had missed many days of class he decided to purchase class notes from another adjunct instructor of the same course from a few semesters prior and expected that studying those notes would help him pass her test. He expected the content to be exactly the same. "I thought, he does know that we write our own tests and our own lecture notes, right?" She continued, "It was amazing to me that he didn't understand that my class will not be the exact same as another. I'm not a robot up there spitting out exactly the same material as someone else."

Did Ms. Smith present content in a way to encourage students to construct their own meaning and think historically? Did the sources she chose encourage that or could she have created some cognitive dissonance to get students stimulated enough to seek a more complete perception of truth about the history presented?

It is evident from participant interviews that they felt that learning was far more effective when they were engaged with the material. All agreed in one way or another that linking prior experience to new experiences and having an interest in the content

facilitated learning, yet in Ms. Smith's class there was little engagement. Only one participant indicated a desire to really learn the content presented, although all expressed belief in the importance of learning history. Others indicated their desire to learn it long enough to pass the tests. Kathy, in fact, expressed that this process of learning for the test is one in which she engaged throughout all of her history classes. Although in the observations and through the interviews, I noted Ms. Smith's attempts to engage students in the various sources and narratives to encourage reflective discourse, most class time was built upon lecture material presented by the teacher who appeared to be trying to fill students with factual knowledge with little thoughtful examination of the content presented. According to the participants, this treatment of the content was very typical of other history courses.

Students in this study were quoted in this narrative regarding disappointment in most history classrooms which focus on teaching the names and dates of history. They reported teachers often ignoring intriguing investigation of conflicting historical facts in favor of a race through centuries of history with the intent of finishing "all" of the content- often disregarding the fact that most students will forget the content soon after the final exam is completed. That paradigm held true for this class as well, and by the students' and teacher's indication, this way of teaching may be an efficient way to transmit information, but is hardly ideal for insightful and meaningful learning. It did, however, illuminate responses I may expect from high school students when asking them to articulate their experiences in history class and how lessons consistent with historical thinking might be different as a result. The insights I gathered from this pilot study better prepared me for the think-aloud interview sessions I planned to conduct in the methodology for the larger study. Although much of these interviews took the form of open-ended responses, the original questions are attached as an appendix (see Appendix G).

## CHAPTER 4

### METHODOLOGY

The contents of this chapter include a review of the methodology employed in this research, including the research participants, the procedures and description of how the data was analyzed and interpreted. The pretest/posttest comparison group design is quasi-experimental utilizing mixed methods. The independent variable of the lessons came from various research activities and lessons done in the field of historical thinking. Critical thinking, one of the dependent variables, is measurable from a litany of instruments, and in this study was measured through a long-standing instrument verified to be valid and reliable through analysis of years of data, much of which was similar to the data collected in this study.

Examining students' metacognitive abilities was a different challenge. No instrument was found that effectively examines such thinking processes, therefore participant think-aloud sessions of students in the experimental group were employed to seek evidence of this dependent variable (Chowen, 2005; Patton, 2002). In short, critical thinking was analyzed using statistical analysis, while the think-aloud sessions, conducted with randomly selected students from the experimental group research sample were coded and analyzed for themes emerging regarding students' metacognition and construction of meaning of the content presented.

#### **Participants**

This study was conducted in three high school settings. Originally, four schools were to be used in the study; two public schools and two private schools. However, although permission was granted through high levels of school district and school level administration, the teachers at one public school declined to participate at a late stage in the planning of the study. Therefore only three schools were used; two private schools and one public school. At all three schools used in this study, American history is a required course. This fact however, does not suggest that students in these classes were randomly chosen since development of master schedules often requires utilization of other factors beyond random selection to classes for assignment.



### **Setting: School/Teacher 1**

One of the schools in which the research for this study took place was a research school associated with a large public university. The research school is a public school in which the student demographics reflect the regional population at large, specifically designed as such for research purposes. During the 2006-2007 school year, this school listed 58.5% White students, 24.3% African-American, 10% Hispanic, 2.1% Asian, 0.75% Native American and 4.5% multicultural. In the high school, nearly 11% of the student population qualified for free and reduced lunch (School website reference not cited to preserve anonymity). The school is located within a large, planned, mixed land-use subdivision community, but draws students from all areas of the county. Students attending this school may reside in urban areas within the county-seat center, suburban areas nearby the city, or more rural areas in the outskirts of the county. During the past three years, this school had received an “A” grade from the state, indicating outstanding scores on the state’s standardized assessment. This school is one to which many parents wish to send their children, as indicated by a waiting list for entrance.

The teacher, Mr. Campbell had been a staff member of the public research school for nine years. He also served in the military reserves and had been recently deployed as part of his service. In fact, for much of the 2004-2005 school year he was serving in a military capacity. His position at the high school was reserved for him, and he returned to teaching full time the following year.

Most of the students within Mr. Campbell’s American history classroom were juniors with very few sophomores and seniors. All were minors, under the age of eighteen. Two of Mr. Campbell’s classes were targets for the study. One class served as part of the experimental group, the other as the comparison group. Students initially learned about the concept of the study and received consent forms to complete for participation in the study. Once forms were completed and returned to the teacher, the students took the critical thinking pretest, which served to provide a baseline of critical thinking skills. After completion of the pretest, these students were instructed by Mr. Campbell using the various lessons and activities specifically designed to engage students in historical thinking through primary source analysis, multiple perspective investigation and inquiry toward deliberative conclusions based on history content.

The second class served as part of the comparison group. These students received a treatment to maintain the continuity of research and limit the Hawthorne Effect. Those in the comparison group engaged in lessons involving current event study. Which class received which treatment was chosen at random by the teacher and kept secret from the students and other staff members. Mr. Campbell had a student-teacher who also participated in the study. The student-teacher utilized the lessons provided under the direction of Mr. Campbell and the researcher, and he helped administer the assessments. As the semester progressed, he became even more involved in implementation of the activities. Although having this student-teacher was unplanned, I would not consider this circumstance to be a limitation of this study as he demonstrated skills necessary to implement the lessons. Further, only one teacher at a time was engaged in teaching the lessons.

Once all lessons were implemented, students were given a posttest. Additionally, some students participated in the think-aloud interview sessions. These sessions were a significant part of the study intended to extract ideas students had regarding their thinking skills as a result of learning history is this new way: that of engaging in historical thinking. To reiterate, those students interviewed were chosen at random from a list of those students within the experimental group whose parents had consented to allow their children to participate in interviews.

### **Setting: School/Teacher 2**

In a second school, Mrs. Fisk agreed to participate in the study with her American history students. Mrs. Fisk teaches at a private Catholic school for girls. The school, over 100 years old, is located in a suburb of a large southern city. The student population was largely White. As of last school year (2005-2006), only six percent of the students were minorities. The school's website boasts that the 117 students who made up the graduating class of 2004 (most recent data available) received more than 1.5 million dollars in college scholarships (School website reference not cited to preserve anonymity). It is clear from walking on campus that the focus of this school is to academically prepare students for elite colleges and universities. The campus itself reminds one of a university

with ornate buildings and statues similar to some Ivy League institutions. The staff is treated in a manner consistent with that of a prestigious university.

At the time of this study, Mrs. Fisk had been teaching for ten years, all at this school. She was receptive to the study from the first time we discussed it and took the lessons home that evening to color-code the lessons according to the unit in which she planned to use them. I was impressed by her willingness to participate, as well as her eagerness to begin. Through our initial discussions, I found Mrs. Fisk to be an experienced teacher who favored active learning for her students, yet mostly practiced teacher-centered pedagogy. She did, however, employ projects and activities to engage her students at times. In an early meeting, I discussed with her the fact that the lessons and activities provided for this research project would be exciting for her to try. Although she had never heard of historical thinking as a social studies construct, I believed, as a result of multiple conversations that her style of teaching, or at least her teaching philosophy, might fit well with the tents of historical thinking as described for this study: using primary source analysis, examination of multiple perspectives and issues-analysis.

As in the first school, two of Mrs. Fisk's American history classes were utilized in the study. One served as the experimental group, engaging in the systematic implementation of the lessons and activities provided. The other class served as the comparison group, employing current event study in the same manner as the first school.

After explanation and questions of the experiment were covered, students received consent forms to sign. Since all were under the age of eighteen, all completed a consent form which had to be signed by a parent as well as the student. After receipt of those forms, the pretest was administered. The teacher then began engaging her students in the lessons and activities provided. Once all lessons were administered, students were given the posttest. Additionally, some students were chosen to participate in think-aloud sessions conducted near the end of the study.

### **Setting: School/Teacher 3**

In a second private school, Mr. Downs and his American history students participated in the study. The school, located in a small, but fast growing, county in Northeast Florida has been serving students for over 125 years. The 2006 class included

only 72 students, most of whom planned to attend either a four-year or two-year post-secondary institution immediately after graduation. Although the focus of the school is surely on college acceptance, and well over ninety percent (90%) of the students take both the SAT and ACT aptitude tests, the students' test average was only marginally above the national average. According to school statistics, sixty-two percent (62%) of students were eligible for the Florida Bright Futures Scholarship (School website reference not cited to preserve anonymity): a college scholarship awarded to those students who maintained a high school GPA of at least 3.0 and who participated in volunteer activities (<http://www.firn.edu/doe/brfutures/bffaq.htm>, 2006). The campus, which is fairly new, was relocated from a downtown area to a larger site outside of the city center after outgrowing its original facility.

At the time of the study, evidence of growth was again apparent. Mr. Downs taught his classes in one of the five portable classrooms located at the fringe of the academic buildings. Mr. Downs had the most diverse professional experience of the three teachers. He began his teaching career in New York State where he taught in a detention facility. He eventually moved to a traditional high school setting where he became a teacher in the special education department. He recounted an affinity for those students and suggested that he might like to return to special education one day. For the time being however, he was happy in his environment. He liked the other teachers and staff very much and enjoyed the students as well. In fact, Mr. Downs said that he felt most at home when he was teaching. Mr. Downs favored lecture style teaching for his students. He related that he often felt forced to speed through content, and often used a didactic lecture-style methodology to efficiently cover the material. In a conversation he told me how much he enjoyed reading about lesson ideas and believed the ideas for this study were viable. Yet he also acknowledged the difference systematic implementation might make when compared to his customary teaching style. Like Mrs. Fisk, Mr. Downs was intrigued by the new research concerning historical thinking we discussed. He felt as if he understood the concepts promoted by such active engagement of students.

As with the other two teachers, two American history classes were involved in this study. One class, chosen randomly, engaged in the lessons and activities developed for the study, while the other, the comparison group, spent time reviewing and discussing

current events. Both classes took the pretest near the beginning of the semester and the posttest once all lessons were implemented.

### **Protocol**

In each high school one secondary American history class was randomly assigned to the experimental group. Treatment lessons plans consistent with developing students' historical thinking abilities were implemented. Another American history class in each school served as the comparison group in which the teacher implemented an intervention other than the experimental treatment. The treatment was designed to measure how the key independent variable, the lesson activities, affected the dependent variables of the students' critical thinking abilities, as measured by the Cornell Critical Thinking Test, and the students' recognition of their thinking about their thinking (metacognition) as examined through think-aloud interview sessions. Additionally, data were examined to explore how other independent variables, such as gender and school type (public or private), might have contributed to students' critical thinking and metacognition.

To begin, each teacher was provided with a set of twelve lessons specially prepared for the first semester of American history (see Appendix F for complete lessons/activities). Each lesson or activity was consistent with lessons or designs from leaders in the field of historical thinking such as: Wineburg (2001), Drake & Nelson (2005), Stearns (2000), Seixas (1993) and Drake & Brown (2003). Some lessons were developed by the researcher while serving as a secondary social studies teacher and edited to be more in line with what the literature revealed about developing students' ability to think historically. The lessons were reviewed by each teacher and discussed to clarify any confusion or logistical concerns such as resource availability or time constraints. Providing resources needed or adjusting the lessons to accommodate the classroom environment addressed any such concerns. Additionally, each teacher (and his or her administration as necessary) had previously received instruction as to the intent of the study and the nature of historical thinking, metacognition and critical thinking.

Once agreement upon the lessons and the intention of the study was reached, students in each class received an overview of the study and consent forms for participation (see Appendices A-C). At this time they also had the opportunity to ask any

questions to help clarify the expectations and procedures. Students also had the opportunity to sign up for participation in the think-aloud sessions as well. From those with consent to participate in the think-aloud sessions, some students were chosen randomly to participate. These think-aloud sessions provided an opportunity to gain a more complete understanding of the students' experience during the process and discern any patterns or themes emerging from this type of lesson implementation.

Once consent forms were returned to the teacher, the critical thinking pretest was administered to establish a baseline critical thinking measurement (Discussion of validity and reliability statistics related to the Cornell Critical Thinking Test will be addressed in the "Instrument" section of this chapter). Teachers then implemented the provided lessons and activities throughout the semester. With twelve lessons and activities, each teacher was asked to include all lessons as they saw fit within the context of his or her classroom. Some teachers chose not to follow specific chronological order, and that was acceptable so long as each lesson was implemented during the study's time frame. Some activities were not content specific and therefore might be implemented at various times for maximum effect. For example, teachers were expected to utilize the activity designed to allow students to make comparisons and contrasts between the Salem Witch Trials and The McCarthy Hearings, but the teacher might have chosen to use it while teaching content related to either the Bill of Rights or early colonial America.

In each comparison group class, students engaged in current event study in which they examined current reports of activity from local, state, national and international sources. In each class, students were charged with writing summaries and editorials about particular current events with the intention of participating in a classroom discussion of the events. Near the end of the semester, both groups of students were then given a posttest to measure their critical thinking abilities. The data from the pre and posttests were analyzed for any changes in abilities. Although a certain improvement might be expected from natural maturity resulting in better cognitive abilities, the experimental design would reveal whether or not any change in critical thinking abilities could be associated with the experimental treatment. To reiterate, the hypothesis of this study is, the systematic implementation of lessons and activities consistent with engaging students

in historical thinking would increase students' critical thinking and metacognitive abilities.

## **Procedures**

### **The Lessons/Activities: An Overview**

A total of twelve lessons were derived from various sources to engage students in historical thinking. These lessons were adapted from various historical thinking scholars, renowned history lesson plan repositories, and developed from my experience as a social studies teacher. For example, the lesson which enables students to examine various accounts of the Battle of Lexington and Concord was adapted from a Wineburg (2001) study while the activity examining students' perception of history was adapted from Drake and Nelson (2005). A lesson allowing students to become news reporters during the Battle of Antietam was adapted from one I have used in the classroom with more of an effort toward the operationalized definition of historical thinking employed for this study. Another example focused on whether the United States was founded as a Christian nation. This lesson was developed with the ideas of primary source examination in mind, while using very different sources and discussion questions for analysis. This lesson utilized tenets of issues-analysis, as viewed by the National History Standards (1995), as students examined the perennial issue of separation of church and state and the intentions thereof based on historical evidence.

The lessons were also developed with metacognitive processing in mind. Since metacognition can be achieved by students performing experiments which seek to verify or falsify hypotheses (Donovan & Bransford, 2005), the use of primary source analysis and corroboration aims to engage students as they practice "stimulation of additional inquiry" (p. 10) through methods of historical thinking practices. Moreover, the lessons attempt to impart the "strangeness" of the past and clarify students' ideas of the myriad differences between people of the past and people familiar to them at present.

To ensure construct validity of the lessons beyond guidelines developed from the aforementioned sources, they were also sent out to researchers in the field of historical thinking for examination. The lessons were edited from suggestions of these researchers and administered as final drafts to the teachers participating in the study. Since a semester

is usually eighteen weeks in length, the goal was to have the teachers utilize approximately one lesson per week, providing approximately four weeks at the beginning of the semester for the return of consent forms and administration of the pretest, and one to two weeks at the end of the semester for administration of the posttest. The time at the end of the semester was also considered to allow the teachers opportunity to administer their end of semester exams with minimal interference. Some lessons and activities may have required only one or part of one class period, while others including student research, required upwards of three class periods for completion. These lessons therefore constituted a substantial part of the students' class time. Some of the time spent was variable however, depending on the depth in which some discussions were held.

In order to ensure the validity of their implementation, teachers were observed presenting lessons. At each school, another certified teacher was asked to record extensive observations of the teacher. Notes were taken and a lesson plan activity record observation form was completed for each observation. Observations occurred during lesson implementation only. This observation guide is listed as appendix I.

Below is a brief synopsis of lessons and activities included for each teacher. Complete lessons and activities can be found in the appendices of this manuscript (Appendix F). The lessons and activities were designed for the first semester of American history which generally includes content from pre-European contact to the Civil War. Although not every teacher follows a chronological order in teaching history, this order was utilized here to make the lessons as usable as possible for the teacher participants. As previously stated, many of the twelve lessons and activities come from various historical thinking research texts such as Wineburg's *Historical Thinking and Other Unnatural Acts: Charting the Future of Teaching the Past* (2001) and Drake and Nelson's *Engagement in Teaching History: Theory and Practices for Middle and Secondary Teachers* (2005). Both of these works describe in detail research projects utilizing various lessons and activities to engage students to think historically. I therefore took some of these activities and manipulated them in such a way as to fit in with the historical period with which I wanted to work. Each lesson included a habit of mind particular to it. These habits of mind were developed by the National Council for History Education (formerly



the Bradley Commission) as succinct representations of reasoning historians use in analysis of historical events (Drake & Nelson, 2005).

Lesson 1: In the first lesson, students were encouraged to consider the importance and meaning of history based on their prior knowledge and experience. In this brief activity, students completed diversity activities and related them to historical content. One such activity, the Herman Grid, was designed to help them to consider the complexity of history by noticing areas in a design not seen upon initial glance. Additionally, in this activity, students drew a picture of history as they saw it. This part of the activity was followed by discussion of the various themes students perceive as history. The teacher related these themes to the various prior experiences and knowledge the students brought with them to class, thus allowing both the teacher and the students to recognize the myriad perceptions of historical content.

Lesson 2: In this brief activity, students were asked to consider multiple and various perspectives on seeing the world and the events which have shaped it. The teacher displayed four maps of the world. Each map was from a different perspective. The first was a world display with the United States as the center. This map looked typical, as many maps use the United States as the center. The next illustrated the Prime Meridian as the center point. This map still showed the United States prominently and appeared to show the West as dominant land masses of the world. A third map was less typical for student. It displayed the Pacific region as the center of the map. And finally, a newer and more shocking map was the Australia centric map, in which the world appeared upside down. The teacher then discussed with students the perspectives and the subtle meanings behind them. As a follow up to this activity, students examined two articles depicting the same event (the Boston Massacre) from very different perspectives. Teachers and students discussed reasons and motives behind the differences and how perspectives alter historical record of events.

Lesson 3: In the third lesson, students began to learn to discern between various electronic sources and analyze the reliability of each. Students used a SWOT worksheet (Strengths, Weaknesses, Opportunities and Threats) to analyze each pre-screened website. Discussion of the qualities to look for when examining sites ensued, and the idea

of source corroboration was explained as a result and employed by the students for this and subsequent research activities.

Lesson 4: Lesson four was the first lesson in which students focused on learning about actual historical events. Through a thorough examination of eight depictions of the “Shot heard ‘round the world,” students examined the inevitability of varying accounts of the same historical event. To begin, students recounted the previous school day. Each account varied somewhat and the teacher utilized this realization to segue into examining accounts of the historical event, in this case, the Battle of Lexington and Concord. Students then employed sourcing and corroboration heuristics to determine which, if any, was the most complete and “true” depiction of the event. A review of the activity by the teacher showed students that varying accounts are part of all history, and only through examination such as this may one get a semblance of an objective account.

Lesson 5: This lesson was a multi-day examination into accusing and detaining suspects without evidence and the dangers thereof. Additionally, students saw similarities yet vast differences among events in which such things occurred. To begin, students were led through a simulation of the “Dot Game” in which students were randomly and secretly assigned red dots drawn on a small piece of paper to become infiltrators into groups. These infiltrators represented groups such as communists of the 1940s and 50s, and they tried to join a group or groups without revealing their intentions. The goal was to let the students experience the suspicion present in a situation such as the Red Scare or the Salem Witch Trials. Additionally, students learned about McCarthyism and the Salem Witch Trials via pre-selected electronic media and an examination of political cartoons. They then discussed similarities and significant differences between the two events. As an extension, the teacher brought in the pre-screened resources regarding the detainees at Guantanamo Bay, Cuba from the War on Terrorism to examine any similarities and the vast differences between the events.

Lesson 6: In this activity students explored and considered the struggles for power and the need for compromise during the “Critical Period” through game play in which scant rules were provided yet necessary for play. Students must therefore compromise and create solutions, procedures and rules for the game’s success. This activity was designed for use before or during lessons on the drafting of the Constitution of the United

States. Students were instructed to play a game, but they had few rules by which to play. In the course of events, some students were marginalized and most will be confused. The idea was for those not able to participate to become creative and implore the others to allow them involvement. Following the game, students discussed what factors made the game difficult to play and how they overcame the challenges. Similarities were then drawn to the drafting of the Constitution.

Lesson 7: Through examination of primary sources and student investigation, the class deliberated the hypothesis that the United States was founded as a Christian nation. Students here became involved in a History Research Kit. Beginning with the teacher introducing a first order document of Article XI of the Treaty of Tripoli, the teacher then advanced other notions of the idea through other sources. Once those documents were examined, the students were then charged with finding their own documents either supporting or refuting the first order document. The results culminated in deliberative inquiry into the original hypothesis that the United States was founded as a Christian nation.

Lesson 8: In lesson eight, students utilized the corroboration and sourcing skills learned in previous lessons and developed a resume for a Founding Father (or another significant figure from the time) based on primary source research and investigation. This resume became the platform by which groups of students attempted to get a “candidate” elected. Nominations were proposed and accepted or rejected by the students and teacher culminating in an election for the first president.

Lesson 9: This lesson was directly taken from a History Channel lesson regarding Manifest Destiny. Students were first asked to provide their prior knowledge and experience of the term Manifest Destiny. The term was broken down and described in detail. Students then examined the John Gast painting, *American Progress*, for symbols of America’s move westward. Additionally, students examined primary source documents such as the John L. O’Sullivan quote regarding Manifest Destiny and President Jackson’s 1830 speech to Congress regarding Indian removal. As a class, students decided on the message of these sources and examined further various perspectives regarding the policies of Indian removal and America’s westward expansion.

Lesson 10: In lesson ten students examined various sources depicting Abraham Lincoln differently than what students are perhaps used to. This lesson, borrowed from Wineburg (2001), allowed students to examine Lincoln in a way which a historian might. Various sources showed Lincoln as a politician trying to gain a senate seat and as a friend describing slavery in a personal letter. This lesson was designed to show the complexities of history and historical figures, and how through examination, one could see a more complete picture than what is typically described in textbooks, on posters, or in sound bites.

Lesson 11: Using pictures to help describe events of history can be an effective way of describing the event and allowing students to recognize the different experiences people of the past had as compared to us. This lesson helped to show that people of the past may have seen things differently than we do, and therefore they made different decisions with different motives than we might. Lesson eleven was an introduction to appropriate ways students might examine photographs to gain a better understanding of the content and how that content explains something about the time at which it was taken. In short, this activity, developed by Drake and Nelson, was designed to get students to analyze photographs as a historian might. Students examined various photographs and answered questions relating to the photographs to get them to delve deeper into the image and pick out details. Moreover, students were asked to creatively look at the pictures and title them.

Lesson 12: The last lesson involved students utilizing their new experiences and abilities in photographic analysis in the context of a Civil War battle. During a Civil War unit, students examined two photographs from the Battle of Antietam. Additionally, they created a news account and editorial of the battle. The class formed into groups of newspaper staffs and wrote accounts of events from that battle based on the sources they examined and editorials to express opinions of the battle and its impact on the Civil War in total.

All of these lessons are developed in more detail in the appendices (Appendix F). The intent here was to explain the basic structure of the lessons as they related to developing historical thinking skills in students.

## **The Instrument**

The instrument to be utilized for this study is a widely used critical thinking assessment. The Cornell Critical Thinking Test was designed by Robert Ennis, Jason Millman and Thomas N. Tomko (2004) as an attempt to measure the complex and often nebulous construct of critical thinking. It has been used in many research studies and school districts to measure students' critical thinking skills. Accordingly, the authors developed the test to assess specific subcategories of critical thinking:

Our approach sees three types of inferences to beliefs (induction, deduction and value judging); and four types of bases for such inferences which are: 1) the results of other inferences, 2) observations, 3) statements made by others, and 4) assumptions. Furthermore, close attention to meaning must permeate one's dealing with the three types of inferences and four types of bases. (Ennis, et al., 2004, p. 2)

The Cornell Critical Thinking Test as designed does not, however, cover "...attitudes and dispositions of a critical thinker such as open-mindedness, caution and valuing being well-informed, attitudes for which it is very difficult to test anyway" (Ennis, et al., 2004, p. 2).

The Cornell Critical Thinking Test is age appropriate for the high school juniors who will be assessed, and administration of the tests are considered appropriate for "determining changes and differences in critical thinking ability in an experiment" (p. 3). Questions related to induction involve students' ability to infer a generalized conclusion from a set of facts. Deduction is assessed here as the ability to examine a hypothesis and answer specific questions regarding that hypothesis. "The deduction items are by and large not emotionally loaded, but they do call for interpretation in everyday language." (Ennis, et al., p. 44) Observation is tested through questions which require students to be keenly aware of sometimes subtle aspects of circumstances which may alter plausible explanation. Students are also required to judge credibility in certain questions. That is, they may be presented with a scenario for which one answer is best because sources of the other responses are less credible due to motivation or expertise. Assumptions, in the Cornell Critical Thinking Test, "fill a gap in reasoning." (Ennis et al., p. 45). In each item

testing assumption, one statement more reasonably fills the gap more completely than the others. Together, these aspects make up the entire Cornell Critical Thinking Test.

Each level of the test is designed to be completed by a student in approximately fifty (50) minutes, and according to the authors' manual, more than ninety percent (90%) of students should finish within that time frame. The test questions are centered on a fictitious story. Very limited content area knowledge is necessary for students to answer the questions. The information provided is designed to offer enough content to answer the questions.

### **Validity and Reliability**

Validity may be defined as “the appropriateness, meaningfulness, correctness, and usefulness of the inferences a researcher makes,” while “reliability refers to the consistency of scores or answers from one administration of an instrument to another, and from one set of test items to another” (Fraenkel & Wallen, 2003, p. 158), related to the three most common types of validity, content-related, criterion-related and construct-related. The authors of Cornell Critical Thinking Test provide ample evidence of assessment. Although the authors of the tests acknowledge that more data will always be necessary, and complete confidence is never possible, the validity and reliability of the Cornell Critical Thinking Test are supported by substantial evidence.

In response to the content-related validity claim, the main author of the test, Robert Ennis, has often been referred to as the leading researcher in critical thinking testing and has published in the field for over forty-five years (Grant, 1988; Halpern, 1989; Kuhn, 1994). In fact, not only has Ennis been directly involved in developing various, widely-used critical thinking tests, but his input has been utilized by others, such as the case of the Watson-Glaser test, as a part of validation (Ennis, et al., 2004). In addition to the authors' scrutiny of the test items, “[t]he individual items [on the test] have been intensively discussed by members of the Illinois Critical Thinking Project” (Ennis et al., p. 22). Not only test items, but also potential participant responses were considered extensively and items were added and removed accordingly to get the most objective assessment possible. The authors also recognized the time constraints and desired to make the test easily gradable to increase the content validity. The ideal, the

authors stated, would be to test each aspect pertinent to critical thinking without such constraints, but they recognized that this was not possible with students as participants within a structured school setting.

Regarding criterion-related validity, the Cornell Critical Thinking Test is correlated to various widely used critical thinking assessments. All correlations “cluster around 0.50, a number made plausible by differences among test makers about how to test for critical thinking” (Ennis et al., 2004, p. 23). Statistically significant correlations were found between many of these tests including Critical Reading in social studies (0.60 with N=42), Critical Reading in science (0.55 with N=42), Iowa Test for Educational Development (0.63 with N=28) and Watson-Glaser with Norris’ observation test (0.62 with N=172).

Construct-related validity is also addressed in the literature pertaining to the Cornell Critical Thinking Test. Construct-related validity is more complex than the other types of validity, therefore the authors provided ample evidence of attempts made to demonstrate construct-related validity and continue to add to that evidence with each additional administration of the tests. In relation to IQ, admissions and aptitude test correlations, the Cornell Critical Thinking Tests correlations cluster around 0.50, with a range of 0.40 to 0.63. These data come from eighteen studies conducted with a range of participants numbering from 20 to 1,126. In these studies additional variables were correlated including academic accomplishment, age, gender, socio-economic status and personality. In summary, the authors contend, “that collectively the evidence provides strong support for the validity of (the test) under normal testing conditions.” (Ennis et al., 2004, p. 32)

The authors also address the reliability of the tests. Using the Kuder-Richardson and Cronbach alpha tests for reliability, values range from 0.57 to 0.90 in the 14 studies provided as evidence. The range of participants for these was N=49 to N= 1,673. The authors explained the scores in relation to the heterogeneity of critical thinking, and contended that “[i]f critical thinking were homogeneous, we would expect a higher total score index” (Ennis et al., 2004, p. 17). But as Fraenkel and Wallen (2003) indicate, a Kuder-Richardson and Cronbach alpha value of 0.70 or more is an indicator of a reliable

test, and by and large, the Cornell Critical Thinking Test meets the criteria, heterogeneity notwithstanding.

### **Think-Aloud Sessions**

To more fully determine the effect of the lessons on students' critical thinking and metacognitive abilities, students were randomly selected from the experimental group sample of those whose parents consented for them to participate in think-aloud sessions relating to the lessons in which they had engaged throughout the time frame of the study. The premise of the think-aloud sessions was to determine not only how these students constructed meaning from the content presented, but also to discern whether they felt better able to process and reflect upon historical content as a result of the treatment. Therefore, students from the comparison group were not included in these sessions. The rationale behind this decision was that based on qualitative research protocol from Patton (2002), comparisons of interview statements are difficult to establish. The rich descriptive data preferred from such think-aloud sessions could come from sessions involving experimental group participants. Inclusion of participants from the comparison group would do little to enhance the data collected, as it could easily move the focus of metacognitive strategies employed by those who experienced the lessons to a comparison of strategies used by various students; this was not the intention of this particular study.

Metacognition refers to one's "awareness of thinking and the self-regulatory behavior that accompanies this awareness" (Driscoll, 2005, p. 107), and analysis of these behaviors might best be accomplished through direct interaction with the participants who were in position to best furnish this information qualitatively: those who participated in the experimental group. In keeping with Patton (2002), the session protocol included semi-structured questions designed to encourage participants to discuss content and non-content related topics in such a way as to promote elaboration and clarifications of explanations as necessary. Additionally, participants were asked to pay attention to strategies they used while interpreting text. This strategy, utilized and advocated by Donovan and Bransford (2005), is called metacognitive monitoring and was used in assessing participant metacognitive skills. During this exercise, the participants were asked to read various pieces of historical information, reflect upon them, and provide a



summary of what was read as a way for them to demonstrate skills of metacognition. The primary sources chosen related directly to content covered during their first semester of American history class, including early European contact in North America, the Boston Massacre, and the Civil War.

The configuration for the think-aloud sessions came as a result of a conscious attempt to allow students opportunity to articulate the strategies they employed while reading history content. Each session included questions arranged in such a way that students expressed not only specific strategies they had used in the past and found effective during the semester in which the study took place, but they also discussed strategies used in real time via source analysis. These participants were charged with reading content and reflecting on their understanding. The small focus group idea was employed as a direct result of success during the pilot study. During that study, participants were more apt to elaborate and participate in exchanges when in sessions with more than one person. Moreover, the responses in these focus groups were more related to content as opposed to more nebulous responses of reading comprehension strategy found during single person interviews. Specific questions for the sessions were developed based on research studies which also sought respondents to elaborate about reading strategies (Sternberg, 1996) and content comprehension (Wineburg, 2001; Bain, 2000; Chowen, 2005). Further questions came as a result of the pilot study done prior to this study. The pilot study allowed me to discern appropriate questions related to content as well as questions structured to best allow participants opportunity to elaborate and exchange ideas with each other during the sessions. Bain (2000) and Sternberg (1996) outlined some common questions about reading procedure while Wineburg (2001) and Chowen (2005) included directly related questions of history content and comprehension. Think-aloud interview session data were analyzed based on a qualitative protocol.

A total of nine students participated in the think-aloud sessions. At each school, students from the experimental group were chosen randomly by the teacher prior to my arrival. Each session lasted between one hour and one hour fifteen minutes (each session was limited to the length of students' American history class). Sessions were transcribed and coded to discern themes which emerged from student responses. Student responses to metacognitive questions as well as responses from various readings emerged in thematic

categories resulting in an understanding of students' responses to the treatment with regard to their thinking skills.

### **Teacher/Administrator Interviews and Observations**

In order to better understand the schools and the students in the study, I conducted brief interviews with administrators at each of the three schools. According to Gruenert (2005) school culture has great effects on student dispositions and propensity to challenge themselves academically. It seemed logical therefore to collect information related to the schools' cultures to be utilized in drawing conclusions from other data in the study. From interviews with school administration from each of the three schools, evidence was obtained which helped in describing each school and the climates within which the study was implemented.

Each teacher was also observed and interviewed as part of the process to determine how the lessons were implemented as well as gauge each teacher's dispositions within his or her classroom. Such data would serve as a way to discern whether any differences in test results came from experience differences in methodology associated with historical thinking and metacognitive practices and teachers being more motivated to enhance student learning.

The quasi-experimental mixed methods design of this study provided an opportunity to gain an understanding of how critical thinking and metacognitive abilities were affected through the systematic implementation of lessons and activities consistent with engaging students to think historically. Results from the Cornell Critical Thinking Tests provided quantitative data relating to critical thinking abilities and any changes that might have resulted from the treatment. The think-aloud sessions provided elaboration on the reflective and analytical practices employed by students as a result of their engagement in the lessons and activities. The results of the findings of both the pretest and posttest as well as the results of the think-aloud sessions are contained in the final two chapters.

## CHAPTER 5

### RESULTS

In previous chapters, the structure and design of the study were explained. In this chapter, the results of the data analysis will be reported. To best organize the data analysis, this chapter has been separated into results from the Cornell Critical Thinking Test given pre- and post- to all participants, the think-aloud session with randomly chosen participants from the experimental group, as well as qualitative data from interviews with school officials and observations of teachers.

#### **Test Results**

Reliability of the Cornell Critical Thinking Test for students in the study was found to be 0.66 (Cronbach alpha), which falls at the lower end of the range of reliabilities reported in other studies using this instrument (see chapter 4 for details regarding reliability testing in other studies). The possible implication of this relatively low score will be further discussed in the following chapter.

All scores for both pre- and post-tests were reported as percentages. Mean pretest scores for experimental and comparison groups in each school revealed some differences (see Tables 5.3, 5.5, 5.7). However, t-tests results indicated that these differences were not significant (see Tables 5.4, 5.6, 5.8). Gender was also tested to determine if any differences existed between male and female students in critical thinking ability at the outset of the study. Once again, these differences were not significant at either of the two coed schools (see Tables 5.9, 5.10). Analysis from pretest scores therefore indicated statistical homogeneity of students participating in the study.

Percent differences between the groups did exist (Table 5.1), however, in the analysis of variance to test effect of treatment, no significant differences were evident between the experimental and comparison groups (.133  $p < .05$ ) (Table 5.2). For the analysis comparing pre and posttest results, one hundred eighteen (118) participants remained, after removing participants who did not complete both pre and posttest. The analyses suggested that lesson plans consistent with engaging students in historical thinking of the type implemented in the experimental classes did not improve students'

critical thinking skills more than the current event lessons utilized in comparison group classes. The data therefore indicate the hypothesis put forth at the outset of this paper, suggesting engagement in lessons consistent with tenets of historical thinking would increase general critical thinking skills was not supported in this study.

**Table 5.1 Overall Mean Differences Pre- and Post-Test**

	N	Minimum	Maximum	Mean	Std. Deviation
prepercent	118	.28	.80	.5658	.11338
postpercent	118	.12	.84	.5672	.13001
percentdiff	118	-.48	.43	.0024	.11144
Valid N (listwise)	118				

**Table 5.2 ANOVA Pre- and Post-Test**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.104	5	.021	1.734	.133
Within Groups	1.349	112	.012		
Total	1.453	117			

**Table 5.3 Mean Pretest Scores for University Associated School**

Group	n	Mean	Std. Deviation	Std. Error Mean
Comparison	24	.4792	.13077	.02669
Experimental	29	.5590	.12837	.02384

**Table 5.4 Independent Samples Test for University Associated School**

	t-test for Equality of Means							
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	.972	-2.234	51	.030	-.07982	.03572	-.15154	-.00810
Equal variances not assumed		-2.230	48.81	.030	-.07982	.03579	-.15174	-.00789

**Table 5.5 Mean Pretest Scores for Parochial: Co-Ed**

Group	n	Mean	Std. Deviation	Std. Error Mean
Comparison	18	.6572	.05627	.01326
Experimental	23	.5686	.08915	.01859

**Table 5.6 Independent Samples Test for Parochial: Co-Ed**

	t-test for Equality of Means							
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	.195	3.673	39	.001	.08851	.0241	.03977	.13726
Equal variances not assumed		3.876	37.519	.000	.08851	.0228	.04227	.13476

**Table 5.7 Mean Pretest Scores for Parochial: Female**

Group	n	Mean	Std. Deviation	Std. Error Mean
Comparison	21	.5721	.11092	.02420
Experimental	21	.5764	.11170	.02437

**Table 5.8 Independent Samples Test for Parochial: Female**

	t-test for Equality of Means							
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	.515	-.128	40	.899	-.00439	.03435	.07381	.06504
Equal variances not assumed		-.128	39.998	.899	-.00439	.03435	.07381	.06504

**Table 5.9 Independent Samples Test for University Associated School: Gender**

	t-test for Equality of Means							
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	.807	-.266	22	.793	-.01454	.05469	-.12796	.09888
Equal variances not assumed		-.270	21.999	.790	-.01454	.05384	-.12619	.09711

**Table 5.10 Independent Samples Test for Parochial School, Co-ed: Gender**

	t-test for Equality of Means							
	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Diff.	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	.645	.619	21	.543	.02391	.03863	-.05643	.10426
Equal variances not assumed		.657	20.211	.519	.02391	.03641	-.05198	.09981

**Think-Aloud Sessions**

While quantitative data demonstrated mixed results in test scores measuring critical thinking ability, participant interviews revealed data regarding metacognitive strategies employed in content analysis. Through metacognitive monitoring, students from the experimental group at all three schools demonstrated ability to consider their thinking in such a way as to benefit their comprehension and consideration of content; this process is not directly related to critical thinking skills, but it is closely associated with the operational definition of metacognition employed for this study. Student participants acknowledged that their semester in American history, engaging in lessons developed for this study encouraged them to experience and utilize new ways of learning. One student participant, Patrick, expressed his enjoyment in learning history. “Using primary sources this semester [has] made class more interesting. I feel more like I’m there when I’m learning about it.” Based upon this and other exchanges throughout the sessions, themes emerged including reading strategies, analysis of sources, language used in historiography and making judgments of bias and credibility while reading sources.

As part of these interviews students were asked to respond to questions regarding specific historical events and asked to analyze such events based on inquiries. These inquiries were posed to provide students with opportunities to utilize historical thinking skills and metacognitive strategies. They were to verbalize processes and strategies they employed while responding to questions about the event(s). One participant shared that “reading with the primary sources made me think about how I understand the subject...I can see that the more and better sources I use, I can fill in the gaps of the story and get a better picture [of the event].”

Participants also articulated sophisticated understanding of the strategies necessary when examining historical events. One student expressed her newfound understanding of the benefits of such strategies after engaging in the lessons developed for this study. She began to have new appreciation for events in history and a keen interest in the people of the past. She was better able to consider her thought processes during analysis from the lesson she encountered as part of this study. Another participant expressed more specific appreciation of sourcing and corroboration in examining historical events. These strategies made understanding easier and made him more thoroughly cognizant of historical events through analysis of various artifacts and consideration of the sources regarding intention, audience and proximity to the event. Participants expressed notable acknowledgment of personal metacognitive strategies utilized to better gain understanding of resources. Through the participant interviews, the students demonstrated attributes consistent with metacognitive strategies as gained through participation in lessons developed for this research study.

### **Theme 1: Reading Strategies**

From introductory questions in the sessions, participants described various reading strategies used when analyzing primary source data. In one interview, students responded to their reading of excerpts from speeches delivered by Abraham Lincoln and Stephen Douglas. Participants were asked to share reading strategies they utilized while participating in the semester’s lesson in their American history classroom. Some students expressed strategies not related to the content they experienced during the semester of the study. For example, when asked about reading primary source material with difficult

language, one student remarked that she often would consider the material too difficult and give up. Another student spoke of his use of an Internet dictionary or encyclopedia source. These strategies do not involve comprehension strategies advanced by Wineburg (2001), Drake and Nelson (2005) and historical thinking standards. However, in the think-aloud sessions, students did express notions of cogent strategies which assist them in their comprehension of primary source material. One such exchange included some basic reading strategies such as identifying context clues and acknowledging importance of periodic checks for comprehension. Students added some content specific ideas they had utilized throughout the semester to read and understand the content more successfully. Two students, Keith and Leslie, first expressed use of context clues and margin notes to organize thoughts and understanding. As this particular think-aloud session continued, both of these students as well as a third, Patrick, articulated some tactics used during the study which helped them in their comprehension of the primary sources used. The following exchange demonstrates some of those ideas:

*Interviewer:* How about when referring to the primary sources you've read this semester....any strategies you've used there to help you better understand the meaning of the words. How about with the Lincoln speeches?

*Leslie:* Yeah, before I read these sources, now I look at the title of it. That can give me clues to what I should be looking for to understand

*Patrick:* I do the opposite. I read the entire thing first, and then look back at the title to see if that helps me make sense of it.

*Keith:* It helps too if, like with Lincoln, if you know who he was writing for.

*Interviewer:* Yeah. How does that help you?

*Keith:* Lincoln was speaking to an audience trying to get elected. It helps explain some of what he said.

*Patrick:* Yeah, like in that speech, he was probably saying things he didn't really mean so he could get elected.

*Interviewer:* So is the image you had of Lincoln shattered now?

*Leslie:* Well, it shows that he wasn't all about freeing the slaves. He was trying to get elected and that was his goal.

From another session, this time with Mr. Downs' students, participants were asked to verbalize the metacognitive reading strategies they used as a result of analyzing primary sources from history class. These students reiterated some of what was expressed by the previous group and added:



*Kirsten:* Normally, if I read something that is difficult to understand I look around the sentence or the word to give me the context, and usually if I can understand what's around the sentence or the word it helps me make sense of what he is going for.

*Interviewer:* Who do you mean by "he"?

*Kirsten:* the person who is speaking, the author.

*Interviewer:* Are you thinking about anything in particular from the source's author?

*Kirsten:* I guess what the source is intended for, and like the context clues help me figure that out. I don't know that's what I do.

*Interviewer:* If you see the same information presented over and over again, how does that affect your faith in that first primary source?

*Logan:* Well obviously, I'm more certain the more I see it.

*Kathleen:* I do the same as her [sic] [meaning Kirsten]. If I come to a word or sentence I'll either look it up or find other sources I trust to corroborate. Or ask somebody

*Interviewer:* Would you ask just anybody?

*Kirsten:* Someone older with an education; someone like Mr. Downs.

*Interviewer:* Ok, so is that corroboration as well. Are you also looking to find sources which you trust to figure out if the information is credible?

*All:* Yeah.

After the initial discussion of reading strategies, it became evident that the students participating in these think-aloud session had employed reading and metacognitive strategies to read primary source documents during their American history class. Students described a recognizable plan of monitoring reading content and recognizing methods which support comprehension. Although some of the previous interview questions may seem to have generated intuitive responses from competent students, inclusion of the next portion of the sessions included working with actual documents to discern their strategies directly, a more specific way to determine participants' abilities to analyze content from primary sources. To accomplish this, participants first examined two sources written by eyewitnesses to the Boston Massacre. Sources' accounts varied significantly. The purpose of examination of such sources was to allow students to read and analyze conflicting sources and verbalize the credibility and reliability of each. Moreover, students were asked how they might benefit from reading depictions of an event such as this.

*Interviewer:* Ok, now let's look at these documents. These are quite long, but we can take some time and examine them. I'd like you to be aware of some of the reading strategies you instinctively use as you read. Have you all heard of the Boston Massacre?

*All:* Yes.

*Interviewer:* So you all know a bit about it. What we have here are two accounts of what happened on that March day in 1770. Read through it and compare and contrast the information presented in the sources.

*Interviewer:* If you'd like you can highlight or underline anything you want...you sure can if you'd like to do that.

*Interviewer:* [After about several minutes] Anything striking so far?

*Kirsten:* It seems like that dude...

*Interviewer:* That dude?!

*All:* [Laughter].

*Kirsten:* Yeah it seems like that dude [Anonymous citizen] is more upset about it than this one [Captain Thomas Preston]. This dude [citizen] sounds like he's written stuff before.

*Interviewer:* Ok, great, anyone else?

*Logan:* Well the soldier seems like...the captain's account...seems like he was just following orders. And they [the citizens]...almost reading the military man's account, it seems like they weren't really doing anything wrong.

*Interviewer:* Who wasn't?

*Logan:* The soldiers. The account talks about minding their own business and the citizens starting the riot with the soldiers just protecting themselves.

*Interviewer:* OK, great...think about this...when I handed you these documents, how did you start out? What were the first things you did even before you began to read the text?

*Kathleen:* Like during Mr. Downs' class, I looked at the authors and the titles first. So I knew that he was a soldier and he was a citizen living in the town [Boston].

*Interviewer:* That's definitely a strategy you used. How does that help you when you read?

*Kirsten:* I kind of know what to expect and am keeping the author in mind as I read.

*Interviewer:* Logan, you said the soldiers didn't seem to be doing anything wrong from that account. Was there anything in particular that gave you that impression?

*Logan:* Um, well yeah.

*Kirsten:* The first sentence in the third paragraph. It focuses on them [soldiers] being attacked not on the citizens under attack.

*Interviewer:* Very good. Was there anything else that kind of shows you any hints as to the soldiers' point of view?

*Kirsten:* Like how the soldier writes that the townspeople broke into people's houses and making them out to be the bad guys.

*Interviewer:* And the soldiers to be...

*Kirsten:* The soldiers who were just there to be...

*Kathleen:* To protect them [the citizens].

*Interviewer:* So from these documents we get very different accounts of the same event. Was this everything that happened [holding up citizen's account]? Was this everything that happened [holding up captain's account]?

*All:* No

Through the aforementioned exchanges from two groups of students at two high schools involved in this study, effective strategies employed by these students which allowed them to analyze documents were apparent. Instead of just reading the documents as facts, these students acknowledge the importance of metacognitive strategies which can help them know the content. As with other exchanges throughout these think-aloud sessions, students here are demonstrating the “doing” of history. While these examples may not seem to involve complicated thinking on the part of the students, numerous researchers in history education have noted that the skills highlighted in the exchange above do not occur naturally; they must be taught (Donovan & Bransford, 2005; Wineburg, 2001).

In these next exchanges, students discussed dealing with contradictory sources further, with more of an eye toward multiple accounts of an event and how to garner the truth from them. Some students revealed that a simple guess is their most effective way to deal with reading multiple contradictory sources, and little investigative reading is common in their reading practice. However, some students did consider thorough examination of the sources to judge source reliability. Below is an excerpt from the third school where participants examined speeches and other sources surrounding Abraham Lincoln.

## **Theme 2: Use of Multiple Perspectives/Contradictory Sources**

*Interviewer:* If I'm looking at a historical event, say Abraham Lincoln's assassination, what's the advantage of looking at multiple accounts of that event. And I think we kind of hit on this somewhat already, but I wanted you guys to kind of express further your thoughts on that. What's the advantage of examining multiple accounts of the same event to insure that you have the most accurate depiction that you can?

*Stephanie:* Some accounts like with Abraham Lincoln's assassination may be from someone who was in the booth with Lincoln and he may leave out stuff in his account because he couldn't be everywhere at once, but like if

you read other accounts also from another person who was in the audience, he may have a different perspective and may have seen things differently since he was somewhere different.

*Emma:* I agree, if you have more sources, you can get more of the story.

*Interviewer:* Ok, yeah, Laurie do you have anything to add to that?

*Laurie:* Well take Abraham's assassination at the Ford's Theatre, there were people at a lot of different places, like the guy standing outside and adding them all into one story helps fill in the gaps. The person out in the street might see Booth running away, and maybe someone in the galley down below might have actually seen Booth shooting him.

*Interviewer:* And so all of that helps give you the complete story. And so on that note what is your idea of what historians do?

*Laurie:* Just that, piece a story together based on multiple perspectives and probability as to what happened to get a complete picture.

*Interviewer:* Ok, great. So what is the problem with seeing history and historical events from just one perspective?

*Stephanie:* You just have a one-sided story and they could be wrong, but the way they perceive it in their mind, they think they're right about it.

*Emma:* Looking at more than one perspective helps give the truth.

The students continued to elaborate when the session broadened to consider more nebulous events which may be considered movements rather than specific events. Some students had creative ideas in response and demonstrated evidence that their engagement in the lessons consistent with historical thinking in their history class contributed to the content of their responses.

*Interviewer:* Well you might have eyewitnesses to certain aspects of [a] movement, but it's not a single event, so no eyewitness per se for the entire movement we intend to study. We have pieces of this movement, but you, as a historian are looking at it in its entirety. What strategies do you think a historian would use in order to give a complete image of what happened?

*Emma:* Well I think maybe you would start at a certain time and then go to a certain time past that and see what's changed to get an idea of what events shaped those changes.

*Interviewer:* Laurie, anything to add to that?

*Laurie:* I was thinking that maybe you could look at something like that and make a grid to divide up the world and examine events that happened in other parts of the world to get a picture of how something like that happened in all parts of the world.

*Interviewer:* Ok, so the idea is that you would be looking at it from multiple perspectives.

*Laurie:* True.

*Interviewer:* Your idea is to look at it from various regions and the idea is that to give a complete picture of this movement, we must look at it from many perspectives to give a complete picture of what happened.

*Interviewer:* When you guys were studying about Abraham Lincoln, was it helpful to see his speech and then see the speech of his opponent characterizing him? If you just saw one of those, would it give you a complete picture of who Lincoln was at that time?

*Stephanie:* No, 'cause it doesn't like...I never studied Lincoln before so I didn't really know what he was up against. So when you add someone who was opposing him into the sources with his speech there, then I can kind of feel what he was battling against.

*Interviewer:* So was seeing both sides at that time helpful to you to see a clearer picture of who he was?

*Stephanie:* Yeah.

*Emma:* Maybe look at other primary sources to see if they say the same thing as the one you're looking at.

*Interviewer:* Ohhh, that can be called corroboration.

*Laurie:* You can stack that source up against others.

*Interviewer:* To see if the event is described in a similar way? Would that help you decide if a source was credible?

*Laurie and Stephanie:* Yeah.

*Interviewer:* What strategies would you [Laurie] use in that case?

*Laurie:* Well you've got to get multiple sources and document more sources perhaps that haven't been used or seen before. You could actually go to the site and search for evidence...you know the earth doesn't lie. That might be a way to help with that.

*Interviewer:* Okay, what if you have one source that says one thing and one that says another? Which one do you trust?

*Emma:* The one that makes more sense based on what you already know. If one has a wacko opinion you might question it more...I don't know.

*Interviewer:* So then does history come down to who are the good authors and who can make a story sound more reasonable? If you can make sense of an event and make it sound good then that's the one that sticks? Does that necessarily mean it's more true?

*Emma:* No, no.

*Interviewer:* So how do you judge that?

*Laurie:* Use that source and judge it with others...put aside your definitive answer until you've uncovered all the sources you can...even then maybe something will pop up later and you need to include that as well.

*Interviewer:* Okay, set it aside and understand that it's there and look for other sources to perhaps corroborate it?

*Laurie:* Yeah, it's our job to get multiple perspectives on the event to see it for what it really was.

When examining the same sources from the Boston Massacre, student participants in one of the three schools reflected on their ideas about working with

conflicting sources. The following exchange from the think-aloud session demonstrated sophisticated perspectives of inference and analytical skills necessary to understand primary sources encountered in history class.

*Interviewer:* Well, what do you think? What sorts of things stuck out for you? Were these two sources telling the same story?

*Patrick:* Not at all. The one seems [from anonymous] like he's mad and wants to get rid of the soldiers.

*Keith:* I think that in that one the author is a better writer and he might have a reason to write what he wrote.

*Interviewer:* How so?

*Keith:* Well like here in the third paragraph he calls it a massacre.

*Interviewer:* And that's using language.

*Keith:* Yeah, to his benefit.

*Leslie:* The other one [Captain Thomas Preston] seems like he and his soldiers were the victims.

*Patrick:* Yeah, they seem like they were just there....

*Interviewer:* To protect?

*Patrick:* Yeah exactly, and the people were starting trouble.

*Interviewer:* You mentioned that the citizen might have had an incentive to write about the event the way he did. What about the captain, did he have an agenda or can we take his account as the truth?

*Keith:* He probably had his own reasons for writing it like that. Or he was just writing what he saw...his perspective. Either way we don't get the exact truth.

*Interviewer:* So if we don't get the exact truth, is there any point to reading these accounts?

*Leslie:* Well yeah, it helps to read about it from all the ways then you get a better idea.

*Interviewer:* Well to finish up, I'd like to ask each of you to think about and sum up what you learned from this semester of American history.

*Leslie:* Well, I'd say that when you look at history, you've got to think about that there are other sides to every story.

*Keith:* And you need to read about all sides to really know about it.

*Patrick:* I agree with them.

### **Theme 3: Truthfulness in Content**

One of the tenets of historical thinking is analysis of multiple events which are combined to create historical change. In the following exchange student participants examined hypothetical concepts of historical events in which no specific or definite objective truth can be obtained, rather developments of change are the target of examination. While some

students dismissed such hypothetical events as unworthy of consideration, other participants demonstrated a high level of cognitive processing in their reflection on the sources.

*Interviewer:* Okay, so we'll look at some different kind of content of history. Let's say you are historians...how do you know what history or whose history that we should study? Put yourself in the position of a historian. As we just outlined some of the roles historians play. How do historians know which history and whose history to study?

*Kathleen:* Well they study areas of history they like.

*Interviewer:* Okay, so they might focus on areas to their liking.

*Interviewer:* Okay, so let's say we are all focusing on an area of history that we each like now go one step further how do you know what history, whose history to study within that?

*Kirsten:* The major events. I think the events that shape peoples' living.

*Logan:* I'd say it's important to actually visit the sites of history and look around to see what piques your interest and go from there.

*Interviewer:* Okay, does the job of a historian also include making sure he or she is as objective as possible, including using multiple sources and taking into account various aspects of the event?

*Logan:* It's supposed to be, but I don't think it's always the case.

*Interviewer:* What if a historian is looking at an idea or an event or a social movement in history that has no eye witnesses...for example, what if we're looking at "the changing role of women in twentieth century America." That's not really an event it doesn't have a particular eye witness. So how could a historian handle a subject such as that? What do you guys think?

*Kirsten:* Well you could like combine all the parts...like if we were interested in women's voting, you could look at one rally and combine the different parts and that's what makes the whole of the women's movement.

#### **Theme 4: Judging/Assessing Credibility of Information**

Participants also addressed the issue of credibility of evidence and the challenge to discern objectivity from artifacts. Although addressing credibility is not a specific tenet of metacognition, it is central to historical thinking. And as students make learned judgments about credibility, they are also employing metacognitive strategies which allow students to gain understanding of the content presented.

*Interviewer:* If a historian is not being credible and he leaves out certain aspects of events on purpose, how might that hurt your understanding of

that event? Let's say in your history class, you're hearing about only one side of Abraham Lincoln or the American Revolution, how does that hurt you in your understanding of your world when only hearing about it from one side?

*Logan:* I would say all history is biased in one way or another...so to go back to what we talked about earlier, we need to get multiple sources to compare and contrast to come up with our own decision as to what happened.

*Interviewer:* And so how might a historian deal with encountering a source which contrasts all that he knows about a subject...for example, when looking through sources, he finds a source which claims that Lincoln was shot by more than one shooter, or that the American military in the Revolution was not as courageous as we're used to hearing?

*Kirsten:* Maybe you can like compare and contrast and line them up. And maybe it's not a major difference and maybe it fits in the rest of the story and it needs to be combined into other parts of the story.

*Interviewer:* So perhaps it could add to your story?

*Kirsten:* Yeah and make it more complete.

The conversation continued with a discussion of credibility of history content taught in class.

*Kirsten:* I think that it depends. On some major events like wars, the losers never really write the history of that war because they lost so if something comes up and it's way different, it kind of tests the limits of what you've been taught.

*Logan:* Mmhmm.

*Interviewer:* So what if an author of a source comes from the "losing" side of a conflict. Do you trust that? Do you automatically throw it away?

*Kathleen:* I don't know, that's a hard question [laughter].

*Logan:* I think instinctively we probably do that.

*Interviewer:* Should you do that?

*Logan:* No, but take WWII for example, were the Nazis all bad people? I don't know I wasn't there. It sounds like it from our classes, but we can't know for sure. All the documents I read in textbooks and everywhere else says [sic] they were bad people, but those who wrote the textbooks were from the side of the Nazi enemy so how do I know for sure if that's what happened?

*Interviewer:* So we read and learn from one perspective usually right?

*All:* [Nodding heads]

*Interviewer:* Is that a sound way to think about the world?

*Kathleen:* No, no.

*Kirsten:* Not really, no.

*Logan:* Well I feel these people [the citizens] were more intelligent and therefore knew how to make a story to get support for their cause. To swing the words a little bit. But I feel like the soldier is just telling you the way it was as he saw it.



*Interviewer:* So the anonymous account might have had an agenda?

*Kirsten:* My thing about the soldier one is that he had a reason to make his soldiers out to be the good guys also.

*Interviewer:* So he may have an agenda too?

*Kirsten:* Yeah.

*Interviewer:* Why else would he have an agenda? Put yourself in the officer's shoes.

*Logan:* He has to keep track of this account and tell the king what happened.

*Interviewer:* So does he have a reason to write about it a certain way?

*Kathleen:* He doesn't want to look like he messed up: like he was the bad guy.

*Interviewer:* Okay, great. If his intended audience was the king, he certainly would try to make him and his soldiers out to be obeying orders. And the citizens had their own agenda as well...could be true.

*Interviewer:* Now let's move away from looking at how you think about history toward the actual history content and how that content gets into your textbooks and your classroom.

*Interviewer:* What is the role of historians?

*Keith:* They present the information about history to us in a form we can understand [Keith and Patrick then give each other a handshake and grin at the articulate answer].

*Interviewer:* All the information?

*Keith:* Well, they should take all sides and put them together to create the story.

*Interviewer:* Do they do a good job of that?

*Patrick:* Yeah they do.

*Leslie:* I don't think they do. They put in whatever they want us to know. The losers in a war don't get to write about the war. If we go to another part of the world, they might have a totally different idea of history then we do.

*Patrick:* Yeah, I'd say that they [historians] do a good job to tell our side.

*Interviewer:* To make us look good?

*Patrick:* Yeah.

*Interviewer:* Is that a good way to learn history? Are you getting all the facts when it's given to you that way?

*Leslie, Patrick, Keith:* [in unison] No.

*Keith:* All that we read is biased by whoever writes it.

*Interviewer:* Bias is exactly what I wanted to talk about next. Do you all know the meaning of bias?

*All:* [acknowledge yes]

*Interviewer:* If a historian sees bias in a source, does this make that source useless?

*Keith:* Not really, it depends. He might find out that the bias he saw was really in all the other sources he's seen and really this one is the one without bias

[The other students here seemed to be a bit lost by this line of talk and kept quiet while Keith talked].

*Keith:* He might see that the way he thought something happened was really not true at all and it was really another way that no one thought was true.

*Interviewer:* How can the historian then figure out the truth? What things might he look for to get a better idea about the real event?

*Leslie:* He needs to look at the event from all ways. Like if he's studying about Abraham Lincoln, he could go to where he lived and research his life.

*Interviewer:* And that might give him a better idea of the real Lincoln?

*Leslie:* Yeah.

*Interviewer:* Okay, well think about this next question a bit...do you think that people of the past were more or less clever than we are today? So when a historian is studying an event in history, should he or she be aware of the people's frame of mind and perceptions in order to give us a more true picture of history?

*Patrick:* Hmm, that's a good question.

*Interviewer:* Thanks, I tried to make all of these good questions [Laughter].

*Patrick:* I think that they may have been more clever since they had to deal with things without knowing what we know today. Technology's made things easier for us and we don't have to think as much to do things.

*Keith:* If you mean that clever is like being able to control their environment, then I guess we are more clever since we've sort of evolved in our thinking. I don't think we're really any smarter, but we have sort of conquered our environment more than people from history.

*Interviewer:* How do you measure or judge the quality of these primary sources you use? In other words, what makes one source credible and a great source and one not so credible? Think about the primary sources you've used and think about what you just said [Logan] about editing. So what in your opinion makes a source credible? What makes it a good source. What do you think about that?

*Stephanie:* It's hard to tell if it's a great source or not unless you're there. Like the Lincoln speeches we read, we weren't there so we don't know how much the person left out, if any.

*Laurie:* Like with a product, good advertising might make a bad source seem good.

During each of the think-aloud sessions, students examined a story of the European discovery of North America from a source with which none were familiar. The story of St. Brendan challenged the students to

utilize their metacognitive strategies in reading the story. Additionally, students employed historical thinking skills to seek corroboration and credibility in the story. Instead of examining sources which portray events as fact, this particular source reads as a narrative myth, thereby encouraging students to consider history in a way new to their academic paradigm. In this exchange, most student-participants could not see value in examination of sources which depict myth, but some used the opportunity to imagine how the stories could provide valuable information using language and descriptions familiar to the writers at that time.

*Interviewer:* So this account [of St. Brendan's voyage to North America] is one-thousand years before that [Columbus' voyage]! Yet we often hear that Columbus discovered America. What happened to this story? Skim this story and see what you think. A brief background...He was a monk in Ireland whose job it was to spread the word of God. Typically what happened was that these monks would travel to various islands and other lands to spread the word of God. The story here is that he sailed so far that he landed in what we know as North America...present day Canada. If this is true, doesn't this change the way we view the founding of North America by the Europeans?

*All:* Yeah

*Interviewer:* So read this and tell me your thoughts

*Interviewer:* [After several minutes] Does it sound like a true story to you?

*Emma:* No, right here he writes that they landed on a whale and didn't know it.

*Stephanie:* Yeah.

*Interviewer:* Do you remember encountering the part where he encounters a big crystal in the ocean? From what we know are there big crystals sticking out of the Atlantic Ocean?

*Emma:* No, but he may have encountered it and didn't know what it was so he gave it a name based on what he knew. So he probably saw ice

*Stephanie:* An iceberg.

*Emma:* It sounds like a story I would read in the Bible.

*Interviewer:* Okay.

*Emma:* There's no real evidence found, so did this really happen? We don't know.

*Interviewer:* As a historian...would you throw this out as false?

*Stephanie:* I don't know. I don't think so. It needs more investigating. It's like Paul Revere, we hear about him, but there was another guy who rode like 120 miles more than he did, but we never hear about him.

*Interviewer:* Why?

*Stephanie:* Because everybody's heard of Paul Revere. His story was cooler than the other guy's so we hear about him. It's not okay, but it's

how it happens. People write about the legend and we learn about the legend. They sell the story to us.

*Interviewer:* That's kind of a sad comment on history.

*Stephanie:* I love history, but it happens that the story is more important than the truth sometimes. When it comes to learning, people don't want to learn something that's not going to entertain them.

*Interviewer:* So perhaps your strategy to learn history based on the lessons you've encountered in this study is what? If you could sum up strategies you've learned to use to better judge sources...if you could say, "when encountering primary sources in history from what I've learned this semester, I will do what?"

*Emma:* I'll try to always get to different versions of an event from primary sources. There's tons of versions and we usually just either use the book or hear it from the teacher. Now I realize that there's always another version of the story out there and to get the truth I need to dig. Like this one I don't know if it's true or not, but it seems pretty cool.

*Stephanie:* Yeah.

*Emma:* I'll know to look at more sources and combine them together to get a better idea of what really happened.

*Interviewer:* How does that help you?

*Emma:* 'Cause if I look at more than once source and it pretty much says the same thing I can be pretty sure that the story is true.

During another exchange, students from another school discussed St. Brendan's voyage to America. The following is an excerpt in which two students recognized the usefulness of viewing historical evidence atypical of that commonly utilized in history classrooms.

*Interviewer:* Ok well for the next part, let's look at another account of history. Who do you typically think of when you think of discovering America?

*Leslie:* Columbus.

*Keith:* Well Eriksson, the Viking, came here before that.

*Interviewer:* True, let me ask you this...what year did Columbus or Eriksson supposedly discover America?

*Patrick:* Uh, like 16...

*Keith:* 1492

*Interviewer:* Yeah, 1492. When you read this next thing, be aware of when it supposedly happened.

[Students given about 4-5 minutes to read the account of St. Bernard traveling across the Atlantic Ocean in fifth century].

*Interviewer:* Well, what did you think? Does this story seem credible to you?

*Patrick:* No, it seems like a legend, but not a true story.

*Interviewer:* What makes you say that?

*Patrick:* Like on page two, it says that he was met by someone who greeted him. Like that person wouldn't have seen people coming and been friendly.

*Keith:* I agree. And even in the beginning it says that another priest told him about land across the ocean. How would he know about it if no one had been there?

*Interviewer:* So the evidence isn't there to support this story?

*Patrick:* I thought about how impossible it would be to go across the ocean in that boat, but at the end it shows that recently someone did it with a boat like he did.

*Interviewer:* So overall, this story doesn't seem credible?

*All:* No.

*Patrick:* Well, I'm not so sure. It may be meant as a myth, or some of the stuff in the story may be like symbolic or something.

*Interviewer:* What can you take from reading a story like this?

*Keith:* Well, even though I don't think it's true, it gives me an idea to think about it [the discovery of America] from a new way.

Student participants also examined a commonly seen painting of George Washington crossing the Delaware River. This exchange included discussion of history sources developed with intention of influencing public opinion.

*Interviewer:* Great, great. Now let's look at this painting. First of all, what event is this picture portraying?

*Stephanie:* That's George Washington crossing the Delaware.

*Interviewer:* And that happened approximately when?

*Laurie:* 17...late 1770s.

*Interviewer:* Yeah, good.

*Interviewer:* It was painted around 1860, so how does this artist know what the event looked like if he wasn't there?

*Stephanie:* From stories. I don't think the Delaware's that big is it?

*All:* (Laughter)

*Interviewer:* Can we trust this portrayal? This is typically what we see when we think of this event, but was this how it happened? Was Washington really standing like that?

*Laurie:* Well for the painting, they're going to want to make it look pretty. Um, it's not like taking a photograph; you can make it look like anything you want.

*Interviewer:* So is this source credible?

*Emma:* No, I mean it depends. If he's getting his idea of what happened from someone who was on the boat with Washington, then it might make it a little credible, but then that soldier has reason to make himself and Washington to be more heroic.

*Laurie:* I think well maybe...you said it was painted around 1860, Civil War time. Was it painted in the North or the South and was there an agenda to paint something to make America out to be more patriotic to keep the Union together?

*Interviewer:* Great, good point. I don't know where specifically it was painted but that certainly might have had an effect on the artist.

*Laurie:* If it was painted in New York or something he might have wanted to show American patriotism. To make it look like America was not falling apart at the brink of civil war.

*Interviewer:* Wow, that's excellent! So even this artist might have some sort of agenda.

*All:* Yeah.

*Interviewer:* Well great, now a closing question. Do you think people of the past were more or less clever than we are today, or about the same? How they act in and depict history versus how we act in and depict history...were they more or less clever then we are today?

*Emma:* I think they were about the same as we are. We all want to depict our own side of history. We all want to say "well this is what happened" and everyone else wants to say, "well this is what happened" and it's up to us [the reader] to look further at the intentions of the writers to figure out what really happened.

*Stephanie:* I think I agree, about the same. Maybe people in history were more clever even because they figured out that they could manipulate history for their own benefit, and we've just used their idea to keep doing that.

During another think-aloud session, student participants reiterated ideas of purposeful development of sources in examination of the painting from the previous exchange. Here, students discussed the prevalent symbolism found in the painting. While some had experience examining such visual media, others struggled to see any symbolic content in the painting.

*Interviewer:* With the final part of this interview, I'm going to give you a picture of a painting. I think you're probably familiar with this painting. [Hands out the picture of the painting]

*Interviewer:* Have you seen this before?

*Leslie:* Yeah, back in like seventh grade.

*Interviewer:* What is this painting of?

*Keith:* It's Washington crossing the Delaware.

*Patrick:* During the Revolution.

*Interviewer:* That would mean the event took place in the late 1770s, but this painting was painted about eighty years after the event. How could he [the artist] depict the event if he was not present there?

*Leslie:* I didn't realize that he painted it so long after it happened.  
*Keith:* Me either. It makes it seem less likely it was really what happened.  
*Patrick:* Even if Washington was really curled up in the back of the boat, the painting was created to make it seem like America and Washington was great.  
*Leslie:* Yeah, even look at the light over Washington's head  
*Interviewer:* Makes it look heavenly?  
*Leslie:* Yeah.  
*Interviewer:* So if it was painted so long after the event, can this be credible?  
*Keith:* Not really, but it's beside the point. The idea is to make America look good.  
*Leslie:* But if it's not how it really happened, then what's the point?  
*Patrick:* Artists have their own agenda.  
*Interviewer:* So this artist had his own agenda?  
*Patrick:* Probably...if the painting was painted eighty years after the Revolution, was [the artist] from the North or the South?  
*Interviewer:* I'm not sure. I'm not sure if he was even American.  
*Patrick:* If he was from the north, maybe he painted it that way for patriotism; since it was close to the Civil War.  
*Interviewer:* Interesting: patriotism in what way?  
*Patrick:* Well, he might have thought that he could get people behind the war if his painting reminded people about how great America was before the problems.

### **Theme 5: Use of Language**

A significant revelation from these think-aloud sessions was participants' careful consideration of the language used in the sources they were presented. Most significant was the acknowledgement of the inflammatory language used by the Boston citizen during the Boston Massacre.

*Laurie:* In the first paragraph. He calls it the "horrid massacre."

*Interviewer:* Ahhh, so in the citizen's account he uses some language to describe that maybe we didn't see in the captain's account. How do we understand this incident as American students in a history class?

*Stephanie:* We call the event a massacre.

*Interviewer:* Does that word mean anything?

*Emma:* It's a strong word.

*Stephanie:* And we should look into it further before accepting the label of massacre.

At another school, student participants expressed their ideas of the use of language in primary sources. These participants also expressed

insight into the use of language employed in these sources. Additionally, participants demonstrated, through the think-aloud session, metacognitive strategies. As the student participants read the sources, some noticed the importance of the use of language, recognizing inflammatory language significant to the perception of the source's presentation.

*Keith:* I think that in that one [Citizen's account of the Boston Massacre] the author is a better writer and he might have a reason to write what he wrote and the way he wrote it.

*Interviewer:* How so?

*Keith:* Well like here in the third paragraph he calls it a massacre.

*Interviewer:* And that's using language.

*Keith:* Yeah, to his benefit.

*Leslie:* The other one [Captain Thomas Preston] seems like he and his soldiers were the victims.

*Patrick:* Yeah, with some of the words they seem like they were just there....

*Interviewer:* To protect?

*Patrick:* Yeah exactly. He says that the citizens were the ones causing the trouble.

*Interviewer:* You mentioned that the citizen might have had an incentive to write about the event the way he did. What about the captain, did he have an agenda or can we take his account as the truth?

*Keith:* He probably had his own reasons for writing it like that and using the words he did. Or he was just writing what he saw...his perspective. Either way we don't get the exact truth.

*Interviewer:* So if we don't get the exact truth, is there any point to reading these accounts?

*Leslie:* Well yeah, it helps to read about it from all the ways then you get a better idea.

The think-aloud sessions revealed high-level thinking from these students about historical content. Although some students demonstrated simplistic fact-based understanding of content and seemed to demonstrate no acquired skills from the semester of lessons developed for this study, others exhibited insight into the importance of examining primary sources to analyze history. Moreover, certain items of analysis, and their related exchanges, seemed directly related to the semester's history curriculum. The recency of such content played a role in how these students understood their role as participants, but their abilities to recognize contradictions in sources, judge credibility



from information, recognize partisan language and acknowledge benefits of examining multiple primary sources demonstrated well-developed thinking and processing skills.

For example, when examining several primary source artifacts from the time of Abraham Lincoln, students utilized elements of metacognition such as consideration of what was to be read, consideration of their prior knowledge about the topic, contextualization and corroboration, and recognition of bias from implied meaning based on evaluation of the sources. In analysis of conflicting primary sources from the Boston massacre, some students recognized inflammatory use of language and demonstrated analytical acumen in ascertaining objectivity from said sources. Further, students examined other sources and discussed methods for comprehending purpose and relevance of the sources. While not all students revealed capacity for such thinking, the results demonstrated certain optimism in students' "doing of history." However, the failure of improved critical thinking scores for the experimental group as measured by the Cornell Critical Thinking Test refuted the original hypothesis of this study.

### **The Teachers: Interviews and Observations**

In brief interviews with each teacher near the end of the study, I sought to gather conceptions of how the study was conducted and whether they saw any improvements in students' metacognitive skills and abilities to think historically. Although the think-aloud sessions provided the vast majority of data related to the thinking skills of the students, my intent was to enhance those sessions with some insight from the teachers relating to a larger cross-section of the participants. The think-aloud sessions dealt with just a few students, while interviewing the teachers yielded data concerning all participants. Mr. Campbell, the teacher at the only public school involved in the study, reflected on what he saw as a semester in which his students were truly engaged in the content of his class. As stated in the previous chapter, Mr. Campbell favored a management and teaching style in which classroom control was always maintained. However, his teaching strategies included deep concern for his student's learning. Throughout interview sessions, he expressed excitement at the way in which his students learned the material he presented. Moreover, he said, "my students seemed to come into these lessons more willing to participate."

Mrs. Fisk, a teacher at an all female Catholic high school also experienced what she saw as improvements in her students' abilities to analyze historical data. In a written statement of summary after the conclusion of the study, Mrs. Fisk indicated her recognition of her students' palpable engagement in the content. And, "whether or not the tests reveal an improvement in the experimental group's critical thinking skills, I found techniques that truly held students' interests. The historical thinking skills these students used benefited them in my class."

Mr. Downs, the most veteran teacher of the three, expressed doubt that engaging students in the developed lessons consistent with historical thinking skills would affect general critical thinking skills. He extensively discussed his experience with getting students to read history content, both primary and secondary sources which have generally come with some level of frustration. Mr. Downs lamented his students' lack of high-level reading and thinking skills upon entering his classroom, and concluded that historical thinking, while effective in engaging students within history class, would not likely transfer to general critical thinking abilities.

Throughout the study, each teacher was observed at least twice while implementing the lessons developed for this study to determine the extent to which each followed the lesson plan. The observation instrument (Appendix I) utilized a Likert scale with seventeen observable items. Observers were to indicate SA (strongly agree), A (agree), N, (neither agree nor disagree), D (disagree) or SD (strongly disagree) for twelve items and respond with a "yes" or "no" to five other items. Data from these observations revealed that for each lesson observed, teachers followed the lesson provided with 92% of the responses an "SA" or "A" and 85% of "yes" indicating a high level of adherence to the lessons plans and activities provided. Differences occurred in preparation and questioning techniques employed by the teachers. For example, observation data from a lesson taught by Mr. Campbell revealed that he neglected to adequately state the appropriate habit of mind used for the lesson. Additionally, the student-teacher was observed. He was effective in overall implementation of the lesson, but failed to re-direct off-topic questions back to the content, and to pose follow-up questions to students to expand on the topic.

## **School Culture**

Along with a look at each teacher involved in the study, it was also appropriate to briefly examine the culture of each school. In order to best research the students within each of these schools, school culture was examined to provide a basis from which to derive the results. Widely different cultures exist in schools. Some of those cultures encourage positive learning environments while others may hinder performance of students. According to Baldwin, Keating and Bachman (2006), a positive school culture in which teachers and students feel safe, cared for and encouraged to succeed through positive reinforcement correlates with higher performing students.

In this study, it was appropriate to seek evidence of the cultures of the schools examined. At each of the three schools, administration was contacted to participate in an interview regarding the culture of the school. Such discussion with administration resulted in better insight into the attitudes and traditions of each school based on questions relating to pedagogical practices, teachers' influence on instructional practices and dispositions of teachers in curricular policy decisions.

In discussion with administrators at all three schools, interviewees revealed their desire to operate schools in which students feel safe and supported and teachers feel empowered to make curricular and pedagogical decisions. At the two private schools, administration expressed more confidence in their schools providing the freedoms necessary for the teachers and students as well as a positive environment serving the interests of the students as the primary focus of the school. Evidence from these conversations led to a notion that private schools are in better position to allow such freedoms without the constraints of standardized testing and district oversight. Although private schools are held accountable to standardized tests such as advanced placement and college entrance exams, generally the pressures of testing all students throughout their school careers is less. The public school administration expressed that mandates are continuous and are often seen as detrimental to learning by students and teachers alike, while no such expressions were revealed in interviews with administration from either private school employed for this study. Jessica, an assistant principal at one private school, articulated her preference to keep the focus on the students rather than succumbing to local, state and federal mandates. "I know that when we're here, we're

here for the students entirely. We're not concerned with test scores that have no bearing on their academic career after high school. We focus on getting students to college the best way we can without all the hassle the public schools must deal with."

## CHAPTER 6

### DISCUSSION

The data analysis of this study demonstrated the complexity of engaging students in historical thinking. Quantitative data revealed an increase in critical thinking skills in both experimental and comparison groups. These improvements verified only that the students did slightly better on the posttest than the pretest, given about four months apart. These improvements may have been in part due to the lessons in which students in the experimental groups engaged, but this would not be a full explanation. Those students in the comparison group did as well on the posttest, thereby verifying only that myriad different reasons may have combined to be the cause(s) of the critical thinking improvements. Through these quantitative findings, we can only conclude that engaging in historical thinking through the lessons designed for this study did not meet the expectations put forth in the hypothesis. A statistically significant difference was not achieved between groups as a result of the treatment as measured by the analysis of variance run at the conclusion of research.

Results from the qualitative portion of the study reached more optimistic conclusions regarding students' engagement in historical thinking. From the lessons developed for this study, some of the students who participated in the think-aloud sessions demonstrated skills consistent with historical thinking and metacognitive skills. Compelling responses from student-participants provided evidence of recognition of significant language used in historical sources and evidence. Furthermore, some interview responses demonstrated a sophisticated understanding students had when analyzing sources. On multiple occasions, students expressed high level recognition of their own thinking while examining sources from American history. These exchanges reiterated skills these students utilized with the lessons developed for this study, thereby, providing some evidence of the treatment's effect on students thinking about the content and developing metacognitive skills.

## Limitations

As with every endeavor into research, limitations emerged which reduced the quality of the data. Inclusion of human participants, an instrument measuring complex analytical skills such as critical thinking, and examination of students within differing schools and school systems all affected the outcome. Additionally, in a study of this nature devoted to study of the participants must also be considered a limitation. It is with these limitations identified that transparency is more likely achieved, but these limitations certainly prevent faultless data from emerging.

Upon conceiving this study, the limitation which emerged as most salient was that of working with human subjects. Challenges manifested almost immediately. Upon administration of the pretest, some students were absent and would therefore be ineligible to be considered from results. Even if these students may have been able to take the pretest soon after, the teachers began the lessons almost immediately after giving the pretest; allowing those students to take the pretest after experiencing even one of the lessons developed for this study, was not an option.

After the pretest was administered, it was discovered that some classes scored higher on the pretest measuring critical thinking abilities (see Tables 5.3 through 5.8). These results demonstrate that students were not randomly distributed into American history classes, and due to limited influence of the researcher in these schools, redistribution of students to create more homogeneous classrooms was not possible.

The instrument used was also a limitation. As outlined in chapter four, the authors of the Cornell Critical Thinking Test acknowledged limitations in measuring critical thinking skills. Testing “value judging” and “dispositions to critical thinking” were found so difficult to measure that these important characteristics of critical thinking were left out of the test completely. Cronbach alpha results of 0.66 reveal a marginal reliability for the instrument which may have contributed to the findings of no significant differences between experimental and comparison groups in the pre- and post-test administration. Moreover, the multiple choice format of the test disallows elaborated explanation from respondents in which students may demonstrate some critical thinking ability.

As discussed previously, the schools must also be included as a limitation, as no two schools operate under the same culture or rules, traditions and academic history.

Other than not being able to work with a fourth school, as addressed previously, aspects of school culture surely have an effect on how students learn thereby affecting how well or poorly they do on the assessments and in the classroom.

Further, the teachers were not experienced in conducting research in their classrooms. Examination of this type was new to two of the three teachers, while one teacher had some experience; this variation once again contributed to the lack of homogeneity within participants in the experiment. Action research was discussed with the teachers in explanation of the project and seen as valuable by all teacher participants however, experience in such research was limited. Upon entering these classrooms, the teachers had little idea about what to expect from my presence as well as how their students might react to participating in research.

Themes expressed as emerging from the think-aloud sessions were not triangulated with student-created artifacts from the semester. Due to a lack of artifacts from the students categorizations of such themes lack fundamental backing from other sources. Teacher interviews did provide some basic notion of student performance in class, but responses were not specific enough to employ as evidence of triangulation.

Observations of teachers revealed strong adherence to the lessons as designed. However, since not all lessons were observed, this adherence might have been a result of the Hawthorne Effect in which teachers were more conscientious in lesson implementation at the time of the observations and less stringent to the lesson plans during other times.

In an attempt to consider the heterogeneity of the teachers beyond a priori understanding, observations were conducted of each teacher to verify the methodology utilized by each teacher and to experience how closely each was following the lessons designed as the treatment for the study. For two schools, the researcher was the primary observer, while in one school, an administrator observed the teacher. Prior to any observations, clear criteria were established to improve objectivity in observations. Additionally, observers were provided with the lessons before hand to review and recognize what to expect from the teacher and the students.

A final limitation of this research study was the time devoted to developing skills consistent with historical thinking. Subsequent examination into the topics addressed in

this study would provide more sound results if the participants were tracked and measured over a longer period of time, with more specific benchmarks serving as more accurate measures of the treatment's effect. Moreover, time played a factor in think-aloud sessions. Along with more time for each session, which may have yielded more rich evidence of metacognition and characteristics of historical thinking, employing many more participants would have been beneficial to the results of the study, validating or refuting findings provided by the participants used herein.

### **Additional Research**

This study was not meant to be generalizable to all social studies students, rather a contribution to two significant areas of social studies education which in my experience has marked deficiencies: the fostering of higher order thinking skills in students, and development of analytical and metacognitive skills related to history content. This study was meant as a contribution to the field of literature which recognizes these deficiencies and seeks solutions. The data from this study demonstrated two significant findings. First, the lessons consistent with historical thinking created for this research did not affect students' critical thinking skills any more than an intervention in a comparison group which did not employ historical thinking tenets at all. Second, some of those students who participated in the think-aloud sessions were able to analyze historical documents with sophisticated care and cognizant exploration; often modeling archetypal metacognitive strategies while doing so.

Beyond this study perhaps other researchers will be able to conduct further research to either replicate or counter the findings herein. Although this research showed no statistically significant differences among those students in the experimental group as compared to those in the comparison group regarding critical thinking skills, aforementioned limitations may have contributed to the failure to affirm the hypothesis. Moreover, additional research into metacognitive skills is necessary to more fully develop a link between effective metacognitive strategies and engagement in historical thinking skills based on the lessons developed for this study. The researcher recognizes the difficulty to alter patterns of learning in a one semester research study. More intensive study for longer periods is needed to gain a more complete understanding of how such



skills affect students' understanding of content. Additionally, further study into the habits of mind of students examining history content would be better served with lessons geared more specifically to students' development of metacognitive strategies rather than assuming such strategies would be improved from critical thinking improvement.

### **Implications and Conclusions**

The results of this study suggest that using mixed methods approaches is an effective tool when exploring metacognition and critical thinking skills. As explained, the results of this study were mixed. The hypothesis that engagement in the lessons created, intended to adhere to tenets of historical thinking, would increase non domain-specific critical thinking skills was not proven true. Significant however, were student interviews in which some participants expressed deeper understanding of historical events through engagement in metacognitive strategies.

But what does the lack of significant critical thinking development tell us about the transferability of historical thinking skills to non domain-specific critical thinking skills? As Wineburg (2001) has stated, thinking historically is an "unnatural act." In this study the attempt to conflate thinking skills from one domain, specifically history, with general thinking skills proved a complex undertaking. As stated, more research is needed to substantiate or refute these findings since they suggest important implications for education. As teachers become more pressured with accountability standards in schools, educators and administrators seek to find a "magic bullet" to help students think more effectively and become more successful in the standardized assessments given to most every American student. Without clear evidence that domain specific thinking skills transfer out of that classroom to other, more general thinking applications, that magic bullet remains elusive.

This study did however demonstrate that participants exposed to lessons consistent with historical thinking may be able to consider their own thinking in a more sophisticated manner, thereby helping them develop recognition of the processes and strategies necessary for deeper understanding of history content. And that recognition may suggest an exciting aspect of historical thinking as related to metacognition thereby encouraging more research possibilities. As Wineburg expressed in his 2006 article A

*Sobering Big Idea*, certain students are recipients of history delivered to them in such a way as to encourage high-order thinking and analysis through primary source engagement, but it is the vast majority sitting in general education history classrooms from primary grades through upper secondary school who receive no such creative and engaging instruction. These were the students targeted in this study. The results demonstrated a significant challenge to affect general critical thinking skills of the participants in this study. Results found no significant differences in experimental and comparison groups, however the think-aloud sessions provide evidence that engagement in lessons consistent with historical thinking can make students more aware of their own thinking, thereby more cognizant of the content in which they engage.

APPENDIX A:  
LETTERS OF CONSENT

**Consent to Participate in the Study,  
“The Manifestation of Critical Thinking and Metacognition in Secondary American History Students through  
the Development of Historical Thinking Skills”**

Option 1:

\_\_\_\_\_ I agree that as a **teacher** of American history, I am willing to participate in this research study. I agree to work with the researcher, Anthony Pellegrino, to develop and implement lesson plans which fulfill basic guidelines of historical thinking, and assist in administering the critical thinking assessment. I also agree to participate in interviews that may be audio-taped. These audiotapes will be accessible to only myself as the researcher and the professors on my dissertation committee, all of whom are aware of sensitivities regarding field notes of any kind including audio recordings. All audio recordings will remain in my possession in a locking cabinet and will be destroyed before three years after completion of the study; estimated to be April 2007. Any paperwork I submit (such as lecture notes) may also be used for the purposes of the study described in the letter I received. I understand I will not be identified by name in **any** publications resulting from the study, and information obtained during the course of this study will remain confidential to the extent allowed by law. No participants will in any way be identifiable from either the dissertation or any subsequent manuscripts resulting from it. My consent to participate in this study is voluntary, and I understand I may withdraw my consent to participate at any time without penalty. **Checking the blank above indicates my willingness to participate fully in the study.**

Option 2:

\_\_\_\_\_ I agree to the conditions outlined in option 1 above, with the **exception of** the following: I do not wish to (check the appropriate option):

- \_\_\_\_\_ be interviewed.
- \_\_\_\_\_ submit paperwork.
- \_\_\_\_\_ be audio-taped.

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

For questions regarding Florida State University’s IRB approval of this research, contact:

Office of Research  
Human Subjects Committee  
2010 Levy Avenue  
Research Building B, Suite 276  
Florida State University  
Tallahassee, FL 32306  
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Or for any questions regarding the research, contact:

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Authorization For A Minor To Serve  
As A Participant In Research

I authorize the participation of \_\_\_\_\_ as a participant in the research investigation entitled: *The Manifestation of Critical Thinking and Metacognition in Secondary American History Students through the Development of Historical Thinking Skills*.

The nature and general purpose of the research procedure and the known risks have been explained to me. I understand that \_\_\_\_\_ will be given a pre-participation explanation of the research and that he/she may decline to serve. Further, I understand that he/she may terminate his/her participation in this research at any time he/she desires.

I understand the known risks are minimal, and the research procedure is designed to only involve students with a fifty minute pre and post test at the beginning and end of the semester respectively and an introduction of new research based instructional material in your child's history course.

I understand also that it is not possible to identify all possible risks in an experimental procedure, and I believe that reasonable safeguards have been taken to minimize both the known and potential unknown risks.

Signed: \_\_\_\_\_  
(Parent or Guardian Signature)

Date: \_\_\_\_\_

For questions regarding Florida State University's IRB approval of this research, contact:

Office of Research  
Human Subjects Committee  
2010 Levy Avenue  
Research Building B, Suite 276  
Florida State University  
Tallahassee, FL 32306  
850-644-8633

Or for any questions regarding the research, contact:

Anthony Pellegrino (Researcher)  
Florida State University  
Social Science Education Department  
209 Milton Carothers Hall  
Tallahassee, FL 32306  
p. 904-377-3428  
e. amp04x@fsu.edu

Dr. Sarah Drake Brown (Major Professor)  
Florida State University  
Social Science Education Department  
209 Milton Carothers Hall  
Tallahassee, FL 32306  
p. 850-644-6533  
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**To Be Retained by the Researcher**

**Consent to Participate in the Study,  
“The Manifestation of Critical Thinking and Metacognition in Secondary American History Students  
through the Development of Historical Thinking Skills”**

Option 1:

\_\_\_\_\_ I agree that as a **student** in American history class, I am willing to participate in this research study. I may be observed and/or audio-taped (only if additional consent is given to be interviewed). Any paperwork I submit (such as lecture notes) may also be used for the purposes of the study described in the letter I received. I understand my classroom work will be altered somewhat by this study, and I may ask the researcher any questions and share any concerns with him. I understand I will not be identified by name in **any** publications resulting from the study, and information obtained during the course of this study will remain confidential to the extent allowed by law. No participants will in any way be identifiable from either the dissertation or any subsequent manuscripts resulting from it. Any audiotapes will be accessible to only myself as the researcher and the professors on my dissertation committee, all of whom are aware of sensitivities regarding field notes of any kind including audio recordings. All audio recordings will remain in my possession in a locking cabinet and will be destroyed before three years after completion of the study; estimated to be April 2007. My consent to participate in this study is voluntary, and I understand I may withdraw my consent to participate at any time without penalty. **Checking the blank above indicates my willingness to participate fully in the study, however if you are under the age of eighteen (18) years old, you will be required to obtain a parent or guardian signature for full participation.**

Option 2:

\_\_\_\_\_ I agree to the conditions outlined in option 1 above, with the **exception of the** Following: I do not wish to (check the appropriate option):  
\_\_\_\_\_ be interviewed.  
\_\_\_\_\_ submit paperwork.  
\_\_\_\_\_ be audio-taped.

Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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APPENDIX B  
PRIMARY SOURCE ANALYSIS WORKSHEET

**Your task is to read the primary source documents you have been given, and answer the following questions for each document.**

**Your Name** \_\_\_\_\_

**Type of Document (Check One)**

- |                |                   |                          |
|----------------|-------------------|--------------------------|
| ___ Newspaper  | ___ Map           | ___ Advertisement        |
| ___ Letter     | ___ Telegram      | ___ Congressional Record |
| ___ Patent     | ___ Press Release | ___ Census Report        |
| ___ Memorandum | ___ Report        | ___ Speech               |

**Date of Document** \_\_\_\_\_

**Author or Creator of Document** \_\_\_\_\_

**Audience for Whom Document was Written or Spoken** \_\_\_\_\_

Now read your document (Ask the teacher, someone else in your group, or consult a dictionary to help you with any words or ideas that give you difficulty)

When you are sure you understand your document, **rewrite it in your own words**. And please answer who the main characters are, what happened, and why. Please include the following also:

- Three things that the author (or creator) said that you think are important**
- Include why you think this was written (or spoken)**
- What evidence from the document helps you know why it was written**
- Write a question to the author (or creator) that is left unanswered by the document.**

At this point, please get your teacher's initials before continuing: \_\_\_\_\_

Now read your version of the document to the others in your group. Take turns and have a group discussion about the importance of the document.

APPENDIX C  
LETTER TO TEACHERS

August 1, 2006

Dear Teacher,

First of all, thank you so very much for participating in this study. My goal is to determine whether teaching American history students systematic lesson activities consistent with methods of historical thinking will transfer into results on a critical thinking test unrelated to history. Through a pre and posttest (given early and late in the semester respectively), I will examine the results for significant differences.

Within this packet, I have developed twelve lessons/activities for your use during the semester. These lessons come from a wide array of sources. For example, lesson nine is almost directly from a History Channel sourcebook, while others come from historical thinking pedagogical experts such as Sam Wineburg, Frederick Drake, Sarah Drake Brown, Lynn Nelson, Peter Seixas and Peter Stearns. Still others were my design I used while a high school social studies teacher. Some are inclined to help students develop skills for use with history content, while others are directly history related. I have been specific in some descriptions while others have been left more vague. This is by design. In consideration of developing these lessons I wanted to move you toward teaching these historical thinking skills directly, while maintaining respect for your professionalism by allowing freedom to expand on and develop varying ways to arrive at the same learning goals. For each lesson I have included what I consider an appropriate “habit of mind” for you to consider as you work with your students. These may be conveyed to the students as they work, or just kept in mind by you as you teach. I ask that you please use these lessons, but in any order you like with whatever additions you’d like. If you are changing an activity entirely, please let me know so I may take that into consideration when collecting data.

For your part in this research, I ask that you present these activities and be cognizant of engaging students in historical thinking while doing so. Additionally, please keep in contact with me as necessary throughout the semester and I will be glad to come to your school or try to resolve any concerns from afar. I also ask that you try to get your students interested in the study, and get parents on board as necessary (since all must sign consent forms and those under 18 must have parent signature to participate). And for the comparison group, I ask that you keep the purpose of the study secret until completion, and try to engage that group in current event lessons (perhaps once per week) to minimize any data corruption resulting from one group knowing the intended purpose or outcome of the research and acting accordingly.

Finally, although not nearly enough for true compensation, I would like to give each of you \$150.00 at the end of the study as a very small thank you for your anticipated cooperation in this research.

Thank you,  
Anthony Pellegrino

APPENDIX D  
LESSONS AND ACTIVITIES: COMPLETE

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

1. **Emphasis:** To allow students a chance to consider the importance and meaning of history based on prior experience and knowledge

**Habit of Mind (see attached letter for explanation): Acquire a comprehension of diverse cultures and shared humanity**

**Activity:** During the first week of the semester, students will be given one of the two “diversity activities” to begin. Both of these are designed to get students to consider their thinking. The activity in which students connect the dots encourages students to think of new and atypical ways to solve problems. The Herman Grid activity will help students read between the lines and consider that there are often gray areas which make life complex and the student of history complex as well. Be sure to discuss the results of the activity you choose and relate the results to the complexity seen in a particular historical event.

The next activity involves students using paper and simple drawing utensils (e.g. crayons, colored pencils or markers) and to **draw a picture of history**. At this time the teacher will circulate around the room to examine students’ progress. Students having difficulty getting started can be encouraged with suggestions, but the idea here is to let the students creatively put their ideas to paper, so much of this should be left up to the students. Students then get into pairs to discuss their ideas. Upon completion, of the paired sharing, the teacher requests some or all of the students to share their ideas to the entire class. The teacher here might keep track of the general themes which emerge. Expect some students to depict wars, or triumph, or protests or great figures such as George Washington. Once enough themes have emerged, the teacher will engage students in a discussion of the meaning of history with the intent to demonstrate to the students the complexity each of us sees in history. Additionally, the themes which emerge will help the teacher gain an understanding of his or her students’ perceptions.

**Discussion suggestions:**

Explain the image(s) you’ve created in your drawing.

Explain, what is history?

Why have these particular images dominated your drawing?

Once themes have emerged, move the class toward a discussion based on...

How many different themes did we discover from our drawing here in class?

What prior experiences have influenced your perception of history?

**Sources and Materials:** Diversity activity worksheet, various drawing materials such as crayons, colored pencils, markers and paper



**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

2. **Emphasis:** This is a short activity which helps to explain to students that although we usually are egocentric when studying history, there are other ways of looking at the events and our personal and America's role in historical events. Through discussion, it encourages students to consider bias when learning history or experiencing media.

**Habit(s) of Mind: Understand the relationship between geography and history as a matrix of time and place and as a context for events; Read widely and critically to recognize the difference between fact and conjecture, between evidence and assertion, and thereby to frame useful questions**

**Activity:** Show students the three maps and discuss the differences. Begin by showing the map in which the United States is central. This is the map we often see. Ask students to briefly describe it, without giving away the idea that perspective will be the differences among the three maps. Then show the map in which the Prime Meridian is central. Ask students the differences they note. Finally, show the map in which Australia is central. To them the world might look "upside down", but in reality this map is just as correct as the others. You might encourage discussion from students to explain the maps from a scientific perspective and how all are really correct...even the "upside down" map. Students enjoy using the knowledge they've developed in other classes. From this simple activity, encourage students to remember when reading history or watching the news, we experience bias. You might follow the map activity with newspaper articles in which bias might be present. Articles from newspapers such as the New York Times might contrast with your local newspaper or the Wall Street Journal for example. This activity may require you and the students to review the event as you've learned it before providing the students the articles so they have some background knowledge on which to base their analysis and evaluation. I've provided samples of two newspapers writing about the same topic with very different perspectives. Use these if you wish, or you could find something more current. With these articles, students should recall the map exercise, review each article and discuss the differences in, not only the facts of the article, but also in the tone of the words used. For example, in either article how do they refer to the conflict? Does it seem to favoring Israel? Hezbollah? And have students pick out phrases and words which back up their claim. Additionally, have them compare and contrast each article for objectivity.

**Sources:** Three world maps attached if you'd like to hand all of them out to students. If not, they are available on the web as well.

<http://www.newint.com/catalog/pics/hobobigback.jpg> Australia centric

<http://www.frapppr.com/googlemapsmania> US Centric

[http://www.eduplace.com/ss/maps/pdf/world\\_cont.pdf](http://www.eduplace.com/ss/maps/pdf/world_cont.pdf) Prime Meridian Centric

Two newspaper articles depicting the same event (Israel's push into Lebanon)

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

**3. Emphasis:** Internet research practices

**Habit of Mind: Grasp the complexity of historical causation, respect particularity, and avoid excessively abstract generalizations**

**Activity:** Students will learn to discern reliable versus non-reliable websites by investigating some credible and not so credible websites for an idea of how to tell the difference. For example, students will first go to Wikipedia and research a topic of interest (history related preferably) then to the US government archives site to find the same topic. Have students examine both to find any discrepancies in the accounts of the event or person. Explain to them that researching on the Internet involves not simply going straight to Wikipedia or using the first “hit” from a Goggle search. Rather students should understand what types of qualities make a credible site. Explain to them that they should “**source**” their sites: that is, examine who controls the site, is it maintained, and can these people be contacted? Point out some of the potential errors in the site such as the use of the phrase “high-ranking officials” as evidence for their theory. Additionally, students should gather that they must **corroborate** the information from multiple sites before believing it true. You may take them onto some questionable sites involving the conspiracy of the Moon landing, or the conspiracies of the September 11, 2001 attacks to further illustrate the points. I’ve attached a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis guide to help students graphically organize their evaluations.

**Sources:** Computers with Internet access

<http://www.ufos-aliens.co.uk/cosmicapollo.html> This is a pretty good conspiracy theory site regarding the 1969 (and subsequent) moon landing and can be refuted by NASA and other reputable scientific sites.

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

**4. Emphasis:** To demonstrate the inevitability of varying accounts of historical events.

**Habit of Mind: Comprehend the interplay of change and continuity and avoid assuming that either is somehow more natural, or more to be expected, than the other**

**Activity:** First, students will write an account (as accurately as possible) of the school day (if you're meeting first period, you can have them write about the previous day). Provide them with "primary sources" from the previous day as well to encourage investigation. Such sources might include a copy of morning announcements or data such as number of students absent. Explain that the students are acting as "reporters" so their accuracy is important. Once completed, discuss the accounts. Certainly, students will have different accounts of the same "event", the school day. Discuss why the accounts differed, and if some were more accurate than others. Segue into the idea that all history accounts have some of that differentiation from the actual events. Based on bias, ignorance, space or time constraints of other ulterior motives, historical records are not completely accurate. Then compare the textbook explanation of the Battle at Lexington and Concord with the primary source found here [http://pages.towson.edu/mhofer/hsi/cases/lexington/lexington\\_student.html](http://pages.towson.edu/mhofer/hsi/cases/lexington/lexington_student.html)

This source includes eight depictions of the "shot heard 'round the world" and asks students to consider, based on sourcing and corroboration heuristics, who fired first and which is perhaps the most accurate account of history. I've attached the documents to this lesson activity for your use.

**Sources:** Textbook account of Battle of Lexington and Concord and primary source documents...see attached. Additionally, attached is a primary source analysis worksheet helpful for examining primary sources.

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

**5.Emphasis:** This is a multi-day activity with the intent to examine, through three events, government officials engaging in accusations without evidence. The three events I had in mind are the Salem Witch trials, the McCarthy hearings and the recent detainment of enemy combatants in the War on Terror. The idea is to challenge students to examine any similarities and significant differences found here. They may not find any connections and that's fine, but it is the challenge for them to see how history does not repeat itself, rather we can use history to inform our experiences, but not project events as "the same"

**Habit of Mind: Understand how things happen and how things change, how human intentions matter, but also how their consequences are shaped by the means of carrying them out, in a tangle of purpose and process**

**Activities:** To begin take students through the National Geographic site at <http://www.nationalgeographic.com/features/97/salem/index.html>

From this webquest they will see the difficulty one had being accused with no recourse. Then make the connection between that time and the witch hunts of McCarthyism by the following game and activity...

Activity/Sources:

1. Opener: Students will be led through a simulation called the "Dot-Game" adapted from a History Alive! Activity.
  - Students pick a small piece of paper from a plastic bag. Some of the pieces of paper have a red dot on them while most of the pieces are blank. Each student is not to reveal what is on his/her piece of paper to anyone else.
  - The object of the "game" is for the students to create the largest group possible without any red dots. They may question each other as they form groups. The largest group without a member with a red dot wins. Any person who holds a red dot and has infiltrated a group wins.
  - The purpose of the "game" is for the students to experience some of the suspicions associated with the McCarthy Era.
2. Provide background information on McCarthyism. This can be done with a film clip (film title suggestions in the Bibliography) or through a class reading and discussion from your textbook. There is a 12 minute speech from March 1954 in which McCarthy names individuals, it can be found at <http://www.historychannel.com/broadband/clipview/index.jsp?id=v4t2>  
Or certain portions of the feature film, *Good Night and Good Luck*
3. Introduce a political cartoon & the Cartoon Analysis guide.
  - Introduce political cartoons and their purpose Political cartoons are intended to make a certain statement or provide commentary on a current event, public

personality, etc... Political cartoons go beyond merely reporting facts but provide the cartoonists' opinion and are intended to sway the opinions of readers.

- Have a political cartoon on a transparency and ask the class to analyze. This will be difficult if students are not familiar with the skill. Introduce the [Cartoon Analysis Guide](#) as a tool to breaking down and understanding political cartoons.
- Then distribute a copy of the guide to the students and briefly review the analysis process with the class.
- Guide them through the original cartoon following the Analysis Guide.
- Display another cartoon and ask the class to follow the steps from the analysis guide and analyze the cartoon.

**Recommended Cartoons:** The Herblock website

<http://lcweb.loc.gov/rr/print/swann/herblock/fire.html> contains 12 different political cartoons dealing with the early Cold War time period. These cartoons are appropriate for this lesson on McCarthy (except perhaps "Here he comes now" which looks at Nixon's discovery of smear tactics during his 1954 run for vice-presidential re-election). The cartoons "[It's okay- We're hunting Communists](#)" and "[You read books, eh?](#)" are good cartoons to begin with and work on as a class. Completed Cartoon Analysis Guides for these two cartoons are attached. Summaries of all cartoons are provided on the website.

4. Student analysis of political cartoons. Put students in groups of 3-4. Give students a selection of printed political cartoons on McCarthyism. (Herblock cartoons on McCarthy: <http://lcweb.loc.gov/rr/print/swann/herblock/fire.html>) Allow them to pick one of the cartoons and analyze it as a group (using the Cartoon Analysis Guide), making sure to follow all of the steps of analysis.
5. Presentation of cartoons. Have each group display their cartoon on a classroom television screen (if Internet is connected) and analyze for the class.

Extension Activity: Students will read Appendix 1 & 2 to establish a clear picture of what some describe as a modern day witch hunt at Guantanamo Bay then write a compare and contrast essay drawing conclusions between the Salem Witch Trials, the McCarthy Hearings and the Guantanamo Detainees. In the essay make sure to remind students to use their sourcing and corroboration heuristic when examining these articles.

## American History

### Lesson Plan/Activity Capsules

#### Semester 1: Pre-Colonial Period-1865

- 6. Emphasis:** Students will investigate and consider the struggles for power and the need for compromise during the “Critical Period” (the period between the end of fighting in the American War for Independence and the drafting of the U.S. Constitution) through game play in which rules are scant yet necessary, and students must compromise and deliberate to make the game function

**Habit of Mind: Perceive past events and issues as they were experienced by people at the time, to develop historical empathy as opposed to present-mindedness**

**Activity:** During a unit on the Critical Period, the teacher will incorporate the following activity to get students to consider the compromises required to develop the U.S. Constitution: Students are provided with a set of rules for the game about to be played. The rules are simply that students in each team can do anything they want as long as they find some way to use all the pieces of equipment. The students and teacher then move outside to the school tennis courts and find the equipment—two tennis racquets, a Frisbee, a Nerf ball, and several ping pong balls along with a small chalk board and chalk (if these exact items are not available, you can certainly make due keeping in mind there must be fewer objects than there are students to make the game effective). Before long the students will find the rule inadequate and begin to make adjustments. Most students on the each team will be left without a racquet or ball to use and will remain on the sidelines. Some of these students will begin to try to negotiate their way into the game by suggesting compromises and adjustments to the game. The teacher will allow help only by reiterating the rule, but also suggesting that the students think hard about the game for an essay about the relation of the game to the Critical Period in America which is due two days later. During the next day’s class the teacher must push the students to make the abstract connections of the game to the Critical Period. For example, the teacher may use a graphic organizer even as simple as a table to compare “the game” to the “U.S.”. Students might realize here that in both cases the rules needed to be changed to get more people involved in the process, others might see how important compromise was in the game and is in the U.S. in order to maintain society. Students should be encouraged to consider from their past experiences and knowledge rules that have changed...perhaps during the Civil Rights era or during the Great Depression or during the War on Terrorism in which we are currently involved. This lesson should serve as a good springboard toward discussion of the difficulty in maintaining a democracy. And since you might be closing in on the November elections, it may also help get students involved in some of the issues of the day...local, state and national.

**Sources:** Two Tennis racquets, ping pong balls, Nerf ball, Frisbee, chalkboard and chalk (Substitute these for others, but try to keep them non-harmful. Baseballs might be too dangerous for example)

Some sort of graphic organizer such as a simple table printout for all students to organize the essay

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

7. **Emphasis:** To engage students in constitutional crises and complexities relating to the separation of church and state. This activity can be used during a unit on the creation of the United States government. Before this activity, students should be somewhat familiar with the concept of separation of church and state and the idea of a theocracy versus democracy.

**Habit of Mind: Understand the significance of the past to their own lives, both private and public, and to their society**

**Activity:** Take out a dollar bill (have students take out dollars as well if possible) and read “In God We Trust” on the back. Discuss the importance of the quote written on our currency. Is that significant? Then have students recite the Pledge of Allegiance and pause on the “One Nation Under God” phrase and discuss its importance also. Now project the quotation from Article XI of the Treaty of Tripoli. Explain that this quote was written by George Washington as an end to a war between the newly formed United States and the nation of Tripoli over trade routes through the Mediterranean Sea. From these contradictory items, discuss as a class whether the United States was founded as a Christian nation. Has this changed since the time of the Founding Fathers? Since the events of September 11, 2001, has this changed yet again?

After discussion, bring students to a computer lab if possible to search the following websites for evidence of God in the documents. In this webquest, have students write why they believe the language referring to God was included in the document. If it was necessary and if it works to prove or disprove the generalization that America was founded as a Christian nation or simply a nation in which “God” is included to mean a general higher power. Finally, have students look further at historic documents from the United States to find one of their own which also either includes or excludes God in the verbiage as evidence of a Christian founded nation or not. Students should then be instructed that they are lawyers arguing a case in front of the Supreme Court regarding a parent whose child is subjected to reciting the Pledge of Allegiance. They are to choose a side and include historical facts/evidence that American is or is not a Christian nation and the plaintiff is either entitled to not participate in the recitation of the Pledge or not.

**Art. 11.** As the Government of the United States of America is not, in any sense, founded on the Christian religion; as it has in itself no character of enmity against the laws, religion, or tranquility, of Mussulmen; and, as the said States never entered into any war, or act of hostility against any Mahometan nation, it is declared by the parties, that no pretext arising from religious opinions, shall ever produce an interruption of the harmony existing between the two countries shall ever produce an interruption of the harmony existing between the two countries.

**Sources:** [http://www.stephenjougould.org/ctrl/treaty\\_tripoli.html](http://www.stephenjougould.org/ctrl/treaty_tripoli.html)  
<http://www.ushistory.org/Declaration/document/index.htm>  
<http://showcase.netins.net/web/creative/lincoln/speeches/gettysburg.htm>  
<http://www.law.umkc.edu/faculty/projects/ftrials/conlaw/estabinto.htm>

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

8. **Emphasis:** Students will examine various Founding Fathers in an attempt to get one elected as the nation's first president

**Habit of Mind: Recognize the importance of individuals who have made a difference in history, and the significance of personal character for both good and ill**

**Activity:** To begin this simple lesson, students will need to be refreshed on researching on the Internet; reminding them how to “source” and “corroborate” sites. This will hopefully make them more able to scrutinize websites for reliable sources versus unreliable or “less” reliable sources. Students will research various founding fathers in groups of three, choose one who is most qualified to become president, then present their candidate to the class who will act as the interview committee ultimately “electing” the first president. To begin, the class should develop a list of leadership qualities and preferable qualities for a president. Students should also examine the Constitution for official requirements such as citizenship and age requirements (35 yrs. old). The final list should be scrutinized by the teacher...instead of “strong” and “smart” the list needs to be more specific and try to get to the heart of qualities required. From there the students will get into groups and research (either from handouts you provide describing the accomplishments and flaws of these Founding Fathers, or from Internet sources) a Founding Father (teachers can give each group a person on which to focus e.g. group one might receive Thomas Jefferson to research). Students will then divide roles in the group. Each group of three should have a leader, reporter and recorder. The leader organizes the plans for the group. The reporter is charged with leading the presentation of the research, and the recorder is charged with writing or typing the information. Groups will be responsible for creating two documents, a cover letter and a resume as well as a brief presentation of the candidate. All of requirements should have mandatory information to be included. The cover letter for example, should include leadership characteristics the individual has exhibited, proven loyalty to the American cause, an understanding of the importance of the position of president. The last paragraph should articulate perceived responsibilities of the president (these can be gathered by the groups from the U.S. Constitution), and how their candidate will live up to those challenges. Incidentally, the documents will be written on behalf of the candidates, so they must be signed by the candidate himself (e.g. the leader of the group). In the resume, students may examine typical resume templates and follow them accordingly. If appropriate, the students may also include such information as marital status (For example, John Adams might include his wife Abigail since she was influential at the time). If you are daring, you may even want to enter Abigail Adams as a candidate also! This might throw an interesting spin on the activity and inspire some real discussion about the patriarchal nature of American politics. Once the resume and cover letter are completed, each group will present the candidate. The class will vote on the most



qualified person for the job as first president of the United States. For the “vote” each student will be required to write an essay as to why he or she has chosen this particular candidate. In this essay, students would include concrete examples of characteristics necessary for election. As an extension (depending on time) all groups could investigate their opponents to find any failures or misdeeds. For example, if I’m writing to get Washington elected, I might have students look at Jefferson’s flaws as well to gain a more complete picture of the candidate. Note: The idea of this lesson can be adapted to many eras in the American history course. For example, students may research Stephen Douglas and Abraham Lincoln for the 1860 election. This activity will have fewer candidates, but can still accomplish the same objectives.

**Sources:** <http://www.americanrevwar.homestead.com/files/FATHERS.HTM>

(this is a decent source for a celebratory description of the Fathers, but it may be good to get students to find another source examining...reminding them to use their research skills to examine the data presented on the site as credible or not)

<http://hotjobs.resumeedge.com/professionals/> then click on “after” under samples in the upper right hand portion of the page for a good resume example

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

9. **This lesson is from the History Channel Sourcebook Volume III.** Donna Sharer, High School Social Studies Teacher, Northeast High School, Philadelphia, PA  
**Emphasis:** To examine the encounters and exchanges between the Cherokee Nation and the European-American settlers, the US government and the US courts via the Indian Removal Act and various policies thereof

**Habit of Mind: Perceive past events and issues as they were experienced at the time, to develop historical empathy as opposed to present-mindedness**

**Activity: Day 1:**After reviewing the brief historical background provided, have students get into pairs for the “think, pair, share” activity. Present the question, *What is Manifest Destiny?* Then, present the John L. O’Sullivan’s 1839 quote, *Manifest Destiny*, as well as John Gast’s painting, *American Progress*. Allow each group to use the enclosed worksheet to develop a definition of Manifest Destiny. In the analysis of the painting, have students reflect on what images they see in the picture. There are so many small details, be sure to spend some time examining and reflecting on why Gast may have included them in his work (use the worksheet provided if possible). Have students then share the definitions developed while in their pairing and create a unified class definition of Manifest Destiny. Finally, explain to the students that they will be continuing to learn some details of Manifest Destiny the following day, specifically, details which led to the forced removal of Native Americans.

**Day 2:** First, reflect on the previous day’s information and reiterate the classroom definition of Manifest Destiny. Then introduce the students to the primary source of President Andrew Jackson’s 1830 speech to Congress regarding Indian Removal. Put students into groups and have each group assign a role within the group (one student should be the leader, one the recorder, one the reporter)...this is done to minimize the effect of one student in the group performing all or most of the duties him or herself...Students will then use the analysis worksheet to complete their examination of the speech. Students will then present their findings to class. In their presentations, have students express what phrasing or information stood out for them, and their opinions of the handling of the “Native American Problem”. Finally, as a class decide on the message of the speech.

**Day 3-4:** If time permits, the final portion of this lesson involves students examining various websites and creating a short, (3-4 slide) PowerPoint presentation. The lesson involves dividing the class into 11 groups, each with a specific topic and assignment from the website(s). Although somewhat time consuming, it is an excellent way to see a broader spectrum of debate regarding these policies. See the attached worksheets from the History Channel for specific group assignments and websites.

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

**10. Emphasis:** Various Abraham Lincoln speeches...Who is the real Lincoln? This activity is effective in illustrating that Lincoln's views on slavery and race were not as clear as usually portrayed in textbooks.

**Habit of Mind: Recognize the importance of individuals who have made a difference in history, and the significance of personal character for both good and ill**

**Activity:** Begin with asking students what they know about Lincoln and his views on slavery and race. Typically, students have a clear understanding of Lincoln as "freeing the slaves" This activity may help to cloud their ideas of Lincoln but also serve to demonstrate that one's views are shaped by circumstances and experiences. Have students read the excerpts from the Lincoln Douglas debates as well as the excerpt from the 1841 letter to his friend Mary Speed which help explain the complexities of Lincoln's views on race. Have students write down various phrases or sentences which confuse the formerly clear picture we had of Lincoln. In an effort to keep students from now seeing Lincoln as a racist (yet another bad generalization) have students write an essay describing the views of Lincoln and speculate reasons as to why he had those conflicting views....remind students that he as a politician and running for office at the time of the debates and how that may have played a role in his statements, while the letter was written for private viewing and much earlier in his career.

**Sources:** Lincoln Douglas debates excerpts, Mary Speed Letter

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

**11. Emphasis:** As an introduction to the age of photography, this is an activity designed to get them to analyze photographs as a historian might. And in the next activity students will use these skills to analyze photographs from the Civil War, so this is a precursor to that activity.

**Habit(s) of Mind: Distinguish between the important and the inconsequential, to develop the “discriminating memory” needed for discerning judgment in public and personal life; Appreciate the often tentative nature of judgments about the past, and thereby avoid the temptation to seize upon particular “lessons” of history as cures for present ills**

**Activity:** Students will be provided the three photographs taken in New York City on September 11, 2001. I chose these images because they will be familiar to the students and therefore an easy transition to examining images more carefully for details and as evidence. Once the students receive the photographs, they are to answer the following questions regarding each picture:

1. Where was this photo taken?
2. When was it taken?
3. Why do you suppose the photographer took this particular picture (e.g. from this angle, with these subjects, with this background)?
4. If there are people in the picture, describe the emotion you see in the face(s) of the people in the picture.
5. Now cover half of the picture with a blank piece of paper and describe in detail the picture you see now. Then do the same for the other side.
6. Create a title for this image
7. In your own words, why is this image important to future students learning American history?

**Sources:** Three images of the World Trade Center attacks from September 11, 2001, and student journal.

**American History**  
Lesson Plan/Activity Capsules  
Semester 1: Pre-Colonial Period-1865

**12. Emphasis:** Students will be able to create a newspaper account and editorial of the Battle of Antietam from photographic analysis.

**Habit(s) of Mind:** Distinguish between the important and the inconsequential, to develop the “discriminating memory” needed for discerning judgment in public and personal life; Perceive past events and issues as they were experienced by people at the time, to develop historical empathy as opposed to present-mindedness

**Activity:** To begin, students need to be aware of the differences between newspaper articles and editorials. I would often use newspapers or National Public Radio audio found at [www.npr.org](http://www.npr.org) to play both types for students. From the audio, I would play a news broadcast story and compare it to a commentary presented by Daniel Shore (an editorial). Or use a newspaper to accomplish the same goal. It often leads to a discussion of fact versus opinion, and what is included in each. From that, I explain to students the inverted pyramid concept typical of a news article in which the most important “lead” comes first (including who, what, why, when, where, and how) then moves toward less vital and more broad facts (thus the “inverted pyramid”). The next idea to explain to students is how to analyze visual media such as photographs...see photograph lesson number 11. Once students are familiar, then you can move to the activity...Divide the class into groups of three. Within each group will be a 1. “fact checker” or editor, 2. a writer/researcher and 3. an interested and informed citizen. Students will be given the two photographs and each group will **write a newspaper account** of the battle, including speculation of the conversation between General McClellan and Lincoln in the photograph. Students can use textbook sources (or other available sources) to gather factual information of the battle. Additionally, the groups must attach a title and a caption to each photograph using the skills learned from the photograph analysis activity. With the help of the fact checker, the informed citizen in the group will then **develop an editorial** for the newspaper as well. As the teacher, you must assign certain groups to be from Southern or Northern cities and develop the editorial accordingly. As an extension, you can have them create additional articles for the newspaper including a masthead with newspaper title and city of origin.

**Sources:** Two photographs from Battle of Antietam, newspapers to teach differences between news accounts and editorials, computer with Internet access (if desired), and factual accounts of the Battle of Antietam either from lecture notes, textbook accounts or other sources.

APPENDIX E  
PILOT STUDY INTERVIEW QUESTIONS

- 1. How is the history of your own life different or similar to the history you learn in school?**
- 2. Why is learning history important to you and others who live in America?**
- 3. What is involved in being a historian?**
- 4. How have you been taught to read historical documents?**
- 5. In the documents you read for class, what kinds of strategies do you employ to better understand them?**
- 6. What kinds of thought processes do you think are included in choosing the documents you read in class or in your textbooks?**
- 7. How does the use of primary sources affect beliefs and “facts” about history?**
- 8. Has reading a historical document affected your belief about an historical event? If so please explain.**
- 9. What do you do when you come to a word you don’t know?**
- 10. How do you handle reading conflicting narratives in history...e.g. what strategies might you employ?**
- 11. What might be some advantages and disadvantages of using your history textbook as your only source of information about history?**
- 12. What do you do when you want to be sure to understand a passage or chapter from this textbook?**
- 13. Does this strategy differ if you were trying to learn the information for a true/false test?**

APPENDIX F  
THINK-ALoud QUESTIONS

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I. Metacognitive strategies

- What has been your experience with using primary sources this semester in your American history class?
- How do you measure the quality of the sources you've encountered this semester in American history class?
- How has engaging in historical thinking helped you to do that?
- What "study" strategies have you used successfully to help you better understand the primary sources you've encountered?
- What strategies do you use to monitor your reading comprehension as you read these sources?
- How do these strategies help you figure out what is being said in these sources?
- What have you learned about corroborating sources and using multiple sources to better know the event in question?
- How might it be beneficial to you to think about your comprehension of the story or document as you read it?
- Does it help you to discuss what you've read with your teacher and other students to get a better understanding of the text?

II. The nature of their thinking about historical content

- How do historians know what history to study?
- What if the history we're talking about has no living "eyewitness" account like...Did the changing role of women in the second half of the twentieth century strengthen or weaken American social cohesion? (Lee, 2005, p. 37). How do historians answer these types of questions? What strategies might they use to give history students an answer?
- What is bias?

- If bias is detected in a source, does this render the source useless? Why or why not?
- How might a historian deal with bias when he or she detects it?
- When thinking about and studying people of the past, do you think they were more or less clever than we are today...or about the same? Why?

III. Lesson content: Two versions of the same event (e.g. Boston Massacre). Students will evaluate and answer...

- Why are there different interpretations of this same event?
- Which one(s) is more credible? What makes you say so?
- How can historians best give us a picture of the events of history as they happened?

IV. This section will require students to read the story of St. Brendan, and his journey to the New World in 500AD...long before Erikson or Columbus

- Does this story seem credible to you?
- For such a significant event, why is this the first time you're encountering it?

V. The final section will require the student to examine a painting of an event in history. The painting will be of an event or at least part of an event with which the students are at least somewhat familiar (e.g. Washington crossing the Delaware River)

- How did the artist know what the event looked like if he was not present there?
- Can we trust that this is that one would see if one had been present?
- If not, is this depiction credible?
- Why might an artist generate a representation of an event if he or she wasn't there to witness it?



## APPENDIX G

### LESSON PLAN OBSERVATION FORM

**Observer,**

**Please complete the following form as you observe the teacher implementing the lesson plan/activity. Also, please indicate the title of the lesson you are observing. This title can be found on the lesson plan/activities front cover page. Additionally, fill in appropriate indicator for each observation point. The first group of questions should be completed using the Likert scale responses while the second set of questions should be completed using a “yes” or “no” response. Thank you for your time in assisting me with this task.**

Lesson Observed: \_\_\_\_\_

Date Observed: \_\_\_\_\_

Likert Scale: “strongly agree (SA), agree (A), neither agree nor disagree (N), disagree (D), strongly disagree (SD)”

- Lesson goals clearly stated to students before beginning\_\_\_\_\_
- All lesson materials are present at beginning of class\_\_\_\_\_
- Transitions within lesson are done with minimal interruptions or distraction (students remain on task)\_\_\_\_\_
- Questions posed relate to topic content\_\_\_\_\_
- Follow-up questions are asked by teacher to expand on topic\_\_\_\_\_
- Unrelated discussion is quickly re-directed back to the lesson goal\_\_\_\_\_
- Student responses are integrated into the overall topic discussion/deliberation\_\_\_\_\_
- Directions of lesson (provided to you) are followed\_\_\_\_\_
- Students engaged in lesson (visibly listening, attentive)\_\_\_\_\_
- Teacher includes historical thinking “habit of mind” in explanation)\_\_\_\_\_
- During discussions/deliberations, students are encouraged to respond\_\_\_\_\_
- Student responses are managed so all have a chance to and feel encouraged to participate\_\_\_\_\_

Yes/No

- Students are encouraged to examine sources for evidence of bias\_\_\_\_\_
- Students are encouraged to examine sources for the intended audience of the source\_\_\_\_\_
- Students are encouraged to examine sources for author credibility\_\_\_\_\_
- Students are encouraged to put the time frame of the source into context \_\_\_\_\_
- Students are encouraged to read sources with the aforementioned examinations in mind\_\_\_\_\_

APPENDIX H  
SCHOOL CULTURE INTERVIEW QUESTIONS

1. How much influence do your teachers have on establishing curriculum for the school?
2. How much influence do teachers have on selecting content of courses? On selecting teaching methods? Grading practices?
3. How involved are teachers in school decision making and policy development?
4. To what extent do you agree with this statement: Teachers are involved in making decisions that affect them?
5. How do teachers' and students' views of their work define their conception of instructional and learning situations or changes to those situations?
6. What defines the boundaries between teachers' or students' acceptance or rejection of curricular innovations or changes (e.g. content literacy) based on how they view their position in the class structure of the school?
7. How disposed are your teachers to getting involved in and contributing to curricular and other policy decisions at your school?

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## BIOGRAPHICAL SKETCH

Anthony Michael Pellegrino received his Bachelor of Arts degree in social science education from Flagler College in St. Augustine, Florida. Upon earning his degree, he began work for the St. Johns County, Florida Adult Education Department. As a teacher in adult education, Anthony taught GED preparation and adult high school courses to inmates at the St. Johns County Detention Center as well as at the adult education facility at First Coast Technical Institute in St. Augustine. After four years, he moved to become a social studies teacher at a St. Johns County high school. In his four years there, he earned the teacher of the year award for the school while teaching social studies and journalism. He became a lead teacher and eventually career specialist for the school. In 2001, Anthony began work on a master's degree in educational leadership at the University of North Florida in Jacksonville, Florida. Upon completion of this degree in 2003, he was appointed to the coordinator of adult education position for St. Johns County. Soon thereafter he was promoted to add coordinator of instructional programs at First Coast Technical Institute to his job duties. In December 2004, Anthony left the St. Johns County school system to pursue a doctoral degree in social science education at Florida State University in Tallahassee. In 2007, after two and one-half years, he completed his doctoral degree at Florida State University.