

ABSTRACT

LIST, JONATHAN SCOTT. Historical Thinking in Information Rich Environments: An Exploration of Eighth Grade Students' Actions Locating and Analyzing Digital Historical Sources. (Under the direction of John K. Lee, PhD).

This study uses a bounded case to investigate how students engage in historical inquiry using digital historical sources. Drawing on research and theory related to historical thinking, digital history and new literacies, this study explores how students located historical documents in an online archive and then analyzed those documents given online access to related historical information. Historical thinking deals with how expert historians can engage in the development of historical synthesis, as well as how students can learn to analyze historical sources. Key concepts include summarizing, contextualizing and corroboration (Barton, 2005; Wineburg, 1991; Wineburg, 2001). Digital history research examines how the digitization of historical materials can influence access of historical materials and presentation of historical analysis (Ayers, 1999; McClurkin & Slezak, 2006). New literacies explores how new technologies influence the process of finding and using information, and has important implications for the use of digital history archives in the classroom. Particularly, students need to understand how to navigate online archives, switch between various roles and tasks during the inquiry process (New London Group, 1996; Leu, 2001).

The key findings from this research are that students struggled with document selection, were unable to make efficient use of information from the Web, and had difficulty integrating disconfirming evidence into their answer to the historical inquiry question.

This study reveals that there are missing pieces to the puzzle of how students engage in historical inquiry using digital historical sources. The findings of this study suggest that

the process of locating and analyzing digital historical sources is complex and students need specialized support when searching for documents and when locating and using related online information.

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Historical Thinking in Information Rich Environments: An Exploration of Eighth Grade
Students' Actions Locating and Analyzing Digital Historical Sources

by
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A dissertation submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

Curriculum and Instruction

Raleigh, North Carolina

2012

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DEDICATION

This dissertation is dedicated to my family. My loving wife Carrie who has put up with all of my eccentricities and odd working habits over the past several years deserves first billing in my dedication of this work. In addition to my wife, my children, who I love deeply, have been understanding beyond their years.

In addition to my family, I need to dedicate my dissertation to my advisor, Dr. John K. Lee. Without his direction and support, I could never have completed this work. His guidance has been invaluable, and I treasure the time I have been able to spend working alongside him.

BIOGRAPHY

Jonathan comes from a long line of steel workers. His grandfather and father worked in a steel mill in Youngstown, OH, until it closed down. After which his grandfather retired and father joined the Navy and did odd jobs until he returned to working with Steel during Jonathan's childhood. Both of Jonathan's parents have had some college classes, but neither completed a college degree. Despite this lack of higher education, Jonathan's parents were adamant that both Jonathan and his brother go to college and get at least Bachelor's degrees.

While Jonathan's brother pursued a degree in Chemical Engineering, Jonathan focused on the humanities, receiving a BA in History. After college, Jonathan went to France to teach English for a year. Upon his return to the United States, Jonathan earned his Master's in Education and began working with children who have special needs.

After supporting families who have children with special needs for several years, Jonathan obtained a teaching position in rural North Carolina. Through that teaching position, Jonathan experienced a professional development seminar at North Carolina State University. Upon returning to his home after the seminar, Jonathan completed his application to enroll in the PhD program at North Carolina State University.

ACKNOWLEDGMENTS

I would like to acknowledge the help and support of all my professors, including Dr. Hiller Spires, Dr. Meghan Manfra, and Dr. Jason Osborne. Each of these professors has given me insight into the world of academia beyond the classroom, and I will never forget them. I would also like to acknowledge my classmates with whom I collaborated and developed ideas. My classmates introduced me to new ideas and perspectives beyond the curriculum.

In addition to all of the formal connections I had through classes, I would like to thank Nathan Stevens and Anne Akers for their support through the library systems. Rarely have I encountered media specialists who have the skills and knowledge to support both students and professors.

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Chapter 1: Introduction

Things just happen, one after another. They don't care who knows. But history... ah, history is different. History has to be observed. Otherwise it's not history. It's just... well, things happening one after another. – Terry Pratchett, *Small Gods*, p. 3.

Some may say that history just happens. In reality, things happen and history is created when those things are recorded and analyzed. Important events occur every day that never find a place in the annals of the great volume called history. For example, new areas of historical study have recently emerged to examine the story of women and the private lives of individuals (Aries, Duby, Perrot & Goldhammer, 1990; Rowbotham, 1999). New historical sources supporting inquiry in these areas have emerged in tandem as historians expand their research.

Wineburg (2001) argues that the construction of historical narrative is not a natural process, but requires work and specific skills relevant to the process of historical thinking, including sourcing, contextualizing and corroborating. This study is about the acquisition of and engagement in historical thinking skills as students conduct historical inquiry and compose narratives from those inquiries. Specifically, this study examines the influence of an information rich environment facilitated through online technologies on the process of historical inquiry in a public school class.

Social studies teachers are integrating technology into their classrooms (Bachen, Raphael, Lynn, McKee, & Philippi, 2008; Bennett, 2005; Doolittle & Hicks, 2003; Lee & Friedman, 2009; Manfra & Hammond, 2008). In a 2008 study, Bachen et al, explored the influence of technology on civic engagement, pointing out that interactive websites provide a

way for students to express their civic ideals as well as to practice providing their own content in civic discourse. In related work, Bennett (2005) outlined several performance indicators for teachers to use, noting that social studies teachers are “expected to be model citizens” (p. 38). Being model citizens, in Bennett’s view, requires teachers to teach and use technology effectively and responsibly. Doolittle and Hicks (2003) expanded our understanding of how social studies teachers use technology arguing that online environments can support constructivist-oriented learning. Lee and Friedman (2009) point out several potential uses and pitfalls of technology in the social studies classroom. One of the potential uses they identify is the ability to access materials and experts in the classroom, regardless of distance. The difficulties include not being able to verify the authenticity of some sources or materials.

Questions remain regarding how students engage historical inquiry in information rich environments. Addressing these questions requires an examination of three areas: (a) historical thinking, (b) digital history, and (c) new literacies. Wineburg (2001) argues that expert historians and novice historians think differently, but that novice historians can be taught to think like expert historians. Digital history includes the process of putting historically significant materials into a digital, and often online, form (Ayers, 1999; Cohen & Rosenzweig, 2005a). New literacies research, in part, examines how individuals engage in reading activities in digital settings (Coiro, 2009). Historical inquiry using digital historical sources represents a confluence of these fields, thereby necessitating an examination of all three areas.

Researchers of historical thinking have developed various instructional scaffolds to support students as they develop document-level historical thinking (Barton, 2005; Hicks & Doolittle, 2008; Nussbaum, 2002; Seixas, 1998; Wineburg, 2001). Hicks, Doolittle, and Ewing's (2004) model supports the processes of summarizing, contextualizing, inferring, monitoring and corroborating (SCIM-C). This model is intended to aide students as they process historically significant documents. While research has been conducted on using SCIM-C to support students' uses of print resources (Hicks & Doolittle, 2008; Lusk, Evans, Jeffrey, Palmer, Wikstrom & Doolittle, 2009), little is understood about historical inquiry using SCIM-C in information rich environments.

Teachers are increasingly able to access technology in the classroom (Kay, 2006). Access to technology allows teachers to begin integrating digital history archives into their classroom (Cohen & Rosenzweig, 2005a; Cruikshank, Daniels, Meissner, Nelson, & Shelstad, 2005). Increasingly, teachers are engaging their students in historical thinking using online historical archives (Molebash, 2004; Street, 2005). We might describe the settings where such activities are conducted information rich environments. An information rich environment is some location (either digital or physical) where learners can access large amounts of information and various resources to aid in the process of conducting inquiry.

Understanding historical inquiry in information rich environments has the potential to complicate or challenge our current understanding of historical inquiry. Digital archives allow students to have access to previously inaccessible documents. Teachers can use these digital archives to help create meaningful experiences for students to engage primary source historical documents (Hicks, Carroll, Doolittle, Lee & Oliver, 2004; Swan & Hofer, 2008).

Digital history archives allow students and scholars to access materials without travelling to remote locations. Materials that had been previously only available in a physical form are available digitally and collected into cohesive online archives (Cruikshank, et al, 2005; Saunders, 2005). Access to information allows teachers to construct lessons to encourage authentic historical inquiry, drawing from a large set of resources.

Problem Statement and Questions

Three overlapping conditions frame the research proposed here. First, research on historical thinking, or the process of analyzing historical documents, provides a framework for teaching students how to think historically (Barton, 2002; Hicks, Doolittle, Ewing, 2004; VanSledright, 2002; Wineburg, 1991; Wineburg, 2001). Second, digital history provides teachers with a framework for accessing materials students can use to learn the process of historical thinking (Ayers, 1999; Cohen, 2004; Lee, 2002). Third, new literacies theory redefines the ways students' engage information (Coiro, 2009; New London Group, 1996; Leu, 2001). Although researchers have identified important aspects of historical thinking, and teachers are beginning to use digital historical resources in information rich environments to teach historical thinking skills, to date, little empirical research has been conducted on how students engage in historical thinking in an information rich environment. Among the research that has been conducted, Swan & Hofer, 2008 examined how teachers support "historical thinking with Web-based, digital primary source documents" (para. 1). They found that teachers were increasingly using technology to find and deliver content to students. They also noted that students were able to present the results of their work to the class using technology. Hicks, Carroll, Doolittle, Lee and Oliver, (2004) found that

undergraduate students were able to learn to summarize, contextualize and make inferences using historical documents. In addition, they found that the students' ability to engage in historical inquiry improved. Given this context, the questions for this research are:

- How do students conduct historical inquiry in an information rich environment?
- How does an information rich environment influence the document-level analysis of historically significant materials?

Theoretical Framework

This study is situated within the field of historical thinking, with additional understandings drawn from digital history and new literacies. The goal of the research is to better understand how students engage in a process of historical inquiry using digital historical sources in information rich environments. Digital history informs this study by establishing an understanding of how digital archives are created and how they are organized (Anderson & Tedd, 2005). New literacies frame this study with regard to our understanding the process of engaging information in an online setting (Coiro, 2003). Each of these fields contributes something unique to the overall framework of this research.

Historical Thinking. Historical thinking describes the processes that expert historians and novice students of history use, including a range of thinking skills that support disciplinary inquiry. The process of document level historical thinking includes tasks such as identifying pertinent source information, contextualizing historical sources and information, corroborating emerging claims, making inferences, and monitoring the progress of one's work (Barton, 2005; Britt & Aglinskas, 2002; Hicks & Doolittle, 2008; Wineburg, 2001).

Understanding these disciplinary thinking skills serves to inform educators about the meaningful integration of inquiry-based activities into the social studies classroom.

Wineburg's (1991) research on historical thinking demonstrates a difference between expert and novice historical thinking. Some of these differences are evident in document level historical thinking skills such as sourcing, contextualizing, and corroborating. Wineburg (1991) found that experts were more likely to use historical inquiry heuristics than novices. While skills such as sourcing are expert in practice, novices can be taught to engage in expert historical thinking (Beyer, 1987; Beyer, 2008; Britt & Aglinskas, 2002; Rouet, Favart, Britt & Perfetti, 1997; Seixas & Cark, 2004; Wineburg, 1991). SCIM-C allows teachers to support students as they to engage in activities that assist in developing historical thinking skills (Hicks, Doolittle & Ewing, 2004; Hicks & Doolittle, 2008). One key to teaching historical inquiry is to have students engaging historical documents. Digital history presents a way for teachers to locate and use historical documents in a classroom.

Digital History. Digital history includes the digitization and presentation of historically significant materials in digital environments. The digitization of print resources and physical archives introduces a number of complexities. For one, the inclusion of digital resources in an archive may result in the replacement an original archival context and possible addition of new layers of context (Cohen, 2004; Cruikshank, Daniels, Meissner, Nelson, & Shelstad, 2005; Vajcner, 2008).

When archivists digitize materials, organizational structure must be designed in order to allow researchers easy access to the materials. Some archives attempt to establish organization by adding contextual connections between various materials, which relies on

historical interpretation of the materials (Cohen & Rosenzweig, 2005b; Cruikshank et al., 2005; Segell, 2005). Additional context does not inherently reduce the value of an archive for social studies educators, but requires that teachers carefully select archives for use in class.

Teachers can leverage digital history to help create meaningful experiences for students to engage primary sources and historical documents (Hicks, Doolittle, & Ewing, 2004; Hicks, Doolittle, & Lee, 2004; Lee & Friedman, 2009; Seixas & Clark, 2004; Swan, 2005). Digital history also allows students and scholars to access materials without travelling to a remote location by presenting the information online (Cruikshank et al., 2005; Everitt, 2005; Hicks, Doolittle, & Lee, 2004; Saunders, 2005). The act of putting these artifacts into centralized, searchable, easily accessed archives allows students and teachers to find and leverage documents and materials that had been previously out of reach.

New Literacies. New literacies research suggests that students need new skills to be able to engage digital materials (Coiro, 2009). These new literacy skills include game-based literacies, new media literacies, search skills and online reading and comprehension (Coiro & Dobler, 2007; Iding, Crosby, Auernheimer, & Klemm, 2008). The skills most informative for this study are those of online reading and comprehension (Coiro, 2003; Coiro & Dobler, 2007) and search skills (Chiafari, Chiazzese, Seta Merlo, Ottaniano & Allegra, 2010). Understanding how to evaluate search results and meaningfully select from those results is important in the process of engaging information rich environments.

Purpose and Implications

The purpose of this research is to examine what students do when they engage in historical inquiry in an information rich environment. As information rich environments

become more common in schools, teachers and researchers need to understand more about how students engage in a range of learning activities including the process of historical inquiry. This study has practical significance for social studies teachers who want to engage students in historical inquiry using digital history (Bachen, Raphael, Lynn, McKee, & Philippi, 2008; Brown and Dotson, 2007; Hicks and Doolittle, 2008). Although information rich environments are not ubiquitous in American schools today, this study engages hardware and resources such as laptops, online archives that are becoming available to teachers in public schools.

Summary of Methodology

This study relies on case study methodology with a research framework grounded in naturalistic inquiry (Athens, 2010; Merriam, 2009; Stake, 1995; Thomas, 2011). According to Thomas (2011), case study should be viewed as a method for research in which specific methods of data collection are leveraged to examine a policy, project program or system. Furthermore, Stake (1995) argues that case studies are preferred when one is attempting to understand current events in which relevant behaviors cannot be completely manipulated. What follows is a brief synopsis of the research methods used in this study that will be fully examined in chapter three.

Naturalistic inquiry as a research framework provided guidance throughout the research process. In the planning stages, naturalistic inquiry required authenticity in the activity being studied. During the process of collecting data, direct quotes from the participants were preferred to relying fully on observations. During the analysis stage, naturalistic inquiry provided a framework for analyzing the data to ensure accurate

descriptions and clarity with regard to the relevant research ideas (Athens, 2010). Athens (2010) uses the term ideas as a construct within naturalistic inquiry to refer to all aspects of the research, including the research question and themes drawn out from the data (p. 96). Naturalistic inquiry served as a guide for all aspects of this research and provided a lens to ensure high-quality outcomes.

Merriam (2004) states that case study needs to include (a) a definition of the case being studied, (b) a determination of relevant data to be collected and (c) a plan for what should be done with the data once collected. In this research, the case study focused on four students in a class as they engaged in a historical inquiry activity in an information rich environment. This class was targeted primarily because of the convenience of location, as well as accessibility for research purposes.

Students were engaged in an inquiry process using online historical resources and the SCIM-C model to produce essays that use historical sources as evidence. SCIM-C and specific new literacy skills, (i.e., online reading comprehension), were used to support students' in their analysis of the documents. Combined with new literacies skills, the SCIM-C method was used to support students as they analyzed historical documents and established a theme from which they produced their essay (Coiro & Dobler, 2007; Hicks, Doolittle & Ewing, 2004). Students were encouraged to engage a topic of interest within the constraints of a specific curricular topic.

Data were collected throughout the exercise using a variety of techniques. Students participated in think aloud protocols and interviews. The researcher collected student products, including the products of their SCIM-C document work and their final essay. The

teacher was interviewed on several occasions and classroom observations were conducted prior to the start of the historical inquiry activity.

The data were analyzed using Coding Analysis Toolkit (Lu & Shulman, 2008). Thematic analysis was used to analyze the data and draw out codes and themes from the data in an inductive manner (Lu & Shulman, 2008). This analysis took place during two stages, exploration and investigation, as outlined by naturalistic inquiry (Athens, 2010).

Definition of Terms

For the purposes of this research, when these terms apply to the data being collected, the following definitions were used. Some of these terms also appear in this text outside of the context of these definitions.

Summary. Summary is a process of identifying and recording the key facts in an historical document.

Contextualize. Contextualizing is a process of situating an historical document within a geographical and temporal period.

Inference. Inference is a process of drawing forth ideas from an historical document.

Corroboration. Corroboration is a process for validating inferences from historical documents, as well as for developing a deeper more nuanced understanding of those inferences.

Digital Historical Sources. Digital history sources are historically significant materials that have been digitized and are accessible through a digital archive. These sources are often collected based on topic and are often available using the Internet.

Information Rich Environment. An information rich environment is a conceptual description of an environment in which students have immediate access to a variety of information. For the purpose of this research, the information rich environment will be provided by a Web-based digital history archive.

Chapter 2: Review of Literature

The research literature presented here situates this study within historical thinking research, and draws connections to the related areas of digital history and new literacies research. The primary aim of this study is to understand how students engage in historical inquiry in an information rich environment; the following review of the literature provides context for understanding issues related to historical inquiry in an information rich environment.

Scope and Sequence

The purpose of this literature review is to situate the study within the fields of historical thinking, digital history and new literacies research. Historical thinking research is presented first in this literature review because it serves as the core concept in the theoretical framework for the research. Digital history and new literacies are related concepts that build out the theoretical frame for this research. In the context of this study, digital history research helps to illustrate how digital archives are constructed and how their construction can support historical inquiry. New literacies research related to online reading, comprehension and search skills serve as an additional frame.

Historical Thinking

This section examines historical thinking research in the context of more general thinking skills (Beyer, 2008; Martin & Wineburg, 2008). Although historical thinking is the process by which expert historians use source materials as evidence to construct an interpretation, the general process of thinking does not originate in history, rather the process

of thinking is a field unto itself (Beyer, 1987; Beyer 2008; Paul, Binker, Martin, Vetrano & Kreklau, 1989; Wasserman, 2009).

Thinking, in general, has long been a core area of education research (Beyer, 1987; Paul et al., 1989), and has recently been highlighted by the Partnership for 21st Century Schools (Shaw, 2009). Much of that research has focused on gaps between novice and expert thinking (Beyer, 1987). Novice thinkers in all content areas lack the skills, stances and dispositions that support and drive effective thinking (Beyer, 1987). In contrast, Beyer (1987) writes that expert thinking, “requires deliberate, continuing instruction, guidance, and practice in order to develop to its full potential” (p. 2). Educators need to understand that thinking skills must be taught, if they are to be effectively utilized (Beyer, 1987). Toward that end, thinking has been well researched by a variety of individuals in different content areas (Beyer, 1987; Beyer, 2008; Drake & Brown, 2003; Martin & Wineburg, 2008; Wineburg, 2001).

Thinking comprises various skills, strategies and operations. Activities such as recalling, analyzing and detecting basic logical fallacies are considered skills. Strategies involve complex, possibly sequential activities, and often rely on learned skills. Operations include both skills and strategies, and can combine several skills and or strategies into a single category of operations (Beyer, 1987). Beyond skills, strategies and operations, students can also develop stances and dispositions to use the correct operation in the correct situation (Beyer, 1987; Mathews and Lowe, 2011; Seixas, 1998). Stances allow experts to think about materials within a specific context (Beyer, 1987; Wineburg, 2001). Questioning, historical perspective, critical evaluation and empathy are all examples of stances within the

discipline of history. Dispositions are attitudes that encourage individuals to engage in thinking activities. Dispositions in history include being well informed, using credible sources, seeking / giving reasons, suspending judgment when appropriate, and seeking sufficient evidence and reasoning (Beyer, 1987, pp. 211-213).

Stances and dispositions help students to engage in expert thinking as well as help teachers to understand how teaching skills can be taught. Once these dispositions are understood, teachers can begin engaging students in operations. There are two kinds of operations: cognitive operations and metacognitive operations. Cognitive operations include decision-making, critical thinking, processing and recalling. Meta-cognitive processes include processes such as planning, assessing, and monitoring (Beyer, 1987).

Within the discipline of history are several unique cognitive operations (Barton & Levstik, 2010; Beyer, 2008; Wineburg, 2001). Historical thinking describes the thought process that expert historians and novice students of history use, including a range of thinking skills that support disciplinary inquiry. Document-level historical thinking skills include tasks such as identifying pertinent source information, contextualization, corroboration, the process of making inferences, and monitoring the progress of one's work (Barton, 2005; Britt & Aglinskas 2002; Hicks & Doolittle, 2009; Hicks, Doolittle, Ewing, 2004; Rouet, Britt, Mason, & Perfetti 1996; Wineburg, 1991). Understanding these disciplinary historical thinking skills, as implemented in online environments, can help to inform educators about ways in which students can conduct historical inquiry in an using digital historical sources..

Wineburg's (1991) research on historical thinking reveals a difference between expert and novice historical thinking. Some of these differences relate to document level historical thinking skills such as sourcing, contextualization, and corroborating. Wineburg (1991) found that experts were more likely to use a sourcing heuristic than novices were. While skills such as sourcing are expert in nature, novices can be taught to engage in expert historical thinking (Beyer, 1987; Beyer, 2008; Britt & Aglinskas, 2002; Hicks, Doolittle & Lee, 2004; Rouet et al, 1996; Seixas & Clark, 2004; Wineburg, 1991). Rouet, Favart, Britt & Perfetti (1996) examined the influence of content-specific skills in historical inquiry. Beyer (1987 & 2008) argues that these thinking skills can and should be taught in schools. Britt & Aglinskas (2002) examined the ways that technology can support the development of skills related to sourcing information during historical inquiry.

Purpose of Teaching Historical Thinking. Often history teachers put information in front of students and expect them to simply recite, memorize and recall ideas. The teaching of historical thinking skills, on the other hand, is a much more detailed process. In recent years, researchers have discovered that students can successfully engage historical thinking skills as early as elementary school and continue improving their historical inquiry skills throughout their education (Alibrandi & Sarnoff, 2006; Alleman, Knighton & Brophy, 2007; Barton, 2002; Brophy & Alleman, 2002; Fragnoli, 2005).

By engaging historically significant materials directly, students are able to develop their own understanding of history. Learning to think like a historian allows students to learn facts and develop understandings of historical time and narrative (Barton, 2002). Properly utilized primary sources serve to cultivate students' understanding of history (Barton, 2005).

Historical thinking involves sophisticated experiences that stretch from elementary grades through college. Historical inquiry can support the development of civic understanding (Barton & McCully, 2007). Historical inquiry can also provide students with a sense of agency, or the ability to act on decisions to bring about a desired objective (Barton, 2012). This sense of agency, if supported correctly, can promote students' engagement in social, economic and political issues (Barton, 2012). By providing students opportunities to make meaning of historical events and develop a strong sense of agency, students can become more effective democratic citizens.

Teaching Historical Inquiry Skills. Historical thinking involves a complex set of activities that require specific processes for analyzing historical material and composing interpretations from that analysis. When teaching students who are novice historical thinkers, teachers can use a variety of pedagogical scaffolds to support students' acquisition of historical thinking skills. SCIM-C is a specific pedagogical scaffold that has been particularly useful in supporting the development of students' historical thinking (Hicks & Doolittle, 2008; Hicks, Doolittle, & Ewing, 2004).

The SCIM-C model includes five specific processes that can be broken into three distinct groups of actions: (a) summarizing, contextualizing and inferring, (b) monitoring, and (c) corroborating. Summarizing, contextualizing and inferring are all actions that require students to work directly with a single document and support the development of thinking skills. Prior knowledge and outside sources can be used, but the intent of these steps is to understand the document (Hicks, Doolittle, & Ewing, 2004). Monitoring is a meta-cognitive process. When monitoring, students engage in an internal dialogue to ensure that have

engaged the analysis in as much depth as possible. Corroboration encourages students to support their arguments with multiple sources. SCIM-C should not be viewed as a series of discrete steps, but rather as a series of interrelated tasks (Hicks, Doolittle, & Ewing, 2004).

SCIM-C

Summarizing. Summarizing is the foundational task of the SCIM-C process. During this step, students are asked to engage the document directly. The focus of the document summary is to elucidate the facts contained in the document. These four questions help guide students as they summarize a document:

1. What type of historical document is the source?
2. What specific information, details and/or perspectives does the source provide?
3. What is the subject and/or purpose of the source?
4. Who was the author and/or audience of the source? (Hicks, Doolittle, & Ewing, 2004, p. 221).

By focusing on the facts of the document itself, students can establish a foundation for making further inferences regarding the document. If the document is a simple invoice, the student need not concern herself with perspectives or points of view during the process of Inferencing (Barton, 2005; Hicks, Doolittle, & Ewing, 2004).

Contextualizing. The process of situating a document with a specific time and space is contextualization. Identifying the time and space during which a source was created helps students to identify stances that aid in understanding the meaning/intent of the source.

Meanings of words and images change over time and contextualization helps to reveal some

of these differences (Hicks, Doolittle, & Ewing, 2004; Leinhardt & Young, 1996). This stage is guided by four questions:

1. When and where was the source produced?
2. Why was the source produced?
3. What was happening within the immediate and broader context at the time the source was produced?
4. What summarizing information can place the source in that time and place?

(Hicks, Doolittle, & Ewing, 2004, p. 221).

Contextualization serves as a bridge between summarizing and inferring. When contextualizing, students need to draw on the factual information from the task, as well as possibly make some inferences as to the intent of the source. When students establish a context for a document, they develop a stance to understand the document from within its own time (Beyer, 1987; Barton, 2005; Hicks, Doolittle & Ewing, 2004).

Inferring. Inferring requires that students revisit important facts gleaned from the source, and place those facts within the original context of the source in order to draw forth insight and understanding. This process is guided by four questions:

1. What is suggested by the source?
2. What interpretations may be drawn from the source?
3. What perspectives or points of view are indicated in the source?
4. What inferences may be drawn from absences or omissions in the source?

(Hicks, Doolittle, & Ewing, 2004, p. 221).

Inferring allows students to move beyond the facts of the documents to begin exploring the broader implications of the document in a historical investigation (Hicks, Doolittle, & Ewing, 2004; Monte-Sano, 2011).

Monitoring. Beyer (1987) indicates that teaching thinking requires the teaching of metacognitive skills. In the SCIM-C heuristic, metacognition is supported through the explicit support of monitoring. Students are asked to engage in a process of self-reflection to ensure that they remain on task with regards to a specific line of inquiry. This is assisted through a series of reflective questions:

1. What additional evidence beyond the source is required to answer the historical questions?
2. What ideas, images, or terms need further defining from the source?
3. How useful or significant is the source for its intended purpose in answering the historical question?
4. What questions from the previous stages need to be revisited in order to analyze the source satisfactorily? (Hicks, Doolittle, & Ewing, 2004, p. 221).

This meta-cognitive process of self-reflection supports the development of dispositions that encourage the student to fully engage historical sources (Beyer, 1987; Hicks, Doolittle, & Ewing, 2004).

Corroboration. The process of corroborating involves the comparison of documents to determine similarities and differences toward supporting conclusions about an historical inquiry. The scaffold includes four questions:

1. What similarities and differences between the sources exist?

2. What factors could account for these similarities and differences?
3. What conclusions can be drawn from the accumulated interpretations?
4. What additional information or sources are necessary to answer more fully the guiding historical question? (Hicks, Doolittle, & Ewing, 2004, p. 222).

Corroboration in the SCIM-C model is a deliberate step for using evidence to support a claim during an historical inquiry (Coventry, Felton, Jaffee, O'Leary, Weis, & McGowan, 2006; Hicks, Doolittle, & Ewing, 2004, p. 221; 2004; Monte-Sano, 2011; VanSledright, 2002; Wineburg, 1991). This process is particularly meaningful, as it requires students do more than merely collect evidence, it requires that students account for discrepancies between sources. Using evidence to support an idea involves identifying confirming and disconfirming information and incorporating that information as evidence into the overall an emerging interpretation. Corroboration is a process of verifying the accuracy and truth of a claim from evidence (Hicks, Doolittle, & Ewing, 2004; Monte-Sano, 2011). Together, each of the steps of SCIM-C support student as they learns the various operations involved in historical inquiry.

Summary. This section provided a review of research on general and historical thinking skills. General thinking research can help educators understand the nature of engaging in a thought process. Historical thinking research focuses on how expert historians engage in a process of making meaning from historical sources.

Digital History

We know that some things change when historical archives move from a physical form to a digital form (Vajcner, 2008). Some of these changes, such as increased access and

searchability of large catalogs, can be positive (Everitt, 2005). Other changes, such as loss of context or contextual interpretation, can be negative (Vajcner, 2008). Regardless of whether the changes are positive or negative, physical archives are increasingly becoming digital.

Digital History, in its most basic form, is the digitization of materials that were previously only available in a physical form in physical locations. In practice, the act of digitization adds complexity to an archive, potentially removing one context and possibly adding several new contexts and layers complexity (Cohen, 2004; Cruikshank et al., 2005; Vajcner, 2008). These layers of context and complexity have implications for historical inquiry, as well as social studies pedagogy.

One of the biggest issues in the process of building a digital archive is the task of deciding what is significant enough to be included. Digital archivists typically select materials for digitization that best reflect the intent of the archive (Saunders, 2005), but constraints are always in place, as is the case with physical archives. Whereas space once restricted archives, finances available for digitization now restrict what can be archived.

Online archives. In a physical archive, scholars attempt to preserve the context from which the materials were collected. Archivists also work to preserve context in digital archives, however the nature of a digital archive can circumvent any context by enabling direct access to historical sources through the use of external search engines (Cohen & Rosenzweig, 2005a; Vajcner, 2008). A traditional archive restricts access in this sense, by requiring a more localized search mechanism. Researchers in a traditional archive are required to use tools such as a localized index that provides some context for the source materials.

In a sense, we are in the infancy of digital history. Much still has to be worked out, including questions of sustainability. There exist several models for sustainability. One model can be found with the Valley of the Shadow. The online archive was created in 1993 and is one of the earliest online historical archives. This project is part of the Virginia Center for Digital History, and was supported with institutional funds (Ash, 2001; University of Virginia, 2009). There are many models for sustaining digital archives, and the funding and sustainability of each model can be as varied as the projects themselves.

Part of the complexity of sustaining a digital history archive is that design considerations can affect both usability and sustainability. Whether a site uses an off-the-shelf content management system, or uses a uniquely designed system, considerations need to be given to design. Questions such as, what is the intent of the archive? who will be accessing the information?, and what information will they want?, are all important. Cohen and Rosenzweig (2005a) explore these issues, focusing on several of the unique design elements for digital historical websites in their recent book on digital history. Some the traditional design features used in physical archives and print media remain useful in online setting. For example, print and online historical sources typically include a table of contents or an index to assist researchers as they engage the materials. But, in digital environments formatting can be easily manipulated to add meaning to text through the careful use of fonts and non-linear designs. As a whole, the inclusion of digital media offers the most significant change for digital archives. Images can be produced at extremely high resolutions, and videos can take the place of still images (Cohen & Rosenzweig, 2005a). While historians may have traditionally eschewed design issues for the sake of content, the ability for anyone

to publish materials online has brought design considerations to the desk of historians producing new and interesting analysis of historical events.

Teaching with digital historical sources. Digital history has not benefitted only historians and scholars, teachers and students have also been able to use digital history to influence teaching and learning. McClurken and Slezak (2006) found that digital history can help students to learn new media as well as the rigor and care that must go into historical analysis. Instead of simply preparing a historical interpretation that only a classroom teacher will read, students can create a presentation of historical interpretation on the Web that can be viewed and challenged by peers and professionals alike. McGlenn (2007) found that teachers were able to learn to use a digital history archive to engage students in historical analysis. Teachers were able to pre-select digital sources which allowed the teachers to become content facilitators. Students were able to use these sources to develop their own understanding of historical events.

Summary. Digital history is evolving as a medium through which the historical materials can be archived, accessed, and analyzed. Issues related to accessibility and contexts are being examined as scholars work to develop sustainable models for digitizing historical materials. While digital history provides materials for students to engage while learning historical thinking and developing an understanding of historical events, it also introduces emerging technologies into the classroom.

New Literacies

New literacies research reaches broadly and creatively into new areas prompted by emerging technologies. The central question propelling research on new literacies asks,

“how do the Internet and other information and communications technologies (ICTs) alter the nature of literacy?” (Coiro, Knobel, Lankshear and Leu, 2008, p 1). New literacies research includes multimedia literacies, Web 2.0 skills, search skills, online reading comprehension, game based literacies and online community engagement (Coiro et al., 2008). Three of these areas of research are particularly relevant for this study are navigating online, roles and tasks of engaging online environments and teaching and learning using new literacies. These three areas have significant overlap, but are also different enough to warrant separate consideration.

Navigating online. Reading online requires that most students develop new skills. First, there is a dynamic aspect to reading online that requires readers to parse complex text and image configurations. A text might reference an image, which requires the reader to use the technology to click on the image to continue reading. Hyperlinks might enable a reader to leave an initial text and find an alternative source or idea (Chiafari, Chiazzese, Seta Merlo, Ottaniano, & Allegra, 2010).

Coiro (2003) explores the new literacies required to read online by illustrating how students access key ideas. She argues that students can engage media in a dialogue to ensure an accurate and complete reading. This dialogue involves the students asking questions of themselves and the text. These questions include:

- How should I navigate this information?
- How can I expect to navigate this environment?
- What is my role or task in this activity?
- How can I add to this body of knowledge? (p. 460)

Navigation plays an important role in new literacies. Students must be able to navigate through complex texts and find the information they are seeking. Students might begin using a search engine, then visit a Web site to find information related to a specific idea, then return to the search engine if the information they found was not what they needed (Chiafari, et al, 2010; Coiro, 2003). These skills are important, especially when students begin using multiple sources of information such as a digital history archive and as well as general Web searches.

Roles and tasks. In addition to navigation, students engage in a variety of roles and tasks during Web-based inquiry. They might begin in the role of detective, shift to the role of reporter, only to return to the role of detective to search for more information. They also shift tasks during the inquiry process, from navigating search results to locating facts, to reading texts to recording ideas in their notes and finally reporting their findings in a summative analysis (Coiro 2003; Coiro & Dobler, 2007). While these roles and tasks might bear similarities to traditional inquiry activities, the introduction of technology requires new skills and understandings.

One of the benefits of information rich environments such as the Internet and digital history archives is that the information being accessed uses search tools. A simple search term can take a reader directly to a source, and in most instances the source can be directly accessed (Bennett, 2005; Burton, 1979; Coiro & Dobler, 2007). Although search tools themselves are often simple to use, complex skills are required to yield meaningful results, as well as to select the best options from the search results.

Engaging search results requires specific skills that assist students in finding appropriate results from a list of results. Students need to engage these results critically by identifying options that best fit the criteria for addressing a line of inquiry. Even if students are careful in the selection of a document or image, the resulting selection might not be adequate. Often, a quick return to the search results can speed the process of finding the desired information. In addition, searching within a page for key words can assist savvy readers as they engage a document (Coiro & Dobler, 2007; Dalton & Proctor, 2008). Understanding these principles is key for engaging in an information rich environment.

Teaching and learning using new literacies. Students also contribute to the body of knowledge in the classroom. They research the answer to an inquiry question and report those findings back to their classroom teacher and peers both formally and informally (Coiro & Dobler, 2007). The development of new ideas in the classroom falls under the umbrella of constructivism in the classroom, which Doolittle and Hicks (2003) described as a way to encourage student engagement in historical inquiry.

Many of the skills included in online reading comprehension are similar to those found in the SCIM-C heuristic. Students must be able to read inferentially, engage in a process of self-regulation, and use thinking operations to read online texts (Coiro & Dobler, 2007). Online reading comprehension research demonstrates that students read inferentially by using a variety of strategies to parse out important information from a text. The process of self-regulation includes reading specific texts as part of a larger strategic reading process (Coiro & Dobler, 2007).

Another complexity with using online text in the classroom relates to prior knowledge. Prior knowledge includes the content knowledge of the subject being researched, as well as knowledge of the structural paradigms of online text (Coiro & Dobler, 2009). For example, students need knowledge of the hierarchical and non-linear referential structure of the Internet to be successful as they work to understand online text (Coiro, 2003; Coiro & Dobler, 2009).

Summary. New literacies research focuses on new concepts related to the ways we learn in information rich environments. Reading online requires specific skills and dispositions directly related to the ways in which the materials are being presented.

Summary

Historical thinking research reveals the use of stances and dispositions that assist historians as they engage historical sources. SCIM-C provides a method for teachers to assist students as they learn historical inquiry skills. Digital history research illustrates some of the complexities of engaging materials in a digital archive. New literacies research identifies online reading comprehension and search skills that students can use to effectively navigate and use the Internet.

Chapter 3: Methodology

This study examined a bounded case guided by the following questions:

- How do students conduct historical inquiry in an information rich environment?
- How does an information rich environment influence the document-level analysis of historically significant materials?

Naturalistic inquiry framed the research, with a case study as the method. This chapter includes a description of the research framework and the methods used for collecting and analyzing data, as well as a description of the instructional activity.

Research Framework

The research framework for this study was naturalistic inquiry (Athens, 2010). Naturalistic inquiry requires that the research context be authentic and provide a framework for examining the activity being studied (Athens, 2010; Blumer, 1931). In this research, the activity under investigation was an instance of students in a middle grades social studies class engaging historical inquiry in an information rich environment. Naturalistic inquiry, as implemented in this study, includes two stages of research, exploration and inspection.

During the exploration stage of this study, the students' early engagement in historical inquiry in an information rich environment was examined so that the research questions could be fully understood. The exploration stage of naturalistic inquiry in this study included the use of first hand-knowledge gained through initial interviews with the teacher in this research and early observations of the teacher's classroom. These interviews and observations guided the research process. During the exploration phase, the research process and data sources were fine-tuned so they better aligned with the problem and addressed the

research questions. The most important part of naturalistic inquiry is “to acquire a sufficient amount of firsthand knowledge about the problem under study [in order to] have an empirically sound basis for defining your problem and selecting the initial rudimentary ideas to use in later investigating it” (Athens, 2010, p. 95).

During the exploration stage of this naturalistic inquiry, initial impressions about how the research might unfold were developed and during investigation these ideas became more polished and dense. This refinement happens through a process of comparing initial codes and ideas to new data emerging from new and existing sources (Athens, 2010). During the investigation phase of this research, special consideration was given to any negative instances found in the data. Negative instances are pieces of data that cannot be comfortably placed in any of the initial ideas developed during exploration (Athens, 2010; Blumer, 1931). As these situations arose in this study, ideas were revised and adjusted to fit the negative case. Through carefully examining the data, the ideas from the exploration stage were refined and further developed. This process is described in more depth later in the section titled Analysis of Data.

While naturalistic inquiry provided a framework and a guide for conducting research, it did not provide a means of doing research. In this instance, a bounded case study provided the means of collecting data and examining the questions.

Case Study

This study made use of a bounded case approach through the examination of a learning activity as experienced by four students. Bounded case study calls for clearly established boundaries, and allow for an in-depth examination of specific activities

(Merriam, 2009). The setting for this case was a middle school class in the rural southeastern United States. Understanding a process as complex as historical inquiry called for a rich and descriptive set of data afforded by examining a case in depth. McGloin, 2008 indicates that case studies allow for this type of rich and descriptive data to be collected because the researchers can focus specifically on the case. Case studies also provide methods for the critical analysis of an issue that can result in the transformation of practice in others (Corcoran, Walker, & Wals, 2004). In order to best fulfill the promise of case study, the purpose of the research must be clearly defined (Corcoran, et al., 2004). The general purpose of this study was to better understand how students do historical inquiry when they engage materials in an information rich environment. A more detailed explanation of the purposes of this research and the rationale for using case study follows.

Figure 3.1 illustrates the flow of the research from the development of research questions to the analysis of data. Data analysis consisted of coding the data, research memo writing and journaling throughout the study. Additional details regarding the data analysis is provided in the section titled, “Analysis of Data.”

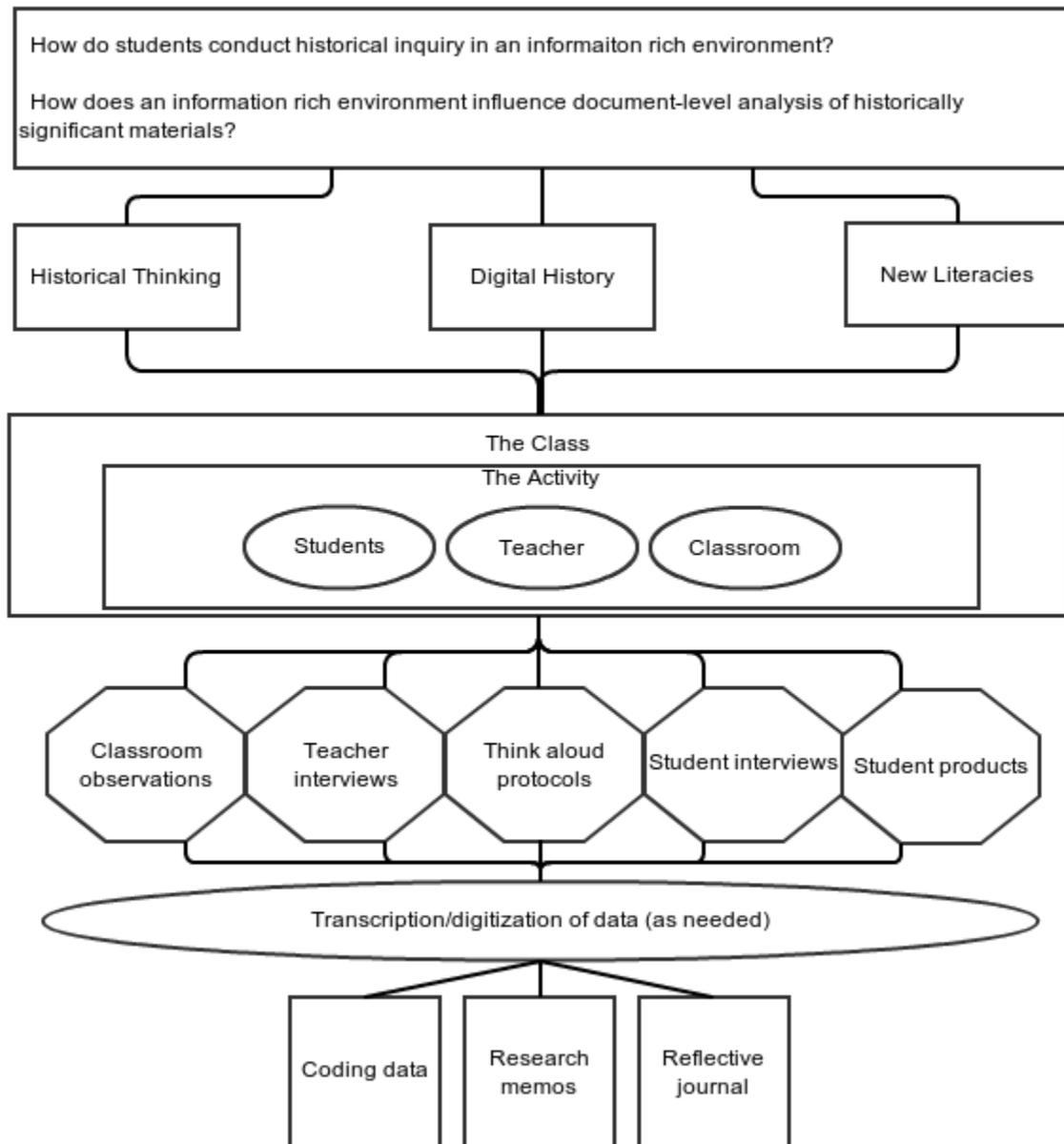


Figure 3.1: Illustration of the research process

Rationale for the use of a case study. Historical inquiry is a complex process that requires large volumes of data to be fully explored and analyzed. This research did not intend to examine the solution to a problem, so action research methods did not provide an accurate

framework. Although ethnography and phenomenology would both provide enough data, neither method would adequately address the in-process examination or specific focus required by an examination of historical inquiry. Case study, with its ability to focus on a specific activity as it is in process, was particularly well suited to understanding the process of historical inquiry.

The bounds of a case study serve to narrow the focus on specific and relevant factors, rather than attempting to understand issues in a broader context (Merriam, 2009). In this case, the boundaries were defined as a multi-day activity as engaged by a four students from a single class in a rural school district. The activity, which served as one of the bounds of the case, lasted six days.

Activity. Given that this research aimed to help us better understand how students engaged in historical inquiry in information rich environments, the activity required the students to have access to a wide variety of information, as well to the ability to conduct searches using a variety of techniques (e.g., localized search in an archive and broader searches for understanding unfamiliar terms). In the first stage of the activity, students read and analyzed a letter written by a Confederate soldier named Iowa Michigan Royster to his mother in North Carolina. The letter, by a young soldier who lived in the same part of the country as the students, was selected to engage students in the inquiry process. The teacher used the letter to model the SCIM analysis process with the whole class. Following this modeling activity, students developed an historical inquiry question. Using the SCIM-C heuristic, students then selected and analyzed documents in the information rich environment. Once the students had analyzed additional documents, they were instructed to

write an initial draft of an historical interpretation or response to the inquiry question. Next, students were directed to search the archive for additional documents to analyze (Sample documents, including the letter written by Iowa Michigan Royster, can be found in Appendix A). These documents were to be used to corroborate their initial answer to the historical inquiry question. The full inquiry process involved background reading, developing a guiding question, pre-writing, SCIM-C analysis, an initial draft, final report, with teacher support throughout. During the activity, the students' writing was supported using a process of pre-writing. Monte-Sano (2011) identified pre-writing as an effective means of supporting students' development of topics and ideas for their writing while analyzing multiple sources to produce a historical essay. Students were asked to respond to a series of questions each day regarding their work during the class period. These questions included: How many documents were you able to read? and, what important details did you discover during your investigation today? See Appendix B for a full description of the instructional activity.

Setting. The school selected for this study was in the rural southeastern United States. For the year prior to this study, the school's average achievement scores were 67.4% for reading and 79.1% for math. The state's average was 70.7% for reading and 82.4% for math. The school had a total enrollment of 649 students, with an average class size of 24. There were 40 teachers in the school, all of whom were fully licensed and highly qualified (NC School Report Cards, n.d.).

The teacher for the class where this study was conducted had been teaching for six years. He was in the final semester of a graduate program in education. One of his personal goals for the class was to teach the students how to access and use historical materials. This

study was conducted in an 8th grade U. S history class, which had 28 students. All students in the class had access to a laptop computer, which they were responsible for bringing to class each day. Each class period lasted 60 minutes with additional time available after class through a school-wide enrichment period that immediately followed this section of the class.

Students used documents from an online historical archive called The Valley of the Shadow: Two Communities in the Civil War, hosted by the University of Virginia. Using the Gunning Fog index to calculate the readability of the letters analyzed by the students in the case, an average of 8.11 years of formal education would be required in order to easily understand the letters on the first reading. This average was calculated using the online readability analyzer located at: <http://www.online-utility.org/english/>. One letter was excluded from the average because it registered as requiring 36.95 years of formal education and did not score well using any of the readability measures reported by the analyzer.

Participants. Mr. Jacobs, the classroom teacher, selected four students for participation in this study from the 28 students in the class. Mr. Jacobs was a six year veteran of the classroom and thought of himself as a facilitator of collaborative learning. He was also enrolled in a graduate studies program in social studies education. The students, Neil, Felicia, Nikki and Viktor (all pseudonyms), represented a cross-section of the class as a whole with regard to student achievement, gender and race. Each of the students was able to complete the activity and provide data for analysis, although Nikki was absent for the final activity in the unit.

Neil was a Caucasian male who reported that social studies was his third favorite class, behind science and math. He thought that Mr. Jacobs was a good teacher, but that did

not matter because he did not care for the materials and concepts presented in social studies. Felicia was a Caucasian female who reported that she preferred math, and like Neil thought that social studies was just, "O.K." Nikki was a Caucasian female who reported that math was her favorite class. She did not like social studies because Mr. Jacobs required too much writing. Nikki was often not prepared for class during this study. Viktor was a Caucasian male who reported that social studies was a good class, but that he disliked school in general. He stated that Mr. Jacobs was not as bad as some of the other teachers because he let them use their computers.

Data Collection. To best understand historical inquiry in information rich environments, this study made use of data from two sources, the students and their classroom teacher. Data from students included think aloud protocols of their analysis of historical documents, interviews, and video screen captures of the laptops on which students were working, and paper and electronic copies of all student work. Data from the teacher included observations of his teaching practices and interviews from each day of research. Data collected served to triangulate findings as they emerged. Triangulation of data provides a means of ensuring a complete understanding of the process of historical inquiry in the classroom (Meijer, Verloop, & Beijaard, 2002). Data were triangulated using two methods, triangulation by source, and triangulation by method. Triangulation by source in this study meant that information was collected from different sources, including the teacher, the students, and classroom observations. Triangulation by method, on the other hand, involved the collection of data through interviews, think aloud protocols, screen captures and copies of student work. By using a variety of sources and types of data, a more complete understanding

of historical inquiry in information rich environments was developed. A data matrix made this process easily identifiable. Data by source was arranged in rows, and data by method is arranged in columns. Appendix C includes three sets of data reflecting each of the findings and arranged in a manner illustrative of this method of triangulation.

Classroom observations. Classroom observations were conducted for two days in advance of the historical inquiry activity, and provided important information regarding the context for the case. A specific observation protocol for recording observation notes guided the process (Appendix D). Observations focused on student and teacher interaction, classroom discourse, and the use of technology. Observation data helped to clearly define the setting of the case and functioned as an important source of data for the exploration phase of this research.

Teacher interviews. The teacher was interviewed prior to the research activity and after each day when data was collected. The initial interview focused on his previous experience teaching historical inquiry and his perception of the students' abilities to conduct historical inquiry. This initial interview served as a second source of data, along with early classroom observations, in the exploration phase of this naturalistic inquiry research. After each class period, a follow up interview was conducted to explore and clarify data collected during the class. Follow-up interviews focused on what the teacher observed during the class period and what questions or problems students were reporting. Subsequent interviews were conducted to clarify and extend data. A semi-structure interview protocol was used to guide all teacher interviews (Appendix E).

Video screen capture. All of the participants' work on their laptop computers was video recorded using stand-alone video cameras on tripods. This allowed for students on-screen navigation to be tracked, audio of the student comments was also collected but was categorized separately as part of a think aloud protocol.

Audio capture. The participants engaged in a think aloud protocol. Think aloud protocols are an effective technique for gaining information regarding cognitive processes (Sasaki, 2008; Fonteyn, Kuipers, & Grobe, 1993). The think aloud protocol for this research included prompts to encourage participants to verbalize their thoughts. When paired with post-process reflection, this think aloud protocol provided a rich and descriptive understanding of participants' cognitive process. In an effort to not disrupt the students' work flow, or to indicate to the students that they should take a specific course of action, some questions could not be asked while the student was working. These questions included:

- Did you look at the dates of the documents? Did you feel that the dates were important?
- Do you think there are documents that better address your question? Why or why not?

Student interviews. At the conclusion of the activity, interviews with the students explored questions that emerged during the think aloud protocol. Interviews with students focused on their understanding of historical inquiry in an information rich environment. These interviews served as a reflective verbalization, helping to fill in any gaps in understanding from the think aloud protocol.

Student products. During the activity, the participants were required to submit several products of work including all document analysis forms and all versions of their essays. All student work (e.g., screen captures as well as digital and hard copies) was collected for analysis. During the course of this activity, some of the students took notes about their work. These notes were not an explicit part of the assignment, but proved to be valuable in examining the process students undertook when examining documents and conducting searches in the archive.

Research Memos. Research memo writing included a process of notating, organizing data, proposing emerging findings and developing coding systems. Following the technique described by Glesne (1992), memo writing was done concurrently with data collection, and assisted in the development of questions for the student interviews. The memos helped inform the development of initial codes and guided the development of questions to be asked during student interviews. These memos contributed to the development of formalized codes and themes and helped to associate ideas that emerged from the data with themes from the literature.

Reflective Journal. A reflective journal was kept during the research to help organize data collection and analysis. The reflective journal served to help identify what worked during data collection as well as to identify areas that needed adjusting during ongoing data collection. Reflective journals help researchers to maintain analytical focus on the research questions and to avoid getting sidetracked by interesting, but tangential, issues (Etherington, 2004; Glesne, 1992). The reflective journal allowed the data collected in this study to inform the development of initial codes and helped keep the research process organized.

Analysis of Data

The analysis of data followed a social constructivist stance that sought to formulate an understanding of how students engaged in the process of historical inquiry in information rich environments. Creswell, (2007) and Crotty, (1998) identified a constructivist stance as useful for developing understanding of tasks without using preconceived and possibly inaccurate understandings of the task being studied. Although this research assumed that there was such a process as historical thinking, assumptions regarding how the students should engage in the process of historical inquiry in an information rich environment were kept to a minimum. Research to date on historical inquiry has involved teachers selecting documents and providing students with a framework for analysis (Hicks, Doolittle & Ewing, 2004; Monte-Sano, 2011). While existing research provided a useful framework for understanding historical thinking, this study focused on a different process where students selected the documents and were provided access to information online throughout their analysis.

Data analysis took place during all phases of data collection. As suggested by Athens (2010) and Glesne (1992), initial analysis occurred in the exploration stage, and involved a process of writing research memos, keeping a reflective journal and organizing data in analytic files to help to ensure that the correct data was collected. The full analytical process included five distinct activities, coding data using thematic codes (SCIM-C codes), coding data using open codes, identifying ideas from the coded data, reviewing and revising ideas based on further analysis of the data which resulted in the three findings. Figure 3.2 illustrates this process.

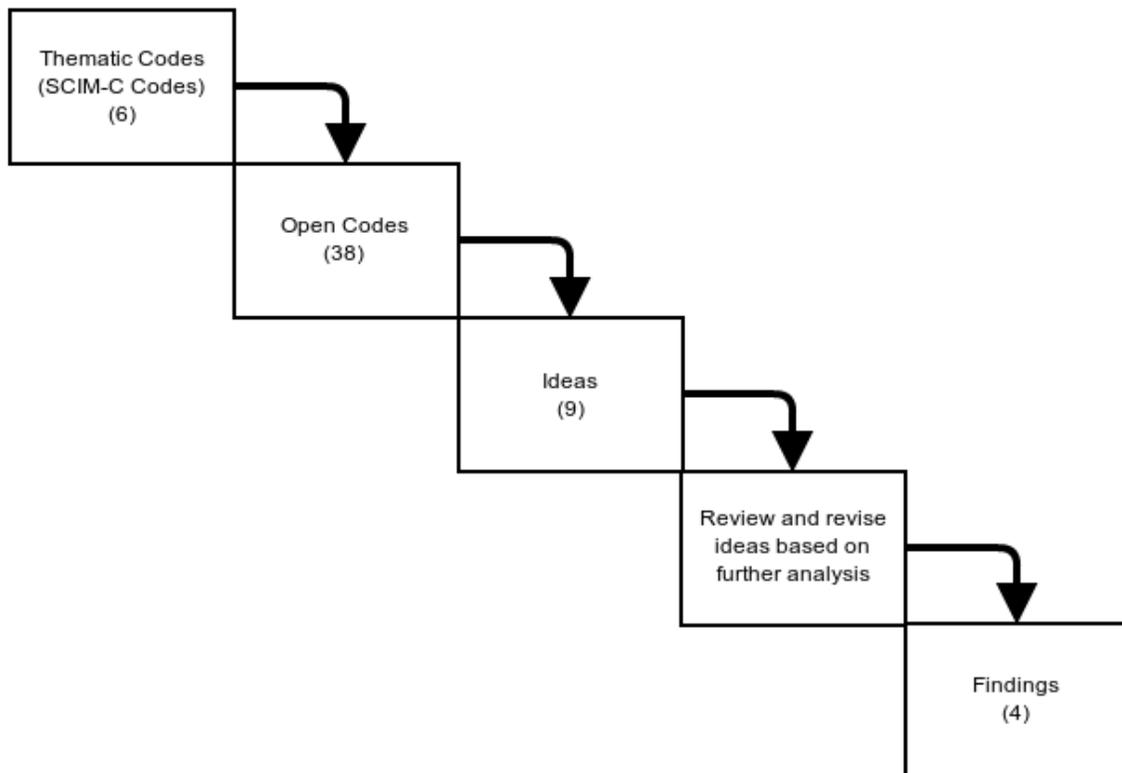


Figure 3.2: Data points to findings

Data organization. Data were organized into three broad categories, (a) text-based materials, primarily student work; (b) audio materials from interviews and the associated transcripts; and (c) audio/video materials from video screen-captures of students' work and associated transcripts. This data structure enabled a simple tracking procedure for using the data. Carefully tracking the data during analysis helped to triangulate the data and aided in the development of themes. Each category of data was further broken down into sub-categories. Each day of data collection represented a sub-category of data and was analyzed independently. When an individual sub-category was processed, it was marked and the next

day was analyzed. During the initial data analysis, different processes were labeled in the data. Examples of these labels included, an indication for when students' started searching for a document, an indication for when they completed various SCIM-C questions and instances of searching the Web for supporting details. These labels were used to identify data across the data types and participants in the study to support the development of the themes.

Data analysis process. The process of analyzing the data was guided by the consistent search for the prevalence of particular themes. Using Hesse-Biber and Leavy's (2006) system for inductive coding allowed for themes to emerge from data analysis. Themes that were supported by the data from each of the four participants were considered prevalent enough for deeper investigation. The development of themes was crucial to understanding how the data related across coding categories. There were no quantitative measures to support prevalence of any given theme, so careful consideration was given to identification of the themes presented in the data. Each theme captured something important about the data as it related to the question of historical inquiry in information rich environments. Naturalistic inquiry also requires that themes emerge through careful consideration of the data (Athens, 2010).

The data were analyzed in sections. First, the teacher interviews and classroom observations were analyzed. Then, the audio from the concurrent think-aloud sessions was analyzed. Finally, the student work and interview data were analyzed. During this process, notes regarding commonalities among the data were recorded in a research journal. These notes contained several ideas, phrases and sentences that helped to develop the findings and themes. The research notes included the following.

- At the start of the activity, the students have at least some shared experiences that help them to inform their initial search. At this point, the students are in a condition, how does this condition affect their searching?
- Do the students ever move away from IRE?
- Spent a good deal of time activating prior knowledge @ the beginning of class.
- Their ability to express.
- They have a value to get it right, and there is a difficulty in asking students to point out something wrong.

Data were coded using the Coding Analysis Toolkit (CAT), an open source web-based program developed by Pittsburgh University (Lu & Shulman, 2008). This program allowed for the tracking of codes and memos and the validation and analysis of codes in a variety of ways. As data was being analyzed in the CAT, a rudimentary coding system was established. Data codes were compiled into a list and similar codes were merged together. Codes that emerged early in the research include the following.

- Easily uses archive.
- Struggles with archive.
- Focused on the historical inquiry question.
- Right-click to search.
- Fluid technology use.
- Empathy.
- Verified sources.

These emergent codes were complemented by the following thematic codes that were predetermined give the concepts and ideas embedded within SCIM-C.

- Summarizing while inferring.
- Summarizing while contextualizing.
- Context in the summary.
- Context in the inferencing.
- Inferencing in the context.
- Inferencing in the summary.
- Searching (archive) and searching (Web).

Research memos were written to describe how the codes emerged from the data, as well as to clarify the use of a code within a specific line of data.

The coded data revealed key “ideas” that served to establish themes and nascent findings from the data. These key ideas included:

- Takes time.
- Contextualizing: More info & Presentism.
- Initially had difficulty finding appropriate documents.
- Used search engine to supplement argument and understanding.
- Document revision is quicker with a computer.
- Students used CTRL-F to find facts.
- Quickly shifted between programs on the computer.
- Varying degrees of analysis.

- Using evidence.

These ideas provided a lens for further data analysis, and provided a tool to focus the data on tentative findings specific to the research questions.

- The students struggled with doing historical inquiry in an information rich environment.
- The students needed to adapt their understanding of historical inquiry to meet the needs of a historical inquiry project in an information rich environment.

Some of the tentative findings dealt with the students' engagement with SCIM-C. The students sometimes returned to questions they had already answered to provide further information. Other tentative findings dealt with the students' search skills. Since these findings did not directly address the research question about historical inquiry in an information rich environment, they were not further investigated. Several findings emerged from this phase, but only three findings were further investigated.

Assumptions

Several assumptions supporting this research were required. With respect to the students, this study assumed that students were familiar with SCIM-C because they had analyzed documents using SCIM-C during previous activities. The students were also assumed to be proficient with using their computers and the Internet, as well as being able to use the programs installed on their laptops to write essays. With respect to the teacher, this study assumed that the classroom teacher had enough familiarity dealing with technology and historical inquiry to be able to support students throughout the course of the study. Finally, historical inquiry in an information rich environment was assumed to provide valuable

information regarding the process of historical inquiry. These three assumptions supported the core activities being investigated in this research.

Summary

This study provided important information about historical inquiry in an information rich environment. Naturalistic inquiry provided a research framework for this study and structure for the collection and analysis of the data. Bounded case study provided a method for collecting data and a system for data analysis data.

Chapter 4: Findings

This chapter presents findings related to the following research questions:

- How do students engage in historical inquiry in an information rich environment?
- How does an information rich environment influence the document-level analysis of historically significant materials?

Three findings emerged from the analysis. A sample of the data supporting each of these findings can be found Appendix C.

- Students had a preconceived notion or developed an initial impression of how to answer the historical inquiry question and this influenced how they selected documents for formal analysis using SCIM-C.
- Students struggled to identify and use appropriate information when analyzing documents using the SCIM scaffolding, particularly when working on the contextualizing or monitoring phases.
- In an information rich environment, where disconfirming evidence was abundant, students had a hard time dealing with contradictions to their answer to the historical inquiry question. This was true even when they encountered potentially disconfirming evidence.

Historical Inquiry in Information Rich Environment: The Setting

Mr. Jacobs was familiar with the research on historical inquiry and the related scholarship on instructional practices using historical inquiry in the classroom. In fact, he often integrated history-related online tools and activities into his lessons. He believed that

the Internet provided opportunities for students to develop historical inquiry skills. Mr. Jacobs usually placed students in groups of four when working with online tools to, “encourage students to collaborate with one another.”

One activity conducted by Mr. Jacobs before the start of this research required the students to use a web-based tool called “Jog the Web” to analyze a collection of historical documents. The tool supported students as they learned historical concepts and examined historically significant topics. Jog the Web allowed Mr. Jacobs to select documents from a variety of online sources and present them in a specific order with associated questions. Students answered questions related to each historical source, including a description of the Civil War era 54th Massachusetts Infantry, a letter from a soldier in the 54th, and an image of Private Robert Jones of the 54th. Each item included two to four questions including:

- The 54th was composed primarily of what type of men?
- Analyze this image. Describe what you see.
- Read the description at the bottom of the page. What fate could have Pvt. Jones faced as a black prisoner of war?

Mr. Jacobs stated that he included the image in the lesson because students, “seem to be able to identify with the content through historical images.”

Mr. Jacobs was responsive to the needs of his students. As students worked on their in-class assignments, Mr. Jacobs ensured that all students were able to participate in the activity. He moved around the classroom and answered all the questions that students had about the assignment. For example, Mr. Jacobs provided support when a student came across the word, “dragoon” during a web search. The student raised her hand and asked Mr. Jacobs

what, “dragoon,” meant. He responded that it was a type of military soldier, and that the student should do another web search to discover more.

The students in Mr. Jacobs’ class were diverse and required a range of instructional techniques. Mr. Jacobs stated that he typically used a “variety of materials in the class,” including a state approved textbook, “video clips from PBS and The History Channel,” as well as primary source documents and online activities. Mr. Jacobs used all of these resources when he taught historical inquiry, including the activities described in this research.

When preparing for the activities in this research project, Mr. Jacobs focused on historical inquiry in an information rich environment (IRE). The IRE included two subfields, the Web at large, and the collection of historical documents contained online within the Valley of the Shadow (VotS). The VotS provided an impressive information rich environment in itself, with 2708 letters that the students could search and select during their inquiries. The archive included several features that students used to find documents. Table 4.1 explains the search options provided by the VotS.

Table 4.1

Valley of the Shadow Search options.

Search Feature	Description
General Search	<p>A general search returned any letter that included the search term in the body of the letter. This search type could be restricted by the source of the letter which included:</p> <ul style="list-style-type: none"> • Augusta County • Franklin County • The Freedman's Bureau
Keyword Search	A keyword search returned any letter with the search term in the meta data, or in the body of the letter.
Author Search	An author search returned any letter written by a specific author
Date Search / Restriction	Dates could be set for any search. If no search term was selected, the search engine would return every letter between the selected dates. If a search term was selected, the search engine would return a date restricted set of letters.

The documents in the archive were not accessible through a general online search, and required the students to interact with the tools build for the VotS.

The Web in general, served as an open environment for the students to explore in order to access information for answering questions related to the analysis of the historical documents they selected. Students were given instructions on how to effectively search the Web using quotation marks around specific words or phrases, and how to use CTRL-F to quickly find an instance of a word on a web page.

Mr. Jacobs relied on his own understanding of historical inquiry online in order to best support his students. He relied on techniques with which he was familiar to support students such as: Stopping the class to address common concerns, answering individual student's questions and setting up the classwork for each day at the beginning of the period. Mr. Jacobs supported the students' use of the VotS and Web by demonstrating search techniques and describing how to sift through search results.

This study examined student responses to instructional strategies for conducting historical inquiry in an information rich environment. Four key informants, Neil, Felicia, Nikki and Viktor, provided data on the process of historical inquiry in an information rich environment.

Classroom Activity

A description of how the students were introduced to the activity will help situate the findings of this research. To begin the activity, the students were asked to analyze a letter from Iowa Michigan Royster to his Mother written on June 29, 1863. The Royster letter included details related to the war, Royster's financial situation, his social life and his religious beliefs. Royster was a young man, probably in his early 20s, and was originally from Raleigh, North Carolina.

The students analyzed this letter using the SCIM heuristic. Mr. Jacobs supported the students as they analyzed this letter by answering direct questions, and reviewing each of the steps of SCIM. From this analysis, as a whole class the students developed the historical inquiry question that guided the remainder of the unit; “What was life like for soldiers during the Civil War?” Students then searched for documents in the Valley of the Shadow archive and conducted SCIM analysis of each document they located. Students recorded their work on a document analysis sheet. Students wrote an initial essay responding to the guiding question after their analysis of documents. They were then asked to return to the Valley of the Shadow archive to locate additional documents in the process of corroborating their findings. These new documents were analyzed using the SCIM-C model, focusing on corroboration. As a final activity, students revised their essay using new information from the corroboration phase. See Appendix B for a full description of the instructional activity.

The students had not conducted an historical inquiry as involved as this activity, but Mr. Jacobs reported that the students had completed SCIM activities on, “The Mayflower Compact,” and “The Declaration of Independence.” This activity was the first time students had been asked to self-selected documents for analysis in historical inquiry. The process of selecting the documents to analyze framed the first key finding of this research.

When the students had completed the analysis of the Royster letter, they were given instructions on how to search the VotS archive. In order to demonstrate the search functionality of the archive, Mr. Jacobs asked the students for a search phrase. The students selected the phrase, “General Lee.” Several of the students started their interaction with the VotS using the search results from this demonstration.

Selecting the First Document

When change happens, those involved must adapt and respond. Likewise, when change happens in a classroom, students are the ones who must respond. In this study, students were asked to use something familiar, browse the Web, as well as something unfamiliar, select historical documents to analyze. The students were instructed to initially select a document that would help them to answer the guiding historical inquiry question, “What was life like for soldiers during the Civil War?” The analysis of data collected from students’ work on selecting the first document suggested that students completed this task given certain conditions. The following assertion frames the findings for this section.

Students’ had a preconceived notion or developed an initial impression of how to answer the historical inquiry question and this influenced how they selected documents for formal analysis using SCIM.

To begin their work inquiring into the life of soldiers during the Civil War, students searched the collection of letters in the Valley of the Shadow (VotS) archive. The VotS archive included 2708 letters. Students were expected to select one letter and conduct a document analysis using the SCIM heuristic to begin their inquiry. Each of the key informants indicated that they had an idea of how to answer the historical inquiry question before they selected a document for formal analysis using SCIM. Among the key informants, Neil had the clearest idea about how to answer the question. Early in the search process, Neil indicated that life for soldiers during the Civil war was bad, and selected his document based on this idea. Felicia did not have an initial idea of how to answer the question, and spent the first day exploring the archive without selecting a document. After she read several letters,

Felicia developed an idea of how to answer the question and based her document selection on this idea. Nikki focused on one key idea before she selected an initial document for analysis. Viktor explored the archive and copied the URLs of several documents into his notes without reading the documents. After reading two of the documents he found, Viktor selected his first letter for document analysis based on his emerging notion of how to answer the inquiry question.

Each of the students selected a document for analysis only after arriving at an initial idea of how they would answer the historical inquiry question. Students either read several documents before they selected a document for analysis or selected the first document they found based on a preconceived notion about how to answer the inquiry question. Either way their idea of how to answer the historical inquiry question influenced the selection of a document to analyze using SCIM-C (Figure 4.1).

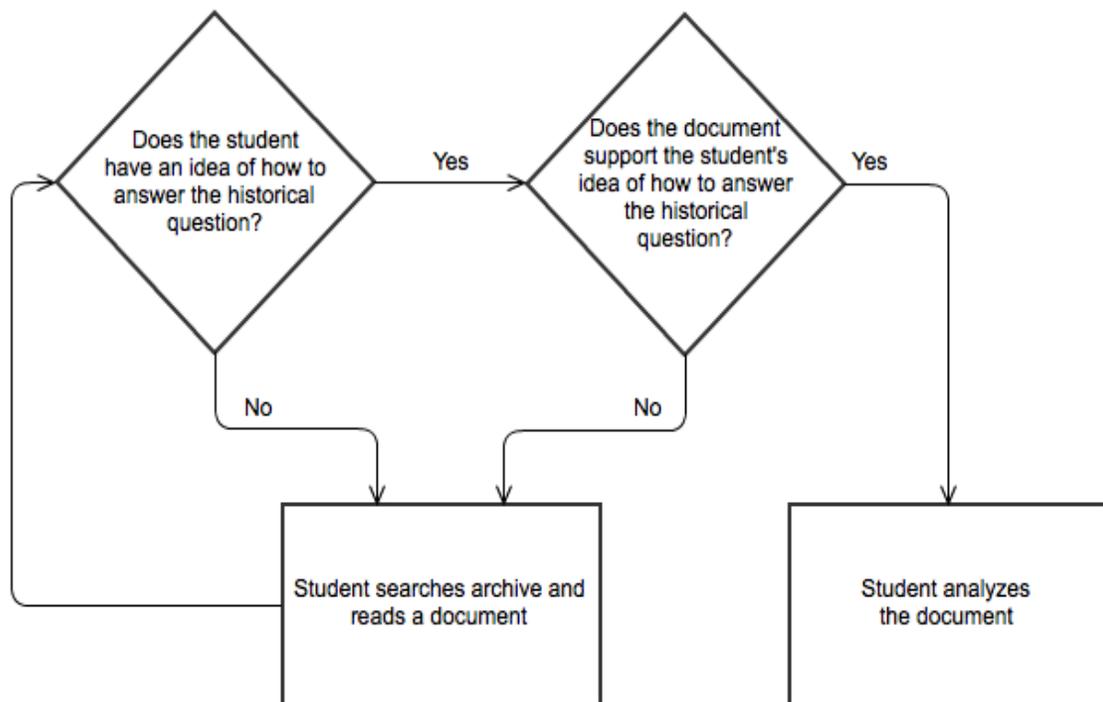


Figure 4.1. Flowchart for document selection.

Neil initially searched the archive using the phrase, "life in the war," and restricted the search engine to only return results from the "Freedmen's Bureau Letters." He indicated that this search was just to, "see what kind of letters it had." This initial search returned no results. He then searched, "soldiers' life," with the same search constraint and no results were returned. Neil's first two search terms were experimental, and he did not find any documents. He reported during the exit interview that he felt that he, "needed to find something quick and fast that was specific to what I was looking for." With his third search on the term "hardships," it was apparent that Neil had a specific idea of what he was looking for.

Neil reported during the think aloud that he was “trying to answer the question, what was life for a soldier,” as he conducted the searches. Neil believed he had an idea of what life was like for a soldier during the Civil War. He stated that he selected, “hardships” for his search term because, “many soldiers used the word hardship to describe their life in the war, and I thought this would work.” Neil selected a letter that he thought would be useful from his search on the word “hardships.” In the think aloud, he reported that “the description talked about some of the hardships [the soldiers] had to go through.” After reading the letter for a short while, Neil started the document analysis using the SCIM scaffold. This was the first document Neil analyzed.

Neil only formally analyzed one document in addition to the Royster letter. This letter, which he selected from his search on the word, “hardships,” was from an Augusta County Virginia soldier named Thomas M. Smiley and was written to his sister on January 10, 1864. During his analysis, Neil focused on how bad life was for soldiers during the Civil War. In the summarizing section of his SCIM form, he wrote, “This source tells us of some of the difficulties of the life in the war.” In the inferring section of his SCIM form, he wrote, “It suggests that war life was very rough and sometimes unbearable. He seems to want to get out of the war when his term is over.” Neil highlighted only information that focused on the negative aspects of the Smiley letter, and did not explore Smiley’s statement that, “I am well and getting along pretty well.” The focus on the negative aspects of the soldier’s life supported the idea that Neil had a preconceived notion that life for the Civil War soldiers was difficult.

When he finished formally analyzing this document using SCIM, Neil searched using the term, “hurt.” He found another letter from Thomas M. Smiley this time to his aunt written on May 12, 1863. Neil did not analyze the letter due to time constraints, but when asked why he selected this document during the think aloud, he stated that, “right at the beginning it tells you about some of the suffering they had.” As evidenced by his search terms and his selection of two letters Neil felt dealt with hardships and hurt, he had a preconceived notion about how to answer the inquiry question.

Felicia approached the document selection task differently than Neil. She chose to conduct several searches and read several documents before she fully developed her idea of how to answer the inquiry question. Once she had an initial answer to the inquiry question, Felicia reviewed her list of documents and selected one that she felt supported her answer.

Immediately following the modeling activity on how to use the VotS search engine, Felicia examined the results from the search term, “General Lee.” This was the search term selected by the class during the modeling of how to use the VotS search engine with the whole class. From these search results, Felicia selected a letter from Henry H. Dedrick to Mary E. A. Dedrick written on October 4, 1861. She stated that she selected this letter, “because in the summary underneath it, about him, it talked about General Lee whipping people.” She read the document, then reported that the document “did not really answer what I was looking for.” Felicia returned to the search results, scrolled down a little further, then went to the main search page to view the possible keywords to use with the keyword search feature.

Following the Dedrick letter, Felicia selected the keyword, “camp life,” and entered this phrase into the keyword search feature of the VotS. When she selected this search term she stated that documents found using the phrase, “camp life,” would reveal “what their life was when they were in camp and how things were.” From the search results she selected a letter from James B. McCutchan to his cousin written on February 23, 1863. She read this letter before returning to the, “camp life,” search results, because it “was just telling what he was feeling, it didn’t really tell anything about camp life.”

Following her search using the keywords, “camp life,” Felicia decided to view all the letters between the dates of 1861 and 1865. She did not enter a specific search term, instead she restricted the search by date and clicked on the search button. After she read through the first page of the search results, she stated, “this is not going anywhere,” and returned to the main interface of the VotS search engine.

In her next search, Felicia used the phrase, “hardships.” She kept the search results restricted to letters written between 1861 and 1865. She conducted this search because, “not only does it keep the time period, but hardships is like, what they go through, so I need to find out some of the hardships that individuals went through.” She selected a letter from Tony Pastor to Annie Harris, written June 10, 1861. Felicia stated that she selected the letter because it referenced, “talking about the hardships of being a general.” She copied the URL into her notes because, “it was telling how, it was his only sheet of paper, and it kind of tells that they were poor.” She also stated that, “I guess it just kind of tells that no matter what they go through they really don't get paid enough to get what they really need, like the supplies they need.” Felicia was not yet certain how she wanted to answer the question. She

had an idea that hardships were important to answer the historical inquiry question, but she continued looking for more perspectives from soldiers' letters in the archive.

Felicia continued to examine the results from her search on "hardships," and read another letter from these results. This letter was also from Tony Pastor to Annie Harris, but was written on October 19, 1861. Felicia reported that this document was helpful because, "it shows that, all the courage they have, because it states they keep saying, If God be for us, who can be against us?" Felicia also argued that the letter "shows that they kept thinking good thoughts their whole way through this war, other than thinking all the negative stuff." Felicia recorded the URL for this document in her notes.

Felicia selected another document from the search on "hardships" and stated that "in the summary it was saying a little bit about one of their hardships and it looked like an interesting hardship that I want to know more about, so I'm going to see more about what it was about in a broader context." She did not record the URL for this document because, "it really didn't give anything about their hardships at all, it was just telling what he's been going through."

At this point Felicia indicated that she had an idea of how to answer the historical inquiry question. During the think aloud she stated that, "I would answer this as it depends on the person. Some people think it's not that bad, some people think it's bad." She continued to search the archive with the date-restricted search phrase "hardships."

Felicia selected a letter from Clinton Hatcher in Augusta County to Mary Anna Sibert on July 7, 1861, because, "he was talking about their hardships as opposed to him being anxious for battle. Like, he was ready to go to battle, so maybe this was him against the

whole not liking the battle.” She recorded this URL in her notes and stated that, “I think I found enough to answer the question the way I want to answer it.” She did not start to formally analyze any of the documents that she had found, but conducted another search in the archive.

For this search, Felicia searched the phrase, “camp life”, and used the general search feature instead of the keyword search feature. She restricted the dates as she had in her previous searches. In the results from this search, she found a letter from P. H. Powers to Mrs. Powers on March 17, 1863.” Felicia selected this letter because, in her words,

He sounded like a really important person, because it was like, P.H. Powers, and most people, with their names abbreviated like that, some of them are really famous, and it was like talking about his camp life, and his missing his family, and after you start reading it you can tell, it tells like what things were actually like for him and how much things cost.

When further prompted to explain why cost was important, Felicia stated, “because you can kind of tell how much they had to spend on everything and how much of their money actually went to things they needed.” Shortly after Felicia recorded this URL into her notes, Mr. Jacobs called the class together and asked them to complete a closing activity.

The next day in class, Felicia reviewed the final two documents she recorded in her notes. She stated that she was, “revisiting the [documents] that I went to yesterday so I can find a new one that is rich in information so I can redo another one.” After she briefly reviewed the Hatcher letter, she pulled up the Powers letter and began to analyze it using the SCIM scaffold. Felicia stated that, “now that I know what is going on in the other letters, I

actually think it [Powers' letter] will be more useful to me." In her analysis of this document, Felicia wrote that the Powers letter, "provides the perspective of a soldier in the war. He discusses the different prices of things that they would actually need and be able to use." In the inferring section of her SCIM analysis Felicia wrote, "He is suggesting that things are going very well, and that he is doing very well. You can infer that the things that they had to buy to survive were very expensive." Felicia was the most careful of the four participants in this study in her selection of the first document to SCIM. She did not decide on a document to analyze until she had read several documents, and then selected a document for analysis.

Nikki was not as careful in her approach to document selection. She started searching with the results from the modeling activity, when the whole class searched on the term, "General Lee." She selected the same letter as Neil from Thomas M. Smiley to his aunt written on May 12, 1863. Nikki reported that she selected this letter because it was sent to his aunt instead of the soldier's mother. Nikki recalled that the Royster letter, which was featured in the modeling activity introducing the SCIM method, was written by Iowa Michigan Royster to his mother, so she wanted to see what information a soldier would tell his aunt. Nikki copied the URL of this letter and stated in the think aloud that "he's talking about their in camp life on the way to getting ready for battle." She returned to the letter and continued to read.

Nikki was sitting next to Felicia and followed Felicia's lead in selecting the term "camp life." From the results on the search, "camp life," Nikki selected a letter from Thomas Garber in Augusta County to Addie Garber written on July 21, 1862. She read this letter and reported that it was not valuable for answering the historical inquiry question. She stated that,

“he was just telling his sister to send him stuff ... it was like tobacco and socks.” She returned to the “camp life,” search results and selected a letter from William B. Gallaher, also from Augusta County, written to his father on April 20, 1861. This letter was the only letter she selected for SCIM analysis.

In her think aloud, Nikki stated that she selected the Gallaher letter because, “in the description it stated that camp life was fairly good.” In her SCIM analysis, Nikki recorded information about Gallaher being camped just outside of a town. She mentioned that “he is able to go and eat with his grandparents who lived in the town.” She also noted that “they have been eating and living in good conditions.” In her exit interview, Nikki stated “that life in the beginning of the war was better than it was at the end because they weren’t sure how long it was going to take, and what supplies they needed.”

After Nikki completed her analysis of the Gallaher letter, she searched on the phrase, “Union soldiers” using the general search function of the VotS. The search results resulted in mostly negative perspectives on the life of the soldiers, during the think aloud, Nikki stated that the documents mostly referenced “poor conditions,” and a “negative view of [a] General.” Nikki did not view any documents from these search results, and proceeded to search on the term “Union.” From this set of results, Nikki read a letter from Jedediah Hotchkiss of Augusta County to Governor Letcher written on July 27, 1861. She decided to read this letter because, “in the description of it, it said that he was captured by the Union soldiers and was in prison and in under their command.” She did not select this letter for analysis using SCIM, because there, “really wasn’t that much in it... there wasn’t really anything that you could use to do the SCIM document on it.” She returned to the search

results and, like Felicia, read a letter from P.H. Powers to Mrs. P.H. Powers, although this one written months earlier on December 25, 1862. Nikki indicated that Powers was homesick, but when asked why she selected the letter, she stated that the author would, “rather be cooking than sitting around and waiting for breakfast.” For this letter, she acknowledged the negative aspect of the soldier’s life, but chose to focus on a more positive part of his letter.

Throughout her work, Nikki put the most direct emphasis on the positive feelings of the soldiers. She reported that, “Gallaher stated that he would eat good and slept well,” and “Powers ended up working for the chief cook.” Nikki consistently kept to her notion that camp life was good. Her belief that camp life was good was central to her selection of documents to analyze.

Viktor selected his initial document to analyze differently than Neil, Felicia or Nikki. While he had a clear answer in mind before he analyzed his first document, Viktor approached the initial search process superficially. He searched on a number of terms, including the term, “life,” but did not read the all of the documents retrieved from the searches. In the think aloud, he reported that he would read documents from his list later. Viktor stated that he included letters on his list that mentioned, “how camp life was so, it probably... possibly relates to what life was like for the soldiers.” Viktor said that he recorded the URL’s because he was, “not reading them right now, I’m just copy-and-pasting the URL’s so I can go back and read them later. Just finding some that might be useful.” He only spent a few seconds on each document from his list, and did not read any of the letters in full.

After he searched on the word “life” and collected several documents in his list, Viktor searched using the term “experiences.” He said that he selected this term because he wanted to, “see if they mention how their experience was.” Viktor said that he thought the search term, “experiences,” would provide additional information about, “how they felt about their camps, or their marches or whatever.” Viktor then added documents from the results list to his notes. He stated that he was, “looking for experiences related to camp life,” and ignored any instances he felt would not help him to answer the question. Viktor reported that he relied heavily on the contextual information provided by the VotS search engine to guide document selection. Victor claimed that he was interested in letters for various reasons.

For some of them it was just experience like, this one is ‘profit from my lesson of experience,’ or, ‘by the experience every day,’ so if the summary like, talks about his experience in the war I’ll use that, I won’t use other uses.

Viktor’s final list of documents included eight letters from two searches. Once he collected the URL’s for these documents he said that he thought he had enough documents because, “there aren’t really any useful documents towards the bottom of the search results.”

From the list of letters he collected, Viktor selected a letter to analyze from James B. McCutchan to Rachel Ann McCutchan written on February 20, 1862. He said that he selected this document because, “in the first two sentences [McCutchan says], ‘please excuse the paper because it’s the best I have,’ so it describes that there wasn’t a whole lot available to them.” When he decided to SIMC the McCutchan letter, Viktor was asked if he had already decided on an answer. Viktor immediately responded that, “Yeah, I have an idea now, that, it depended on the camp, because the one soldier said it was happy and exciting, but this

soldier was like bored of it and basically wants the war to be over.” It was clear that he had decided on this answer prior to beginning the analysis of his first document.

Viktor’s analysis of the document aligned with his initial idea of how to answer the historical inquiry question. He stated in his SCIM analysis that, “the writer is suggesting that all is well and that he might rejoin the army and possibly will see a long term of duty.” Viktor also noted that the soldier, “sounds like he is depressed or just sad,” but still referred to, “how fun it is to be in the army.” These inferences were closely related to his idea that the quality of life for a Civil War soldier was both good and bad.

Neil selected a document based on his preconceived notion that war was bad, containing hardships and hurt. Felicia had an emerging notion that she developed from reading several documents. Nikki’s notion was vague, but still guided her document selection. Viktor systematically approached sifting through the archive, and had developed a notion of how to answer the question prior to selecting his first document for analysis. Each of the students had at least a kernel of an answer before he or she selected their first document for analysis. While they did not approach the process of document selection in exactly the same way, it was clear that each student had a preconceived notion or developed an initial impression of their answer before they selected a document to SCIM.

The selection of documents to analyze was not an easy process for the students. They were able to utilize the VotS search engine, but the students were not provided with any explicit instructions on how to select a document from the archive other than Mr. Jacob’s suggestion that, “it should be a rich document,” and, “it should help you to answer the historical inquiry question.” The students often looked at several documents before selecting

one to analyze. They had a notion of how they should answer the inquiry question before the selected a document. Neil clearly relied on prior knowledge and had a preconceived notion of how to answer the question early on in the process. Nikki and Felicia read several documents from the archive before developing their notions of how to answer the question. Viktor selected documents that seemed useful, and then quickly developed a notion of how to answer the historical inquiry question. Regardless of how they came to their initial idea of answering the inquiry question, the students used the answer they were formulating to the question as a filtering mechanism to select documents for analysis.

With 2708 documents available for analysis, document selection became a serious consideration for the students in this activity. There was no structure in place for the students to select documents from the archive, so the students approached the process differently. Once the students identified an idea of how to answer to the inquiry question, they were able to select documents from the archive that would support their idea.

While document selection is important, historical inquiry does not end with the selection of documents, the students must also analyze these documents. The next finding addresses the way participants interacted with the information rich environment as the conducted document analysis using the SCIM scaffold.

Influence of the Information Rich Environment on Document Level Analysis

After selecting documents, students began the process of analyzing them in order to answer the historical inquiry question. Students used the SCIM method to support their analysis of the documents. This method included four distinct analytical activities supported by scaffolding questions (summarizing, contextualizing, inferring, and monitoring). For parts

of the document-level analysis (summarizing and inferring) the students did use online information. Students relied almost exclusively on the document to provide answers to the summary and inference questions. The students did use the online information, although sporadically, during the contextualizing and monitoring phases. The data revealed that the students struggled with finding information when analyzing the documents. The following assertion frames how students analyzed documents in the information rich environment.

Students struggled to identify and use appropriate information when analyzing documents using the SCIM scaffolding, particularly when working on the contextualizing or monitoring phases.

When analyzing documents, the information rich environment (IRE) functioned as a disruptive force for students. Specifically, students had difficulty identifying relevant details from online sources that would support their understanding of the document they were analyzing. Furthermore, students engaged the IRE sporadically during the SCIM process resulting in a disjointed overall experience. They relied on the documents themselves as the main source of information during the summary phases of SCIM, but used information from the Web during parts of the contextualizing or monitoring phases of SCIM. During the contextualizing phase of SCIM, the students relied on the document to respond to three of the four scaffolding questions.

1. When and where was the source produced?
2. Why was the source produced?
3. What summarizing information can place the source in time and place?

When the students encountered the fourth contextualizing question: “What was happening within the immediate and broader context at the time the source was produced?” they relied on the IRE by searching the Web to help them find information. Students focused on finding external sources during the contextualizing phase for two types of information: Current events related to things described in the documents and information about the location in which the document was written. Three of the four students (Neil, Felicia, and Nikki) used timelines found on the Web to help them fill in contextual details, while Viktor preferred to rely on prior knowledge to answer all of the contextual questions. Table 4.2 provides an overview of the students’ approach to each document. The students did not reference the Web while they were inferring from the documents. Viktor used Web searches in an attempt to identify additional information while answering the monitoring questions.

Table 4.2

Summary of document level analysis

Document Title	Use of document for analysis
Iowa Michigan Royster, June 29, 1863	All of the students analyzed this letter and used the document to answer the summarizing questions. All of the students used the document to answer most of the contextualizing questions, but Neil, Felicia and Nikki searched online to find information regarding the immediate and broader context of the letter. Viktor used his prior knowledge to answer the question about the immediate and broader context. Viktor used a Web search to find additional information to answer the question, “What ideas, images, or terms need further defining from the source?”
Thomas M. Smiley, January, 18, 1862	Neil analyzed this document. He relied on the letter to provide details for the summarizing and most of the contextualizing questions. He searched online to find information regarding the immediate and broader context of the letter. Neil did not reference the document or web sources to answer the inferring and monitoring questions.

Table 4.2 (continued)

P. H. Powers, March 17, 1863	Felicia analyzed this document. She relied on the letter to provide details for the summarizing and most of the contextualizing questions. She searched online to find information regarding the immediate and broader context of the letter. Felicia did not reference the document or web sources to answer the inferring and monitoring questions.
William B. Gallaher, April 20, 1861	Nikki analyzed this document. She relied on the letter to provide details for the summarizing and most of the contextualizing questions. She searched online to find information regarding the immediate and broader context of the letter. Nikki did not reference the document or web sources to answer the inferring and monitoring questions.
James B. McCutchan, February, 20, 1864	Viktor analyzed this document. He relied on the letter to provide details for the summarizing and most of the contextualizing questions. He relied on his prior knowledge to provide information regarding the immediate and broader context. He searched online to find additional information about the contents of the letter while attempting to answer the question, “What ideas, images, or terms need further defining from the source?”

At the beginning of this research, students analyzed the Royster letter as a whole-class activity. The students were asked to individually answer the questions in each section of the SCIM scaffold. Mr. Jacobs provided the students with a paper copy of the SCIM questions as well as a Microsoft Word document that had blank sections for each of the parts of SCIM. The students used this document for both their SCIM analysis and as a place to keep notes. Students who recorded URLs for documents added them at the very bottom of the Word version of SCIM document. Mr. Jacobs facilitated a class-wide discussion for each of the four sections of SCIM.

Neil used the Royster letter to answer the summarizing questions, and did not conduct any online searches to help him answer the summarizing questions. He did not use the Web to find information when working on the inferring or monitoring questions either. To answer the contextualizing questions, “When and where was the source produced?” and, “Why was the source produced?” Neil referenced the Royster letter. When he got to the question, “What was happening within the immediate and broader context at the time the source was produced?” he searched online for an answer on the. His first search term was, “news of June 29, 1863.” Neil selected the first link from the results set titled “June 29, 1863 News: NewspaperARCHIVE.com” and followed the link to <http://newspaperarchive.com/1863-06-29/>. This site required a subscription, so Neil returned to his search results. He then selected the second link, which was from the same source as the first website. The title of this link was “Tri Weekly News, June 29, 1863: Front Page: Newspaper ARCHIVE.” On this page, Neil scrolled down and realized that he could view selected newspaper images for free. He returned to the first search result and scrolled down to view the image of “The Newport Daily

News,” from June 29, 1863. Neil used a feature on the website to zoom in on the image, but reported that, “it is hard to read this.” He looked at the image for a few moments more and returned to the search engine to conduct a new search.

Neil changed his search term to, “events of June 29, 1864,” and selected the first link from the results. This link took him to the website called, “History Orb.com.” This site displayed a timeline of “Historical Events for June, 1863.” Neil spent some time reading information on this site. From this site, he added, “On June 29, 1863 Lee plans to invade Pennsylvania, Lee crosses the Potomac,” to the contextualizing section of his SCIM document. In the inferring section of Neil’s SCIM analysis of the Royster letter he wrote:

The source suggests that the Confederates were planning on attacking in the North, and that General Lee has made a new law to the Confederates about stealing. He talks about himself a lot, South is making progress, and that he is Religious. It is mostly a Confederates Soldiers perspective. He didn’t mention slavery so you can infer that that wasn’t a big reason that he was in the war.

The History Orb.com timeline was useful to Neil, because he inferred that, “the source suggests that the Confederates were planning on attacking in the North,” which was supported by the information he found during his online search. Neil did not conduct any further searches while analyzing the Royster letter.

The second document Neil analyzed was a January 10, 1862 letter from Thomas M. Smiley to his sister. In the letter, Smiley described troop movements in the mountains of Morgan County, Virginia during bad weather and a brief confrontation with Yankees at the county seat, Bath. Smiley also indicated that the troops were constructing winter quarters. As

with the Royster letter, Neil relied on the letter itself to answer all of the summary questions and most of the contextualizing questions. In Neil's work analyzing the document, specifically in his summary of the letter, Neil stated, "this source tells us of some of the difficulties of the life in the war." In the summarizing section of his analysis, Neil wrote that the purpose of the Smiley letter was, "to tell his sister about what he has seen and done in the war."

Neil used the Web to help him to answer the contextualizing question about the immediate and broader context. His first search term for the Smiley letter was, "1862 major events." He selected the first link from the search results, "because it was talking about significant battles and events in the states, which is what I am looking for." The site at <http://www.mikalac.com/civ/main62.html> included a timeline of significant events in 1862, from January 11, when Simon Cameron stepped down as Secretary of War to December 31st with the Battle at Murfreesboro. Neil selected two facts from the timeline to answer questions regarding the immediate and broader context including the following. "On January 11, Simon Cameron resigned," and, "on March 9, the first battle between two ironclad ships occurred." In his contextual analysis, Neil wrote

[This letter was written in] Morgan, Co Augusta County [on] January 10, 1862. The source was made because this soldier wanted to tell his sister about what he was doing at this point in the war. On January 11, Simon Cameron resigned, on March 9, the first battle between two ironclad ships occurred (<http://www.mikalac.com/civ/main62.html>). He talks about war and being in the same

country so we can conclude that he is talking about the civil war and that will set the source in time and place.

Although he recorded these facts in the contextual section of his SCIM form, Neil stated in the think-aloud that, “I don’t think that they’re that relative. I don’t think they really affect [Smiley] that much. I’m not even sure if he knows anything about them.” A few minutes later, Neil remarked that the events he identified were, “just other main events around that time.”

In the inferring section of the SCIM form Neil wrote:

It suggests that war life was very rough and sometimes unbearable. He seems to want to get out of the war when his term is over. It’s the perspective of a Confederate soldier. Like the last letter he doesn’t speak about slavery at all.

In responding to the monitoring questions in his SCIM analysis, Neil wrote:

I will have to find more letters that heavily describe soldier life in more detail. He needs to describe more about the battles and the chaos going on. This source is really useful in answering our question because it describes the hardships these soldiers faced. I need to revisit Inferring Question number two because I didn’t get many interpretations in this source.

Neil did not reference the Web resources from his contextual analysis in when inferring or when responding to the monitoring questions. The information that he found during his Web searches for contextualizing information did not demonstrably add to his understanding of the letter. Neil mentioned that Smiley should have described, “more about the battles and chaos going on.” Neil’s knowledge of the ironclad ship battle may have

helped him to understand that there were, ‘battles and chaos,’ but this connection was unsupported by the think aloud, SCIM form or exit interview data.

The key points Neil wrote in his essay were:

- “Life for a soldier usually included common chores for the camp, and extreme amounts of marching under harsh conditions.”
- “Soldiers in a battle had a lot of stress when dealing with fighting or helping the injured.”

Neil identified the dates of battles using information he found on online. He did not visit any sources that described life during a battle. Neil used the Smiley letter to support his first key point. He stated during the exit interview that his second point was, “mostly based off of memories from other things I’ve done in social studies.” He did not use the Royster letter to support any of the key points in his essay.

Although it was possible that the information Neil found while doing his online search spurred his memory about life in battle, none of the information he found on online dealt with stress during battle or chores soldiers had to do while in camp. He spent a total of eight minutes and 25 seconds looking at contextual information online, and did not retrieve any information that he was able to directly reference in his final answer.

Like Neil, Felicia relied on the actual document when analyzing the Royster letter to answer the summarizing questions in the SCIM scaffold. She also used the letter for contextualizing questions with the exception of the question regarding the immediate and broader context of the letter. When selecting summarizing information, Felicia wrote that the Royster letter, “provides the perspective of the officer who is actually fighting the war.”

Felicia also used an online timeline to identify the immediate and broader context of the Royster letter. Her first online search was on the question, “What things were going on in 1863?” She selected a site from the results titled, “What Happened from 1860 to 1869 including Events, Technology,” at <http://www.thepeoplehistory.com/1860to1869.html>. This website presented a broad timeline of events during the 1860’s. Felicia identified several events as important contextual information and recorded the following on her SCIM analysis form, “things going on also include the Battle of Antietam, the Second Bull Run of Manassas, the Homestead Act, the Battle of Shiloh, the Battle of Gettysburg, the Emancipation Proclamation, and the first Underground Railroad was taking place.” Felicia gathered information about all of these events from the online timeline.

Felicia conducted a second search to further contextualize the Royster letter. For this search, she used the question “What things were going on in June of 1863?” This time she selected a link titled, “This Day in the American Civil War for June 29” at <http://www.civilwarinteractive.com/This%20Day/thisday0625.htm>. This site contained a description of events on June 29 for each year in the Civil War. She did not add anything to her SCIM form from this resource, and returned to the search results. Felicia scrolled down the page of search results and selected a link titled, “Historical Events on 29th June” at <http://www.historyorb.com/events/june/29>. This site included a timeline of events that happened on June 29th, organized by year from 512 CE to 2008 CE. She added the following to her SCIM form in the contextualizing section. “Lee had also just told his Army on June 29, 1863 to focus on Gettysburg PA.” This information about Lee’s command proved to have multiple uses in Felicia’s analysis of the Royster letter. She inferred that Royster believed,

“the Confederates [would] take over the north,” and presumably was able to infer this because the date of General Lee’s matched the date of the Royster letter. The information regarding general battles that happened during 1862 was less useful for Felicia because these events did not occur at the same time as Royster’s letter.

The second letter that Felicia analyzed was written by P. H. Powers to his wife on March 17, 1863. In the summarizing section of her SCIM form, Felicia wrote that Powers, “discusses the different prices of things that they would actually need and be able to use.” She also wrote that Powers, “talks about the different places they have gone, and the different people he has talked to.” For the initial contextual information, Felicia wrote that,

This source was produced in Augusta County in 1863. The letter itself was written on March 17, 1863. The source produced was to tell his wife and other family members back home how he was doing, how the war was coming along, the conditions he has lived through and where he has been.

In order to find contextual information regarding the immediate and broader context of the Powers letter, Felicia conducted an online search. The first search phrase was, “historical events of 1863.” She selected the first link from the search results titled “Historical Events for Year 1863 | History Orb.com” at <http://www.historyorb.com/events/date/1863>. Using information from this site, Felicia identified that, “The Battle of Kelly’s Ford was going on at the time,” and, “the territory of Idaho was established.” Felicia recorded this information in the context section of her SCIM form. Neither of these facts influenced Felicia’s inferring related to this letter. Felicia inferred that Powers’ experience as a soldier was tolerable, but not without inconveniences.

He is suggesting that things are going very well, and that he is doing very well. You can infer that the things that they had to buy to survive were very expensive. All the points of view in this letter are from him himself. He is missing different places he went. He states a couple, but not as many as he could. He leaves a lot of gaps in his information.

Felicia did not reference any information regarding the Battle of Kelly's Ford, or the Territory of Idaho when inferring. Instead, Felicia inferred about Powers himself, what he felt, what he saw and what he wanted. In her final essay, she used the Powers letter to support the idea she had that soldiers were homesick. The key points Felicia wrote in her essay included the following.

- “You can tell a difference between the Confederate soldiers and the Union soldiers.”
- “Most soldiers were homesick.”
- “The Yankees had a great advantage.”

Felicia did not reference any troop movements, anything about the influence of battles or any information about the establishment of territories in her essay. Although it was possible that the information Felicia found while searching online spurred her memory regarding some aspect of the Civil War, none of the information she found online dealt with the differences between the Confederate and Union armies, soldiers being homesick or Yankees having an advantage in the war. Felicia spent a total of five minutes and six seconds searching for contextual information. All the supporting facts that Felicia used in her essay were from documents Felicia found in the VotS archive. In the monitoring section of her

SCIM form, Felicia recorded, “I think knowing where he has been going for the past few weeks since he has written his wife would be helpful if it was further explained.” The contextual events Felicia identified were not particularly useful or relevant.

Nikki, like Neil and Felicia, went online to find contextual information to help her more fully understand the letters from the VotS archive. She completed most of the SCIM analysis for both documents without searching online, but searched to identify details regarding the immediate and broader context of the letter.

Nikki summarized the Royster letter writing that Royster was writing, “to tell his mother what is going on.” Nikki, like Neil and Felicia, relied on the actual letter to answer all of the SCIM summarizing and contextualizing questions with the exception of the question regarding the immediate and broader context. Nikki added two facts to her contextual information for the Royster letter from outside sources.

Nikki’s first search phrase was, “June 29, 1863,” which lead her to a Minnesota Historical Society page that contained Civil War letters from January to June, 1863 (http://www.mnhs.org/library/Christie/1865_jj.html). Nikki did not spend long on this page and returned to the search. She next searched using the question, “What was going on June 29 1863?” Nikki scrolled down the page of search results before she decided to view, “American Civil War Timeline 1863” at <http://americancivilwar.com/tl/tl1863.htm>). From this page she selected a page titled “June 29–30, 1863 Goodrich's Landing / The Mounds / Lake Providence” at <http://americancivilwar.com/tl/tl1863.html>. She scrolled through this page before she returned to the search engine and used a new search phrase. For this search she used the question, “Where was General Lee’s [sic] troops in June?” She found a website

titled “Robert E. Lee Time Line” at

<http://www.sonofthesouth.net/leefoundation/time%20line.htm>. This site provided important details about Robert E. Lee’s life organized by date. From this site, Nikki recorded the following contextual information on her SCIM form. “In 1863, General Lee moved his troops to the North.” Nikki recorded the following detail in the inferring section of her SCIM form:

The confederates are bringing the war to the north. There is new laws pit (sic) in place. They are not going to give in to the north. He is a very religious person during the war. It was one sided, it was only the confederate soldier’s point of view. He did not say anything about slavery, how bloody the war was.

Nikki found contextual information that supported her understanding of the troop movements during the Civil War. It is possible that this information supported her understanding of the Royster letter.

The second letter Nikki analyzed was written by Gallaher, and the search Nikki conducted while analyzing this letter used the term, “Martinsburg.” She used Google maps to identify that Martinsburg was in West Virginia. After she recorded the current location of Martinsburg, she conducted a Web search using the phrase, “April 1862.” Nikki selected the first link from the search results which was titled, “Time Line of the Civil War - 1861” at <http://memory.loc.gov/ammem/cwphtml/tl1861.html>. Using this source, she recorded, “April 12th the day the war started,” in the contextualizing section of her SCIM form. Nikki then conducted a search using the phrase, “April 1861 West Virginia.” Her top result from this search was identical to her previous search. Nikki selected the second website from her

results, which was titled “West Virginia Sesquicentennial Timeline: April 1861” at <http://www.wvculture.org/history/sesquicentennial/186104.html>.” Nikki recorded one piece of information from the site about an April 5 meeting in Harrison County. Specifically, Nikki wrote on her SCIM form that “there was a States’ Rights [meeting] 15 days before.”

On her SCIM form Nikki wrote, “the war had only started so there was nothing really bad going on yet.” She wrote this detail immediately after she identified the contextual information regarding the start of the Civil War. Nikki did not seem to know that West Virginia was not a state in 1861. Nikki inferred much from her initial analysis.

He has been writing his mother. They have been eating and living in good conditions. While the soldiers aren’t doing anything at camp, they are going to town to find work. The soldiers aren’t really doing anything at camp. It is from a confederate soldier’s point of view at the beginning of the war. He has not mentioned things about the actual war. He is just telling about how they are at camp. He hasn’t seen much of the war yet.

In the monitoring section of her SCIM form Nikki wrote the following.

We need to know what is going on around that time. We need to know more the places they were at. It is sort of useful. It doesn’t tell much about what was going at the time, but it tells about how it was before all the action started. It tells us about how the soldiers lived before the war got worse. I need to go back to the context and do more and question three.

Nikki did not reference anything about states’ rights when inferring or when monitoring. Her reference to, “question three,” in the monitoring section of her SCIM form

related to the question about the immediate and broader context, indicating that Nikki felt that the details she identified were not as helpful as they could be.

Nikki focused on one key point in her essay, which was, “I think camp life was okay.” She did not mention any battles, troop movements or states’ rights in her essay. She spent a total of, 13 minutes and 23 seconds searching online for contextualizing information.

Viktor did not search online to find any summary or contextual information for the Royster letter. When Viktor analyzed the Royster letter he did not search for any additional contextual information. He reported during the think aloud that the answers to the contextualizing questions were, “just stuff that he remembered.” Viktor did not conduct any Web searches related to the Royster letter until he began answering the monitoring questions.

Viktor’s first online search related to his analysis of the Royster letter was a search on Royster’s full name, “Iowa Michigan Royster.” Viktor conducted this search as he tried to answer the SCIM monitoring question, “What ideas, images, or terms need further defining from the source?” Viktor reported that he wanted to, “get more background information,” about Royster. The Web resource Viktor selected was titled “Iowa Michigan Royster on the march to Pennsylvania” at <http://www.learnnc.org/lp/editions/nchist-civilwar/4608>. This site contained a copy of the same letter the students were analyzing. Viktor viewed this site for a few moments and then returned to the search results, and did not record any information from this site in his notes. He attempted to select a site titled, “Vermont C. Royster | Facebook,” but was unable to visit the site due to the school’s firewall. He continued to view the search results for “Iowa Michigan Royster,” and selected a result titled “Vermont (Connecticut) Royster Biography | BookRags.com” at <http://www.bookrags.com/biography/vermont->

connecticut-royster-dlb/. Viktor said that he selected the site because, “it had information about his family, and that all the boys were named after states, so I was trying to see more about that.” Viktor spent three minutes and 23 seconds analyzing results from his “Iowa Michigan Royster” search. He shared this information about the names of Iowa’s siblings with his classmates near him, but did not record anything on his SCIM form. He did not include information from Royster’s letter in his final essay.

Viktor conducted another search when he analyzed a letter from James B. McCutchan to Rachel Ann McCutchan written on February 20, 1864. During his work with the McCutchan letter, Viktor became interested in a mention from McCutchan that officers were able to purchase certain items for 20 cents. In the think aloud, Viktor mentioned the text from the McCutchan letter on which he was focused, “...they are furnished for the officers at 20 cents per [unclear: goll].” In order to find out what the officers got for 20 cents, Viktor used the Web. Because Viktor devoted a lot of time searching for this answer Table 4.3 provides details regarding the search processes he used.

Table 4.3

Viktor's searches for information related to the idea that something was furnished for the officers at 20 cents per

Search Term(s)	Title / URL	Viktor's response
"What did the officers get for twenty cents"	No Links selected	Viktor added, "Civil War" to the end of his search terms
"What did the officers get for twenty cents civil war?"	No Links selected	Viktor used a new set of search terms

Table 4.3 (continued)

“What was furnished for the officers in the civil war?”	List of American Civil War Generals – Wikipedia, the free encyclopedia (http://en.wikipedia.org/wiki/List_of_American_Civil_War_generals)	Viktor used CTRL-F to search the web page for, “furnished.” He did not record anything from this page. Viktor reported that “not much” of the Wikipedia entry was helpful, but that he was, “just caught up in the... I saw, [the article contained information regarding the] ‘oldest officer in the American Civil War,’ when I searched for, “issued for 20 cents.” Before he returned to the search results, he stated that the information was, “not important at all.”
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Table 4.3 (continued)

<p>“What was furnished for the officers in the civil war?”</p>	<p>Massachusetts in the Civil War (electronic book) (http://books.google.com/books?id=ub8cqVKoXwgC&pg=PA196&lpg=PA196&dq=what+was+furnished+for+the+officers+in+the+civil+war&source=bl&ots=aw4yZguiEk&sig=pfFnRGJ4VrY9y39AW4WpmXqTfbc&hl=en&sa=X&ei=a4qRT4aeIq2f6QHZZdGEBA&ved=0CDwQ6AEwBA#v=onepage&q=what%20was%20furnished%20for%20the%20officers%20in%20the%20civil%20war&f=false)</p>	<p>Viktor immediately recorded the URL for this source in his SCIM form. Said that he would attempt to narrow the search down using CTRL-F.</p>
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Table 4.3 (continued)

“furnished officers” (CTRL-F Search of the electronic book)	Massachusetts in the Civil War (electronic book)	Viewed the excerpts revealed by the CTRL-F search, and returned to complete the monitoring section of the SCIM form. Said in the think aloud that he, “couldn’t find anything.”
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Viktor’s final search used the question, “what was furnished for the officers in the civil war?” When he was finished conducting his online search, Viktor returned to the McCutchan letter and read the rest of the passage, which was:

Can fix it up a great deal better in our cabin than when we were in our tents we have yeast and bake raised bread, have warm rolls for breakfast every morning, we have our mess laid off in twos and have regular cooking days, there is 14 of us so cook day does not come but once a week, get plenty of coffee and shugar, can get some molasses, have to buy them, they are furnished for the officers at 20 cents per [unclear: goll].

In the exit interview, Viktor stated that he realized the answer to his question about what cost 20 cents was actually in the letter, “after I went back and actually read it.” By not carefully reading the document, he spent a lot of time searching for an answer elsewhere. In

both instances when he searched for further information, Viktor spent a good deal of time searching for information that he did not use.

Viktor not record any of the details from his search in the SCIM forms for the letters he analyzed, nor did he include this information in his essay. Viktor wrote three key points in his essay:

1. "Life was fairly good for the soldiers."
2. "During the Civil War people were very patriotic and thought that they were honored to serve, they also thought it was cool to fight."
3. "Some people even had fun in camps, and didn't deal with what hardships are so often described."

Viktor did not use the information regarding Iowa Michigan Royster's family and naming conventions. He also did not use the information about what the soldiers found for 20 cents or about food or supplies in his essay.

Neil spent a total of eight minutes and 25 seconds searching and identified three pieces of information of varying utility for contextualizing. Felicia spent five minutes and six seconds, and recorded a total of four sentences worth of contextual information. Nikki used 13 minutes and 23 seconds of class time to find contextual information, and found a total of four facts. Viktor's search to find more information during the monitoring phase lasted 18 minutes and 31 seconds, but provided no useful information. Each of the key informants struggled to find information online that would help them to answer the historical inquiry question. The students did record information from a variety of websites in response to contextual and monitoring questions, but Neil and Nikki indicated that the information they

found was not helpful. Neil stated that the information he identified was not connected to the Smiley letter, and Nikki wrote that she needed to find more information about the immediate and broader context of the Gallaher letter. None of the key informants used information they found during these Web searches in their final essay.

Whenever students used the Web to gather information, they were not able to make efficient use of their time. The students were supported in the process of contextualizing by the SCIM questions relating to contextualizing and by Mr. Jacobs's instructions and reminders, but struggled find relevant information online. These struggles suggested that they were unsure of what types of information would be helpful for expanding their understanding of the documents they were analyzing. Neil's comment that he was not sure if he had the right kind of information for the context of the letter supports this idea. Nikki's indication that she should return to find more contextual information, also supported the idea that students were unsure of what they needed, because she did not return to find more contextual information. Both Neil and Nikki knew that the information they found was not quite correct, but neither made further attempts to find better contextualizing details. Felicia spent the least amount of time searching for supporting details. Felicia described the process of contextualizing, stating that, "So if you can find things that are going on in this time period, then you can kind of tell what was going on in, not only what he's been through, but what else is going on." She did not think that the process of contextualizing furthered her understanding of the document. Felicia did not use the facts that she found during her online search in her analysis or her essay.

Viktor's reliance on his memory to identify contextual details related to the letter also suggested that he was unsure about how to contextualize. He clearly identified the broader context of the letters he read, but made no effort to identify the immediate context beyond the contents of the letter. Viktor did not identify any information from his online searches that provided him with additional understanding of the document, or details that supported the key points in his essay.

Students used the online sources to investigate two questions during their SCIM analysis. These questions were: (a) What was happening within the immediate and broader context at the time the source was produced? and (b) What ideas, images, or terms need further defining from the source? The students were not always able to identify information useful for helping them to further understand the document.

Students Engagement in Corroboration

A tendency to ignore confounding information was evident among the participants in this study, particularly with regard to their practices of corroboration. Although students had evidence available to them, they did not make the best use of it. The following assertion frames the findings in this section regarding the use of corroborating information during historical inquiry in an information rich environment.

In an information rich environment, where disconfirming evidence was abundant, students had a hard time dealing with contradictions to their answer to the historical inquiry question. This was true even when they encountered potentially disconfirming evidence.

Once the students had completed their initial draft essay to answer the historical inquiry question, "What was life like for soldiers during the Civil War?" they were asked to

go back to the Valley of the Shadow archive to search for corroborating information. The students were given two class periods to engage in the process of corroboration. When the students were asked to corroborate their answers to the historical inquiry question, they were supported by the corroborating questions from SCIM-C:

1. What similarities and differences between the sources exist?
2. What factors could account for these similarities and differences?
3. What conclusions can be drawn from the accumulated interpretations?
4. What additional information or sources are necessary to answer more fully the guiding historical question?

While the students were able to identify similarities that they used to support their answers, they had difficulty identifying and incorporating differences or disconfirming evidence into their essays. Table 4.4 summarizes the content that the students used to support their arguments during corroboration. These traces of evidence were contained in documents identified as confirming by students after they were instructed to corroborate their ideas. The potentially disconfirming evidence were in documents read by the students but discarded.

Table 4.4

Student claims with confirming and disconfirming evidence

Student	Claim	Sources of Confirming Evidence	Sources of Potentially Disconfirming Information
Neil	Life in the Civil War was bad	Harman Letter (September 24, 1862)	Powers to his Wife (Undated)
	“ ”	McCutchan Letter (February 23, 1863)	
	“ ”	Rosenberry (December 25, 1863)	
	“ ”		McCutchan letter (January 28, 1862)

Table 4.4 (continued)

Viktor	The soldiers' lives during the civil war was pretty good.	McCutchan Letter (February 20, 1862) *
“ “		Royster Letter (June 29, 1863)
“ “		Powers Letter (December 17, 1862)
“ “		Berry Letter (July 12, 1861) *
Soldiers (and everyone) was patriotic		Powers Letter (December 17, 1862) *

Table 4.4 (continued)

Felicia	Union soldiers had more advantages	Hubard Letter (February 21, 1862) *
	“ “	Hotchkiss Letter (September 21, 1864) *
	“ “	Blakemore Letter (September 11, 1864) *
	Freed slaves had the most disadvantages	Cook Letter (October 31, 1866) *
	Lots of soldier were homesick	Hotchkiss Letter (April 24, 1863) *
Nikki	Camp life was ok	No points corroborated.

**

*These documents were added when the student attempted to corroborate an idea.

**Nikki was absent during the corroboration activity, so she provided no additional evidence.

The central idea framing Neil’s answer to the historical inquiry question was that life for the soldiers was bad. The opening sentences to the first draft of his essay prefaced Neil’s conclusion.

What was life like for soldiers during the Civil War? Life for a soldier usually included common chores for the camp, and extreme amounts of marching under harsh

conditions. These were everyday occurrences for the soldier of the Civil War on both the Union and Confederate sides. This was the basic life for soldiers at camp. Soldiers in a battle had a lot of stress when dealing with fighting or helping the injured.

Neil continued by introducing his key idea that life for the soldiers during the Civil War was bad.

He wrote, "Overall I think Civil War soldier life was horrible. The camps were extremely overcrowded, and disease spread fast. The diseases were usually caught from something a soldier ate or drank."

Although Neil attempted to find disconfirming evidence, he focused his effort on locating information that would support his answer. His first search term was, "confederates." With this search, Neil was "looking for something similar" to his idea that life was horrible for the soldiers during the Civil War. After viewing the search results, Neil described his thinking about corroboration by saying that "contradicting would be something different to add it, but that's more information, because there could be two sides to a soldier's thought, [a soldier] thinking it was good and [a soldier] thinking it was horrible." He continued looking at the search results for the term "confederates" and selected a document because, "the other ones didn't seem like a Yankee's point of view, and this one did." The document he selected was, a letter from a Confederate soldier in Augusta County named Phillip H. Powers to his wife. The letter, which was undated, discussed the Battle of Fredericksburg. Neil decided not to use it because, "it didn't really give details on how their life was like, this was kind of like how the war was going and specific things about the war."

Once he finished viewing the search results for the term “confederates” Neil searched the VotS using the word “fun.” He said that he selected this term because he was, “trying to find something that contradicts it being boring and stressful.” From these search results, Neil selected a letter from an Augusta County soldier named Asher Harman to Albert Garber written on September 24, 1862. He used CTRL-F to find the word “fun” in the document. He discarded this letter because “when it was talking about the fun and the good things, it was talking about when they got home after the war, then they could enjoy the fun and the good things, it wasn’t talking about during the war.”

When Neil finished reading the Harman letter, he returned to the VotS search engine and conducted a search with a new term. For this new search, Neil used the term, “enjoying,” and selected a letter from James R. McCutchan in Augusta County to Rachel Ann McCutchan written January 28, 1862. Neil claimed that he was had trouble finding disconfirming evidence and said that “most of them didn’t enjoy life in the Civil War.” The McCutchan letter started with a poem about the Confederate States of America. The first paragraph read, “I am again in camp enjoying the pleasures & braving the hardships & dangers of such a life.” After he read the McCutchan letter, Neil returned to the VotS search engine and stated, “I think I’m going to go try to find something that is similar, since I can’t find [any documents that contradict my argument].” Despite statements in a letter that a soldier was, “enjoying the pleasures,” as they were available, Neil stated that, “this still describes some of the bad things,” and did not record any information in his notes from this letter. Neil reported that he would have liked to use some contradictory evidence in his essay, but that he, “decided to go with support because [he] had more details [supporting his initial

argument].” Neil encountered contradictory evidence in the McCutchan letter, but did not integrate the contradictions into his answer to the historical inquiry question.

Neil found a letter written by Franklin Rosenberry to John Rosenberry on December 25, 1863. He selected this letter because it had, “a Union perspective.” He indicated that the letter was interesting because it referenced a wish that the, “northerners would further devote themselves to the nation's cause.” Neil read this letter then returned to the VotS search engine. He entered the term, “conditions,” into the search engine and found a document that mentioned, “harsh winter conditions.” He selected this document, which was written by McCutchan to his cousin on February 23, 1863. While he read this letter he highlighted the word, “dull,” and said, “he talks about dull right there.” Neil also highlighted the sentence, “Well I have done a big days washing, pretty hard job,” and said, “Look at that, it’s describing some of the chores they had to do.” Neil included this evidence in his essay. He wrote, “At camp each soldier had a list of things to do each day,” and, “their best companion was boredom.” When Neil encountered potentially disconfirming evidence, he discounted the content as irrelevant. When he encountered confirming evidence, Neil was more likely to engage the content and even use it as evidence.

Viktor argued that life must have been pretty good for the soldiers. In the introduction to his essay, Viktor wrote the following.

This week we were tasked with analyzing several documents using SCIM-C to try and answer a big picture question. We were trying to figure out what life was like for soldiers in the American Civil War. The most prevalent answer to this question was that life was fairly good for the soldiers. Most soldiers had what they needed.

His conclusion restated the central idea that life was good for soldiers.

With the information I have gathered I believe that life was pretty good for the Civil War soldier because camp life was good and they were provided with everything that they needed. In Conclusion the men in the Army had a pretty good life during the Civil War because they had a good camp lifestyle, they didn't feel the need to share information about their lives, they had lots of fun, and they were still just excited to be in the Army (Berry para 2). These are the reasons why life wasn't that bad for a Civil War soldier.

The data from Viktor's think aloud suggested that he considered a much wider range of evidence that presented in the conclusion. After selecting a February 20, 1862 letter from James B. McCutchan during the corroborating stage, Viktor said during the think aloud that, "the one soldier said it was happy and exciting, but this soldier was like bored of it and basically wants the war to be over." In his analysis of the Royster letter, Viktor again offered contradictory evidence this time in his SCIM notes. "The interpretations that can be drawn are that the man loves his mother and he is kind of scared of battle, so this is why he is writing." Later, in his analysis of the letter written by P. H. Powers on December 17, 1862, Viktor stated that, "the source suggests that he wants the war to be over and he wants to come home." Viktor instead chose to only include the idea that Powers, "just thought they were lucky to get to fight in it [the civil war]," in his essay.

When Viktor was looking for a letter to corroborate his answer to the historical inquiry question, he selected a letter from Maggie H. Berry to Thomas M. Smiley written July 12, 1861. Berry was Smiley's female cousin, and did not report any direct experience of

camp life during the Civil War. He selected the Berry letter because the search results included the phrase, "... excited about war." Viktor stated during the exit interview that he did not read the whole letter because he, "only used the part that I thought that I needed to." He looked for evidence to support his claim that life for soldiers during the Civil War was good. When Viktor viewed the letter, he used CTRL-F function in this browser to find the word, 'excited.' He did not read the surrounding paragraphs or the rest of the document. The text he read was: "We are all well & getting along very well only we are very much excited about war. We hear very little news about anything else & to tell you the truth we don't feel much interested on any other subject." He used this document to support his claim that soldiers in the war were excited to be fighting.

In Viktor's analysis of the Royster letter, he wrote that Royster was, "kind of scared of battle," and that Royster, "might be trying to protect his mother from some of the more gruesome details of battle by not explaining how brutal the battles really were." In his analysis of the McCutchan letter, Viktor wrote, "in various places in the letter you could mistake the author to be excited to be in the army, but at the same time some of the letter sounds like he is depressed or just sad." Even though Viktor had evidence that contradicted his claim that life was good, his final answer to the historical inquiry question focused on the good life that the soldiers had, and the patriotism the soldiers felt.

Felicia was able to further support her ideas, but did not look for any disconfirming evidence during corroboration. In the introduction to her essay, Felicia put forward her general response to the inquiry question, "What was life like for soldiers during the Civil War?"

If I had to answer this question using specific terms I would say some were homesick, while others weren't really offended by the way the war was treating them. They had stayed the same. You can tell a difference between the Confederate soldiers and the Union soldiers. The Union soldiers seemed more homesick than the Confederate soldiers. The Union seemed more interested in the Dred Scott Case than the Confederates. I think the answer to our question would depend on which side you were on. Although a lot of soldiers were homesick. Also, I think that depending on which side you were on, depended on how you got treated. So I think that the advantages and disadvantages are another good key point.

Felicia was unique among the participants in that she added two paragraphs to her essay during corroboration. The other students only added one or two sentences to further support their arguments. In the text that Felicia added to her essay during corroboration, she presented several new ideas.

With the key point of homesick, I think that the differences from the different letters I read were based on the person. Some were missing the comfort, whereas some were missing home itself. I think it depends on your lifestyle back home. If you had a life in which everything was given to you and you go to war you're really going to miss home and all its comfort. If you live in a place where you have to earn everything you have then the war isn't going to affect you too much. I think it would just make you miss the people back home.

One soldier said that the way they gained advantages was by killing people. He said that since more people were dead then they didn't have as many people to

worry about as the war goes on. (Hotchkiss, para 1) Another soldier was saying the Yankees had the advantages of the water. (Hubard, para 3) The Yankees had a great advantage, to the point where some soldiers said there was no point in them continuing to fight the war because the Yankees already had so many advantages. (Blakemore, para 3) It was said that the freed black men had to face more disadvantages than anyone else. (Cook, para 9) So I think that depending on what type of person you were, freed or slaved, depends on what kind of advantages and disadvantages you had. The Union having more money than the Confederates had made them getting treated better than the Confederates did. If they all had the same amount of money and advantages then things might not have been more sided to the Union being better than the Confederates.

During corroboration, Felicia conducted a general search in the Valley of the Shadow archive on the term, "homesick." She read a letter from Jedediah Hotchkiss to Sara A. Hotchkiss written April 24, 1863. She referenced this letter to support the idea that soldiers were homesick and wrote in her essay, "Another soldier said that if he wasn't homesick, then he was just missing home very badly. He said he misses all the comfort he had at home compared to the comfort that he is getting from the war. "

After Felicia used the Hotchkiss letter to support to her argument regarding homesickness, she conducted another search on the term, "advantages," in the VotS general search. From these search results, Felicia selected another letter from Jedediah Hotchkiss to Sara A. Hotchkiss written over a year later on September 21, 1864. Felicia used this letter to introduce the new idea of a Union advantage in the war. She returned to the search results on

the term “advantages” and selected a letter from J. S. Hubbard to his uncle on February 21, 1862. She used this letter to further her claim regarding advantages, and indicated that it was primarily the Union army that was better off. In her essay, Felicia wrote, “another soldier was saying the Yankees had the advantages of the water,” referring to a naval advantage of the Yankees in Roanoke and Port Royal.

Felicia returned one more time to the search results for “advantage” and selected a letter written by James H. Blakemore on September 11, 1864. She used CTRL-F to search for the word “advantage” within the document, and focused on this paragraph from the letter:

We fought 2 corps of Yankees, charged their Brest Work & drove them out & held them until we left the 3rd day. The Yanks would not fight. So we would not stay any longer, our loss was very small considering the great advantages the Yanks had over us.

In her think aloud, Felicia stated that she selected this document because, “in the summary it talked about how [Blakemore] wasn’t going to fight in the war anymore, because of all the advantages that the Yankees had over them.” After Felicia added the information from the Blakemore document to her essay, she returned to the VotS and searched on the term “disadvantages.” From the results, Felicia selected a letter from the Freedmen's Bureau collection, written by George E. Cook on October 31, 1866, a letter written after the war. When she found this letter, she stated that, “I think reading about the disadvantages would be helpful because that way you have something to go against all the advantages you have.” Felicia used CTRL-F to find the word “disadvantages” in the Cook letter and read aloud the following sentence. “The freedmen are laboring under many disadvantages now which will

require time at least to remove.” From this document, Felicia added to her essay the idea that, “It was said that the freed black men had to face more disadvantages than anyone else.”

Although Felicia explained her selection of the search term, “disadvantages,” as going against the advantages, she did not seek evidence to counter her claim that the Union soldiers had an advantage over the Confederate soldiers.

While Felicia identified several additional documents during corroboration, she did not attempt to identify any disconfirming evidence. She added information supporting her claim that many of the soldiers were homesick, and she introduced two new claims.

When Felicia was asked during the exit interview about her choice to find evidence to support her claim instead of looking for evidence that might contradict her answer, she stated that she did not, “like to be wrong,” so she tried to, “look for more stuff to prove that I'm right than wrong.” She also stated that, “some soldiers didn't say they were being homesick, some of them said they were having fun”. She explained that, “they were from different sides, so [the Union soldiers] were treated better.” Felicia was unwilling to seek disconfirming evidence because she did not want to be proven wrong, and was reluctant to explore perspectives that would have challenged her conclusions.

Felicia’s approach to corroboration was to support the argument she had formulated in the first draft of her essay. She did not seek evidence that could contradict her claim, or even evidence that would add a further nuanced meaning to her claim.

Nikki was absent during the corroboration phase and no evidence regarding her efforts at corroboration was collected. In the exit interview Nikki stated that she, “didn’t look for any extra documents.”

The students had a difficult time integrating contradictory evidence into their answers to the historical inquiry question. Each of them either encountered or acknowledged that the archive held contradictory information, but were either unable or unwilling to engage this information during the process of corroboration. Viktor analyzed documents that contradicted his own conclusions, but focused on specific ideas that offered supporting evidence instead. Felicia developed ideas for her final essay while looking for corroborating evidence, but she was not willing to identify evidence that would challenge her conclusions. In each case the students were able to select documents from the archive that did not provide disconfirming evidence.

Neil offered a good explanation of this phenomenon, when he stated that he “decided to go with support because [he] had more details [supporting his initial argument].” The Valley of the Shadow archive provided documents that could have both support and challenge the students’ ideas of how to answer the historical inquiry question. With the large volume of available documents, the students could, and did, focus on supporting their initial conclusions. Since they had put so much effort into developing their answer, students had difficulty accepting documents that challenged their answer and instead focused on supporting their original conclusions.

The students developed their answer and worked to support that answer when they wrote the first draft of their essay. During the corroboration phase of the activity, Mr. Jacobs directed the students to corroborate their answer using confirming and disconfirming information, but the students were unable to transition from supporting an answer to challenging that answer.

While the students were able to technically corroborate their answers, they had difficulty identifying and using evidence that contradicted their initial conclusions. The students developed their individual answers to the historical inquiry question, and did not challenge this answer with disconfirming evidence. Instead of fully corroborating their answers to the historical inquiry question, the students focused on finding only supporting evidence because they had developed ideas of what life was really like for soldiers during the Civil War.

Summary

The students were able to complete this activity and engaged a wide variety of resources to answer the historical inquiry question. The students were uncomfortable selecting an initial document for formal analysis before they had a tentative answer in mind. Once the students had formulated an answer to the historical inquiry question, they were reluctant to accept contradictory information.

When the students attempted to find an initial document, they first identified an answer to the historical inquiry question, “What was life like for soldiers during the Civil War?” Once they had a notion of how to answer this question, they selected a document that they felt would help them support their answer. They refined their answer as they progressed through the inquiry process, but maintained at least part of their answer throughout. This approach appeared to lead to difficulties when the students were asked to corroborate their answer, because they had already collected data that supported their answer.

The students were unable to use the Web to collect information to more deeply analyze the documents they selected. The SCIM-C scaffolds in place to support the students’

analysis of documents were not designed to support such work in an information rich environment. Despite the abundance of information available to them, students were not able to make use of information from general searches to support their document analysis and found it difficult to make use of contradictory information in their document-level analysis, they did not use this information to answer the historical inquiry question.

Chapter 5 Discussion

This chapter presents the discussion related to the findings. In general, this study did not reveal answers so much as reveal more questions for the process of historical inquiry in and information rich environment. This study examined a single case in order to better understand historical inquiry in an information rich environment. The following questions guided this research:

- How do students engage in historical inquiry in an information rich environment?
- How does an information rich environment influence the document-level analysis of historically significant materials?

All of the documents and materials the students selected during the inquiry activity were online and in an information rich environment (IRE). The Valley of the Shadow archive provided 2708 letters from which the students chose their documents to use as evidence. The Web provided students with additional information at their discretion.

The findings of this research included the following.

- Students had a preconceived notion or developed an initial impression of how to answer the historical inquiry question and this influenced how they selected documents for formal analysis using SCIM-C.
- Students struggled to identify and use appropriate information when analyzing documents using the SCIM scaffolding, particularly when working on the contextualizing or monitoring phases.
- In an information rich environment, where disconfirming evidence was abundant, students had a hard time dealing with contradictions to their answer to the

historical inquiry question. This was true even when they encountered potentially disconfirming evidence.

These findings illustrate how the students were able to engage in a process of historical inquiry in an information rich environment. Several themes emerged from the findings as a whole, and serve as an outline for the discussion of this research

- Students' selection of documents and other resources in an information rich environment adds additional complexity to the process of historical inquiry.
- Historical inquiry in an information rich environment requires that students learn to account for contradictory evidence from a variety of online sources. This process needs pedagogical support.
- Because document level analysis becomes recursive in an information rich environment, students need support in selecting documents for analysis.

These themes illuminate a gap in the initial consideration of this research. While it was true that students relied heavily on historical inquiry, digital history and new literacies skills, they also had to manage two information rich environments. The management of these environments, and specifically the process of selecting discrete information from these environments to support document analysis and historical inquiry, proved to be difficult for students.

This study was designed to give students an authentic experience conducting an historical inquiry. Instead of providing the students with materials to analyze, students were allowed the freedom to select their own documents from the online collection at the Valley of the Shadow, and then to use the vast array of additional sources available online to support

document analysis and the development of an historical interpretation. Given the findings of this study, it is apparent that historical inquiry in an information rich environment depends heavily on not just historical inquiry, digital history and new literacies skills, but also specific information literacy skills. Students needed to search the Valley of the Shadow archive and the Web in general to find materials that would help them to answer the historical inquiry question. Although the students in this study experienced difficulties with these processes, we know that such work is valuable. Martin and Calabrese (2011) suggest that learners benefit from engaging in the process of seeking information because they feel more empowered to direct their learning. Chin-Yang (2011) indicates that activities requiring online research help students to develop information literacy skills. The question thus becomes, how best to support the development of discipline-specific information literacy skills for history.

Information literacy goes beyond identifying information online to include an understanding of the context from which the information comes. Information literacy can support students as they engage in historical inquiry, particularly when they are using search engines and other online tools (Carpan, 2010). Understanding information literacy and how students engage in the process of finding information to answer questions is important because people are increasingly turning to the Internet for answers (Rainie, Estabrook & Witt, 2008). Students in this study engaged in such activities, were self-directed and empowered, and were expected to draw on a range of skills and techniques.

Each of the themes presented in this discussion illustrate an important aspect of historical inquiry in an information rich environment and suggest future research. First,

asking the students to engage in historical inquiry in an information rich environment increases the complexity of the students' task. Second, students need help and scaffolding to be able to better account for contradictory evidence. Finally, the process of selecting documents needs to be further researched in order to better understand how to support students as they learn to select documents for historical inquiry.

Increased Complexity in Historical Inquiry

Historical inquiry is a complex process. Students must manage multiple sources of information, identify important facts and ideas, and synthesize an answer to the historical inquiry question. Beyond navigating the historical materials, the students must be able to navigate through various stances and processes of metacognition to ensure they are looking at the issue from multiple perspectives and stances (Barton, 2002; Beyer, 2008; Swan & Hofer, 2007; Wineburg, 1991; Wineburg, 2001). Understanding the complexity of historical thinking when combined with an IRE requires further investigation. The following theme guides this aspect of the discussion:

Students' selection of documents and other resources in an information rich environment added additional complexity to the process of historical inquiry

Students look to their teachers to support them and guide them as they learn how to engage historical inquiry tasks, but historical inquiry is complex from the teacher's perspective as well. Teachers must often plan for standardized tests and school-wide goals and objectives, in addition to teaching skills necessary to engage in historical inquiry (Singh & Al-Fadhli, 2011). Additionally, the new Common Core Standards invite inquiry, linking the process of reading and writing to the process of inquiry (Common Core State Standards

English Language Arts, 2010). The logical solution for many teachers is to rely on an established structure to help support historical inquiry.

In this research, SCIM-C provided support for the students as they engaged in document-level analysis of letters from the Valley of the Shadow archive. The Valley of the Shadow contains 2708 letters, and includes a search feature using terms, keywords, authors' names and dates. The Web in general provided information for the students as they contextualized the documents they analyzed.

The findings of this study suggested that the information rich environment added complexity to the already complex process of historical inquiry. By contrasting historical inquiry in an offline setting with similar activities in an online environment, we can see the important difference. In an offline historical inquiry activity, with documents selected by the teacher, students are able to focus on a small set of decisions and activities during the inquiry process. Some of these decisions are based on the following questions.

- What information from the source that I have been given will help me answer my inquiry question?
- How does this source help to answer the historical inquiry question?
- If more than one source is provided, do they support, contradict or have no connection to each other? (Hicks, Doolittle & Ewing, 2004)

During an online historical inquiry activity, students need to make additional decisions and engage in additional activities. Some of the decisions the students needed to make include the following.

- What initial historical sources from the online archive will help me answer my inquiry question, and what information from each source will help me answer my inquiry question?
- Are there any additional useful sources from the online archive that will help me continue my inquiry?
- What information from other online historical sources can support my document analysis?
- Are there additional sources that can help me as I corroborate my initial findings

Each of these considerations about inquiry in an online environment includes an additional layer complexity resulting from the availability of large amounts of information. In this research, the additional complexity required that students determine the value of a wide range of resources. While students in this study were able to draw on new literacies skills when making general searches and when reading online, they had little support in the process of identifying useful information. The connection between information literacy and inquiry-based learning is clear. Students need to be able to filter through information in order to identify what will be useful for their inquiries (McKinney, Jones & Turkington, 2011). Explicit instruction on information literacy, in addition to the instruction provided on the new literacies of online reading and comprehension and search skills can help students to manage the complexity of historical inquiry in information rich environments.

Information literacy can provide students with a filter to select documents for analysis (McKinney et al., 2011). One such filter can be found with Drake and Brown's (2003) suggestion that students use and select documents for analysis using a three-tiered approach.

In this model, the teacher provides a core document or level-one document, and guides the student through an analysis of that document. The teacher then provides a series of supporting documents or level-two documents from which the students can select several to analyze. After these documents have been analyzed, each student self-selects a single document or level-three document from whatever source they choose (Drake & Brown, 2003). This three-tiered approach can help students understand how to select documents, and identify what kind of documents might provide valuable information for answering the historical inquiry question.

In addition to selecting historically significant materials for analysis, students in this research struggled to find other resources online to assist in their analysis. For this research, it was during the process of contextualization when the highest levels of complexity were introduced into the process of historical inquiry. Hicks, Doolittle and Ewing (2004) describe contextualization as, “the process of having students spend more time with the source in order to explore the authentic aspects of the source in terms of locating the source within time and space” (p. 221). Although students in this research used the SCIM-C protocol to support their efforts to contextualize the documents they selected from the Valley of the Shadow, they struggled to locate and draw out information from online sources that could have supported contextualization.

Students had access to an almost unlimited amount of information online from which they could find contextual details, but focused mostly on battles and political events. Given that the inquiry was focused on the lives of soldiers, information about battles and political events could have been useful, but the details identified by the students were often loosely

related to the document they were analyzing. Wineburg (2001) indicates that contextualization is a process of understanding historical ideas by examining the connections between events and ideas in a historical setting. Students must learn to think about the connections between events, as well as the significance of those connections in order to fully understand a historical idea (Wineburg, 2001). Further instruction on the metacognitive processes for managing inquiry in online settings toward, might help students to select materials that they can use in their work.

The fact that each of the students made attempts to collect valuable information in the IRE, but were unable to fully capitalize on their efforts suggests that they required further support for conducting historical inquiry. Coiro (2011) argues that, “a reader’s level of metacognitive awareness about which strategies are best suited to locate, critically evaluate, and synthesize diverse online texts is likely to foster a deeper understanding of the texts they encounter on the Internet” (p. 108). Metacognitive awareness includes content knowledge and strategic knowledge (Azevado, 2005). This indicates that students need to have some prior knowledge related to the historical inquiry question, as well as strategic skills for identifying important information from the documents selected.

The monitoring phase of SCIM-C focuses on helping students to engage in metacognitive thinking related to the primary source materials. Students were asked to think beyond individual texts and identify further information that will help to fully understand the historical situation of the text for development of a full answer (Hicks, Doolittle & Ewing, 2004). This metacognitive support, however, is designed for application to the historical inquiry materials in an offline setting. The task of identifying information from online

settings that supported the document being analyzed is another example of the increased complexity of historical inquiry in an IRE.

Historical inquiry is a complex task, made more complex in information rich environments. In order to be successful when conducting historical inquiry in online settings, students need to manage the complex processes of document analysis, the development of an historical interpretation and the locating and extracting of information to support these activities.

Accounting for Contradictory Evidence

To supporting students' understanding of how contradictory evidence should be used to more fully develop an historical argument, teachers often select specific documents and provide them in print or offline environments. In an offline environment, contradictory information can be staged into the process of historical inquiry. Teachers select documents that present an issue or topic from a different perspective. Often, students will write an initial draft and the teacher will then provide a single piece of evidence that contradicts the ideas put forward in this initial draft (Drake & Brown, 2003). With limited document sets, teacher can easily support students as they engage contradictory evidence. In an information rich environment, students may be overwhelmed with the volume of information as seemed to have occurred in this study. The section considers how contradictory evidence can be used in an information rich environment. The following theme summarizes the discussion put forth here.

Historical inquiry in an information rich environment requires that students learn to account for contradictory evidence from a variety of online sources. This process needs pedagogical support.

In Wineburg's (2001) research into historical inquiry, he carefully selected several documents that contained multiple perspectives. Swan and Hofer's (2008) Historical Scene Investigation strategy presents historical cases with specific pre-selected historical sources. Activities for introducing SCIM-C to students also provide document sets for the students to analyze and read intertextually (Hicks, Carroll, Doolittle, Lee & Oliver, 2004). In contrast, this study required students to search for documents and related information in vast and complex online settings. In such situations, students might encounter contradictory evidence or they might choose to focus on building support for their argument.

Van Dries and Van Boxtel (2008) describe corroboration as a source dependent consideration. "Information from the sources is important to support assertions about the past. Sources often contain complementary, but also contradictory information about the past" (Van Dries and Van Boxtel, p. 92, 2008). They referred to corroboration as "the act of comparing documents with each other" (Van Dries and Van Boxtel, p. 92, 2008). Wineburg indicates that comparing documents and understanding differences is part of the contextualization process for experts. Contextualization is the process of understanding documents, and the ways in which they relate to each other (Wineburg, 2001). Wineburg's version of expert contextualization takes place concurrently with document analysis.

While the difference between addressing contradictory evidence during contextualization or corroboration is a type of expert historical thinking, the placement of

corroboration in the SCIM-C framework makes the distinction important for students who are novice historical thinking. In SCIM-C, the deliberate connecting of historical sources occurs during the corroboration phase (Hicks, Doolittle & Ewing, 2004). Given that students used SCIM-C in this research, their emerging ideas about how to answer the historical inquiry question were corroborated after students analyzed a series of documents. The students were not necessarily inferring from multiple sources, instead typically inferred from a single document. In this study, students were reluctant to engage ideas that conflicted with their emerging ideas, and as those ideas reified, they became even more reluctant.

While Wineburg's notion of intertextually reading during contextualization might have supported students in their attempts to deal with contradictory ideas, such a process would have been difficult in an information rich environment. One participant in Wineburg's (2001) study was a 34 year old Caucasian female physics major with little prior experience in historical inquiry reported. She was able to read a set of documents and provide an intertextual interpretation of at least some of the documents. Wineburg (2001) argues that students can be taught historical inquiry skills, including intertextual reading. One key difference is that the students in Wineburg's research were given a limited set of documents to analyze, while students in this study were given liberty to select documents from a very large set.

In this study, students were given liberty to select documents from an online collection as they saw fit. If students had been taught to read documents intertextually, a mechanism would have been needed to help them select documents to support that intertextual reading. In this research, students' efforts to answer to the historical inquiry

question pushed them to select documents that supported their answer, but might have not provided further understanding of previously selected documents. The question thus becomes, how do we support students in the selection of documents that encourage intertextual reading and the consideration of contradictory information while working in online collections of historical materials?

The students' tendency to avoid including contradictory evidence in their final answers demonstrated the need for a deeper understanding of the role that contradictory evidence can play in historical analysis. Wineburg (2001) puts the discovery and analysis of contradictory evidence in the process of contextualizing. Hicks, Doolittle and Ewing (2004) put the consideration of contradictory evidence into the corroboration phase of historical inquiry. It is clearly an important to include a consideration of contradictory evidence in historical analysis, but how does that process influence historical thinking in online settings, and what methods of pedagogy are best for helping students to engage contradictory evidence in a meaningful way?

Wineburg's research presents a clear example of how contradictory information can be important for historical inquiry. In his 2001 book, *Historical thinking and other unnatural acts*, Wineburg gives several college students identical sets of interrelated documents. During the analysis of these documents students struggled with contradictory ideas as they synthesized the source materials (Wineburg, 2001). Swan & Hofer's (2008) HSI protocol also asks students to engage in an investigative process toward responding to an historical inquiry question. In the process, students are presented with an historical scene and are asked to develop an answer to a whodunit type of historical inquiry question. Using a limited set of

documents, specific sources with contradictory evidence are provided as well as pedagogical support for students as they work to develop their answer (Swan & Hofer, 2008). We do not know much about how to best support that process in the type of online setting found with the Valley of the Shadow, but this process should include information literacy skills and explicit scaffolds to encourage the consideration of contradictory information during the analysis. Further research needs to be conducted to better understand how students can best learn to incorporate contradictory ideas during their historical analysis in information rich environments.

Supporting Document Selection

We already know that traditional literacy skills are necessary, but not sufficient, for readers to successfully make meaning of online text (Coiro, 2011). The research reported here indicates that traditional pedagogies for teaching historical inquiry skills may be necessary, but are not sufficient for students to successfully engage in historical inquiry in an information rich environment. The following theme guides this discussion.

Because document level analysis becomes recursive in an information rich environment, students need support in selecting documents for analysis.

SCIM-C is designed to support document level analysis, and as such does not include support for selecting documents for analysis. In this research, students focused on answering the SCIM questions while they were analyzing documents and did so to the best of their abilities, but as they selected documents they also engaged in a version of the SCIM analysis process. In other words, students needed to know something about a document before they selected a document. This resulted in a two-tier analysis. First, students informally analyzed

documents to determine whether the documents were suitable for further consideration, then if the documents were deemed suitable they conducted the second tier of analysis where the formal SCIM scaffold was applied. This resulted in a recursive process of vetting, self-selection, and formal analysis that seemed to feed on itself. Students needed to analyze a document before they selected it for SCIM analysis, but were doing so without specific guidance or support. Given that a classroom teacher cannot directly guide this process since each student could be working with a different document, a model is needed to assist students in their document selection process.

One possible model would be to have the students use SCIM at different levels. A first level could be a scaled down SCIM with limited questions for use when reading a document to determine suitable for additional analysis. Such a scaffold could support students as they read letters, but may be prohibitive in terms of time required to do historical inquiry in the classroom. Each of the students in this study read documents that they did not use for either formal SCIM analysis or their final essay, so analyzing each document with SCIM, even a scaled-down version, might be inefficient.

Another possibility is to rely on existing systems for document selection process. The Drake and Brown (2003) model, which includes a three-tiered system for document analysis, might in fact be tweaked to support students in document selection. With enough practice using the Drake model, teacher might be able to instruct their students in the processes they engaged as teachers to select tier-one and tier-two documents. The idea would be to teach students the pedagogy of the Drake and Brown (2003) model as a disciplinary skill for supporting document selection in an information rich environment.

Current historical thinking pedagogies tend to focus using pre-selected document sets (Drake & Brown, 2003; Hofer & Swan, 2008). Other research focuses on the process of historical thinking and the general pedagogies of historical inquiry (Hicks, Doolittle, & Ewing, 2004; Swan & Hofer, 2008; Wineburg, 1991; Wineburg, 2001), but there is little research on the selection of historically significant materials. Further research needs to be conducted to understand how teachers and expert historians select historically significant materials from information rich environments for analysis.

Document selection as it played out in this research required a considerable amount of reading, and much of that was done online. One area of possible support for such reading can be found with the existing research on the general processes of online reading. Coiro (2011) suggested four areas in which teachers can support students as they develop online reading skills. First, students need to develop a plan for approaching an online reading task. Such a plan helps students identify what they are looking for to help them avoid distractions. Second, online readers need support as they navigate and negotiate online texts. Teachers can support student to use a variety of techniques to verify information and collect what they need. Third, students must monitor and comprehend what they are reading online. Readers need to be able to keep themselves on task and be able to identify when they need to reread a passage or clarify their understanding. Fourth, successful reading online also requires that readers respond to the text. They need to be able to make connections, sum up ideas and ask questions of the author (Coiro, 2011). In this study, students were not prompted to use these skills. While the students were instructed about how to engage materials in an online setting, they were not required to account for their online reading given that we are unsure what such

a process should look like in the discipline of history. Consequently, students did not engage in highly effective online reading and comprehension as outlined above.

The first aspect of successful online reading is that students should have a plan for retrieving information. Information literacy becomes important in this process, and requires that students have at least some prior knowledge related to the historical inquiry question before engaging in research (McKinney, 2011). With this prior knowledge, students should be able to outline a map of their intended research, understanding that unexpected bends in the road might influence their plan. Using their plan, students can begin navigating and negotiating the information rich environment. Their plan could help them with document selection, as well as drive them towards an answer to their research question. SCIM-C provides critical support for document analysis, monitoring this analytical process and crafting historical interpretations (Hicks, Doolittle, & Ewing, 2004), but additional analytical and monitoring questions need to be included to help students account for the additional complexities introduced in information rich environments.

Wineburg's (2001) questions promoting intertextual reading provide a useful starting place for developing scaffolds to support online reading and document selection for historical inquiry in information rich environments, specifically, how does this text relate to the historical inquiry question?, and how does this text relate to previously selected texts (pp. 80-81)? Further examination of historical thinking skills is likely needed before we can confidently say we understand how to support students in historical inquiry in an information rich environment. Students need to learn how to identify information relevant to their line of inquiry, and need tools to support them as they engage in historical inquiry in an IRE.

Future Research

Given the three key discussion themes generated by this research, several questions for future research emerge. First, is there a way to reduce or at least support complexity in the process of historical inquiry in an information rich environment? Second, what skills and techniques will best support students in the process of selecting an initial document for analysis? Third, what additional steps or sequences would support historical inquiry in an information rich environment? Each of these avenues of research will provide further insight into the process of historical inquiry in an information rich environment.

Conclusion

This study examined a case of four students as they engaged in a process of historical inquiry. While this research does not provide definitive answers regarding historical inquiry in an information rich environment, several key areas are highlighted and require further research. The skills students can learn during an activity such as that studied here can be transferrable and will benefit the students who learn them for the rest of their lives.

With respect to the first question, it is clear that using an information rich environment such as that provided by the Valley of the Shadow archive increases the complexity of the historical inquiry process. Students needed to work with large volumes of information as they conducted their analysis. With respect to the question of document level analysis, this study revealed that students need support with selecting a document as well as dealing with contradictory evidence.

In conclusion, further research needs to be conducted to better understand how to best support students as they learn to engage in historical inquiry in an information rich environment.

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APPENDICES

Appendix A

Example Letters from the Valley of the Shadow Archive

Franklin County: Iowa Michigan Royster to his Mother, June 29, 1863

Summary:

After describing personal matters about his engagement and life in camp, Iowa Royster of North Carolina tells his mother of the plundering of Chambersburg, Pa. and Lee's orders regarding the punishment for such behavior. Royster also describes the fear and submission he sees among the people in the area.

June 29th 1863

Chambersburg, Pa.,

Dear Ma:

I suppose you saw in the "Progress" newspaper a notice of my appointment to this regiment. It was quite unexpected. I had made a request to Captain Nicholson of this regiment to recommend me to the Colonel but he did not expect any good result. When I read the appointment in the newspaper I was under arrest in my old company. In a day or two came a note from Colonel Barbour of the 37th asking Colonel Baker to send me to him as I had been appointed in his regiment. Colonel Baker released me from arrest and sent me on with many expressions of goodwill, and wishes for my future success. The occasion of my arrest was this. Colonel Baker gave an order that the 1st sergeants should call out the men and make them clear out the camp - cut down the trees and pull up the brush. It was Sunday and I was acting as 1st Sergeant of Company E. I refused to obey the order. I wouldn't make the men work on the Sabbath, and I was order to go to my tent and consider myself under

arrest. It was less than a week before I hear of my appointment. The regiment had two fights with the Yankees while was under arrest. I didn't have to fight. They had taken my arms from me and sent me back to the wagon train. So it was a good thing at last.

On my way to join my regiment, I came by Winchester and saw Kate. She had received a letter from you dated in January and was preparing to answer it. She and I are engaged. Tell my Papa that I don't know how much her father is worth.

[page 2]

Don't know whether he is worth anything or not- couldn't come within ten thousand dollars of the amount to save my life. All of his good instructions lost. Well, "a fool will have his own way." Quick courtship wasn't it? A week's acquaintance last September and two days in June. I congratulate myself on my promptness. Great quality in a soldier. When I left Winchester Kate gave me a bundle of provisions, a paper of candy, raisins, etc., some hankerchiefs, trimmed my hat, and did a great many things to captivate me.

I sold my horse for 350 dollars and my saddle for fifty. So I have 400 cash with me. I wish I could get a chance to send it to Raleigh and settle Mr. Lovejoy's account. I am so extravagant that I am afraid I shall spend all my money here and have none, or if I get knocked over by a Minnie I would not like for the Yankees to get my Confederate.

I am the only officer present in my company. The men are very clever. There is not one among them who swears or uses any profane language. There are about twenty four. When the company started from N. C. it numbered 126. At Sharpsburg last September only five. The Captain went back a few days ago on business expecting to join us in a few days. I fear that the Yankees have got him. He is a member of the Baptist Church. When the

company was first made up, the captain, the three lieutenants and one private were all preachers. Every regiment in the brigade has a chaplin; I heard a sermon yesterday. In this brigade there are the 18th, 7th, 33rd, and 87th and 28th regiments. I find a great many old acquaintances among them, and on the whole have

[page 3]

quite a pleasant time. Everybody told me that my feet would be blistered, but I have been marching nearly a week and have experienced no inconvenience, though several men have fallen by the road. There is no straggling. All are compelled to keep up. Those who are too weak or sick ride in ambulances or wagons. Lee has fully double the number of men he had at Sharpsburg. Our regiment for instance had only fifty at Sharpsburg, there about two hundred and seventy five now. The other regiments are the same way.

Yesterday and the day before our soldiers plundered far and wide - taking butter, milk, apple-butter, fruit, chickens, pigs and horses and everything they could lay their hands on. The people are frightened out of their senses. "take anything you want but don't hurt us" is their cry. They are afraid to protest against anything. It is the most beautiful country you ever saw, the neatest farms, fine houses, good fences. The whole country is covered with the finest crops of wheat, such wheat as is not seen in our country.

Yesterday however, General Lee sent an order around that all stealing and plundering should be punished in each case with death, that officers should be held accountable for the execution of his orders, that he made war upon armed men - not upon women and children. The plundering will be stopped now. I never saw people so submissive and badly scared as these people in my life. It must be conscience. They know how their soldiers have desolated

Virginia and they fear that

[page 4]

ours will retaliate. But I can't bear it. I hate to take anything when it is given from fear. Quartermasters and Commissaries and Surgeons are empowered to impress everything necessary for the use of the army. But men are not allowed to have anything but what they buy.

I heard but don't know how true it is that nine of our soldiers were shot yesterday for taking jewelry from off the persons of the women. The articles of war make a death punishment for stealing, and in an enemy's country a regimental court-martial has the power to inflict this punishment. General Lee seems determined to stop all marauding. I don't know what place we shall attack, most seem to think Harrisburg. For my part I want to stay here until the war is over, and take their towns and beat their armies and live on their people. Lee's men have unbounded confidence in him. The Yankees are in great perplexity - don't know what point to re-inforce - don't know whether Lee will attack Harrisburg, Pittsburg, Baltimore, or Washington. I want to take them all. It is glorious. All the fences that are burnt now are Yankee fences. They'll be willing for us to stay out of the Union hereafter. We've come back to the Union, but not as they expected. Write soon. Direct to Lieutenant Iowa Royster, 37th N.C.G. Lane's Brigade, Pender's Division, Hill's Corps.

Augusta County: P. H. Powers to Mrs. Powers, March 17, 1863

Summary:

Powers discusses camp life and missing his family.

Mrs. Powers

March 17th, 1863

Camp near Fredericksburg

My Dearest Wife

Nearly a month has elapsed since I last wrote,. And every day since I have hoped to get some tidings of you. But alas, not a word, not a line can i receive, until the heart has indeed become sick with a long deferred hope. I should feel this more sensibly, but that everyone that I have seen in the Army from Clarke or Jefferson, they hear from home from time to time. And as no bad tidings of you come through this source, I argue that you are at least as well off as your neighbors. Still, it is a source of uneasing anxiety and uneasiness that i cannot hear from you personally. i know my love it is no fault of yours and fully appreciate your dependence upon [illeg.], who either cannot or do not know what it is to be separated for months from wife and children, and confined to the monotony of a camp in winter quarters. If you would put your letters in the hands of those having friends in the Clarke Cavalry, they could be sent out, and then mailed to Richmond. harry Bird told me he heard from his family repeatedly in that way. And Mr. [illeg.] frequently gets [illeg.] out. One of the Randolphs went home a few weeks ago. Staid two days ...

of the County. I would attempt [illeg.], in myself, but Milroy is represented as being such a tyrant, that I should fear the consequences of falling into his hands just at this time.

I must wait and bear. Sometimes I regret not having brought you away with me. Though how could you have subsisted at the present price of everything. God only knows. A Major's pay would not pay your board. Flour sells [illeg.] for \$35 per [illeg.] Bacon \$1.25.

Beef \$1 & everything in like proportion. I sincerely trust that you are not molested by the Yankees and are enabled to provide yourself with such comforts as you need. If there are any goods in the County do not fail to lay in a supply for me. Such as flannel, cloth for pants-coat-Hat-etc. And get [illeg.] or [illeg.] to make me a good [deleted:] of Books. Store them away. Events will very probably enable me to get home before many months. They say we must have a fight here in a few weeks, and then, perhaps we may clear the Valley once more. It is evident that the war will rage this spring with greater fury than ever. May God enable our Armies to successfully resist the hordes of Vandals now being thrown against us! If we can only hold out this campaign. All will be well days ago. Whither he had gone to Lake Ellen-then having been in Richmond several weeks. I regret to have to tell you that her health has failed to such an extent that reason has been dethroned. And she is [deleted:] by this time at the Asylum, under Dr. Wribling's treatment. Poor Jim! He returned perfectly miserable. He never apprehended such a sad [illeg.] from her continued bad health. And was of course shocked, beyond degree at her mental aberration. Doubtless her case has been aggravated by long and continued separation from him. Let us pray and [illeg.] that she may be speedily restored.

I had intended leaving him as soon as he returned and joining the Cavalry, but I could not leave him under such a trial and [illeg.] to remain during this month, provided the Conscript Officers permitted me. As I am not regularly enrolled and they have been looking at all Regiment Officers of late. And enrolling them in the ranks. When I do leave here, I shall attach myself to Gen. Stuart again and serve in the P.n. in some capacity. I can't stand the ranks. And besides, from some staff officers.

All were well in Richmond when last heard from. Mildred has another son.

With most love to all and many Caresses for my little children Whom I am longing to have in my arms [illeg.] more. I am, my own beloved wife.

As Ever

Yours

P.H.P.

Dr Sister-I send you my letter to read altho it has been written so long that it affords me but little satisfaction. I am still in all the doubt & uncertainty about [illeg.] present position and whereabouts If I had not the strong hope that our army [deleted:] coming in to keep me up I don't know what I should do. I hope [illeg.] [illeg.] mine satisfactory. I am deeply grieved to hear of poor Ellies situation & feel for Ben James. That usually is one of the greatest trials a man can be called upon to endure. Write to me sometimes. Betsey is better. The Dr. thinks she will get well. Send this to Sister C.

Yours PMP

Augusta County: James B. McCutchan to Rachel Ann McCutchan, February 20, 1862

Summary:

McCutchan describes the relatively pleasant life in camp, considers whether or not to reenlist, and talks of life back home.

Miss Rate A. McCutchan, Timberridge, Rockbridge Co, Va

February 20th 1862

Camp Zollicoffer

Dear Cousin,

Please excuse my paper, it is the best I have. I commenced writing to you yesterday on half a sheet. I got this yesterday, and I concluded that I would throw it away and commence anew.

I got a letter today the first for I dont know how long, don't think I have got any since yours arrived, got one from Cousin A Buchanan, she has had Diptheria, but I believe she is not a friend of your so I need not write about her. Well I will tell you what I have been doing this evening, have been helping to make an egnog. George Baylor and myself went out this morning and got some milk and eggs, we are going to have some company tonight and have a sing, we have invited some of the Marien Riflemen, from Winchester. They are the best singers I ever heard. We expect to have some

[page 2]

instrumental music too, but you must not think that we expect to get tipsy we don't do such things in our mess. We had a big egnog the evening after we moved into our cabin and had a heap of fun.

You said in your letter that you were disappointed that you did not get to Fairfield, who is it that you go to see there, It must be Charley [unclear:] we are living finely here now, get plenty to eat and of a good quality. can fix it up a great deal better in our cabin than when we were in our tents we have yeast and bake raised bread, have warm rolls for breakfast every morning, we have our mess laid off in twos and have regular cooking days, there is 14 of us so cook day does not come but once a week, get plenty of coffee and sugar, can get some molasses, have to buy them, they are furnished for the officers at 20 cents per

[unclear: goll], we are having a grand time here, if never had no harder times than we have here we would get along very well, but this is not always

[page 3]

the case, I expect we will have some hard fighting to do the next term, and I expect we will all be into it. I have not reenlisted yet and don't know when I will. 9 of our company have reenlisted. we have to the 10th of March to decide. I rather expect most of us will reenlist by that time some will stand the draft. I sometimes think that I will just float along let come what will. I would not hesitate a moment to reenlist if I thought my going would not stop some militiaman from coming. What are they all thinking about it I guess some of them would like if we would reenlist, if I were in their places I would too. Cousin K. I am much obliged to you for the invitation to dinner am very sorry that I could not be there. well it is getting too dark to so will stop for the present, step in and have some eggnog with us. 21st I did not have time to finish my letter in time for the mail today but will endeavor to start it in, in the morning. We had a nice time last night

[page 4]

some came that were not invited consequently were too much crowded, some one I did not say who got one of the performers out and gave him a little too much to drink which spoiled it some. You spoke of thinking about the Sunday that we went to Middlebrook, I expect you often think of that day and of [unclear: So Dall] too. I would like very much to know what you could tell me about that day, but I reckon it is a secret. You asked me if I was fond of [unclear: prels]. I am not particularly fond of them when I am at home but they are very good here. You said that you expected I would not wear a [unclear: viser] that you knit, you are

very much mistaken. I will surely prize it very much indeed. As for the button I have none that is fit. but will get one the next time I go to Winchester. Write soon and tell me about your trip the Ridge. You wished that I was there to go with you some time, you don't wish it more than I do.

Give my love to all the folks

yours truly

Ja's B. McCutchan

P.S. JR is well and all the rest of the boys

Augusta County: William B. Gallaher to His father, April 20, 1861

Summary:

Gallaher writes to his father about the friends he has visited near his camp and reports that he is "very well satisfied with camp life."

Father

April 20th 1861

Martinsburg

Dear Pa

I wrote to Ma from the Ferry on Saturday & I will now write you a few lines. We got here yesterday from the Ferry, & am quartered in a large hall opposite the United States Hotel & am boarding at the Central & Union Hotels. We have a very good time but I don't know how long it will last. I send you by James Patrick a Minnie Musket a present to you

from John Lipscomb. I will get the moulds when I go to the Ferry. We don't know how long we will stay here. Tell Ma I stopped in Shepherdstown yesterday & got my dinner at Grandma's. I saw all the folks they are all well. Grandpa came up here with me & got his supper at Mr Rawlins. I went over this morning to see Mr Rawlins & family. They are all well & very glad to see me. Mrs R sent her son up for me. They send their love to all of you. Mollie says Sallie must write to her. They say Clinton & Sallie must come down this summer. I am very well satisfied with camp life & think I can get along very well. Grandpa says you & Ma must come to see them this summer. I was introduced to Maj Robinson this morning he sends his respects to you. He seemed glad to hear you were improving. He invited me to his house for dinner. I intend going to Mr Rawlins tomorrow again. I want to see his tan yard. Our men behave very well. Any letters you write direct to Harpers Ferry care Capt James Patrick. There is a great many union men here & black Republicans but I think we can get along with them without any difficulty. My [unclear: horse] stands it very well. I attend to her myself. I could have gotten Alfred Plumb to attend to her for \$5 per week but I concluded I had better save it as all the boys attend to theirs. Tell Ma I will take good care of myself & not keep any bad company. How are you getting along tanning. I saw Mr Kiblinger as I came up & also Mr Connoly in Shepherdstown. I will go down and stay half day or so at Shepherdstown if we stay here. Capt Patrick says he will write to you in a short time. The Pistol you sent him he did not need he was made a present of one when we got here. He loaned it to James McClung who is a member of our company he will take good care of it. Should you need it let me know & I will send it to you if I have a chance. As I have

written an unusually long letter & have some business to attend to I will stop. Write soon give my love to all. I will write again in a few days. Tell them all to write me.

Your Son

W B Gallaher

Augusta County: Thomas M. Smiley to His Sister, January 10, 1862

Summary:

Thomas M. Smiley describes troop movements in the mountains of Morgan County during bad weather and a brief confrontation with Yankees at the county seat, Bath. They are moving towards winter quarters.

[1862 Jan 10] Jany 10th

Camp near crossroads Morgan Co

Dear Sister

As it has been almost three weeks since I wrote to you I will try and write a few lines to you this [unclear: morning] to let you know that I am well and getting along pretty well considering the hardships we have had to go through with since the commencement of the present year We left camp Stephenson on New year's day and since that we have been almost constantly on the march and when night came we had to lay down without our tents in the snow and rain We marched to Bath the County seat of morgan and was five days in getting there. The first snow we have seen this winter fell on us the third night while we were laying on the side of one of Morgans Numerous mountains

[page 2]

And after that we marched on a solid sheet of ice the wagons running on the road packed down the snow and it got so icy a person could hardly stand on his feet the horses falling down wagons sliding off the road and breaking to pieces there was several men slipped down and broke their legs and arms there was a great many horses killed and crippled not so many in our brigade but in those that came from Western Virginia they are weak and poor and can not stand much hardship we drove the enemy out of Bath took 24 prisoners killed and wounded 8 or ten took their commissary stores &c we got about 6-or 8000 dollars worth of property our success would have been much greater had it not [page 3] been for some militia we had along with us 2 regiments of them run from some 25 Yankees and their general in the first place disobeyed orders throwing the whole plan wrong he has [deleted: been] been placed under arrest by Gen Jackson. If the Militia had done right we would have captured the whole [deleted: plac] force baggage and every thing they had and made a complete disaster to the enemy We are camped at the cross roads where we can go to four different places we do not know where we are going to some thinks we are going to romney and some to Martinsburg-while others suppose we are going to Winchester we will probably take winter quarters when we get back if the weather is very rough [page 4] you say to let you know whether I want a pair of over socks I do not know that I want them as I have not wore the other ones any yet my boots are most too tight with them on Tell pa that he need not be uneasy about my enlisting for the war as I have not had any idea of it yet there is a bill up in Congress now for the purpose of keeping the twelve month volunteers in service during the whole war but I do not know whether it has passed or not our

regiment are all wanting to go home when their term expires as they do not like their officers

but I must close as my paper is out Write soon

nothing more at present but remain your brother

T M Smily

Crossroads Jan 10th

Appendix B

This appendix contains the lessons as they were designed for implementation in the classroom. These lessons were used by the classroom teacher to guide instruction of the students during the historical inquiry activity. Lessons three and four were initially intended to last only one day, however they were given additional class time.

Lesson Plan Template: Introduction Lesson

Specific Objective: SWBAT demonstrate application of the SCIM process by developing a historical inquiry question related to a historically significant document with 100% accuracy.

Lesson Goals: Students will practice SCIM & Use computers to help establish context. This process will be a whole-class process, allowing students to engage in a historical inquiry activity in an “information rich” environment.

Materials Required:

- Access to the document (Placed online/Residing in archive)
- SCIM-form - Digital
- Computers (1 per student/student pair)
- Pencils / paper for notes if the students chose to take notes.
- Whole class interactive display (White/Chalk/Smart board)

Methods to be used:

- Think pair share [TPS]
- Teacher-directed whole-class discussion [TD-D]
- Guided practice [GP] (Teacher will aide students throughout the process of analyzing the document for class; the entire activity is guided practice.)

In-Class Activities:

Anticipatory Set:

Students will write an answer to the question: How do you know what you know about the Civil War?

New Literacies Sub-Lesson:

One of the ways we know things about historical sources is by looking up information about the sources online. We might look at the definition of words, or look for other examples of ideas. We might even try to understand more about the context of a specific document. For this weeks activity we will be using the Internet. In order to make the best use of our time, we will slow down to speed up.

“What are some important things we need to know when searching for information on the Internet?” [TD-D]

Looking for:

- Using ‘help text’ associated with search results
- Selecting multiple/alternate search terms
- Using quotation marks for specific meanings
- Not necessarily clicking on the first link
- Using Wikipedia as a search-engine – going through Wikipedia to get reference list
- Using CTRL-F on a web-page to find information fast * (Make sure to teach this)
- Bouncing off a web page quickly if the result is not adequate/useful

Main Lesson:

Monitoring – Teacher will ask monitoring questions periodically throughout this activity as necessary. These questions are:

- What additional evidence beyond the source is necessary to answer the historical question?

- What ideas, images or terms need further defining from the source?
- (How useful or significant is the source for its intended purpose in answer the historical question?)

Teacher will start off class by introducing a new activity. “We’re going to start a historical inquiry project, which should last for the rest of this week. To get us started, we will analyze a single document as a whole class. This time, I want you to fill in the parts of the SCIM-form as we go along, and you’ll be asked to fill in the context information using some Internet skills.”

*Students access document.

Teacher uses the Summarizing questions to get things started.

- What type of historical document is the source?
- What specific information, details and/or perspectives does the source provide?
- What is the subject and/or purpose of the source?
- Who was the author and/or audience of the source?

Students work on answering these questions, then partner up with someone nearby to discuss their answers. Students then share out their answers [TPS]. Teacher writes answers on interactive display.

“What we are going to do now is use the Internet to get a full idea of the context of the document. In your SCIM-form fill answer the Contextualizing questions.”

Teacher guides students based on the Contextualizing questions:

- When and where was the source produced?

- Why was the source produced?
- What was happening with in the immediate and broader geographical and chronological context at the time the source was produced? *
- What summarizing information can place the source in time and place?

Students again pair up and discuss their findings. Then share out their findings to the whole class [TPS].

“Now that we know facts from the document, and contextual information, we can begin to draw forth ideas from the document. Does anyone remember what this step is called?”

“When we make inferences, we need to use evidence with explanation. You need to make sure that you keep track of where an idea was represented in a text. That way, if anyone challenges your thinking, you can show them where that idea came from, and how you came to that conclusion.”

Questions for Inferencing:

- What is suggested by the source?
- What interpretations may be drawn from the source?
- What perspectives or points of view are indicated in the source?
- What inferences may be drawn from absences or omissions in the source?

Again, students will engage in a process of individual thought, pairing up and discussing and finally sharing with the whole class [TPS].

“Today we have analyzed a document from just before the civil war. Now we are going to come up with a question, based on this document, that we will research this week.”

[TD-D]

Class writes a question and the teacher records the question for use the next day.

Closure:

Exit ticket:

1. What was the easiest part of today’s activity?
2. What was the hardest part?
3. Did anything surprise you about today’s activity?

Lesson Plan Template: Researching

Specific Objective: SWBAT demonstrate application of the process of historical inquiry by identifying and analyzing documents in order to answer the student-created historical inquiry question.

Lesson Goals: Students will practice analyzing historically significant materials.

Materials Required:

- Access to the document (Placed online/Residing in archive)
- SCIM-form (Completed from previous lesson)
- Computers (1 per student/student pair)
- Pencils / paper for notes if the students chose to take notes.
- Whole class interactive display (White/Chalk/Smart board)

Methods to be used:

- SCIM-C Instruction
- Teacher-directed whole-class discussion [TD-D]
- Guided practice [GP] (Teacher will aide students throughout the process of analyzing the document for class; the entire activity is guided practice.)

In-Class Activities:

Anticipatory Set:

Students will write an answer to the question: What search terms might best help answer the historical inquiry question?

Monitoring Sub-Lesson:

As you work on this assignment, keep track of any questions you have about the ideas you present, or the document you're referencing. You remember from yesterday that we talked about monitoring while doing historical inquiry. Today we're going to continue monitoring ourselves.

Questions:

- What additional evidence beyond the source is necessary to answer the historical question?
- What ideas, images or terms need further defining from the source?
- How useful or significant is the source for its intended purpose in answer the historical question?
- What questions from the previous stages need to be revisited in order to analyze the source satisfactorily?

Main Lesson:

Open with a whole-class discussion:

What did you find in yesterday's document?

What contextual information did you discover? How did you discover it?

What inferences were you able to make, based on the context of the document and any summary information you found?

We're going to look for more information to understand what life was like for soldiers during the civil war. You'll need to find and analyze some more documents in the valley of the shadow archive.

In order to continue analyzing these documents, you will need to look on the Internet for contextual information. Look for things that relate to the letter or diary entry you find. Where were the soldiers? What was life like for everyone else?

Some of the contextual information will be the same for each of the documents you find, but some will be specifically related and connect only to one document. By making sure you keep track of the URL's for each source you find, you can use some information for multiple documents.

** What are some tips you have for making inferences based on the documents?

Navigating the Valley of the Shadow – Structure & tips.

Three sections of the archive -> which will be the most useful to you?

Searching in the archive – using the search tool.

Building information & understanding

Supporting research during the class – What works, what doesn't.

Closure:

Write two sentences about one of the documents you found today. What more do you think you need to find to be able to write your essay?

Jacobs, "Why I am Awesome." http://www.mrjacobs_is_awesome.com

Lesson Plan Template: Writing / Researching

Specific Objective: SWBAT demonstrate application of the process of historical writing by writing a 1-2 page essay in answer to the historical question created by the students.

Lesson Goals: Students will practice using evidence to support an answer to a historically significant question.

Materials Required:

- Access to the document (Placed online/Residing in archive)
- SCIM-form (Completed from previous lesson)
- Computers (1 per student/student pair)
- Pencils / paper for notes if the students chose to take notes.
- Whole class interactive display (White/Chalk/Smart board)

Methods to be used:

- Scaffolded Writing Exercise [SWE]
- Teacher-directed whole-class discussion [TD-D]
- Guided practice [GP] (Teacher will aide students throughout the process of analyzing the document for class; the entire activity is guided practice.)

In-Class Activities:

Anticipatory Set:

Students will write an answer to the question: What does it mean to write an answer to a historical question?

Monitoring Sub-Lesson:

As you work on this assignment, keep track of any questions you have about the ideas you present, or the document you're referencing. You remember from yesterday that we talked about monitoring while doing historical inquiry. Today we're going to continue monitoring ourselves.

Questions:

- What additional evidence beyond the source is necessary to answer the historical question?
- What ideas, images or terms need further defining from the source?
- How useful or significant is the source for its intended purpose in answer the historical question?
- What questions from the previous stages need to be revisited in order to analyze the source satisfactorily?

Main Lesson:

“Today we are going to write an answer to the historical question we created yesterday. Don't worry about this being the absolute best answer possible; we just want you to use the document as evidence to support your ideas.”

How to reference a source? –Reference author & paragraph, references with author, title and URL at the bottom. – Model how / when to use a reference.

Write an introduction:

- Restate the question in some way.
- State your key points

Second/Third paragraph:

- Explain your first key point, using several things from the document (and possibly contextual information) to support your key point (Johnson, para 4).
- Make sure you 'reference' the documents that you're using.

Conclusion:

- Based on your two key points, provide a conclusion. The conclusions should follow directly from your key points. If you don't reference an idea in the second or third paragraph, do not put it in the conclusion.

Closure:

What is the main point of your essay?

Lesson Plan Template: Corroboration/Final Revision

Specific Objective: SWBAT demonstrate application of research principles by looking through an archive for corroborating documents.

Lesson Goals: Support the students understanding of corroboration through instruction and practice.

Materials Required:

- Access to the archive
- SCIM-form (Completed from previous lesson)
- Computers (1 per student/student pair)
- Pencils / paper for notes if the students chose to take notes.
- Whole class interactive display (White/Chalk/Smart board)

Methods to be used:

- Teacher-directed whole-class discussion [TD-D]
- Guided practice [GP] (Teacher will aide students throughout the process of analyzing the document for class; the entire activity is guided practice.)

In-Class Activities:

Anticipatory Set:

Students will write an answer to the question: Do you remember anything in your essay that you felt required more evidence to understand?

Corroborating Sub-Lesson:

Today we are going to be engaging in a process called “Corroborating.” Corroborating is interesting, because you don’t just look for evidence to support your ideas,

but you also look for evidence that contradicts your ideas. When you find something in a historical document that doesn't work with your idea, you need to figure out why. Is your idea wrong? Is the document not applicable to your area of research? Do you need to find out more? Is this document just one example among many that disagrees with the rest?

Questions for Corroboration:

- What similarities and differences between the sources exist?
- What factors could account for these similarities and differences?
- What conclusions can be drawn from the accumulated interpretations?
- What additional information or sources are necessary to answer more fully the guiding historical question?

That last question is a lot like our monitoring questions. Let's look at those again.

Questions for monitoring:

- What additional evidence beyond the source is necessary to answer the historical question?
- What ideas, images or terms need further defining from the source?
- How useful or significant is the source for its intended purpose in answer the historical question?
- What questions from the previous stages need to be revisited in order to analyze the source satisfactorily?

Main Lesson:

“Today we’re going to begin the process of revision of the historical essay you wrote yesterday. We’re going to use the Valley of the Shadow archive, which is where that original document was from.”

“Try to find documents that will corroborate your main answer to your essay. Don’t just look for evidence that agrees with your answer, remember there is a benefit to finding evidence that challenges your conclusion.”

Remind the students of the benefits of finding disconfirming evidence.

Teacher will work directly with students who need assistance.

Closure:

How have the corroboration questions changed your answer?

Appendix C

The following tables illustrate triangulation by source and by method for each of the findings. The rows contain data from individual sources and the columns contain data from different methods of data collection.

Finding 1: Selecting the first document.

	Student Think Aloud	Student Produced Work	Student Interview
Neil	Neil stated that the term, "hardships" would provide a good answer.	Analyzed document related to hardships.	"needed to find something quick related to what I was looking for." -- hardships.
Felicia	"I would answer this as it depends on the person."	Writes that although a soldier is required to pay for his own supplies, he, "is doing very well."	"It's different what the Union's saying how they're being treated and how they're homesick than the confederates."
Nikki	Stated that a soldier was saying that, "camp life was fairly good."	She reported that, "Gallaher stated that he would eat good and slept well."	"that life in the beginning of the war was better than it was at the end."
Viktor	"Yeah, I have an idea now, that, it depended on the camp."	"the writer is suggesting that all is well and that he might rejoin the army and possibly will see a long term of duty."	"obviously not everyone liked it or disliked it, but I think because I chose that people had a good time in the war."

Finding 2: Influence of the information rich environment on document level analysis

	Student Think Aloud	Student Produced Work	Student Interview
Neil	The Smiley letter, " tells us of some of the difficulties of the life in the war." Total of 8:25 looking searching Web.	Added, "On January 11, Simon Cameron Resigned." and the letter, "doesn't speak of slavery at all."	The second point was, "mostly based off of memories from other things I've done in social studies." -- not supported by documents or web searches.
Felicia	Searched web for 5:06 in order to contextualize. Searched, "historical events of 1863."	Added, "The Battle of Kelly's Ford was going on at the time," Powers letter discussed, "prices' and supplies.	Stated that she used, "a calendar and it would tell you the date and the year and what happened."
Nikki	Second letter was written by Gallaher. Spent 13:23 searching the Web. Search phrase, "April 1861, West Virginia."	"there was a States' Rights [meeting] 15 days before." "The war had only started so there was nothing really bad going on yet."	Stated that her main conclusion was that, "life in the beginning of the war was better than it was at the end."
Viktor	Searched on, "...they are furnished for the officers at 20 cents per [unclear: goll]." Searched for 18:31.	Recorded no information related to web-searches during analysis of the second document.	Stated that the answer to the question he searched the web for was in the original document, "after I went back and actually read it."

Finding 3: Students' engagement in corroboration

	Student Think Aloud	Student Produced Work	Student Interview
Neil	Looked, "for something similar" to his idea that life was horrible for the soldiers during the Civil War.	"At camp each soldier had a list of things to do each day," and, "their best companion was boredom."	Searched for disconfirming evidence, but, "couldn't find anything, "so he, "decided to go with support because [he] had more details about it.
Felicia	Stated, "in the summary it talked about how [Blakemore] wasn't going to fight in the war anymore, because of all the advantages that the Yankees had over them."	"The Union soldiers seemed more homesick than the Confederate soldiers."	Stated that she did not, "like to be wrong," so she tried to, "look for more stuff to prove that I'm right than wrong."
Nikki	No Data.	No Data.	No Data.
Viktor	"the one soldier said it was happy and exciting, but this soldier was like bored of it and basically wants the war to be over."	"In Conclusion the men in the Army had a pretty good life during the Civil War."	Stated that he did not read the whole letter because he, "only used the part that I thought that I needed to."

Appendix D

Observation Protocol

Introduction

This protocol is designed to ensure that as much data can be collected as possible. The focus of this observation is to understand the context of the class in as detailed of a way as possible.

Observations

Teacher _____	Date _____
Grade/Level _____	Time _____
N of students _____	Absent/Tardy Students _____

Stated objectives:

Intended outcomes:

Materials used:

Assessment strategy:

Content:

Position of lesson in Unit

Pedagogical techniques:

Student responses during lessons:

Teacher questions:

Other:

Appendix E

Teacher Interview Questions (Initial Interview)

What activities have you done with the students that involve historical inquiry?

Explain the historical inquiry activity X.

What were your goals for activity X?

How did you support student's engagement of historical inquiry in activity X?

How did you determine successful completion of activity X?

What kind of feedback did you provide for activity X?

Were there any common mistakes you found students making during activity X?

Sample of Teacher Interview Questions (Daily Interview)

What do you think went well today?

What are some common problems students are facing during this activity?

How did you support student learning during the class today?

Example of Student Interview Questions (Initial Interview)

Do you remember any historical inquiry activities you have done in this class?

What do you remember about the activity?

What did you like about the activity?

What did you dislike about the activity?

Do you remember what SCIM-C stands for?

Sample of Student Interview Questions (Final Interview)

How well did you like this activity?

How well do you like social studies in general?

How well do you like using your computers?

How well do you like doing historical inquiry?

What is your favorite subject area?

Do you think there are documents that better address your question? Why or why not?

Did you look at the dates of the documents? Did you feel that the dates were important?

When you wrote your initial draft, you relied pretty heavily on things you already knew. Do you agree with this or disagree? Why?

What were some challenges you faced in completing this activity?

What do you think you learned by completing this activity?

Did you focus on supporting your argument, or did you look to see if there was any contradictory evidence that would change your argument?

How comfortable are you using technology?
