ABSTRACT

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BELIEFS ABOUT THE PAST: THE

INFLUENCE OF A COURSE DESIGNED TO

SHIFT WAYS OF KNOWING ABOUT

HISTORY TEACHING AND LEARNING.

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Education

"School history" has long since been characterized by teacher-centered lectures and student passivity, which deviates substantially from the inquiry-based and rigorous methodology historians use to actively reconstruct the past. While recent efforts have been made to move toward a more investigative approach in classrooms, little if any progress has been made beyond the superficial reading of primary source documents. When trying to understand why the disconnect between disciplinary approaches to history and school history continues, researchers have speculated that the knowledge bases, from which prospective teachers develop beliefs about the meaning and processes of history, are foundationally weak.



This study examines the influence of a college course designed to specifically address the teacher knowledge problem in history. Participant beliefs were targeted and intentionally challenged to elicit shifts toward more criterialist ways of knowing. It contributes to the literature on the teaching and learning of historical thinking as well as epistemic beliefs in history. Qualitative and quantitative data were collected from participants over the course of one college semester through questionnaires, interviews, and coursework artifacts. Analysis was completed on two subscales: beliefs about history and beliefs about history teaching and learning.

Consistent with some previous studies, this research found that once surfaced, participant beliefs did begin to shift toward a more expert way of knowing following explicit instruction and practice with authentic disciplinary tasks. While beliefs about the knower, what can be known, and the procedural strategies necessary to create knowledge shifted at varying levels of consistency and stability, the shifts appeared to have an associative relationship often moving in concert rather than independently. Additionally, results indicate that participants whose initial beliefs were more stable made greater shifts toward criterialism suggesting that those who were able to spend less time understanding new ideas were able to spend more time thinking about how to take those ideas and put them into practice. Implications of this research raise questions about what teacher educators need to know in order to expertly prepare preservice history educators along with considerations for the content and instruction of teacher education programs.



CHALLENGING PRESERVICE TEACHER BELIEFS ABOUT THE PAST: THE INFLUENCE OF A COURSE DESIGNED TO SHIFT WAYS OF KNOWING ABOUT HISTORY TEACHING AND LEARNING

By

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Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park, in partial fulfillment of the requirements for the degree of Doctor of Philosophy

2013

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CHAPTER I

INTRODUCTION

Beginning in early American common schools, epistemic beliefs and pedagogical choices associated with history education were constructed around the need to socialize immigrants to "American ways" of thinking (VanSledright, 2008a). In schools, immigrants were taught "the essentials of American citizenship ... and faith in American values and institutions" (Gerstle, 1997, p. 530) repetitively in an effort to build and maintain a national community (VanSledright, 2008a). Coupled with 19th century positivist beliefs (White, 1978), stories of heritage were presented to students as objective history. These stories were memorized and recited to create common cultural identities among an ever-growing population of diverse immigrants.

Such an approach to history through commemorative heritage was characterized by teacher-centered interactions and student passivity (Cuban, 1991). Students were largely dependent on their teachers as disseminators of knowledge and were not often given the opportunity to explore ways of knowing (Huba & Freed, 2000). While reforms such as The New Social Studies of the late 1960s focused on creating discipline-centered change in history classrooms, traditional perspectives regarding the acquisition and construction of historical knowledge, and continued focus on nationalist heritage remain the status quo in classrooms.

"School history" is commonly associated with teacher-centered lectures and textbook driven activities. Characterized by "omniscient voices" (Paxton, 1999), textbooks often portray to students that the histories they read are fait accompli.



Processing heuristics such as source corroboration and assessing author perspective, both procedural understandings within the discipline, have been largely absent from history curricula. When trying to understand why the disconnect between disciplinary approaches to history and school history continues, researchers have speculated that the knowledge bases, from which prospective teachers develop beliefs about the meaning and processes of history, are foundationally weak. Thus, some have argued that a shifting of epistemic beliefs is needed to strengthen pre-service teacher understanding of disciplinary stances. With the responsibility of developing teacher knowledge largely in the hands of pre-service teacher educators, a course designed to surface and challenge the epistemic beliefs of future history educators may be influential to the current issues surrounding teacher knowledge.

A reasonable question to ask is how I came to this study. With significant implications for student learning, teacher educators need to better understand how prospective teachers are learning to think about and teach history. In effort to create a clear roadmap of the teacher knowledge problem among history educators, and the assumptions which drive the methods used to investigate this space, I use myself as a case study. My experiences represent an example of an educator whose lack of disciplinary knowledge of history teaching and learning negatively impacted her students, and whose journey toward a more expert way of knowing resulted in the need for a time intensive restructuring of beliefs. Additionally, sharing my own experiences with this issue gives the reader direct access to my own positionalities as a researcher. These positionalities sit at the foundation of how the research question



associated with the present study developed and why the methodologies and approaches to data analysis used were selected.

Situating Myself within the Research

Becoming an educator was not something I decided on early in my collegiate career. In fact, it was not until after I graduated that I decided I had a calling to be a teacher. Thus, my only option was to search for a position within an independent school, as I did not have the proper state certification to go into public school teaching. By luck, I ran into a family friend who happened to be the principal of a nearby Episcopal school. After interviewing and being told I had "teacher genes", I was awarded a position teaching fifth and sixth grade social studies. When I applied for the job, I had originally hoped to teach language arts, as part of my Bachelor of Arts degree was in journalism. However a personal interest in history and an undergraduate minor in geography made social studies a very close second.

Prior to the first day of school, I was given little to no direction. I was handed a textbook and told to follow it. The only other social studies teacher at the school was actually *my* former grade school social studies teacher. Her advice to me was to have students read through the history textbook, to give them notes, and to use trade book worksheets. I could not help but to notice during our meeting, that the worksheets, written lesson plans, and transparencies were yellowed, visibly quite old, and unrevised. She even admitted that she had been lecturing from the same resources for years.

At this point, nothing seemed out-of-the-ordinary. What she was describing was exactly how I understood the teaching of history. She had played a central role in



defining my K-8 experiences and my high school and college experiences did not steer me much differently. I spent most of my time reading and reciting information, which was assessed using lengthy multiple-choice tests. This was what I used for guidance as I dove into my first teaching assignment.

That first year was actually quite easy. It didn't take a whole lot of work to spend each class period having students read aloud and copy notes. Still, I was troubled by my own lack of formal preparation. I could not help but feel a personal and morale responsibility to go back to school to learn what being an educator really entailed. Additionally, I was troubled by the disinterested and disengaged look on my students' faces. It made me feel like I was doing something wrong. However I had no idea what I could do differently. Dissemination of information was my central goal and I had limited strategies for doing this. That was when I elected to enroll in a M.Ed. program. My focus was primarily to learn pedagogical strategies, classroom management skills, and how to become a "teacher leader" in the sense of really innovating my role as a classroom instructor to engage my students. The first semester of study focused on research foundations for teaching particularly centered on the study of student learning. During semester two, I decided that I wanted to take a course that focused more explicitly on social studies education as that was the subject I was continuing to teach. I enrolled in a 700 level course called "Theory and Research in Social Studies Education".

On the first day of class, the instructor presented us (five doctoral students and myself; a second semester master's student) with a series of primary source documents pertaining to Abraham Lincoln and posed the question "Was Lincoln the



Great Emancipator?" I had my own preconceptions based on what I had learned in previous classes so I went into the assignment thinking I already knew "the answer". However, after reading through the first three documents, I was cognitively paralyzed. They were all saying different things about Lincoln; some of which portrayed the typical Lincoln-as-hero perspective while others shed a negative light on his political intentions. I didn't know what to do. Without the tools to process the conflicting accounts, and the knowledge to work in such a complex disciplinary space, I was unable to move forward with the assignment. This experience bred a great deal of confusion and a frustrating sense of ignorance as I desired to know more but was perplexed by the distance between what I was seeing and what I had known history instruction to entail. I listened to the others talk about the documents and observed how they actually used them to construct interpretations. At this juncture I was completely puzzled as I did not even consider "interpretation" to have a place in the study of history and I certainly was not teaching my students that it did. This was the first of many experiences, which began to shift my own conceptions of what it meant to think about and do history.

While I was taking that history course, I continued to simultaneously teach middle school social studies. I was eager to get them interested and invested in history. Thus, I thought it would be great to try this "new method" with them. I gave them the same Lincoln documents and the same question. I distributed the materials and was anxious to see smiles of enthusiasm. I saw anything but. The complaints started almost immediately. There was too much to read, the text was too difficult, and nothing was saying the same thing. They must have asked me to just "give them



the answer" about 100 times. By the end of the class, my students were tired, frustrated, and had taken little away from the activity. In hindsight I had done the worst thing possible. I paralyzed my students, and I had no understanding as to how I could help them.

It became quickly apparent that I was not equipped to try to teach my own students how to do something that I clearly did not fully understand. I also became aware that it was going to take a lot more than a semester to digest a way of knowing that was diametrically opposed to the ways in which I had always been taught to think about teaching and learning in history. There was so much to know and as I approached the end of my M. Ed program, I found myself only beginning to scratch the surface. I needed to know more. I needed more time, which equated to more courses and more hours spent really thinking deeply about these beliefs while also looking inward at the ones I held. This was one of the driving forces behind my decision to continue through a doctoral program.

Intensive course work and outside research strengthened my own understanding of how to teach and learn within the discipline. I found myself once again eager to share this knowledge and to help others understand not only the foundational beliefs, but also the critical implications they have for students at all levels of education. My platform for this message came by way of an undergraduate social studies methods course, which I was tasked to instruct. My ambitions to challenge and potentially shift ways of knowing were quickly daunted by a severely mitigating factor: *time*. I had a mere 13 class sessions with these students some of which were already designated for the preparation and implementation of mandatory



university assessments (e.g., microteaching and the Authentic Teaching Assessment). Further confounding this problem of time was the title of the course; social studies methods. The "social studies" consists of many different threads (e.g., geography, economics, and anthropology). While my students frequently lamented that what little social studies they did do in their school placements was focused on history, it was still my responsibility to expose them to teaching and learning in the other disciplines.

Thus, my efforts to break the cycle of preservice educators falling back on their own misconceptions about teaching and learning in history (and these misconceptions were confirmed through written and oral surveys semester after semester) was whittled down to a mere two class sessions; ineffective to say the least. What little knowledge they were able to take away was stymied by unproductive cognitive roadblocks, which left them feeling confused and unwilling to move forward with an exploration of their own beliefs. Additionally, their concurrent student-teaching placements (whose 32 hours per week were no match for my two hour course) often continued to reinforce a read and recite methodology.

My doctoral program allowed for me the necessary time and space to think about and reflect deeply on my own beliefs about teaching and learning in history. While I did not go through a traditional undergraduate teacher preparation program, my experiences with learning how to think about and teach history were not unlike those who did. Years of apprenticeships in grade school and high school are challenged minimally if at all in college. Thus, the problem of teacher knowledge in history continues its vicious cycle. After five years of seeing these same patterns, it was clear to me that there was a need for change. These experiences and the resultant



perspective they have given to me as both an instructor and a researcher position me as author of the present study.

Working Assumptions

Research on the preparation of teachers in social studies (Adler, 2010; Dumas, 1995; Owens, 1997) coupled with my own experiences teaching in schools and in an undergraduate teacher education program drives my personal mission to work to better understand and educate others about the teacher knowledge problem in history education. Embedded within my story are a number of working assumptions that provide a framework for this research.

History is the centerpiece of social studies. While mathematics and reading have moved to the forefront of the school curriculum arguably due to testing pressures asserted by federal accountability measures, social studies remains one of the four core subjects within education alongside the disciplines of math, reading-language arts, and science (Perie, Baker, & Bobbit, 1997). The social studies, however, refers to not one but many academic disciplines ranging from sociology and psychology to economics and geography. This makes mastery of the school subject arduous. Thus, it is important to place the focus of preservice teacher education in social studies on the discipline that remains at the center of the social studies curriculum: history. That is not to say that the other social studies threads should be ignored. Quite the contrary is being suggested. The study of disciplinary history naturally encompasses important aspects of economics, geography, and anthropology producing a fertile ground for authentic work within the social studies. As such, disciplinary history necessitates comprehensive study just as different aspects of



mathematics, science, and reading are given their own space during formal teacher preparation. It is also important to note that history appears at the upper and middle school levels as the centerpiece of social studies content standards throughout the country whereas the other social studies subjects are far less prominent.

Investigative history should be at the center of the social studies classroom. School history has long since been dominated by substantive or content knowledge (Lee & Ashby, 2000). It comprises the definitions, descriptions, and terms used throughout history textbooks, which are commonly memorized for recall on multiple-choice tests. Investigative history uses second order knowledge to shape "the way we go about doing history" (Lee & Ashby, 2000, p. 199). This type of knowledge is made up of procedural understandings, which are used to understand history as a discipline and as a formative way of knowing about the past. Both school history and investigative history are often construed to be some of the most dangerous subjects to teach. They each have their own purposes and transmit different messages, which have consequences for the way students think about and engage with the past, and therefore how they learn to define themselves as

In part because of its dangerousness, school history can be equated with what Lowenthal (1998) calls "heritage". The purpose of heritage is celebration and oftentimes patriotism. "Heritage passes on exclusive myths of origin and continuance endowing a select group with prestige and common purpose" (Lowenthal, 1998, p. 128). These myths-as-cultural tools serve as glue, which holds together dominant ways of thinking, socializes young students, and acclimates newcomers into society



(VanSledright, 2008a). In schools, heritage is disseminated through textbooks with the goal of instilling a collective memory and national identity amongst students. Omissions are rarely noticed as stories are seamlessly blended together to form epic tales of heroes and heroines. The roles these stories play within the school classroom teach students to equate school textbook heritage with history and thus as an accurate rendering of the past.

School history also depends heavily on textbooks. They assume background knowledge, and operate from unclear causal explanations that affect student understanding. Beck, McKeown, and Gromell (1989), for example, found that textbooks lacked (on various levels from paragraphs, to sections, to chapters, and to units) clear goals for the content being presented, which directly affected comprehension ability and often translated into little more than a memorization of discrete, disconnected facts. Further, the researchers found that social studies textbook authors made assumptions about the background knowledge of students leaving out "sophisticated and abstract concepts needed as background to understand main points of the content" (p. 152). Lack of necessary background knowledge further challenges the comprehension ability of students making it difficult for them to make causal inferences and build on text (Langer, 1984; Pearson, Hansen, & Gordon, 1979). It effectively sets them up to be passive consumers of the heritage myths and legends the textbooks convey.

Likewise, textbooks promote a view of history as a set of objective and non-interpretable facts. History is presented as knowledge that is "fixed by authority rather than subject to debate" (Sexias, 2000, p. 23). Bound together in a largely



mythical narrative, textbooks serve as the disseminator of this objectified knowledge providing students with a collective memory of people's names, dates and events, which they then approach not with caution, but with unwavering trust. However, there are consequences associated with this approach.

First, consider the content these textbooks provide. Most contain stories of Anglocentric nationalism characterized by "an arc of military, economic, and political" conquests blended into a story of progress (VanSledright, 2008a, p. 119). The inclusion of such content, along with the exclusion of others, sends cultural messages to students regarding who and what society values as important "to know" and consequently, what is acceptable to gloss over. Students not sharing characteristics with the dominant culture can feel slighted and disconnected from school history curricula as their culture and heritage are largely underrepresented (Epstein, 1998). Ultimately, research has revealed that such a narrow and rigid treatment of historical content has unintentionally bred a culture of suspicion and cynicism in some students towards school history (Epstein, 1998; VanSledright, 2008a), because what they hear and read in school history does not square with their ethnoracial experience away from school.

Additionally, the customary interactions associated with school history, such as rote memorization, factual recall, and recitation (VanSledright, 2002; 2008a), lack the foundational principles of authentic, constructivist learning and cognitively paralyze students from engaging with the sort of historical knowledge Lowenthal (1998) distinguished from heritage. Newmann and Wehlage (1993) argue that authentic learning allows "students to construct meaning and produce knowledge, use



disciplined inquiry to construct meaning, and value their work beyond success in school" (p. 8). Within these environments, sophisticated creation and in-depth understanding of knowledge occurs. School history, however, lacks the reflexivity necessary to interact with knowledge; rather it depends on rote memorization and repeated drill in heritage myth. These interactions, while arguably successful in *training* students to read and recite information, do not teach them to *understand* and thus fail to elicit sound learning experiences (VonGlaserfeld, 1989). Additionally, students lacking in disciplinary strategies remain unprepared to make sense of, or deal with other historical narratives that compete with their textbooks. Information conflicting with what is contained in their textbooks creates a situation that students are untrained to navigate. Thus, the conflicting source of information is oftentimes discounted as false, uninformed, or otherwise incorrect, or it is mastered but rarely appropriated (i.e., believed), fostering unproductive dichotomous thinking.

Investigative history takes into account the second order concepts historians utilize to create the narratives often read in schools. It promotes a multiplicity of ways to look at a given historical text through author perspective, historical significance and context of the event. Wineburg (1998) defines the discipline of history as "more than a collection of interesting stories. It is a systemic disciplined way of thinking about the past; a form of thinking that prepares us to exercise choice and judgment in a democracy" (p. 237). Wineburg states that in order to develop and understand disciplinary knowledge, a person must do more than read a stack of documents. Individuals must carefully examine their own beliefs about history and about the past, which in turn shapes their ways of knowing ultimately defining the perspective



through which history is filtered. Understanding human positionality, and the active role of the subject in the creation of history, are fundamental to the discipline (Maggioni, Alexander, & VanSledright, 2004; VanSledright, 2001).

Moving away from the textbook and closer to the actual discipline of history allows for a deeper and more contextualized understanding of history while promoting complex cognitive acts, and motivates students to take ownership of their learning experiences. Bain (2000) states that any student can simply mimic what has already been done. Without a framework for understanding what history is, students are tasked with nothing more than reading a series of words. Seeing history as a complex journey filled with many tasks will force students to think about similarities and differences within the text. Historical thinking challenges students to ask questions of what they are reading, consider the stance of the author and think about the reasoning behind the written text. The activity associated with the act of "doing history" can stimulate motivation and essential critical thinking skills necessary for life in information cultures, which are not often found in school history.

However, like heritage, history is also dangerous. Exposing students to the tools, procedures, and underlying structures of the discipline gives them the power to question, think and reason. Students no longer passively absorb information. Rather they find themselves actively engaged in its construction. Doing so, students begin to understand the fuzziness associated with history and thus can challenge the celebratory nation-state narratives found within their history textbooks. This leaves heritage to be scrutinized. To some, this may be seen as delaminating the layers that



history-as- heritage efforts worked so hard to put in place to help glue society together.

Still, most advocates of history reform agree that authentic learning in history takes place through historical investigation and thus should be at the center of school experiences with the subject (Barton & Levstick, 2010). Placing textual investigation at the forefront of the learning experience allows students to take an active role in understanding how histories are created and how they too can have a hand in their creation (VanSledright, 2002). Students appear to thrive in such environments displaying the ability to coherently express rational and reasoned argumentation for their constructions of knowledge (Smith, Maclin, Houghton & Hennessey, 2000; VanSledright, 2002).

K-12 apprenticeships of observation shape preservice teachers beliefs.

Next, consider my own encounters with history as a student. Heavily influenced by K-12 apprenticeships of observation, my experiences are representative of how most preservice teachers formulate their own beliefs about history teaching and learning (Britzman, 1991; Kennedy, 2005; Lortie, 1975; VanSledright, 2011). The influence of these apprenticeships served as a foundation for my own beliefs towards history education, largely due to the sheer amount of time spent engaging in such practices. Typically, the average teacher spends 12+ years apprenticing "school history" during early elementary, elementary/middle, and high school (VanSledright, 2011). Resultant beliefs about history teaching and learning are often characterized by objectivism. These beliefs, more often than not, remain unchallenged and even reinforced during collegiate study due to content-driven (and methodologically-



absent) history survey courses (Booth, 1993; Calder, 2006; Kornblith & Lasser, 2001; Thornton, 2001) and short, multi-focused methods courses. This extensive period of observation is of little match for the limited hours spent discussing authentic disciplinary ways of knowing during formal teacher preparation.

Preservice teachers receive inadequate preparation in disciplinary

history. Generic licensure policies often dictate credit hours and content requirements for formal teacher preparation. Most require their preservice teachers to take a core of classes centered on theory-based instruction and a smattering of cognate specific classes. The choice of cognate is to allow for specialty content study (traditionally around nine semester hours) within a given discipline. However, as stated, the social studies comprise many disciplines. Students selecting the social studies cognate are not required to specify a discipline of focus. Thus they can essentially satisfy the cognate requirements with three courses from three different disciplines, which is not a salient way of becoming specialized in any one area. This situation becomes additionally problematic when social studies cognates are completed with disciplinary courses not centralized to the social studies school curriculum (e.g. psychology, sociology). Thus, preservice educators, similar to myself, are permitted to graduate and teach history with oftentimes only one lower-level survey course (part of their core requirements) as their referent for content and procedure (VanSledright & Frankes, 2000; Wineburg, 2004). These same licensure policies further dictate pedagogical preparation. Traditionally this includes a block of methods courses each focusing on a given disciplinary area of study. Experiences within these methods courses vary greatly based on course design and instructor knowledge.



As an instructor of social studies methods, I found that most of my students came to my class with limited (extremely in some cases) content knowledge and understandings about history, which were highly reminiscent of my own early objectivist stance. In addition to my own observations, research indicates that social studies methods classrooms are often comprised of students with similarly unproductive epistemic beliefs about teaching and learning in history (McDiarmid & Vinten-Johansen, 2000). Such a stance creates a roadblock for dealing with multiple perspectives and conflicting evidence trails, causing a mental stalemate when students begin to learn about disciplinary criteria. Without the time needed to help guide students through a period of belief reconstruction, two consequences often result: confusion and anxiety and/or complete abandonment and disassociation with what is being taught. Still, it remained important for me to introduce such disciplinary ways of knowing with the hope that students would latch on and seek out the necessary space to learn more.

Underlying this assumption is the theory that one must first understand the structure of the discipline before learning how to translate such ideas and methods into meaningful pedagogy. The theory also suggests that, given the unstable, ill-structured nature of historical knowledge, understanding the discipline depends on the possession of beliefs, which allow the doer of history to work through its unstable nature.

Preservice teachers need more time to explore their beliefs. Preservice teachers with experiences similar to my own, such as those I witnessed as an undergraduate instructor, often choose to revert to their foundational sets of beliefs



(apprenticeships of observation) because they have an inadequate capacity to enact a curriculum and use materials with an investigative history orientation thus propagating ways of knowing that do not align with the discipline and therefore limit progress in developing deeper understandings. Effects impact the way teachers teach history and how their students understand history. Consequently, more educational time is needed to allow preservice educators of history the opportunity to explore meaningful change in their beliefs.

Given such an opportunity, preservice teachers would have the opportunity to examine their existing beliefs (Dole & Sinatra, 1999; VanSledright, 2002), and have those beliefs challenged (Chinn & Brewer, 1993), which could result in a state of cognitive dissonance and a period of reflection where preservice teachers could seek to restore equilibrium in order to move forward. A similar space is commonly offered during preservice teacher training in many of the other core subject areas (science, reading/language arts, and math). However, social studies preservice education remains confined to one short methods course resulting in limited exposure to epistemic reflection or change. Thus, short (either during an internship or in the classroom) experiences preservice teachers have with ways of knowing that are contrary to their lengthy apprenticeships, commonly have little impact due to the time it takes to shift beliefs.

Powerful K-12 apprenticeships of observation centering on memorization and recitation coupled with inadequate teacher preparation in substantive and procedural knowledge associated with history education continues to produce educators who are unprepared to bring investigative history to the classroom. Thus, while history



remains at the center of the social studies curriculum, it continues to be characterized by unproductive epistemic beliefs, which disallows students from engaging in authentic historical thinking. Beliefs associated with an expert way of knowing, which is necessary to think about and do investigative history, would require most preservice educators to shift the ways in which they think about teaching and learning in history. Such a shift requires an intensive understanding of one's own beliefs and a thoughtful provocation of new ways of knowing. However, given the current make-up of most teacher preparation programs, a meaningful space for such a shift does not exist. The assumptions embedded within my own experiences as a preservice teacher and an educator of social studies methods, when melded into a larger framework, theoretically serves as the foundation for the space necessary to strengthen disciplinary knowledge and to shift the epistemic beliefs of preservice teachers of history in order to parallel our history classrooms with the structure of the discipline.

A serious evolution is afoot in how we think about the knowledge teachers need to teach meaningful disciplinary practices. Preservice educators need more subject matter knowledge coupled with deeper, commensurate pedagogical content knowledge to fully engage in the ways of knowing necessary to effectively educate students in the structure of the discipline. However, current teacher preparation programs continue to matriculate preservice educators with limited subject matter and pedagogical preparation in history education. While school history curricula continues to be updated with content objectives which stress procedural skills associated with pragmatic approaches, the subject matter and pedagogical preparation of preservice history educators continues to be brief, disjointed, and oftentimes



objectivist. This problem of teacher knowledge is further exacerbated by state licensure policies, which allow education graduates to be licensed without adequate knowledge of the subjects they are required to teach. Policy advocates continue to demand for more knowledgeable students yet they neglect to consider the knowledge base of teachers. These policies have held steadfast for decades. Thus, teacher education programs must lead through the initiation of experimental change. The course proposed in this study is one such effort aimed at increasing teacher knowledge among preservice educators, which likely will result in smarter, more disciplinary-minded students of history.

Focus of the Study

The teacher knowledge problem in history seems to suggest that additional time is needed for preservice teachers to grapple with the kinds of beliefs they have acquired about ways of knowing in history in relation to criterialist understandings. In traditional teacher education programs, time can be equated with courses and credit hours. College course work provides both the time and the space for students and teacher educators to work together to develop knowledge. The quantity and quality of teacher education, by way of courses, may have an advantageous impact on the development of teacher knowledge. In preparation to teach history, additional time and space is needed to develop disciplinary knowledge and epistemic beliefs to augment the traditional social studies methods block course. Such a stand-alone course must be mindful of not only new teacher knowledge, but also the shifting of existing beliefs that conflict with more productive disciplinary ways of knowing. Because most pre-service teachers enter their teacher preparation programs with



relatively naïve epistemic beliefs in history (as a consequence of their apprenticeships of observation), this new space would need to be carefully designed to give students deliberate opportunities to grapple with their understanding of history teaching and learning in productive ways.

The central focus of this study was the analysis of how a course with these intentions at its foundation influenced a group of preservice educators. Specifically, the purpose of this dissertation was to investigate the research question, "What happens when a particular set of course activities designed with the central goals of raising, deepening, and reconstructing epistemic beliefs in history is shared with preservice educators?" To facilitate this research, a course was designed based on existing research in the field of history education, reform, and conceptual change, which aimed to surface, challenge and shift ways of knowing about the past. A set of experiences and activities derived from and built around previous work in belief shifting and progression in historical understanding, were developed to allow participants the opportunity to deeply consider their existing beliefs about history teaching and learning while simultaneously having those beliefs challenged. Eight participants elected to enroll in the one-credit course, which met eight times for 100 minutes.

While certainly not the solution to the teacher knowledge problem in history, a deliberate course may serve as a step in the right direction; aiding in the deepening of teacher content and pedagogical knowledge in history which stands a chance of transferring to the classroom and thus reforming the way history is taught. Research suggests this sort of reform is necessary for improving the historical understanding of



aged students. Analysis of such an experience may help us to better understand the nature of beliefs in history.

Layout of Forthcoming Chapters

This previous sections of this chapter have laid out the problem space, which sits at the center of this dissertation. The breakdown of concepts, which follows attempts to outline the forthcoming chapters as a way of offering the reader, a roadmap of what is to come and to make the lens through which I have written this manuscript transparent.

Chapter Two. The literature review constructed for this study was designed to help the reader better understand the key constructs, which underpin this research and the theoretical framework, which served as my point of reference for making pedagogical decisions associated with the course. First, I begin with a discussion of teacher knowledge to clarify how the construct is being used throughout the study. This section focuses specifically on the importance of subject-matter knowledge, pedagogical content knowledge, and the didactic relationship between the two. Then, I look at teacher knowledge in history inclusive of what it means to think historically (subject matter component) and how historical thinking is taught (pedagogical content knowledge). The empirical studies included in this section largely influenced content choices made to structure the course.

Research indicates that preservice educators bring a wide-range of beliefs about history teaching and learning to their formal teacher preparation experiences. In order to better understanding the kinds of beliefs the participants in this study might bring with them to the course, I conducted a review of literature surrounding the



acquisition of teacher knowledge in history. An analysis of expert ways of knowing in history coupled with a review of the ways in which preservice educators are acquiring beliefs suggested a teacher knowledge problem in history. Section four of Chapter Two attempts to deconstruct the teacher knowledge problem in history focusing specifically on what knowledge is most lacking, implications for student learning and ways to potentially influence this cycle.

The final sections of Chapter Two investigate empirical studies, which use conceptual change theory as a foundation for their efforts to shift ways of knowing. While the literature specific to history is thin, disciplines such as science have worked extensively in this space and offer significant contributions to the ways in which we can think about fostering belief shifting. Specifically, these studies help to create a framework for the theoretical and strategic design of the course at the center of this investigation.

Chapter Three. In this chapter, I discuss the methodology used to capture the experiences offered to participants and their resulting actions. The overall design for the study is detailed including information about the participants and the particulars of the course itself. Next, I talk about the measures used to better understand what was happening throughout the semester followed by a detailed explanation of analytic procedures.

Chapters Four and Five. Chapters Four and Five report out the happenings of the course. Chapter Four begins with a detailed demographic analysis including college majors of study and educational backgrounds. As we attempt to better understand the influence of the course on each participant, it is necessary to have a



contextual frame for the ways in which they understood the past at the start of the course. Participant baseline beliefs about history and history teaching and learning resulting from measures administered during session one of the course are reported out as individual case studies. These case studies serve as initial points of entry into the ways in which participants understood the past.

Chapter Five investigates the overall influence of the course. Participant ways of knowing about the nature of knowledge, the knower and how history is constructed were analyzed based on qualitative and quantitative measures used to collect data across the semester. The chapter is broken apart into two sections: beliefs about history and beliefs about history teaching and learning. Within each section, the happenings of the course are reported out in terms of "shifts in transitional beliefs" as all participants entered the course in some sort of transition. Patterns with regards to the ways beliefs shifted among participants were dually assessed.

Chapter Six. The final chapter of this dissertation offers a discussion of the course experiences and the possible influence it had on participants. Following a discussion of research limitations, I offer a scholarly reflection on the course, which includes how I had hoped the course would influence participants, how participants perceived the course to have influenced them, and an analysis of what actually happened. Emergent themes and their implications for teacher knowledge and the broader scope of teacher education are considered. The dissertation closes with concluding remarks regarding the future of history education.



Key Terminology.

Before moving forward, clarifications with regards to terminology used throughout this study may be useful. First, I use the term *epistemic beliefs* to refer more specifically to beliefs about knowledge as opposed to beliefs about epistemology. Relying on Hofer's (2004) differentiation of this term from epistemological beliefs, I use epistemic beliefs when referencing the ways in which participants understand ways of knowing about history teaching and learning. Central to my use of this term is the assumption that beliefs about the nature of knowledge and knowing are presumed to have domain-specific qualities.

Historical thinking is another term used extensively throughout this study. It is a complex term with many assumptions embedded within its meaning. I use this term to refer to the process expert historians use when constructing historical narratives or "histories". This work includes "sourcing", which involves a critical level of interrogation of documents and their authors (VanSledright, 2004). The specific processes, which include identification of the source, attribution or recognizing the source is positioned, the judgment of perspective and the assessment of reliability, are discussed in more detail in Chapter Two.

Objectivism, subjectivism, and criterialism are three terms originally developed by Maggioni, VanSledright, and Alexander (2009) to represent categories of epistemic understanding in history. Within each category, individuals hold varying conceptions regarding the nature of knowledge, the knower, and the processes used to create knowledge. Individuals subscribing to objectivism tend to view knowledge as finite and discoverable. The knower or historian is a chronicler of objective facts



discovered. No processes are used to actively create knowledge. Subjectivists, acknowledge the active role of the knower in the construction of knowledge. However, they have limited strategies and thus often fall back on a relativism to justify cognitive impasses such as conflicting sources. Finally, the criterialist represents the expert knower. These individuals have a thorough understanding of the disciplinary heuristics needed to construct authentic and rigorous historical accounts. They recognize that the construction of history is neither absolute nor relative and are able to justify cognitive impasses using a sophisticated understanding of conjectural logic. I use these terms as a way of referencing the varying conceptions participants have regarding the role of knowledge, the role of the knower and the role of processes used to create knowledge in history.

In the chapter that follows, I attempt to elaborate on these key terms, which also serve as the central underpinnings of this research. Through a synthesize of relevant literature and empirical studies surrounding teacher knowledge in history and conceptual change theory, Chapter Two provides a framework for the ways in which the teacher knowledge problem has propagated itself over time and how a course designed with specific goals to target epistemic beliefs may influence preservice educators.



CHAPTER II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A review of research coupled with my own experiences as a student and educator indicates that there is a teacher knowledge problem when considering disciplinary history. Years of apprenticing "school history" followed by limited formal content and pedagogical preparation have caused a stagnant and unproductive understanding of the discipline. This has resulted in the propagation of traditional ways of knowing with regards to what history means and how it is constructed, leaving students of the teaching core woefully underprepared to do more than replicate their apprenticeships of observation with all limitations intact. An investigation of the key constructs associated with such experiences further illustrate the problematic state of teacher knowledge within the domain of history. This review of literature investigates the teacher knowledge problem in history through an analysis of these key constructs which include: the meaning of teacher knowledge, the dimensions of teacher knowledge in history, and the potential for teacher preparation programs to act as an influencing force to promote epistemic change.

What is Teacher Knowledge?

Over the past century, conceptions of teacher knowledge have been at the center of discussions surrounding teacher education. Theories regarding the importance of subject matter content knowledge versus pedagogy have sparked debates about the allotted time spent on each within teacher preparation programs. Driving the focus of many of these programs has been the licensure exams



prospective teachers are expected to pass, which send clear messages to pre-service teachers and teacher educators about what content and pedagogical strategies are important for teachers to know.

Teacher knowledge has been assessed through competency exams for decades. Both questions of content knowledge and pedagogy have commonly been measured. However the emphasis on content knowledge versus pedagogical knowledge has fluctuated over the years. With the introduction of the 1875 California Teachers Exam came an overwhelming focus on subject matter content (only 50 out of the 1000 points were delineated to the theory and practice of teaching), the assumptions this test sent were clear:

The person who presumes to teach subject matter to children must demonstrate knowledge of that subject matter as a prerequisite to teaching. Although knowledge of the theories and methods of teaching is important, it plays a decidedly secondary role. (Shulman, 1986, p. 5)

The 1980s brought about a shift in this conception of hierarchy in teacher knowledge. Teacher exams began focusing less on subject matter knowledge and began shifting their focus to the theory and practice of teaching (Shulman, 1986), which brought about new conceptions of what centrally defined teacher knowledge.

Researchers have remained steadfast in their attempts to better understand what makes up the body of knowledge teachers as professionals need to master.

Grossman (1990) summarizes recent generations of teacher knowledge models stating,



Elbaz (1983) includes five categories of knowledge in her vision of 'practical knowledge': knowledge of self, knowledge of the milieu of teaching, knowledge of subject matter, knowledge of curriculum development, and knowledge of instruction. Leinhardt and Smith (1985) categorize teacher knowledge into subject matter knowledge and knowledge of lesson structure. Researchers at Stanford (Shulman, 1986, 1987; Wilson, Shulman, & Richert, 1987) define seven categories of teacher knowledge: knowledge of content, knowledge of pedagogy, knowledge of curriculum, knowledge of learners and learning, knowledge of contexts of schooling, pedagogical content knowledge, and knowledge of educational philosophies, goals and objectives. (p. 5)

Using this research as a framework for her own conceptualization of teacher knowledge, Grossman delineates four categories of teacher knowledge, placing subject matter knowledge, knowledge of pedagogy, pedagogical content knowledge, and knowledge of context central to the professional knowledge base of teachers (Grossman, 1990).

Similarly, Shulman's (1986) conceptualization of teacher knowledge consists of both subject matter and pedagogical content knowledge; however he explicitly defines them not as dichotomous but instead as a seamless blend of the two. Arguing that the isolation of "general skills, content knowledge, and general pedagogical skills" continues to diminish the professionalism of teaching by trivializing what educators needs to know, Shulman proposes a marriage between content and pedagogy (Shulman, 1987, p. 6). Criticizing the lack of research attending to the



complex nature of integrating subject matter into pedagogy, what Shulman refers to as the "missing paradigm", he contends,

Mere content knowledge is likely to be as useless pedagogically as contentfree skill. But to blend properly the two aspects of a teacher's capacities requires that we pay as much attention to the content aspects of teaching as we have recently devoted to the elements of teaching process. (Shulman, 1986, p.

Defining the knowledge base of teaching as an understanding of the "knowledge, skills, and dispositions" a teacher needs to be an effective classroom educator (Shulman, 1987, p. 106), Shulman argues that educators should attend to the various dimensions of subject matter content knowledge and pedagogical content knowledge (Shulman, 1987) which will serve as the two structural bases of teacher knowledge throughout this study.

Subject matter knowledge. Subject matter knowledge within a discipline is much more than the simplified content to which it is often reduced. While information relevant to a domain of knowledge, namely the principle facts and concepts, is necessary to know and to be familiar, a teacher must also understand the complexities associated with the underlying structures of a given discipline to fully conceptualize the subject matter (Shulman, 1986). Schwab (1978) breaks apart the structure of subject matter knowledge into what he terms "substantive" and "syntactic" dimensions. Substantive structures are the ways in which the concepts and principles are organized to include its facts (Shulman, 1986). These structures include a variety of frameworks, (Grossman, Wilson, & Shulman, 1989), and specify



information and topics to be known (Ball & McDiarmid, 1989). Syntactic knowledge is complimentary. It encompasses "the canons of evidence used by members of a disciplinary community ... and they are the means by which new knowledge is introduced and accepted" (Grossman, Wilson, & Shulman, 1989, p. 29). Substantive structures of subject matter may be thought of as the paradigms while syntactic structures are the tools used to guide inquiry within a discipline (Grossman, Wilson, & Shulman, 1989). Understanding the substantive and syntactic structures of a domain's subject matter knowledge equips an individual with the ability to articulate the central topics of a discipline and its meaning and relationship to inter- and intradisciplinary concepts (Shulman, 1986). While the importance of subject matter knowledge as a prerequisite for effective teaching is clear, educators must also pay special attention to the pedagogical strategies used to communicate knowledge to students (Ball & McDiarmid, 1989; Fergueson & Womack, 1993). These choices can have a profound impact on the way a student conceptualizes an academic discipline (McDiarmid, Ball, & Anderson, 1989).

Pedagogical content knowledge. Professionals within a given disciplinary field are expected to have mastered the subject matter knowledge within their domain. Likewise, effective teachers should master the subject matter knowledge within their field of instruction. However, teachers, unlike their disciplinary counterparts, must take this knowledge and make it accessible to a gamut of learners with varying backgrounds and at varying skill levels. To accomplish this, teachers must strategize about how to best represent this knowledge to their students. "The most useful forms of representation of those ideas, the most powerful analogies,



illustrations, examples, explanations, and demonstrations" used by teachers to teach subject matter knowledge to their pupils is called pedagogical content knowledge (Shulman, 1986, p. 9).

Grossman (1990) describes four central components of pedagogical content knowledge: knowledge and beliefs about purposes of teaching a subject, knowledge of student conceptions and misconceptions, curricular knowledge, and knowledge of pedagogy. Teachers are tasked with blending content and pedagogy as a way of introducing students to communities of discipline (McDiarmid, Ball, & Anderson, 1989). Teachers must skillfully reorganize disciplinary concepts while integrating appropriate pedagogical technique all the while taking into consideration their students, the classroom environment, and the curriculum (Gudmundsdottir, 1990). Teachers who do this successfully, are especially cognizant of how their students might best learn the content they are presenting, taking into consideration common student preconceptions and misconceptions about the discipline. This demands a flexible understanding of a discipline's subject matter knowledge and familiarity with "what experts in the field do, how knowledge evolves, [and] what the standards of evidence [entail]" (McDiarmid, Ball, & Anderson, 1989, p. 194). Deeply situated pedagogical content knowledge allows educators to represent disciplinary content in ways, which guide student thinking and thus aides in the creation of sophisticated ways of knowing. These productive learning experiences help teachers teach for "problem-solving, invention, and application of knowledge" (Darling-Hammond, 2000, p. 167).



Underlying this conception of teacher knowledge are a number of foundational elements, which enrich an educator's mastery of subject matter and pedagogical content knowledge. Shulman (1986) suggests a third conceptual category of teacher knowledge, curricular knowledge, which surrounds the school curriculum and the tools teachers use to represent programs designed for instruction. A "pharmacopeia" from which teachers draw upon, curricular knowledge is used to exemplify subject matter content and to aide in the delivery of pedagogical content knowledge (Shulman, 1986, p. 10). An understanding of this knowledge base also allows teachers to relate content laterally, making connections with other grade-level courses, and vertically, bridging the gaps within a discipline. However, it is important that teachers are simultaneously well-versed in subject and pedagogical content knowledge for these knowledge bases help serve as a critical lens through which curricular tools can be critically evaluated for relevancy.

Along with social and cognitive knowledge of their learners (Turner-Bisset, 1999), educators must have a comprehensive understanding of their educational contexts (Grossman, 1990; Shulman, 1986). Subject and pedagogical knowledge must be adapted to specific school settings and conditions as well as the learners situated within those contexts. Understanding the foundational components of teacher knowledge equips teachers with the ability to construct effective pedagogical strategies (Wilson, Shulman, & Richert, 1987). Finally, teachers need to be knowledgeable of the educational ends associated with their subject matter and pedagogical content knowledge (Turner-Bisset, 1999). As Feiman-Nemser and Buchmann (1985) explain, teaching is a "moral activity that requires thoughts about



ends, means and their consequences ...end-means thinking and attention to student learning are essential to pedagogical thinking" (p.1).

Relationship between subject-matter and pedagogical content knowledge.

Professional teacher knowledge is distinguished from other knowledge bases by the inter-connective relationship between subject matter knowledge and pedagogical content knowledge (Shulman, 1987). Darling-Hammond (2000) suggests, "It seems logical that pedagogical skill would interact with subject matter knowledge to bolster or undermine teacher performance" (p. 167). Understanding the subject matter knowledge and pedagogical content knowledge within a discipline, as well as the necessary interactions between the two (Ball & McDiarmid, 1990; Veenman, 1984), has implications for the ways in which teachers teach and symbiotically, how students learn.

Depth of subject matter knowledge and the disciplinary perspectives, which underlie that knowledge, are instrumental in the content, process, and overall effectiveness of instructional design (Grossman, Wilson, & Shulman, 1989).

Educators with sophisticated understandings of content, pedagogy, and ways of knowing central to a discipline, will be able to represent that knowledge in a range of ways to accommodate diverse groups of learners (Bruner, 1977), whereas teachers with a limited knowledge base may instruct more cautiously at the expense of student inquiry and participation (Manross, Fincher, Tan, Choi, & Schempp, 1994;

McNamara, 1991). While depth of knowledge is crucial to effective instruction, it is important to consider its impact on an individual's personal conception of knowledge. How a teacher conceptualizes disciplinary foci and processes will ultimately shape



the questions they ask, the topics they value as central, and the activities they create for their students (Ball & McDiarmid, 1989). Similarly, a teacher's personal conception of knowledge will affect their success and willingness to implement certain educational innovations. Failing to consider one's own personal conceptions of knowledge often results in an abandonment of new strategies that challenge their epistemological or pedagogical assumptions because teachers find them impractical or unrelated to what they consider to be central to the discipline (Verloop, Van Driel, & Meijer, 2001).

The subject matter and pedagogical choices a teacher makes, which are based on their own conceptions of knowledge within a given domain, have significant impact on the students they are tasked with educating. The content, representations, and processes imparted on their students "convey messages ... about both the substance and nature of the subjects they teach" (McDiarmid, Ball, & Anderson, 1989, p. 194). Thus, teachers with a weak knowledge base may indirectly encourage misconstrued disciplinary practices and ways of knowing (McDiarmid, Ball, & Anderson, 1989), which then influence the foundational structures of a student's beliefs. When these structures are compromised, knowledge within a domain becomes fragmented and thus becomes difficult for students to generalize to future learning experiences, has limited intellectual appeal, and ultimately is likely to be forgotten (Bruner, 1977).

Clearly there is an interrelationship between subject matter knowledge, pedagogical content knowledge and effective teaching. A gap in teacher knowledge directly impacts effective teaching and thus has consequences for student learning.



Deeply rooted teacher knowledge in discipline-specific content and pedagogy is integral for the educational success of students. However, school teaching imposes a unique responsibility for knowledge on its educators (Thornton, 2001). Responsible for mastering multiple subjects, schoolteachers are expected to deeply understand both the subject matter of and the pedagogical content knowledge associated with *many* academic disciplines. An arduous task for pre-service teachers and teacher educators, educators instead often receive brief and contextually disconnected experiences with subject specific knowledge consequently under-preparing them to teach their subjects effectively (Conant, 1963). This has resulted in a systemic problem with immediate ramifications for students; teachers lacking in knowledge produce students lacking in knowledge.

The teacher knowledge problem is one that impacts every discipline. In many subjects, teachers are not being adequately prepared with the knowledge necessary to effectively transform epistemic and procedural ideas associated with academic disciplines into sound pedagogy. Research has illustrated that this problem is especially prevalent amongst teachers of social studies (Wilson, Floden, & Ferrini-Mundy, 2001) and even more narrowly, teachers of history. Limited experience with disciplinary knowledge in both subject matter, which teacher educators assume students acquire through colleges of arts and sciences (McDiarmid, 2004), and pedagogy, which is taught sparingly within colleges of education, have created an endemic cycle of history educators who lack a knowledge base to effectively teach the discipline as school subject matter.



What is Teacher Knowledge in History?

In the domain of history, teachers must have a deep understanding of the "facts" associated with the past while simultaneously understanding how historians have conceptually organized them, and ultimately created histories. Thinking historically, as it has come to be commonly referred, involves a complex set of beliefs, which sit at the foundation of subject matter knowledge in history. Teachers of history also need to understand how their students cognitively process and thus learn to understand the process of historical thinking. Finally, teachers are challenged to learn the pedagogical structures, which will allow their students to successfully access the many layers of the discipline. The following sections will review the knowledge bases teachers of history need to acquire in order to fully understand the disciplinary and pedagogical complexities within the domain.

Knowledge of the subject: What does it mean to think historically?

Historians, as a guild, spend a majority of their time engaged in historical thought, which requires a range of complex cognitive processes used to systematically investigate the past (VanSledright, 1998; 2010). Historians routinely engage in these cognitively challenging and somewhat "unnatural acts" (Wineburg, 2001) to move towards an *interpretation* of a past that has been lost to the present (VanSledright, 2011). Referred to as "historical thinking", these processes carefully consider both the substantive and syntactic dimensions of subject matter knowledge central to the discipline of history.

Substantive knowledge in history consists of "ideas, facts, and theories" used within the discipline (Ball & McDiarmid, 1990, p. 7); the "substance" of history



(Donovan & Bransford, 2005). Also referred to as "first-order knowledge" (Barton, 2005; Lee, 2005), these concepts are often the products of investigative work and make up the who, what, where, when and how questions asked by the inquirer (VanSledright & Limon, 2006). Some examples include names, dates, and events. But other examples include political, economic or social concepts such as nation-state, power or bureaucracy (political) taxes, banks and trade (economic) or justice, class or religion (social). These concepts shape what history is "about" (Lee & Ashby, 2000, p. 199) and provide the space within which historians employ syntactic or "second-order knowledge" to go about doing history.

Second-order knowledge comprises discipline specific concepts involved in making sense of first-order ideas. These concepts are "impose[d] on the past [by historical investigators] to bring some order to its temporally broad and often complex nature" (VanSledright & Limon, 2006, p. 546) and to give meaning to its readers (VanSledright, 2008b). As the structural foundation for the discipline, these conceptual tools shape the way historians engage in historical thought on multiple levels (Andrews & Flannery, 2007). Levesque (2008) described five procedural concepts, which he argues are fundamental to the progression of historical understanding. Historical significance, continuity and change, progress and decline, evidence, and historical empathy, all resonate throughout the literature on disciplinary history as tools historians impress upon first-order knowledge to make sense of residua of the past and each of which has many epistemological underpinnings (Andrews & Flannery, 2007; Lee & Ashby, 2000; Levesque, 2008; Sexias, 1996; VanSledright & Limon, 2006).



Historical significance can be defined as what historians assign as "important" in the past (Levesque, 2008). Determining significance is relational to the kinds of questions investigators both past and present have asked, and what those investigators assume they need to know corollary to what they already know (VanSledright, 2011). The determination of historical significance is heavily influenced by the positionalities of the investigator. VanSledright (1998) defines positionalities as the "frame of reference upon which the thinker bases his or her understanding of the past, the person's implicit theory about how things past hang together with things present and make relative sense" (p. 8). An individual's positionality is largely shaped by the socio-cultural "forces and concerns" surrounding the investigator (Levesque, 2008). Thus, criteria of historical significance such as importance, profundity, quantity, durability and relevance (Levesque, 2008), are judged by the historian through a contemporary lens. These positionalities "impinge on, invade, and configure" (VanSledright, 2001, p. 58) historical information, which historians use to assign significance to the past.

Levesque (2008) goes on to discuss the concepts of continuity and change, along with progress and decline as second-order ideas historians use to situate and make sense of past artifacts. Similar to its effects on historical significance, the historian's positionality influences their understanding about what has changed and what has remained the same. Sexias (1996) contends that one's "historical location", their relative distance both in time and place, will impact their perception of progress and change. "People's own experience with historical change is relevant to their conceptualizing change and continuity" (Sexias, 1996, p. 771). Encounters with



historical events, including one's proximity to those events, the number of historical events occurring during a lifetime, and the social, political, or economic implications of those events, will influence an individual's assessment of historical change and rationale for why it is perceived as progress or decline in relation to the present.

A third procedural concept historians use to make sense of first-order ideas is historical empathy. Historical empathy challenges the historian to understand the moral frameworks of predecessors by contextualizing their actions, judgments, and thoughts "in the specific socio-spatial and temporal location from which they emerged" (Levesque, 2008, p. 150). Nineteenth-century historicist Leopold van Ranke, who believed that scientific history must remain devoid of historian bias or perspective, was adamant that all re-creations of the past reach this level of objectivity.

However, VanSledright (2001) argues that contextualized historical empathy "may well be impossible to achieve" (p. 57). He continues, "bracketing out positionality and limiting the way it is imposed such that we can fully comprehend the foreign-ness of the past – is unavailable to us" (VanSledright, 2001, p. 60). An individual's inherent positionalities, including their ontological and epistemological assumptions guide the ways in which they understand the past. Historical thinkers therefore can only create meaning and pursue understandings about the past through an inescapably positioned lens (VanSledright, 2001) and their own moral frameworks (Levesque, 2008) making historical empathy in the Rankean sense unattainable.

VanSledright (2001) describes an alternative to historical empathy arguing that "mental acts of historical contextualization" can create "strategic competence" in



dealing with recognized positionalities in relation to understanding the past (p. 64). He offers three deliberate, cognitive acts, which historians can engage in to work towards highly contextualized historical thought:

- Exposure to a wide variety array of rich historical materials
- A relentless examination of one's own positionality modeled by all within a community of inquirers
- An equally relentless pursuit of opportunities within this
 community of learners and inquirers to discuss the positionalities
 of producers of historical artifacts and how they represent the
 historical context of the period in question (p. 65)

Such tasks challenge historians to acknowledge and re-examine their own positionalities and to assess the situated context of historical evidence, which engages the mind in the contextualization of the past.

Historical significance, continuity and change, progress and decline, and historical empathy or contextualization are all second-order, procedural understandings historians must cognitively negotiate when engaging in historical thought. This historical thought often stems from the "relics and records central to the historians craft" (Levesque, 2008, p. 116). As evidence, historians use these artifacts as a basis for the construction of historical knowledge. However the selection, evaluation, and use of such evidence involve what Levesque (2008) refers to as extensive internal and external criticism. This strategic knowledge (VanSledright & Limon, 2006) is a component of disciplinary history used to guide the research and interpretation of evidence and the construction of new historical accounts. Largely



comprised of sourcing heuristics such as identification, attribution, judging of perspective, and reliability (VanSledright & Limon, 2006), strategic knowledge is used to assess evidence and engage in historical thinking.

When historians examine and assess primary sources, they engage in interconnected cognitive acts known as "sourcing" (VanSledright, 2010). Firstly¹, historians attempt to *identify* the type of source with which they are working. They may inquiry as to the type of account (primary, secondary), its appearance (old or new), its date of creation, and its syntax (VanSledright, 2010). Secondly, historians consider the author of the document. Initially, investigators will *attribute* the source to an author taking note of the creator's purpose or intent. This requires the historian to situate the account in its historical context (Wineburg, 2001). Then, historians will consider the *perspective* of the author by attempting to surface the author's positionalities through the study of their social, cultural, and political stances (VanSledright, 2010). Thirdly, historians evaluate the contents of the evidence through an epistemic lens, which treats text not as literal but rather as "rhetorical artifact" (Wineburg, 2001) as though there was an "isomorphic relationship between the words in the text and what the author meant" (VanSledright, 2004, p. 344). Finally, historians will assess the *reliability* of the source using inter-textual reading and corroborating strategies. The investigator evaluates the claims made within a source by corroborating them with texts from the same historical period (VanSledright, 2004).

¹ My use of this sequencing term does not intend to imply that there is a particular order followed by historians when engaging in source heuristics.



Combining these three dimensions of subject matter knowledge in disciplinary history (substantive, syntactic or procedural, and strategic), historians engage in the complex process of doing history. Methodologically, historians begin with questions, which may have formed prior to or following contact with the evidence (Levesque, 2008). Then using sourcing heuristics they establish reliable source materials, which are used to construct evidence-supported historical interpretations (VanSledright, 2011). The process of learning to think historically is complex and can be time intensive; however students as early as school are capable of delving into the tasks associated with investigating the past (VanSledright, 2002a).

Knowledge of pedagogy: How do you teach historical thinking? In addition to substantive and syntactic knowledge, an authentic understanding of pedagogical content knowledge is essential for educators to accurately and successfully communicate disciplinary knowledge and procedures to students of history. Wilson (1991) asserts that one of the primary goals of the history educator is to create new understandings about the discipline within their students. To do this, the educator must have a consistent epistemic understanding about the nature of the discipline. Additionally, they must have a foundational understanding of how to best represent this structure to students. In history education, teachers need to know how to teach students to evaluate historical sources and how to deal with problematic texts; skills that are not innately obvious (Wilson, 1991). Likewise, they need to know how to effectively teach students how to assess perspective and how to work with supporting evidence to build historical arguments (VanSledright, 2002a).



To do this educators must be able to use diverse representations to bridge the gap between what the teacher knows and what they would like their students to understand in ways that are neither overly complex nor under simplified. Ultimately, a sound understanding of pedagogical content knowledge can allow educators to attend to more difficult disciplinary procedures (Baker, Cohn, & McLaughlin, 2000) and teach students how to approach historical content and think like historians.

Knowledge of the discipline must be transformed into knowledge that is useful for classroom practice (Bain & Mirel, 2006). Bain and Mirel (2006) argue that teachers need to "use the epistemology of the field to a) probe students' understanding of the content, b) organize mandated curriculum, and c) construct environments and experiences that help students move from initial understandings to more sophisticated knowledge of history" (p. 214). Teachers must first and foremost believe that their students *can* build historical arguments using disciplinary heuristics (VanSledright, 2011). Thus, teachers must learn how to see students' historical thinking and then use that knowledge to shape classroom activities.

Initially, teachers must choose what they are going to teach. VanSledright (2002a) suggests that teachers pay close attention to the topics selected being conscious of their ability to invoke deep historical investigation. Once themes are abstracted, teachers should then create historical questions to be investigated (Drake & Brown, 2003; VanSledright, 2010). The point of these questions is not to see if a student has read a particular text; rather it is to provide direction and motivation for the rigorous work of doing history (Levstik & Barton, 1997). These questions promote inquiry and help surface students' pre- and misconceptions allowing teachers



to better understand how they reason (VanSledright, 1998) so they can make deeper understandings possible. VanSledright (2010) advises teachers to "use activities that expressly raise issues of perspective to hear where students are" (p. 118).

Next, teachers must select accounts, which will allow students to investigate the questions posed. Drake (2002) states,

Teachers must carefully select documents that will engage their students in historical thinking. The teacher can introduce students to a wide array of primary sources that include such written texts as letters, excerpts of speeches, diaries, and ledgers as well as visual materials such as photographs, paintings, maps, political cartoons, charts, and graphs. Capacity to find age-appropriate primary sources that embellish historical thinking is an important attribute of the effective teacher. (p.4)

Oftentimes, especially for younger students, primary source documents impose challenges related to comprehension due to "archaic vocabulary and complicated syntax" (Afflerbach & VanSledright, 2001, p. 704). Editing primary sources is an option. However the teacher must acknowledge that the act of editing (just as is selecting) is in itself an act of interpretation. Drake and Brown (2003) offer the following recommendations for teachers considering editing their students' documents:

Teachers must think carefully about which portions of a document, particularly textual documents, will be deleted and which sections will be retained. Editing is an act of interpretation, and many teachers find it to be a difficult task. Just as the selection of a document is an interpretive act on the



part of the teacher, editing a document involves interpretation. One of a teacher's priorities must be to maintain intellectual honesty. A teacher should never distort the meaning of a document through ellipses or other editorial devices. (p. 473)

Above all, teachers must make reasonable and sound intellectual and ethical judgments when selecting and editing primary source documents for their students.

Next, students must be systematically taught about the nature of historical inquiry. Teachers must provide their students with the tools necessary to investigate the historical questions posed using the evidentiary sources provided. The term "tools" is used here to represent the procedural and strategic knowledge historians use to make sense of historical accounts. VanSledright (2011) offers the acronym "PAIR^e", as an easy-to-remember and systematic guide for reading and analyzing historical accounts. The acronym represents perspective assessment, attribution, identification, and reliability judgment (the superscript alludes to the corroboration of evidence); cognitive acts that students must engage in when working with documents. VanSledright notes that the ordering of PAIR^e does not necessarily follow the chronology of its spelling; rather, he notes, a more likely combination would be I-A-P-R^e, which he noted lacked a memorable mnemonic (VanSledright, 2011).

It is important to emphasize again that all students enter their history classrooms with varying background knowledge and epistemic beliefs. Teaching the procedural and strategic knowledge associated with historical thinking is arduous. Students will remain on different "levels" of understanding, as illustrated within Lee and Ashby's (2000) progression model, and thus will undoubtedly struggle with the



cognitive complexities associated with the discipline. VanSledright (2002b) explains that students are taught very early on in their formal schooling experiences to approach textual knowledge as literal and thus are conditioned to look for "the truth" in history. Introducing concepts such as perspective and positionality can dramatically shift students from one end (naïve trust) of the epistemic continuum to the other (naïve relativism). VanSledright (2002a) observes during his study of fifth graders, "I was struck by the frequency with which several students concluded that they could no longer trust most of the evidence encountered" (p. 50). He goes on to explain that some of his students became historical cynics in which they felt they could not "believe" anything within the evidence. "These students commented that the accounts that they had read (both primary and secondary) were constructed by people who might be, or probably were, lying, and whose statements therefore should be dismissed" (VanSledright, 2002b, p.1104). Breaking these "resilient encyclopedia epistemologies" (VanSledright, 2002a) without creating a classroom full of historical relativists poses a very real challenge to teachers of history. However equipping students with the tools necessary to work with and better understand the discipline can surely bridge the gap between these two competing sets of beliefs.

With their "PAIR^e Toolkit" (VanSledright, 2011) in hand, teachers should let their students do source work in small groups while they circulate and listen to how their students are working with evidence. VanSledright (2010) contends, "students, even the young ones, need opportunities to engage these sources, to learn to assess their status and to begin building and writing up their own interpretations of the past" (p.117). Allowing students to create their own arguments, ones they are responsible



for clarifying, justifying, and rationalizing, promotes both ownership and, or meaning within the discipline (VanSledright, 2002).

How is Teacher Knowledge in History Acquired?

Elementary teachers of history acquire their subject matter and pedagogical content knowledge in a variety of ways. The experiences these educators have with content and instructional strategies associated with history influence the ways in which they understand the structure of the discipline. Elementary teachers, like me, often begin to understand history and history education through observational apprenticeships. More formalized training is thought to be acquired during collegiate history survey and social studies methods courses. The signature pedagogies associated with these observational apprenticeships and formal educational courses influence the beliefs teachers make with history content and pedagogy.

Apprenticeships of observation. Most teachers, prior to their collegiate careers, have extensive observational experiences in classrooms with "school history". During these formative years as students, prospective teachers form their own understandings of what it means to teach and to learn (Britzman, 1991). These apprenticeships of observation (Lortie, 1975) can be central to the construction of epistemic beliefs about historical knowledge. These experiences often shape durable values "...about the nature of school subjects, how teachers and students should behave in the classroom and what constitutes 'good' teaching" (Kennedy, 2005, p.14). Most prospective teachers spend approximately 18 years apprenticing history education in preK-16 classrooms (VanSledright, 2011). As has been illustrated, these teaching and learning apprenticeships are commonly characterized by teacher-



centered lectures and student recitation, which then often become the foundation for which prospective teachers understand the discipline of history (Cuban, 1991).

These educational apprenticeships continue throughout prospective teachers' college coursework. In this case, I focus on those apprenticeships, which take place within the domain of history. Novice teachers look to their history instructors not only for disciplinary understanding, but also for some sense of pedagogical content knowledge, which students can infer from the ways historians represent ideas and formulate the subject (Shulman, 1986). Signature pedagogies used in history courses of study influence the way prospective teachers think about the teaching and learning of the discipline.

Signature pedagogies. Shulman (2005) defines signature pedagogy as the "types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions" (p. 52). He asserts that these practices define "what counts as knowledge and how things become known" (p.54). Signature pedagogies allow practitioners to understand how knowledge is "analyzed, criticized, accepted, or discarded" in various fields of study. These standards of practice teach about the "personalities, dispositions, and cultures of certain fields" (Shulman, 2005, p. 54). Each experience "defines the function of expertise in the field, the locus of authority, and the privileges of rank and standing" (p. 54) through the signature pedagogies used to teach novice students. These key intellectual moves invoke the "core characteristics" of a discipline (Gurung, Chick, & Haynie, 2008) and thus send messages to apprenticing students about ways of knowing and signature pedagogical



moves central to a discipline. Because disciplines vary in their conceptions of knowledge, signature pedagogies often differ.

Prospective school history teachers encounter signature pedagogies within departments of education and colleges of arts and sciences (McDiarmid, 2004), which influence their ways of understanding teaching and learning. Apprenticeship experiences within history survey courses and social studies methods courses taken during formal teacher preparation often shape both the content and pedagogical understandings these teachers have about history. State licensing departments use this course work as a proxy for adequate knowledge expertise in a subject matter (Boyd, Goldhaber, Lankford, & Wycoff, 2007).

However, most prospective teachers of history are expected to take *only one* history "content" course and *only one* course in pedagogical preparation. Thought to be "subject matter generalists" (VanSledright & Frankes, 2000), most teachers are permitted to complete undergraduate majors in education without any deep subject-specific concentration. Wineburg (2004) states, "80% of today's teachers never study history in depth in college" (p. 1412). Thus, new teachers of history must rely on six short credit hours, three in the history survey course and three in the social studies methods course (of which limited time is allotted to history), to ostensibly challenge 18 years of teaching apprenticeship experiences.

The history survey course. The history survey course, often housed within large lecture halls of 100+ students, can be found within departments of history. Commonly taken during the freshman or sophomore year, prospective teachers usually take this course as a liberal arts requirement (Thornton, 2001). Using



primarily lecture as the signature pedagogy associated with the instruction (Kornblith & Lasser, 2001), the history survey in dominated by teacher-centered instruction and student passivity. Citing content coverage as their main instructional goal, many history survey professors have expressed drilling and recall as core course values over interpretation and work with source documents (Thornton, 2001) even in some extreme cases suggesting that it was not their job to teach disciplinary standards (Kornblith & Lasser, 2001). For example, in a roundtable discussion with 11 history survey professors, they were asked to elaborate on pedagogical strategies associated with their history survey courses. Not a single comment about "educational theory, historical pedagogy, or student learning" (Calder, 2006, p. 1) was offered. These instructional representations have a direct impact on the way prospective teachers think about the nature of history. Citing seminar discussions and lectures, students more often than not neglect to associate historical thinking or actually learning how to do history as something they should be practicing in the history survey (Booth. 1993).

The portrayal of history as a lecture-based survey has prompted some historians and educators to speak out about the consequences associated with teaching a course lacking in disciplinary practice. Pace (2004) compared history instructors to "amateurs in the operating room." Historians who become history professors, according to Pace, are never taught how to teach; rather they develop notions about pedagogy in isolation. Pace asserts that the process of thinking historically usually comes somewhat naturally to historians and is rarely an explicit process; therefore it is not something that they see as being teachable to students. Wineburg (2001) refers to this as "disciplinary homogenization" where distinctions among beliefs are blended



together and are not explicitly taught. He goes on to lament, "the call to understand the bias of a source is quite common to the reflective writings of the historian. Yet as a guild, historians have been uncharacteristically tight lipped about how they do so" (Wineburg, 2001, p. 63). So even when historians do *use* primary source documents in their classrooms, they still are not showing their students *how* to use them, consequently sending implicit messages about the construction and acquisition of knowledge in history (i.e., history is received not constructed).

Calder (2006) likewise was dissatisfied with the state of the history survey course. He maintained that the focus on coverage associated with the history survey caused "pedagogical inertia" where the content was constantly changing, due to historical revisionism, yet the pedagogy stayed the same. Beginning history professionals are not being taught how to do, think, or value what practitioners in their field are doing, thinking or valuing (Calder, 2006). Calder quotes Charles Sellers of the University of California at Berkeley after listening to student reflections regarding the history survey,

The notion that students must first be given facts and then at some distant time in the future will think about them is both a cover up and a perversion of pedagogy ... One does not collect facts he does not need, hang on to them, and then stumble across the propitious moment to use them. One is first perplexed by problems and then makes use of facts to achieve a solution. (p. 1362)

Calder goes on to state that the history survey hides what it means to do good history and thus allows beginning history students to understand history as something that is



found in a book. Thus, the prospective teachers' apprenticeship of what it means to be a history pedagogue continues unstated.

The social studies methods course. A second experience prospective teachers have with history usually comes during their senior collegiate year through a social studies methods course. This course represents the space in which undergraduate education majors are to learn how to teach a wide variety of threads ranging from economics and sociology to geography and history. With a typical college semester lasting just 15 weeks, it is difficult to tackle the pedagogical, much less, disciplinary underpinnings of any one thread in great detail. Wineburg (1999) states "in schools of education, courses are offered to future teachers in the teaching of mathematics, the teaching of science, and the teaching of literature, but we would be hard pressed to find more than a handful of courses in the entire nation that are devoted to the teaching of history" (Wineburg, 1999, p. 490). Instead, prospective teachers often receive one or two days (essentially two to four hours) devoted to the pedagogical delivery of history education. The quality of this instruction varies across sections and is heavily dependent upon the exposure to historical thinking the instructing professor has studied (Slekar, 2006).

Aggravating the problem, prospective teachers enrolled within methods courses are simultaneously consumed by student-teaching internships where they are re-exposed to practices that typically deviate from disciplinary standards. Angell (1998) investigated the effects of a social studies methods course on two pre-service teachers' beliefs and assumptions about how to teach and learn social studies. One of the pre-service teachers showed significant restructuring of her beliefs from pre to



post course while the other showed a minimal amount of restructuring. She concluded that the role of the supervising teacher was key. In the case of the student who had significant belief restructuring, the supervising teacher had beliefs congruent with what was being taught in the methods course. Conversely, the student who did not experience a change in beliefs about social studies had a mentor teacher who did not agree with what she was learning in her methods courses.

The limited research available on social studies methods courses paints an unclear picture of how universities are teaching their education students to teach history. Many social studies methods professors assume that students come to their courses with foundational disciplinary knowledge and thus focus solely on instructional practices. A series of studies conducted by McDiarmid and Vinten-Johansen (2000) found that undergraduates weren't learning inquiry based history in history survey courses, thus they were coming to their social studies methods courses with decontextualized content about the past. Thus, social studies methods professors who attempt to instruct their prospective teachers in disciplinary strategies are then stifled because their students do not have key epistemic beliefs and disciplinary understandings necessary for them to engage in such practices.

Suggestions have been presented for the reform of the social studies methods course. Bain and Mirel (2006) criticized the compartmentalization of content knowledge and methods knowledge that often takes place between history and education departments. They asserted, "the knowledge needed to teach challenging subject matter is more complicated than simply demanding that prospective teachers have majors in their subject areas" (Bain & Mirel, 2006, p. 213). In history,



prospective teachers need to understand "how historians frame historical problems, select and organize factual details, and analyze and construct historical stories, and as important, [prospective teachers need to learn how] to present these invisible structures to their students in meaningful ways" (Bain & Mirel, 2006, p. 213). Processes such as these are vastly underrepresented throughout prospective teachers' preparation. Thus a gap exists between how prospective teachers are exposed to history during teacher preparation (both prior to and during their formal training), and how the discipline's guild works from process to knowledge. Consequently, it would be fair to ask, where are prospective teachers supposed to gain this knowledge and epistemic understanding and in what learning context should it occur?

What is the Teacher Knowledge Problem in History Education?

The teacher knowledge problem in history is partially a result of limited formal preparation in disciplinary and pedagogical understandings. History survey courses and social studies methods instructors separated by departments infrequently communicate with one another, yet these courses constitute most undergraduate education majors' collegiate experience with history and history education. The assumption by social studies methods educators that students coming to their classes have already gained disciplinary knowledge through history lecture courses is misguided as a majority of these survey courses are preoccupied with coverage and thus do not attend to disciplinary thinking skills. Conversely, when social studies methods educators do not assume that their students come to them with disciplinary understandings and attempt to teach them these ideas, there is simply not enough *time* in a one-semester course of 40 hours to successfully challenge their under-examined



epistemic beliefs and inadequate pedagogical apprenticeships of observation. The implications of this problem of teacher knowledge in history are significant impacting teachers, students, and the way the discipline is taught in schools.

Teachers lack historical thinking skills. Prior to a prospective educators' formal teacher preparation experience, they have apprenticed history throughout their elementary and high school classes. These experiences are often misaligned with disciplinary history focusing on factual recall over investigation. In, most likely, their first experience with collegiate history, students sit in large lecture halls listening to their professors speak at length about specific topics in history. The signature pedagogy is a teacher-centered lecture. These students fare again hearing history; they are not learning how to *do* what the professor, presumably a historian, has done to acquire that history from the past. The construction of historical accounts, disciplinary history, is oftentimes not explicitly presented. Therefore, students leave these courses continuing to understand history as something that you listen to and memorize rather than investigate and construct. The past is equated with history when in actuality, the past consists of the artifacts left behind while histories (plural because there is not just one) are what is constructed from those artifacts.

Commonly three years after this initial collegiate experience with history, prospective teachers enroll in their social studies methods course. Most have not taken any other history courses. Their epistemic beliefs about history have likely been shaped by the experiences they have thus far had with history as apprenticing students. In their methods course, students may or may not encounter historical thinking; perhaps one or two *classes* as the social studies methods course must cover



the many threads within the domain. During these experiences, they learn to think about history as something to do rather than just something to read or hear. However, the limited time allotted to grapple with these ideas does not provide the space needed to create meaningful change in students' ways of thinking. In order to deepen historical understanding, prospective teachers need first to shift their epistemic beliefs before they can make additional progress. A common consequence is a reversion backwards to their original beliefs often associated with the "school" history they spent many years apprenticing. "Conservatism of practice" (Ball & Cohen, 1999) continues. Prospective teachers, "hone their skills within that [original] frame of reference and have few opportunities for substantial professional discourse" during or after their collegiate preparation (Ball & Cohen, 1999, p. 5). They teach with the signature pedagogies they learned from and create a new cohort of apprenticing teacher interns. The signature pedagogy present in history seems to be endemic (See Figure 1.) to the system and has implications for how students learn history.

Implications for student learning. Foundational beliefs and disciplinary stances within a domain of knowledge are often shaped during formal schooling years. Thus, there are implications for students of teachers who lack this foundational knowledge. Traditional history classrooms, with their intense focus on substantive knowledge often propagated through memorization and recall, often create an environment where a singular perspective (usually the textbook) is valued limiting the space in which students are challenged to think deeply about history. Within this space, naïve realists are trained to place their trust in the textbook author (VanSledright, 2008a) who stands in as the authoritative knower of the past.



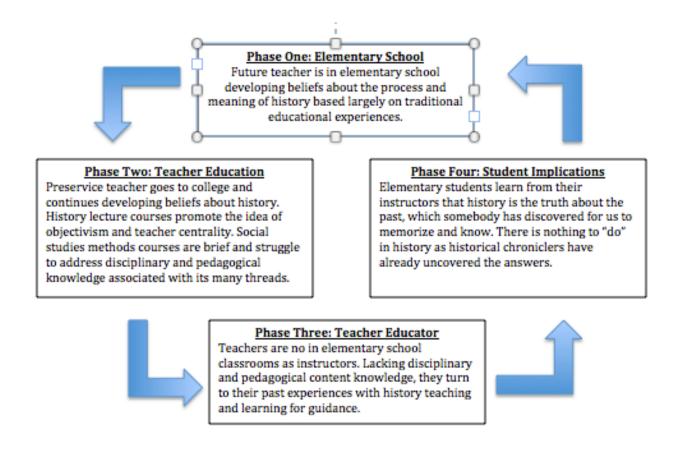


Figure 1. The Endemic Cycle of Knowledge in History Education

Cognitive engagement is minimal as the author has essentially "done" all the work asking of the student nothing more than a close read and a good memory (Bain, 2000) and thus reinforcing absolutist beliefs of historical knowledge.

Such beliefs are highly intolerant of information conflicting with or deviating from the official narrative. Barton and Levstik (1998) found that some learners, whose prior experiences with history taught them a narrative that was incongruent with what they were learning in school, lacked the procedural knowledge to navigate such a cognitively perplexing terrain. Consequently, they "said what everyone else said" (Barton & Levstik, 1998) during class, in essays, and on assessments, although they *thought* something very different about history. Such a dilemma can result in



historical relativism. These patterns can be damaging to a student's understanding of history as a discipline and as a domain of knowledge.

The substantive history taught in schools has additional implications for the ways that students come to understand the purpose of history. Following the interview of 30 pupils, VanSledright (1997) concluded that students felt a central goal of history class was to obtain information from textbooks and teachers. Sitting outside of a contextual framework (i.e. historical significance) such knowledge is often memorized for the short term and frequently forgotten due to its ambiguity.

VanSledright concludes his analysis by stating that not a single student in the study suggested disciplinary reasoning, such as working with or "doing" history," as a focus of history teaching or learning.

Naïve beliefs are further supported by high stakes tests, which dictate to both teachers and students, what should be valued as important and central to a domain of knowledge. Thus, student success is measured by an evaluative summary of scores. However, comparing most high stakes tests with the procedural understandings associated with disciplinary history is a bit like comparing apples to oranges. VanSledright (2002a) explains,

The current testing and accountability movement in U.S education often supports and reinforces the study of feel-good patriotic heritage in schools creating yet another significant challenge for children and their study of history. Many high stakes tests developed by state education agencies that students are increasingly required to take seldom assess the sorts of ideas and practices that investigating history entails. (p.12)



VanSledright acknowledges that some state tests, namely the New York State Regents' document –based questions, are attempting to move toward a more performance-based measure of student knowledge in history. Evidence suggests that teachers who engage their students in procedural understandings in connection with substantive knowledge do just as well if not better on traditional high stakes, often multiple-choice, tests, than those students who practice traditional memorization and recitation practices (Grant, 2003).

In conclusion, VanSledright (2010), argues that there are a variety of reasons why cultivating historical thinkers in students is not only worthy of recognition but also a necessary part of schooling. First, VanSledright describes what historical thinkers can do,

They are careful, critical readers and consumers of the mountains of evidentiary source data that exists in archives and that pours at us each day via the media. Good historical thinkers are tolerant of differing perspectives because these perspectives help them make sense of the past. At the same time, such thinkers are skilled at detecting spin, hype, snake-oil sales pitches, disguised agendas, veiled partisanship, and weak claims. They also know what it means to build and defend evidence-based arguments because of practice constructing interpretations rooted in source data. (p. 232)

VanSledright concludes that teaching students how to think historically not only allows them to think more deeply about the past, but also creates "readers, who appreciate investigative enterprises, know good arguments when they hear them, and who engage their world with a host of strategies for understanding it" (p. 233).



Intervening through teacher preparation programs. Cohen (1995) argues that the teacher knowledge problem in schools is systemic. Student achievement, often at the center of standards-based reform discussions, remains the focus of policy initiatives such as the No Child Left Behind Act while the role of teacher knowledge has arguably been addressed only indirectly. Additionally, state and local governing agencies mandating teacher licensure standards and the benchmarks for student achievement send unclear messages about what teachers are expected to know. This "loosely coupled" (Meyer & Rowan, 1977) educational system in many ways exacerbates the problem of teacher knowledge.

While standards-based reformers have worked towards increasing student achievement some argue that they continue to neglect the problem of inadequate teacher knowledge (Van Driel, Beijaard, & Verloop, 2001). Cohen (1995) asserts that reformers intend to increase instructional competency, acknowledging that without better instruction most students would not raise their achievement levels. However, he argues that these reformers often rely on an external "driving" force such as content standards, high-stakes assessments, and curriculum reform as a means for stimulating improved instruction. But, the lack of a strong foundational knowledge base (subject matter, student learning and pedagogy) inhibits the capacity of teachers to improve their instruction resulting in negligible changes in student achievement. Thus, reformers are neglecting the major "system" within systemic reform (Cohen, 1995) potentially contributing to its structural breakdown.

Further contributing to unsuccessful reform, VanSledright (2011) continues, are State Departments of Education along with federal, state and local governing



branches. State Departments of Education control the teacher licensure requirements, which have been heavily critiqued for their low expectations (Hess, 2002; Darling-Hammond, 1996; Wilson & Youngs, 2005), and subject matter benchmarks often measured by state-wide assessments. Both have direct implications for what preservice educators learn during teacher preparation. Licensure requirements often dictate the structure of teacher education programs (course load, internship hours etc.), which are then approved by accreditation agencies such as the National Council for Accreditation of Teacher Education or NCATE (VanSledright, 2011). Likewise, student benchmarks and testing accountability measures often drive the content teachers view as central to the discipline and thus important to learn.

The Federal Government contributes to this issue through financial pressures, allocating significant funds only to those schools whose test scores meet the set achievement level, which puts significant pressure on teachers to teach to the test (Linn, 2000). In the case of history education, this extends the gap between "school" and "disciplinary" history. States measuring student achievement in history with high-stakes tests often measure only the content knowledge associated with the discipline through multiple-choice and identification questions (Grant & Salinas, 2008; Kurfman, 1991). Those states which do not have testing procedures in place to measure achievement in history suffer a greater loss; getting pushed aside or even dropped from the school curriculum altogether to make more time for math and reading test preparation (Burroughs, Groce, & Webeck, 2005). While social studies and history education reformers continue to advocate for disciplinary standards in



schools, the focus on teacher knowledge within the domain continues to warrant the need for more explicit attention.

Pre-service teachers acquire a majority of their knowledge about subject matter and pedagogy from two categories of experiences: apprenticeships of observation (K-12) and formal teacher preparation programs. I focus here on the latter. Traditional teacher preparation, referring to four-year bachelor-degree programs, is certainly not the only avenue to becoming a certified teacher. However it remains the most popular pathway to certification². Thus, it demands attention when considering the problem of teacher knowledge.

VanSledright (2011) argues that although teacher education programs are allocated limited time (recall on average just a portion of one college course) to prepare pre-service teachers to teach history, they still can serve as a significant and influential force. As a potentially "crucial period for examining the development of teachers' perspectives" (Yeager & Wilson, 1997, p. 125) pre-service teacher education programs provide the space (although again limited) for educators to surface and strengthen student epistemologies within various domains of knowledge. However, as Darling-Hammond (2006) suggests, "the *kind* of teacher education matters" (p. 34). Research journals are filled with both stories of success (Evertson, Hawley, & Zotnik 1985; Ashton & Crocker, 1987; Wilson, Floden, and Ferrini-Mundy, 2001) and stories of inadequacy (Zeichner & Conklin, 2005) from preservice teachers prepared through traditional education programs. Voices of dissatisfaction with regard the substance of teacher preparation programs (Goodland,

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² This claim is based off of statistics published on the National Center for Education Information's website. Country-wide statistics are hard to find as the definition of "alternative" is highly interpretable.

1990; Howey & Zimpher, 1989; Zeichner, 1993), have called for, amongst other elements, a redesign of teacher training programs to strengthen knowledge development (Darling-Hammond, 2006; Hammerness, Darling-Hammond, Grossman, Rust, & Shulman, 2005).

Hammerness, Darling-Hammond, Grossman, Rust, & Shulman (2005) state, "a number of large scale studies have found relationships between teacher effectiveness and the quantity of preparation teachers have received in subject-matter and content-specific teaching methods" (p. 395). Within these teacher preparation experiences, teachers should be allotted ample opportunities to interact with old conceptions of knowledge and new. Learning thus comes as a result of practice and reflection of new ideas (Hamerness et al., 2005). Feiman-Nemser, McDiarmid, Melnick, and Parker (1989), "unless teacher educators help their students surface and examine initial beliefs and assumptions, these taken-for-granted ideas may distort the lessons taught and learned during teacher preparation" (p. 1). Case in point: history education.

Current teacher preparation programs lack a sufficient space for pre-service teachers to properly consider their existing beliefs alongside explicitly taught disciplinary stances in history; an important component in learning and in the acquisition of new knowledge (Bransford, Derry, Berliner, Hamerness, & Beckett, 2005). Thus, pre-service history teachers rely on their apprenticeships when searching for disciplinary understanding and pedagogical practice. Imparting this knowledge on their own students, the cycle of misaligned history education in schools continues and the problem of teacher knowledge remains. As policy analysts continue to focus on



accountability as a means for higher quality teaching, it seems dire that we turn to teacher educators, those tasked with increasing teacher knowledge, with the job of uniting content and pedagogy in ways, which will create powerful disciplinary experiences for pre-service teachers. In history education, this means explicit attention to the beliefs, which foster historical thinking and how to transform these substantive and procedural understandings into pedagogy. Most existing teacher preparation programs do not have a space for pre-service history educators to undergo this type of reflection and conceptual change. With an acknowledged importance of substantive content focus within departments of history, and broad social studies coverage within methods course in departments of education, an additional space, or stated differently, more time, is required to introduce new ways of knowing and to help students grapple with conflicting beliefs in productive ways.

Understanding and Shifting Ways of Knowing

The teacher knowledge problem in history education suggests that shifts in the ways in which preservice educators think about and understand the nature of the past are needed in order to help individuals move past novice ways of knowing with the goal of reaching a more expert way of knowing. In this section, epistemic beliefs, specifically in history are defined and conceptual change theory is investigated as a potential means for assisting preservice educators with the kind of belief shifting, which appears to be necessary. While this type of work is somewhat sparing within the discipline of history, we can look to other areas, namely the sciences, for empirical studies, which support conceptual change theory as a way to surface, challenge and shift beliefs. Coupled with the extant work on progression models in



history education, this synthesis of research helps to better inform the pedagogical decisions made in the design of the course at the center of this study.

Defining epistemic beliefs. Epistemic cognition can be understood as "as the cognitive process enabling individuals to consider the criteria, limits, and certainty of knowing (Maggioni, VanSledright, & Alexander, 2009, p. 188). An individual's epistemic stance therefore defines what counts as knowledge and how that knowledge can be acquired and applied. These conceptions of knowledge, which shape an individual's belief structures (Hofer, 2002), powerfully impact one's understanding of teaching and learning within a discipline (Hofer, 2002; Hofer & Pintrich, 1997; Lampert, 1990; Schoenfield, 1983). Within the domain of history, these habits of mind are used to make sense of historical concepts, influence a student's ability to work with historical text, and affect the overall ways in which a student approaches the study of history. Research on domain-general stances coupled with studies of domain-specific beliefs surfaced three ways of knowing, which characterize students of history. For the purpose of this study, the labels and descriptions for these categories constructed by Maggioni, VanSledright, and Reddy (2009), copier (objectivist), subjectivist, and criterialist, will be used as a way to understand the positionalities of participants.

When considering the ways in which students think about history, it is important to acknowledge their epistemic beliefs surrounding the nature of the discipline. Specifically, it is important to consider the relationships between the investigator (the knower) and the past (what's to be known). Such dimensions



represent ways of knowing, which dictate how and what a learner constructs as knowledge.

Oftentimes, students approach sources as "decontextualized, disembodied authorless forms of natural information that fall ready made out of the sky" (VanSledright, 2010, p.116). Such a belief is characterized by an understanding of history as a direct mirror of the past. The knower or the investigator is absent (Maggioni, VanSledright, & Alexander, 2009). Referred to as *copiers* or objectivists (Maggioni, VanSledright, & Reddy, 2009; VanSledright, 2011), these learners do not decipher between the past and historical accounts as they believe them to be one in the same. Knowledge, as presented within historical accounts, is understood to be absolute (Kuhn & Weinstock, 2002), dualist (being either right or wrong) (Hofer, 2001), and acquired through authoritative renderings (King & Kitchener, 2002). Thus, cognitive impasses are created when evidentiary conflicts surface, such as when historical documents present differing information about the same event. These impasses leave the *copier* paralyzed and able to do little more than ambiguously choose one account as the capital-T-truth, while discounting the others as fictitious or inaccurate due to author bias or error.

Other learners have quite the opposite epistemic understanding of historical knowledge. These learners view knowledge creation in history as the result of opinion. Labeled *subjectivists* (Maggioni, VanSledright, & Reddy, 2009; VanSledright, 2011), these historical thinkers "tend to borrow their story from accounts or pieces of accounts on the basis of instinctive preferences or casual selection" (Maggioni, VanSledright, & Alexander, 2009, p. 198). Also known as "cut



and paste" histories, *subjectivists* have limited strategies to judge historical sources (VanSledright, 2011). The *subjectivist*, compared to the *copier*, acknowledges the active role of knower in the process of knowledge generation. A naïve understanding of author perspective and positionality often drive the *subjectivist* to conclude that all historical accounts are equally biased and of equal trustworthiness or untrustworthiness as the case may be (Maggioni, VanSledright, & Alexander, 2009). Therefore, the *subjectivist* equates the known (or in this case the past) with whatever accounts they can piece together. However, the *subjectivist* often quickly discovers that cutting and pasting leaves gaps in the "story". These gaps create cognitive impasses. Lacking the epistemic understanding to reconcile these gaps, the *subjectivist* is often stifled and unable to move forward with the construction of historical knowledge.

Finally, there is yet a third position often used to characterize the beliefs of learners who have developed more expert ways of knowing. Classified as *criterialists* (Maggioni, VanSledright, & Alexander, 2009), these learners believe that the construction of history is neither absolute nor relative. Rather they understand the importance of disciplinary heuristics in the development of authentic historical interpretations. *Criterialists* view knowledge as actively constructed (King & Kitchener, 2002) by the knower through the use of conjectural logic. It is always evolving and ways of knowing are coordinated with evidentiary judgment and justification (Hofer, 2001). *Criterialists* are able to reconcile the cognitive impasses often experienced by *copiers* and *subjectivists* by acknowledging the positionality of evidence, using procedural understandings, which demand that evidence be carefully



evaluated for consistency and reliability, and bridging gaps between accounts using logical sequences of events. This stance directly links and coordinates the role of the knower, or the historical investigator with what is to be known (the past) via the application of criteria for making decisions.

Shifting epistemic beliefs. Fostering belief change begins with the surfacing of one's existing tenets (Dole & Sinatra, 1999; VanSledright, 2002). This can be facilitated through a careful reflection of disciplinary understandings, which can be provoked in a variety of different ways. Examples include but are not limited to, asking participants to write reflective essays (Benedixon, 2002) and using questionnaires (Maggioni, Alexander & VanSledright, 2004; Qian & Pan, 2002). Such activities help individuals develop awareness and give them opportunity to critically think about what it means to know something.

After existing beliefs have been surfaced, new and oftentimes conflicting beliefs are then introduced resulting in cognitive dissonance (Piaget, 1985). Doubt or dissatisfaction with one's existing beliefs (Benedixon, 2002; Dole & Sinatra, 1998; Gill, Ashton, Algina, 2004; Kienhues, Bromme, & Stahl, 2008) commonly ensues, creating an environment of cognitive conflict as individuals begin to see anomalies between existing conceptions of knowledge and newly introduced ways of knowing growth (Chinn & Brewer, 1993). Thus, the equilibrium necessary to sustain knowledge (Piaget, 1985) is disrupted.

One method for the creation of such an environment surrounds the use of competing historical texts (Palmer, 2003). This method "presents a widely held assumption (intuitive) and refutes it with an alternative theory" (Kienhues, Bromme,



& Stahl, 2008, p. 549). The use of such a method aspires to question prior understandings while offering new information or ways of knowing to rectify the dissatisfaction experienced. Facilitators of belief restricting are encouraged to engage those undergoing the change with strategies for resolving these barriers.

Arguably, certain conditions must remain in place for belief shifting to occur once dissonance has been introduced. Gill, Ashton, and Algina (2004) state, individuals must be convinced "that more sophisticated epistemological beliefs are intelligible, plausible, and fruitful" (p. 168). Likewise they must have a sense of motivation for processing new ways of knowing. Dole and Sinatra (1998) explain:

Motivation is seen as stemming from at least four sources: dissatisfaction with existing ideas, personal relevance of the information, individuals' need for cognition, and social influences. Features of the message, such as comprehensibility and plausibility, interact with the individual's perception of the information. If the message makes sense to the individual and if he or she is motivated to do so, the individual can then proceed to engage with the information. In turn, motivation can influence an individual's willingness to struggle with a complex or confusing message. If the individual processes the information with high meta-cognitive engagement, strong, relatively long-lasting conceptual change is possible. If the engagement is not deep, but superficial, change may come about, but it is likely weak, temporary, and susceptible to further change. (p. 122)

Epistemic change can occur when an individual reflects on both their existing and newly introduced conceptions of knowledge in search of renewed equilibrium. Such



processes can occur immediately or may take many interventions to sustain meaningful change. VonGlaserfield (1989) explains, "learning takes place when a scheme, instead of producing the expected result, leads to perturbation, and perturbation, in turn, leads to accommodation that establishes a new equilibrium" (p. 128). This reflective adaption can shift a conception of knowledge and thus change the way an individual understands within a discipline

Empirical studies in the sciences have offered numerous examples of how conceptual change theory can be implemented to directly target beliefs. Elby (2001) used specific lessons designed to foster very specific ways of knowing in physics. Citing the role of the instructor as central to the process, Elby "carefully chose and sequenced both the experiments and follow up reflections on the experience to push students' epistemic thinking and continuously challenge the students to reconcile their intuitions with conceptual understanding" (Maggioni, 2010, p.34). This strategy of directly targeting epistemic beliefs through surfacing and challenging was also used in Brickhouse, Shipman, and Letts (2004) where the researchers again set out to teach specifically about the nature of science.

Belief shifting in history. Both learners' prior experiences and epistemological underpinnings are essential to understanding how they negotiate the cognitive power and disciplinary conceptions necessary to participate in historical thinking in ways that enhance their understandings. To aide in the continued study of how historical thinking evolves, researchers (Lee & Ashby, 2000; Lee & Shemilt, 2003) have constructed progression models intended to better understand the development of epistemic stances in history. Due to the hierarchical presentation of



progression models, they sometimes carry the implication that students work from less to more powerful ideas (Lee & Shemilt, 2003). However, scholars caution that these models are not meant to be understood as linear.

Historical thinking as a process and a method of knowing, is a cognitive domain which often proves to be quite fluid with regards to how individuals move from one "level" to another. Lee and Ashby (2000) suggest, however, that there is a model, which can help to assess the parameters through which learners move closer to or farther away from disciplinary understanding in history. Lee and Ashby's progression model illustrates the typical advancement of individuals as they learn how to think historically. This progression model coupled with the categories for epistemic beliefs presented by Maggioni, VanSledright, and Alexander (2009) can be illustrated by Figure 2.

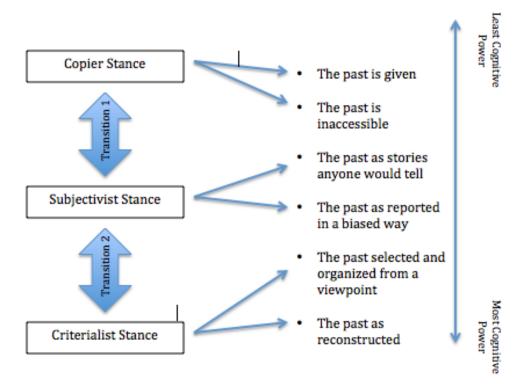


Figure 2. A Model of Epistemic Shifting within the Discipline of History



Lee and Ashby describe this progression model as "a summary of changes in students' ideas about historical accounts" (p. 212). This does not suggest that every person begins at one level and progresses through to the last level; rather individuals move back and forth as they seek some epistemic consistency. As learners work through their own ideas of what knowledge means and what the role of the knower and what is to be known play, they move to different levels within the model.

Individuals with the most naïve beliefs, *copiers*, see the past as a given capital-T Truth and/or as hopelessly inaccessible. The next three levels suggest a gradually increasing awareness of the heuristics associated with doing history and the role the knower plays in using them to achieve understanding. Finally, at the most expert level of cognitive/epistemic power, learners become *criterialists*, understanding that the past is reconstructed by an author with innate positionalities and who consciously interacts with what can be known from an investigation of the past using disciplinary tools and criteria for knowing.

In addition to the categories presented by Lee and Ashby (2000), Maggioni, VanSledright, and Alexander (2009) and Maggioni, VanSledright, and Reddy (2009) found that the fluidity associated with belief shifting left many students between categories. Students who fell within these transitional stances often displayed ways of knowing that were inconsistent with the defined parameters of *copier*, *subjectivist*, or *criterialist*. They often oscillated, for example, between *copier* and *subjectivist* stances or *subjectivist* and *criterialist* stances ultimately having difficulty getting past the cognitive impasses produced by their inconsistent stances. Those individuals who



acknowledged that the end goal of history was to chronicle the past yet simultaneously conveyed that a goal is often impossible because of debatable and thin interpretations were categorized as being within *Transition 1*: fluttering between a *copier* and a *subjectivist*. By contrast, those individuals who acknowledged an interaction between the remnants of the past and the investigator, yet were unable to articulate a clear understanding with regards to methods or criteria associated with such an interaction, were categorized as being within *Transition 2*: fluttering between a *subjectivist* and a *criterialist*. Following Maggioni, VanSledright, and Reddy's model, two transitional positions have been added to the matrix of categories used to define epistemic beliefs throughout the present study (See Figure 2.).

The *copier* and *subjectivist* levels are often heavily influenced by extensive K-12 apprenticeships and experiences with higher education. Thus, a learner's understanding of what it means to teach and learn within a subject matter is commonly defined by those encounters. The practices associated with school history such as rote memorization and multiple-choice recall often train learners to understand history as something that should be read and remembered rather than actively constructed. This objective view of history creates a significant cognitive impasse, preventing students from making sense of procedural concepts and strategies associated with the discipline.

Theoretical Framework

Momentarily reflect on the consequential experiences both my undergraduate students and I had with history. Years of traditionalist apprenticeships influenced the



development of our foundational sets of beliefs, which deviated substantially from an expert way of knowing. Based on Maggioni, VanSledright, and Alexander's (2009) categories, our beliefs about history teaching and learning would be eerily parallel to those described of *copiers*. We treated historical texts as objective, directly mediated the past to the present, and were confused when asked to work with conflicting accounts ultimately concluding that a correct answer, which was thought to be the end goal, was not possible. The past was inaccessible. My own students found themselves stymied after being introduced to disciplinary ways of knowing. Due to limited instructional time, their methods course was unable to provide the space needed to work through the complexities associated with their problematic beliefs thus they could move beyond their own cognitive impasses. Consequentially these students, and most others who chose a traditional path through formal teacher education, fall back on their foundational beliefs, which propagate traditionalist ways of knowing as a result of their apprenticeships of observation

My students, like so many preservice educators, could have been helped just as I was. However, the current structure of traditional teacher preparation programs does not allow for the time needed to foster the meaningful changes in beliefs necessary to engage with the disciplinary practices that research shows improves understanding. Such a space may provide opportunities for preservice teachers to bring to the surface their existing beliefs through reflection and inquiry. Additionally, students could be presented with disciplinary ideas, which may directly challenge their originating beliefs. Wrestling with these complex ideas and engaging in disciplinary activities could afford students the opportunity to begin understanding



the cognitive limits of *copier* and *subjectivist* beliefs while finding meaning and utility in the more *pragmatic criterialist* beliefs associated with historical thinking.

Consider the following scenario. What if prior to the social studies methods course and internship experience, preservice teachers recognized that their beliefs created perturbation to their capacity to better understand history? How could their perspective on teaching and learning in history change if they were allotted the time and space to surface their own beliefs while simultaneously being encouraged to consider criterialist ways of knowing? Such an experience has the potential to create meaningful epistemic change, benefiting students as they think about pedagogical approaches to learning during formal teacher preparation. I would argue that their teacher preparation programs owe them that much.

The course at the center of this study was designed with these questions in mind and was grounded in a framework, which attempts to shift objectivist beliefs often associated with traditional school history toward a more useful, pragmatic understanding of history as a disciplined method of inquiry. To facilitate such an experience, a set of exercises and activities were designed to provoke the examination of existing beliefs about history while simultaneously having those beliefs intentionally challenged by the introduction of conflicting ways of knowing.

Within each of the intervention sessions, strategies to surface, challenge, and shift ways of knowing were deliberately employed. The underlying assumption of using such strategies was that the existence of cognitive dissonance would foster an environment where existing or "old" ways of knowing could be consciously (through self-reflection, class discussions, and instructor-participant interviews) deconstructed



while "new" ways of knowing are simultaneously infused through repetitive exposure to direct instruction (lecture, scholarly readings, discussion) and practice (historical investigations, class exercises, lesson plan and rubric assignments). This theory underlies the pedagogical moves used throughout each of the eight class sessions.

Empirical studies associated with conceptual change greatly influenced the course design and structure of the activities intended to facilitate belief shifting. A review of studies, predominantly in the sciences suggests that derivatives of three pedagogical strategies are useful when attempting to shift beliefs. The first is a consideration of the classroom environment. Research suggests that a student-centered environment fosters an atmosphere welcoming of critical thought and emergent theories about knowledge (McRobbie & Thomas, 2001). Jehng, Johnson, & Anderson (1993) also found that open-ended instructional environments such as seminar-style learning facilitated the opportunity for students to engage in belief restructuring.

There is also some evidence, which suggests that the direct targeting of beliefs can assist with belief shifting. Elby (2001) was careful to provide explicit instructor attention to student beliefs in order to engage with new and existing beliefs. Lecture was also seen throughout the literature as a somewhat effective means for delivering new ways of knowing (Ryder, Leach, & Driver, 1999; Dagher, Brickhouse, & Shipman, 2004; Brickhouse, Dagher, &Shipman, 2002).

Finally, pedagogical strategies which foster the opportunity to engage with and reflect on old and new ways of knowing seem to have some success when considering conceptual change. Studies suggest that class discussions have the ability



to assist with the comprehension of new ways of knowing (Elby, 2001) and the consideration of alternate ways of understanding (Hammer, 1995; Kuhn, Shelton, & Felton 1997). Additionally, inquiry-based activities used to directly engage with theories and processes have been shown to prompt student understanding of new ways of knowing (Bain, 2000; McRobbie & Thomas, 2001; Ryder, Leach, & Driver, 1999; VanSledright, 2002; Wineburg, 2001)

A synthesis of conceptual change literature suggests that such an experience may cause a level of cognitive dissonance, driving individuals to seek equilibrium and thus allowing them to become more open to new ways of knowing. This framework for belief change surfaced from a careful wedding of the literature in cognitive and educational psychology with that of epistemic beliefs in history. The resulting theory offers a perspective for the study of belief change in preservice teachers who are challenged to learn how to think historically in ways that defy what they have to come to believe via apprenticeships of observation. This perspective was used to create the overall structure of the course along with the specific pedagogical moves made all of which will be outlined in the chapter which follows.



CHAPER III

METHODOLOGY

This chapter describes the methodological procedures used to document the happenings of the course. The first section gives a brief overview of the participants and the enrollment process for the course. Next there is a discussion of the research design followed by a description of the course itself. The two final sections of this chapter detail the data collection and methods of analysis used to keep track of participant experiences throughout the course.

Participants

Course announcements, email listservs, and academic advising were used as means for communicating the availability of the course campus-wide and thus served as a way to attract participants (See Appendix A for the official course announcement, which was distributed to academic advisors and students enrolled in the university's education and history departments). There was no prerequisite for the course and academic major was not used to determine enrollment eligibility. Eight students elected to formally register and complete the requirements associated with the course. In total, there were 32 inquiries. However, a time conflict with mandatory course schedules was cited as the most common reason interested parties were unable to register. The cohort of eight students consisted of five females and three males. Demographic data and detailed participant profiles will be provided at the start of Chapter Four.



Design

The mixed-methods used within this study have been foundationally grounded in a one-group pre-test/post-test design. Purposeful sampling (Wiersma & Jurs, 1991) was used to create the participant group. Because of the direct involvement of the researcher as a participant-observer, this study also takes on characteristics of teacher research within the qualitative research tradition. There are two central constructs, which I set out to better understand as a result of this study. They were, participant belief structures and relatedly, the course design, which included my pedagogical choices as the instructor. Thus, an explanation of course happenings is necessary in order to better understand where and how the various measures were used during the class sessions and to better understand the forthcoming discussion of analytical procedures used throughout the present study. The section which follows details the goals of the course, rationale for the selection of specific pedagogical strategies, and an overview of the session by session proceedings.

The Course

The referenced course for this study was offered at a large east coast university, which lies just outside of a major urban metropolis. Housed within the university's Curriculum and Instruction Department, this one-credit experimental course was offered every other week for 100 minutes during the fall semester of the 2010 academic year for a total of eight sessions. The author was the primary instructor. Undergraduates with an interest in pursuing a career in school teaching were the target enrollees. Such a population was desirable because of their relative placement within their collegiate course of study. Ideally, the course would have



come at the very beginning of a preservice teacher's course of study thus allowing the potential for newly formed epistemic beliefs to influence the student's approach to domain-specific and pedagogical coursework throughout their remaining collegiate careers. However, due to enrollment challenges, some of the participants were well into their courses of study.

The intent of the experience was to create a space for undergraduate prospective elementary educators to reflect on their personal beliefs about the teaching and learning of history while simultaneously acquiring knowledge about what historians do, and how that knowledge can be translated into meaningful pedagogical practice. Specifically, the course directly addressed the following three questions with the participants: What does it mean to think historically? How do students learn to think historically? What instructional strategies do teachers engage in, which prompt students to think historically? The overarching goal of the course was to move students towards more criterialist understandings of history teaching and learning. It was created with this intention at the core of its foundation.

The syllabus (See Appendix B) for this course was designed with careful consideration of the limited time allotted for such an experience. There were two overarching questions, which needed to be addressed: 1.) What does it mean to think historically? 2.) How do you teach historical thinking? With these two questions at the forefront of the course design, the decision was made to split the class sessions in half allotting four sessions to ponder the first question and four sessions to investigate the latter. Theoretically, participants would need to understand what it means to think



historically prior to considering how they might teach students of their own to engage in such practices.

Within each of the sessions, strategies to surface, challenge, and shift ways of knowing were deliberately employed. The underlying assumption of using such strategies was that the existence of cognitive dissonance would foster an environment where existing or "old" ways of knowing could be consciously (through self-reflection, class discussions, and instructor-participant interviews) deconstructed while "new" ways of knowing are simultaneously infused through repetitive exposure to direct instruction (lecture, scholarly readings, discussion) and practice (historical investigations, class exercises, lesson plan and rubric assignments). This theory underlies the pedagogical moves used throughout each of the eight class sessions. A brief overview of the course will follow. For an extended commentary on each class session including instructor anecdotal notes, and student responses, see Appendix C.

Session one began with an administration of three measures: the Background Knowledge Survey, Beliefs about History Questionnaire, and History Teaching and Learning Questionnaire. These instruments were used as a way of surfacing the epistemic beliefs participants brought to the start of the course. They were designed to get students to think deeply about the assumptions and the epistemic underpinnings associated with how they think about teaching and learning in history. Students were given an unlimited amount of time to complete the questionnaires. Most spent approximately 30 minutes to complete all three. This data, coupled with the initial interview, served as a proxy for participant baseline beliefs prior to any course instruction. After a brief sharing of goals, the class spent some time discussing the



syllabus. Most of the conversation surrounded the initial lesson plan assignment, which was scheduled to be due prior to start of the next class session. The remainder of the class was used to give students a background on history education in America. Lecture accompanied by a PowerPoint presentation was used to initiate a conversation about this topic.

Prior to arriving at class session two, students were asked to read two scholarly articles: VanSledright, B. (2010). What does it mean to think historically and how do you teach it? and Andrews, T., & Flannery, B. (2007) What does it mean to think historically? These articles were selected because both provided thought provoking and easily accessible commentaries on historical thinking and how it can be taught in schools. The goal was to use inquiries surfaced by these articles as a launching point for classroom discussion.

Session two opened with a reflective discussion surrounding participants' first attempt at writing a history lesson plan. Next, students were asked to engage in their first performance-based activity. Students looked at a number of primary source documents in an attempt to "answer" the question "Was Abraham Lincoln the Great Emancipator?" In this instance, students were not given any sort of guidance with regards to how they should approach the documents or what exactly they should do with them. Instead, they were asked to come up with an evidence-based response to the question posed. A deliberate framework for approaching this task was not offered as the central goal of the task was to surface existing beliefs in order to begin a dialogue about what they might entail. Afterwards, students were asked to reflect on what they had just done; specifically they were asked to ponder their approach to the



main question and the strategies they used to work through the documents. To wrap up the class session, and to address the dissonance that had clearly surfaced in many if not all participants, we engaged in a reflective discussion on the readings, which were due that day.

During sessions three and four, students were systematically taught the nature of historical inquiry. Relying on the PAIRe approach (VanSledright, 2011) and other relevant scholarly literature (Levesque, 2008; VanSledright, 1998), students learned how to critically read and analyze historical accounts through the introduction of concepts such as author identification and perspective assessment.

Looking specifically at session three, the objective was to create a foundational base of knowledge among participants pertaining to substantive (the "what") and procedural (the "how") knowledge in history. Of particular focus was VanSledright's (2011) PAIRe approach, which created a deliberate methodology for employing strategic capabilities used to critique evidence. These capabilities are central to criterialist understandings and needed to be intentionally taught so students could practice and master the associated skills.

Following an in-depth discussion of related concepts such as perspective assessment, attribution, identification, reliability judgment, and contextualization, students were challenged to use these skills to assess a series of primary source documents relating to the events leading up to the dropping of the atomic bomb in Hiroshima and Nagasaki. The PAIRe Guide (VanSledright, 2011) was distributed and students were asked to complete the tool for each document. The goal here, similar to the Lincoln activity, was to actively engage students in the process of doing history



with the goals of simultaneously surfacing, challenging, and introducing ways of knowing.

Session four was the last of sessions with a central focus of teaching students about disciplinary history. This class session focused on second-order knowledge in history particularly the concepts of historical significance and positionality. Students were asked to consider their own identities and how these experiences and ways of approaching the world directly and indirectly affected their approach to the study of history. Emphasis was placed on understanding the active role of the knower in history.

Prior to the close of class, students were asked to again engage in a historical investigation activity. The topic of this exercise was "The Jamestown Starving Time". This investigative lesson originally surfaced in VanSledright (2002). Students were challenged to apply PAIRe in order to create an interpretation, which they were responsible for clarifying, justifying, and rationalizing using documented evidence. Students presented their narratives at the end of the class session resulting in a productive and thoughtful debate about the evidence. The completion of session four marked the mid-point of the course and a transition from a focus on history as a discipline to how it should be pedagogically approached in classrooms.

Techniques for translating PAIRe into appropriate pedagogical strategies were the focus of session five. The questions at the center of this class session were: where do students learn what history means and how to do it and how does this influence their understanding? Lortie's (1975) theory of apprenticeships of observation along with Lee and Ashby's (2000) progression model were of particular focus. To



illustrate the scholarly literature, participants were given transcripts from students thinking aloud about historical topics and about what historians do. This data was analyzed and coded by participants according to VanSledright's (2011) discussion of naïve realist, naïve relativist, and critical pragmatist.

Recall at the end of session four participants were asked to engage in an investigative activity surrounding the "Jamestown Starving Time". Participants had asked for more time to work with these documents; perhaps as a result of having more tools and knowledge of how to do such work in a meaningful way. Participants were given the requested time toward the end of session five. Additionally, participants studied the responses in VanSledright's (2002) where fifth grade students attempted to make sense of the same Jamestown documents. Specifically they were asked to consider how these students approached historical inquiry, what assumptions about history they could surmise from their analysis, and what effects these approaches and assumptions might have on how they might teach a similar lesson.

Session five also marked the due date for the second performance assessment. Students were asked to revise their initial lesson plan based on instructor feedback and theoretical classroom discussions. They were also asked to provide a commentary on the changes made explaining why they chose to make the edits.

Session six was used to apply the conceptual framework of PAIRe to pedagogical moves that can and should be made as schoolteachers engaging in disciplinary history with their students. Once again, participants were instructed explicitly on a method (develop investigative questions, choose sources which retain



conflict and tension yet move students along, distribute tools such as the PAIRe Guide) to use when preparing and teaching students to think historically.

Finally, participants were asked to engage in their fourth historical investigation. This time, participants were given a series of documents surrounding "The Lost Colony of Roanoke". They were again asked to engage in PAIRe in response to a specified question. At the request of a participant, the class was also assigned an additional task, which was to be due at the start of the next class session. Participants would create an investigative history lesson for a grade of their choice with explicit direction including what moves the teacher and the students should make. The lesson plan assignment had not specifically asked participants to design an investigative lesson (although this was the intention as the assignment was presented as the creation of a model lesson representative of how participants believed history can and should be taught in schools).

The first half of session seven was used to reiterate theory, and practice the concepts introduced in the last session. Using VanSledright's (2011) fictional case of teacher Thomas Becker and a series of questions used to structure an analysis of pedagogy, participant's carefully studied the moves made be an educator and the effects those moves had on the students he was teaching. A bulleted recapping of how teachers should prepare and execute investigative lessons including the explicit guidance novice students should receive followed this exercise. Following this deliberate focus on methodology, participants were asked to engage in their sixth and final investigative activity; this topic centered on the "Boston Massacre".



Participants were asked to keep anecdotal notes with regards to the strategies they were using as they moved through the process of creating an interpreted narrative.

Approximately mid-way through the class session, we switched gears to the final topic of the course: assessment. Studying Alleman and Brophy's (1999) "Guiding Principles for Assessment Tools", coupled with VanSledright's (2011) chapter on assessing student learning, participants were asked to create a grading rubric for a historical thinking investigation. Participants were challenged to think about what criteria they would use to evaluate student responses.

Session eight, the last meeting of the course, was used as a space to recap the topics covered throughout the eight class sessions, to share and critique final lesson plan submissions, and to engage in a second round of data collection through the completion of the HTLQ, and the BHQ. Additionally, participants engaged with a third instrument not used at the onset of the course. The HLab Sequencing Task (Maggioni, VanSledright, & Reddy, 2010) consisted of a series of statements pertaining to pedagogical moves teachers of investigative history might make. Participants were asked to select the statements they would consider necessary pedagogical moves and to order them in the sequence they felt teachers should follow. Before leaving the last class session, participants were reminded to schedule a final interview no sooner than two weeks after the end of the course. A two-week period was specified in an attempt to social desirability effects (after grades were assigned) and to more reliably assess the staying power of any influences gained during the course. Appendix D provides an overview of the course goals and topic overviews by class session.



Measures

Both qualitative and quantitative sources of data were collected and used for analysis in this study. Measures used within each methodological tradition are grouped together and defined. A plurality of measures was selected in an attempt to access and evaluate existing and shifting beliefs among participants. Due to the unattainability of the construct "beliefs", all measures serve as proxies for epistemic positionalities.

Quantitative Measure

Beliefs about History Questionnaire (BHQ). The Beliefs about History Questionnaire (BHQ) was used to explore students' epistemic beliefs in history. This 22-item, 6-point Likert scale questionnaire (See Appendix E) was designed by Maggioni, VanSledright, and Alexander (2009) to reflect different conceptualizations of the nature of historical knowledge and exemplify beliefs characterizing three categories theoretically deduced from the literature on epistemic cognition (e.g., King & Kitchener, 2002; Kuhn & Weinstock, 2002) and historical thinking (e.g., Lee & Shemilt, 2003; Wineburg, 2001). The questionnaire comprises statements that represent the three aforementioned categories on the discipline of history. Some statements, represented a *copier* stance where history is conceived as "what it is" allowing the facts to speak for themselves. A second group of statements counters the first signaling a *subjectivist* outlook on the discipline where "the past is what the historian makes it to be". Finally, a third group of statements express on a *criterialist* understanding of the discipline where history results from a process of inquiry in which tools and judgment are applied by the knower to what is to be known. This



measure was administered twice during the course. The first administration (BHQ₁) was given to participants on the first day of the course prior to any instruction or activities associated with the course. The second administration (BHQ₂) was administered on the last day of the course after all instruction and activities had concluded.

Qualitative Measures

History Lab Sequencing Task (HLab). This task was originally developed by VanSledright, Maggioni and Reddy (2012) as a tool used to collect data for an evaluative study of the Teaching American History (TAH) grant program, which is a professional development grant administered by the U.S. Department of Education to school systems. The authors,

... asked teachers to choose from a list of 16 possible pedagogical steps, those that they would take in enacting a historical investigation with their students and to order them chronologically. Although there are several legitimate ways of structuring a historical investigation, we designed this task on the basis of a template structure explicitly taught during the professional development program. The structure envisioned the historical investigation as comprising four main parts: (a) introduction of the overarching question addressed in the historical investigation and assignment of relevant historical sources; (b) modeling of the historical method; (c) student work on the sources assigned; and (d) formal assessment of student understanding of historical content and historical method. (VanSledright, Maggioni, & Reddy, 2012, p.12)



Of the 16 total items included within this measure, the authors designated three of the steps as "throwaway" items or strategies, which would not foster the generation of knowledge through historical investigation. The remaining items included: three "introductory" items, two "modeling items", six items pertaining to student work, and two "assessment" items. Table 3.1 displays these 16 items according to category. The number next to each item in parentheses notes what step in the sequence the authors designated for the given item (e.g.: "(3) Item Q: Model the investigative process by showing students a visual of how steps in the process work" would come third in the sequence).

The course associated with the present study embraced a pedagogical approach to historical investigation, which was comparable to the four parts identified by VanSledright, Maggioni, and Reddy (2012). Thus, it seemed prudent to use this tool as a means for collecting data on participant understanding of the historical method and more specifically how to teach this methodology to future students of their own. Unlike VanSledright, Maggioni, and Reddy (2012), participants in this study were not explicitly given a template structure containing all of the HLab items. However, participants were taught all of the steps and in the same sequence as the HLab task through class discussions and through assigned scholarly journals. Thus, the method of analysis has been altered but the content and structure of the measure (See Appendix F) was kept the same.



Table 3.1

HLab Sequencing Task Item Breakdown and Ordering

Category	<u>Items</u>
	(1) Item E: Initiate the activity by identifying the overall guiding questions the activity exercise will address.
Introductory Items	(2) Item A: Provide students with historical sources relevant to the questions they are addressing.
	(3) Item Q: Model the investigative process by showing students a visual of how steps in the process work.
Modeling Items	(4) Item N: Model the historical investigative process by identifying a focus question and addressing who, what, when, where, and why information gleaned from historical agency.
	(5) Item J: Model the investigative process by determining historical context and subtext and relating them to a focus question.
	(6) Item G: Ask students to determine and choose specific historical questions they will address in cooperative groups.
	(7) Item C: Provide students time to pursue addressing their questions via cooperative group settings.
Student Work Items	(8) Item H: Provide time for students to present their interpretations of the focus questions they used sources to address.
	(9) Item P: Discuss how students' interpretations of the sources are related (or not) to each other to solidify historical facts and clarify reasons for varying interpretations.
	(10) Item O: Discuss and explain organizing concepts such as interpretation, evidence, reliability, progress/decline, causation, historical agency.
	(11) Item L: Request that students synthesize the information they gained to address the overall guiding question.
Assessment	(12) Item K: Formally assess students' understandings of the investigative process.
Items	(13) Item B: Formally assess students/ understanding of the historical content. Item F: Provide students with the correct information from the textbook in order to
	help them arrive at the most defensible interpretation of the sources.
Throwaway Items	Item I: Provide students with a correct answer to the overall guiding question to solidify their learning of the historical facts.
	Item M: When multiple interpretations emerge from students' readings of the sources, offer them the correct interpretation so as to avoid confusion.



BHQ written responses. Participants were asked to qualify their selections on each BHQ Likert-scale response with a written explanation describing why they selected the particular level of agreement or disagreement. These written statements allowed participants to clarify their understanding of the BHQ items and to explain their choice of response. In a previous study, Maggioni, VanSledright, and Reddy (2009) conducted a qualitative analysis of BHQ written justifications from college students and found that most results were compatible with the quantitative findings from the Likert-scale thereby strengthening the reliability of the measure.

Additionally, asking participants to justify their own answers created another crosscheck for consistency in responses and possibly limited the potential for social desirability effects. Data from this measure was collected twice during the course simultaneously alongside the BHQ Likert-scale.

Background Knowledge Survey. The Background Knowledge Survey (See Appendix G) was an open-ended questionnaire used to collect demographic data and information pertaining to participants' apprenticeships of observation with history prior to the course. Specifically, the purpose of this instrument was to capture a resume of experiences with regards to history education and to surface some initial beliefs about teaching and learning in history. Questions included: current major/minor, area of interest in history, listing of all history courses taken post-secondary, listing of all social science courses taken post-secondary, and a commentary on perceived successes and failures within each. Participants were also asked to include a goals statement on the back of this instrument indicating their



reasoning for enrolling in the course. This measure was administered once on the first day of the course prior to any instruction or activities commenced.

History Teaching and Learning Questionnaire (HTLQ). The History Teaching and Learning Questionnaire (HTLQ) was open-ended and comprised two direct questions: "What is history?" and "How would you teach history in schools?" (See Appendix H) The purpose of this questionnaire was to gain a deeper understanding of each participant's beliefs about teaching and learning in history using prompts, which encouraged students to elaborate on their understandings. This measure was administered twice during the course. The first administration (HTLQ₁) was given to participants on the first day of the course prior to any instruction or associated activities. The second administration (HTLQ₂) was given on the last day of the course after all instruction and associated activities had concluded. A follow-up interview after each administration provided an additional space for participants to expand on their responses.

Performance assessments. Participants were asked to complete a number of performance-based assessments throughout the duration of the course. Specifically, they were asked to read and interpret primary source documents in order to engage in investigative historical thinking acts as a strategy for surfacing, challenging, and developing epistemic beliefs. Five document sets were used throughout the course. The focus question and primary source selections for the first set of documents, which centered on Abraham Lincoln, were adapted from Sam Wineburg's (1998) study of how expert historians think about and read evidence. The next three sets, which centered on the "Dropping of the Atomic Bomb", "the Boston Massacre", and "The



Starving Time in Jamestown", were all adapted from exercises used in VanSledright (2002) and Reddy and VanSledright (2010). I designed the final document set, which centered on "The Lost Colony at Roanoke". The exercise associated with each set stayed consistent throughout the course asking students to use the given documents to respond to an associated question with supported reasoning. Volume and consistency of the performance-based assessments were used to provide participants multiple, similarly-structured opportunities to engage in historical thinking.

These investigative activities were designed to surface and disrupt or challenge participants' existing beliefs about how to approach history. Anticipating that a majority of the participants would hold objectivist or subjectivist beliefs, document sets, which contained conflicting documents, were deliberately selected. Copiers, individuals often characterized by the desire to simply "find the answer", would be confused by the existence of conflicting interpretations. Subjectivists, who attempt to cut and paste accounts together, would be troubled by inconsistencies and would produce interpretations that they would likely have difficulty defending. Both situations create cognitive dissonance, which encourages students to ameliorate tension by seeking out new ways of knowing. Artifacts produced during these performance assessments were collected. Group collaborative sessions and class discussions were audiotaped.

Lesson plan assignment. Participants were required to submit three drafts of an original lesson plan to the instructor at the start of class sessions two, five and eight. Specifically, participants were asked to choose a topic within American history



to create a 50-minute, age-appropriate lesson. Expectations for the formal write-up (See Appendix I) included the following key components³:

- 1.) Central goal of the lesson (what students should be able to do)
- 2.) Key concepts (what are the focal concepts students will learn about)
- 3.) Resources to be used
- 4.) Assumptions about students' prior knowledge with regards to the topic/concepts
- 5.) Activity script (a layout of pedagogical moves)
- 6.) Assessment (how will you evaluate if students achieved the central goal)

 The initial assignment allowed participants to make a cursory attempt at crafting
 lesson plans for school students of history. The goal of this draft was to help the
 instructor better understand individual epistemic beliefs through an evaluation of the
 goals set within the lesson plan and the pedagogical moves used to reach those goals.

 Participants used peer critique sessions, instructor feedback (a discussion of how this
 feedback was structured comes within the description of the course) and knowledge
 gained during the class sessions to revise their original lesson plans for the second
 and third submissions. The intention was for the same lesson to be improved upon
 over the course of the three attempts. However, some of the initial lesson plans where
 significantly lacking in substantive and procedural quality therefore necessitating a
 complete overhaul of the conceptual and pedagogical frameworks. A comparison of
 these artifacts along with interview discussion data was used to evaluate the ways in

³ The lesson plan assignment and specified key components was originally developed by Dr. Bruce VanSledright for a similar course.



which participants were thinking about the teaching of history in school classrooms and how those beliefs shifted (or did not shift) over time.

Rubric Assignment. After reading and commenting on the second draft of the lesson plan assignment, it became clear that more data pertaining to participant understanding of assessment was needed in order to sufficiently make claims about their beliefs. The lesson plan required participants to include some sort of assessment, which was useful but left their own goals for that assessment largely to interpretation. In an attempt to add to the data surrounding this conversation, the Rubric Assignment was created and assigned after the seventh class session. The topic of this class session was "assessment".

The Rubric Assignment (See Appendix J) was designed as a performance-based assessment used to capture data about the beliefs participants held with regards to "student" generated historical interpretations (the product of a historical thinking investigation). Participants were asked to create a grading rubric, which could be used as the tool for assessing an interpretation, essay, or brief-constructed response resulting from a lesson or series of lessons. Participants were specifically asked to consider their own goals for such an assessment and their beliefs about what components were most important when creating their rubric categories.

Audiotapes. Each class session (n=8) associated with the course was audio taped to monitor talk amongst participants. Specifically, audiotapes were used to better understand shifting conceptions of what it means to teach and learn history, which commonly surfaced through utterances and conversations verbalized by participants during class discussions and collaborative group work. Open forum class



discussions were used throughout the course as a space for students to wrestle with their existing beliefs and to work through dissonance caused by the introduction of new ways of knowing. Audiotapes were used to understand these conversations allowing student-student interactions and instructor-student interactions to be recorded for later analysis. Audiotapes were also used to document pedagogical moves made by the instructor and to record the overall happenings of the course.

Interviews. Each participant was interviewed three times over the course of the semester; at the beginning of the course, mid-way through (following session four), and then a final time following the last class session. An interview protocol was used for each meeting (See Appendix K). Two protocol categories of questions were used consistently for the three sets of interview meetings to allow for a comparison of responses as a way of gauging belief shifts. These categories were noted as "Understanding of History", which consisted of four multi-leveled questions with the goal of better understanding participant views of disciplinary history, and "Understanding of How to Teach History", which consisted of three multi-leveled questions with the goal of better understanding participant views on pedagogical approaches and student skills in school history.

In addition to these protocol categories, interview one contained three other categories of questions presented to all participants. The first was labeled "Introduction", which contained two multi-leveled questions with the goal of understanding information from participants regarding their reasoning for enrollment in the course, goals for the course, and thoughts about teaching as a career. The second was labeled "Apprenticeships of Observation", which consisted of three



multi-leveled questions with the goal of understanding data pertaining to participants' past experiences with history. Finally, interview one was used to go through the BHQ questions allowing participants to verbally explain their Likert-scale and written responses.

Interview two consisted of two additional protocol categories. The first was labeled "Course Reflection" and consisted of three multi-leveled questions designed to understand data pertaining to participants' personal goals reflections and thoughts on the pedagogical strategies used. Additionally, interview two was used to dialogue about the initial lesson plan assignment, which had been returned to all participants with comments. These comments were used as the basis for individualized questions.

Interview three consisted of four additional categories. The first was the same "Course Reflection" category used during interview two. The second was a question-by-question comparison of BHQ₁ and BHQ₂, which allowed participants to explain their BHQ₂ answers and then comment on any changes from pre to post course with regards to Likert-scale or written responses. Third, participants were asked to reflect on their responses to HTLQ₁ and HTLQ₂ and to comment on any shifts. Finally, similar to interview two, participants were asked individualized questions about the final revision of their lesson plan assignment.

Although a structured protocol was used, interviews were approached as informal and conversational to allow for questions to emerge (Patton, 1990). Most interview sessions lasted approximately one hour although in some instances they approached two hours. Longer interviews often resulted from participants who had significant cognitive roadblocks, which they attempted to work through verbally as



questions were presented. Likewise, the second and third interview sessions served as reflective spaces for participants to think deeply about their own understandings, which often resulted in lengthy and changeable responses. Interviewees were asked to use verbal reports (Ericsson & Simon, 1993) to encourage the discussion of thoughts surrounding given topics or scenarios aloud (Brenner, 2006). All interviews were transcribed verbatim.

Anecdotal notes. The instructor kept an ex-post facto journal of anecdotal notes pertaining to the recruitment of participants, design of syllabus and assignments, pedagogical decisions and overall reflections on class happenings.

Immediately following each class session, the instructor journaled at length on the structure of the class sessions, interactions between the instructor and the participants, and participant interactions with course content as well as one another.

Data Analysis

Both quantitative and qualitative data was analyzed and used as proxies for participant beliefs about history and history teaching and learning. All data was triangulated allowing for emergent themes to surface. Procedures relied heavily on those employed within Maggioni, VanSledright, and Reddy (2009). However, idiosyncrasies of this study led to the alteration of and creation of new coding protocol and rubrics used to assess data collected. Analysis procedures used within this study were derived from relevant literature, prior studies, along with inductive and deductive theorizing. A conceptual framework and explanation for the analysis of each measure is described in the section that follows.



Analysis of the BHQ

Quantitative responses. Participant responses to the BHQ served as a proxy for epistemic beliefs. Data yielded was analyzed and the results provided a cursory indication of where the participants fell on a continuum. Categories associated with this continuum were developed by Maggioni, VanSledright, and Reddy (2009). Initially, these categories began as *copier*, *borrower*, and *criterialist*, which surfaced from prior studies of epistemic beliefs in history (Maggioni, Alexander, & VanSledright, 2004; Maggioni, VanSledright, & Alexander, 2009). Using these three categories, the researchers then proceeded to develop six categories to represent combinations of subjective and objective ways of knowing: Epistemic Belief-Copier (EBCO), Transition 1 (TR1), Epistemic Belief-Subjective (EBSUB), Transition 2 (TR2), and Epistemic Belief-Criterialist (EBCR).

EBCO is used to categorize students with characteristics similar to *copiers* (Maggioni, VanSledright, & Alexander, 2009; Maggioni, VanSledright, & Reddy, 2009). These individuals have an objective view of historical knowledge as obtainable from past remnants. Thus, the knower does not take an active role in the construction of historical knowledge. Rather they simply find it (usually in textbooks or other authoritative sources). Conflicting accounts are judged as false and/or intentionally misleading. Making this latter judgment, the knower continues to experience cognitive disequilibrium because conflicting events cannot be fully understood.

EBSUB is used to categorize beliefs relational to subjectivists (Maggioni, VanSledright, & Reddy, 2009). The role of the knower is now acknowledged;



however, it is seen as unrestricted, meaning that any and all opinions should be accepted because "no one can really ever know what happened." Historical knowledge is based on the assumption that everything recorded about the past is opinion, and all opinions should be weighted equally. Thus, conflicting histories are not argued; rather the belief that "anything goes" remains dominant. This positionality, however, is still marked by cognitive impasses and as such produces dissonance.

EBCR is used to categorize a set of epistemic beliefs similar to *criterialists* (Maggioni, VanSledright, & Alexander, 2009; Maggioni, VanSledright, & Reddy, 2009). The role of knower is understood to be one that is interpretive. These interpretations are constructed through a disciplined method of inquiry into remnants of the past. The EBCR stance also acknowledges that historical evidence is sometimes thin thus propagating the need for a subjective "piecing together" of claims. For *criterialists*, the role of the knower is more fully reconciled to the role of what is to be known (the past) through the exercise of cognitive tools. If consistency of belief and trust in the tools prevail, the knower achieves a form of cognitive equilibrium because she had a means to solve problems or understandings.

Maggioni, VanSledright, and Reddy (2009) also included two transitional stances within their analyses. TR1 refers to those individuals who seemingly slip and slide between EBCO and EBSUB positionalities. The researchers categorized individuals who sought to find out the "Truth" about the past but were stifled by an overwhelming focus on the subjectivity of historical accounts. These individuals oftentimes focused heavily on the fact-opinion dilemma associated with historical



knowledge and were vocal about their reluctance to allow opinion to drive historical fact. The category TR2 was created for the individual who signals clear movement towards the understanding that history is an interpretive work based on evidence. However, those placed within the category TR2 often lacked an understanding of how investigators ultimately constructed knowledge, using tools and judgment strategies common to disciplinary practices. Table 3.2 illustrates the aforementioned categories of epistemic beliefs.

Table 3.2

Categories of Epistemic Beliefs

Category	Meaning	Role of the Knower	View of	Role of Argument
Label			Knowledge	
EBCO	Epistemic-Belief-	No overall awareness	Objectivist;	Not acknowledged;
	Copier		Isomorphic facts	Creates cognitive
				impasse
TR1	Transition 1	1	1	1
EBSUB	Epistemic-Belief-	Active; Unrestricted	Relativistic; History	Not necessary; History is
	Subjectivist		is based on and	opinion; All opinions are
			opinion	of equal stature
TR2	Transition 2	1	1	1
EBCR	Epistemic-Belief-	Has an interpretive role;	Constructed based off	Interpretive work
	Criterialist		of a strategic	through disciplinary
			assessment of	criteria and heuristics
			evidence	

Maggioni, VanSledright, and Reddy (2009) sought to develop a way to quantitatively analyze the BHQ Likert scale measure administered pre and post course. The researchers created a weighted equivalency measure to assess responses to the BHQ and then further broke responses into sub-scales to more intimately measure epistemic beliefs towards (a) history as a discipline or topic; (b) teaching and learning in history. First, the researchers assigned equivalencies to weight the range of scores possible on the six-level Likert scale. The weights ranged from +3 awarded



to those responses of "strongly agree", to -3 awarded to responses of "strongly disagree". See Table 3.3 for a summary of this system of weights.

Table 3.3

BHQ Weighted Equivalencies

BHQ Selection	Weighted Equivalency
Strongly Agree (6)	+3
Agree (5)	+2
Somewhat Agree (4)	+1
Somewhat Disagree (3)	-1
Disagree (2)	-2
Strongly Disagree (1)	-3

Second, the researchers were interested in separating the items on the BHQ which identified statements pertaining to history as a discipline (abbreviated as "H") and teaching and learning associated with history (abbreviated "HTL"). To do this, the researchers labeled each of the 22 statements independently as having an EBCO, EBSUB, or EBCR positionality. Table 3.4 illustrates the results yielded by this breakdown. Each statement was weighted according to the +3 to -3 equivalencies described previously.

To interpret the weighted results, Maggioni, VanSledright, and Reddy (2009) developed an algorithm. First, they took the arithmetic mean of weights within a given category and compared the result to the actual scale. To illustrate the authors explain,



Table 3.4

BHQ Breakdown of History and History Teaching and Learning Statements

Abbreviation	Description	Breakdown	
		(See Appendix E for a detailed breakdown	
		of questions)	
(H) Items		- 13 Total Statements (out of 22)	
	History as a discipline or	- EBCR = 5 items	
	topic	- EBSUB = 5 items	
		- EBCO = 3 items	
(HTL) Items		- 9 Total Statements (out of 22)	
	Teaching and Learning in	- EBCR = 4 items	
	History	- EBSUB = 2 items	
		- EBCO = 3 items	

Imagine that Student A circled 4, 6, 2, 5, and 5 Likert responses on the five EBCR items that assess the EBCR stance on the H subscale. Weighting translates this to +1, +3, -2, +2, and +2 respectively, for an additive total of +6. Because there are 5 items in this subscale category, we divided +6 by 5 to arrive at a score of +1.2 (out of a maximum agreement/disagreement score of +3/-3). In interpreting such a score, we would characterize it as "weak agreement" with the EBCR category because of its close proximity to 4 (somewhat agree) on the actual Likert scale (Maggioni, VanSledright, & Reddy, 2009, p. 13).

After analyzing positionalities within individual epistemic categories (for example within HTL items a participant yielded +1.2 amongst EBCR items, +3 amongst EBSUB items, and -1.2 on EBCO items), the researchers created a ratio to measure overall consistency between epistemic stances.

The consistency ratio was based on the selection of EBCO/EBSUB and EBCR items. The researchers calculated this ratio by adding up the number of times a participant "agreed" or "strongly agreed" with EBCR items and the number of times



they "disagreed" or "strongly disagreed" with EBCO and EBSUB items. The additive of those two numbers was divided by the total number of possible items resulting in a percentage of consistency across a given epistemic stance. For example, perhaps a participant "agrees" or "strongly agrees" with 8/10 criterialist items and on the same BHQ "disagrees" or "strongly disagrees" with 4/10 EBCO and EBSUB items, the overall consistency relating to an EBCR stance would be 12/20 or 60%.

The creation of the consistency ratio was based on the theory that the strengthening of an EBCR stance would weaken the scores of EBSUB or EBCO stances. Additionally, experts' beliefs in history shift around less frequently arguably as a result of deeper "knowledge, strategic processing, and interest" (Alexander, 2003, p.12) within an academic domain. Therefore they appear more consistent. Thus, the consistency ratio was used to gauge the overall stability of a set of beliefs.

Maggioni, VanSledright and Reddy (2009) used the mean weights of the BHQ responses and the overall consistency scores to categorize participants in that study as EBCR, EBSUB, EBCO, TR1, or TR2 both pre and post course. A categorical "highbar" was set for the designation of a participant as EBCR. This was "in response to expert historian comments on the validity of the scale, possible social desirability effects for EBCR items and, past studies (e.g., King & Kitchener) in which participants selected stronger responses on the EBCR-type items than their subsequent oral-response rationales could justify" (Maggioni, VanSledright, & Reddy, 2009, p. 14). The researchers used the following formula to code participant epistemic beliefs as EBCR: minimum consistency score of 90% across all 22 BHQ



items, scores above 2.5 on the criterialist items (both H and HTL), and scores above - 2.0 on both EBCO and EBSUB items.

The present study utilized Maggioni, VanSledright and Reddy's (2009) three-step process for analyzing the results of the BHQ Likert-scale responses. Data from the full-length BHQ (22 items) was broken apart and analyzed on three scales: history specific items (13 items), teaching and learning items (9 items), and as an aggregate total (22 items). The data within each scale was represented in three ways. First, weighted equivalencies were assigned to each of the BHQ statements. This quantified the data allowing for the computation of weighted categorical scores. Next, consistency scores were calculated. Finally, a high-bar analysis was conducted across all categories and subscales. Figure 3. illustrates how the BHQ was analyzed for this study.

BHQ Analysis Approach

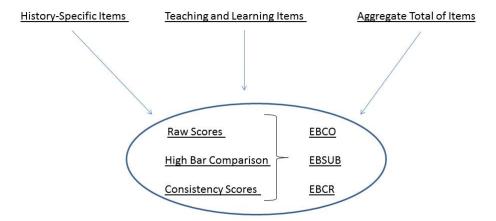


Figure 3. BHQ Analysis



The quantitative data resulting from the BHQ served as a broad stroke measure to initiate the analysis of participant beliefs about history and history teaching and learning. Specifically, consistency scores and categorical weighted scores were targeted as an entry point into understanding participant beliefs. BHQ data was also triangulated with qualitative results to allow for emergent themes.

Qualitative responses. Written responses and interview transcripts pertaining to BHQ items were used to clarify and qualify the results of the BHQ quantitative analyses. The unit of analysis for the BHQ written responses was phrases. Interview data resulting from protocol associated with the BHQ items was analyzed for utterances. Initially, phrases and utterances were coded according to the six categories Maggioni, VanSledright, and Reddy (2009) originally developed for the BHQ quantitative analysis; EBCO, TR1, EBSUB, TR2, and EBCR. It quickly became clear that participant beliefs were quite inconsistent and needed a finer grain analysis in order to surface emergent themes or patterns. Thus, phrases and utterances were recoded specifically for beliefs about the "role of the knower", "view of knowledge" and "role of argument". The code "K" super-ceded by "EBCO, EBSUB or EBCR" was used to signal instances of beliefs pertaining to the "role of the knower" in history. The code "Kn" super-ceded by "EBCO, EBSUB or EBCR" was used to signal instances of beliefs pertaining to the "view of knowledge" in history. Finally, the code "A" super-ceded by "EBCO, EBSUB or EBCR" was used to signal instances of beliefs pertaining to the "role of the argument" in history. Table 3.5 displays the rubric used throughout this iterative process. See Appendix L for a coded data sample.



Table 3.5

BHQ Written Response Phrases and Interview Utterance Rubric

Meaning	Role of the Knower	View of Knowledge	Role of Argument
Epistemic-Belief-	No overall awareness	Objectivist; Isomorphic	Not acknowledged; Creates
Copier		facts	cognitive impasse
(EBCO)			
	Code: EBCO-K	Code: EBCO-Kn	Code: EBCO-A
Transition 1 (TR1)	Code: TR1-K	Code: TR1-Kn	Code: TR1-A
Epistemic-Belief- Subjectivist (EBSUB)	Active; Unrestricted	Relativistic; History is based on opinion	Not necessary; History is opinion; All opinions are of equal stature
	Code: EBSUB-K	Code: EBSUB-Kn	Code: EBSUB-A
Transition 2 (TR2)	Code: TR2-K	Code: TR2-Kn	Code: TR2-Kn
Epistemic-Belief- Criterialist (EBCR)	Has an interpretive role;	Constructed from an assessment of evidence	Interpretive work through disciplinary criteria and heuristics
	Code: EBCR-K	Code: EBCR-Kn	Code: EBCR-Kn

Analysis of HLab Sequencing Task

Deductive reasoning was used to analyze the data resulting from this task. Three patterns of interest surfaced, which included (a) Items designated by participants as "throwaway" or not pedagogically useful (b) Ordering of items pertaining to categories (i.e. "Were assessment items left out? Were participants forgetting to model?") (c) The overall ordering of tasks. Themes resulting from this iterative analysis were triangulated with other data sources to add to the conversation pertaining to participant pedagogical decision-making. Additionally, data from the analysis was used as an evaluative measure of the course itself. The same categories used to surface patterns among participants were used to make generalizations about the content and pedagogical strategies associated with the course (i.e. If seven of eight participants did not select any items within the modeling category, this may signal a lack of attention to these pedagogical strategies during the course).



Analysis of Lesson Plan Data

Lesson plan data was analyzed using a coding rubric (See Appendix M) designed by the author with its framework centrally rooted in (a) the specific goals for the assignment (b) the five categories of beliefs (EBCO, TR1, EBSUB, TR2, EBCR) defined by Maggioni, VanSledright and Reddy (2009) and relevant literature (VanSledright, 2010). The rubric contains four categories all of which are measured on five levels, which were derived from Maggioni, VanSledright and Reddy's (2009) epistemic categories coupled with the course goals and prior studies. In an attempt to avoid confusion, the term "participant" is used in the discussion which follows to reference the author of the lesson plan while the term "recipient" is used to reference the fictitious student who would be the receiver of the lesson.

Category one: Goals. This first category sought to capture the overall goal the participant had for the recipient of the lesson. Specifically, this category aimed to assess how the participant chose to engage the role of the "student" and how the relationship between the knower and what is known was defined.

At the C₁EBCR (most desirable) level, the participant makes a clear distinction between the knower and what is known. Recipients of the lesson are at the center of historical investigation and use a rigorous method to actively construct an argument, which becomes equivalent to what can be known in history. Next, the C₁TR2 level signals a distinction between the knower and what is known. Recipients of the lesson are asked to engage in some aspect (s) of historical thinking but a method of active construction is not clear. A level three scoring within category one, or the C₁EBSUB level indicates that the participants viewed the recipient of the



lesson as biased and unjustified in making any attempt at an argument. In this instance, recipients of the lesson may be given multiple accounts but they are asked to showcase one rather than create a rational interpretation based on evidence. The C₁TR1 level holds the role of knower (the recipient) as marginally if at all involved with the construction of knowledge. Quite often, participants with a C₁TR1 goal coding viewed the recipients of their lessons as imperfect chroniclers. For example, a C₁TR1 goal may have recipients of a lesson seeking out the "true" historical information, but acknowledges that missing or "tainted" information may make their quest for the truth impossible. This category differs from the C₁EBSUB category because all information is not innately seen as subjective. The least sophisticated level of historical understanding comes the C₁EBCO level. This level characterizes a plan containing goals, which signal no overall awareness of the knower. The recipient of the lesson is expected to receive and regurgitate objective information.

Category two: Pedagogical Strategies. The second category within the Lesson Plan Rubric sought to identify and code the pedagogical strategies associated with the participants' attempts to teach historical thinking. Throughout the course, a strategic process for approaching historical investigation in the classroom from a teaching stance was described, discussed, and practiced. This strategic process was adapted from VanSledright (2010) resulting in four key pedagogical moves. Category two attempted to measure the occurrence of these moves within participant lesson plans and to assess how they were executed.

The C₂EBCR level signals the most desirable scoring on the rubric. A lesson receiving this level of scoring strategically guided students through a historical



investigation using the following moves: (a) an authentic and reflective investigative question(s) was posed; (b) sources which retained a sense of conflict and tension among perspectives were distributed; (c) recipients of the lesson were instructed to engage in PAIRe; (d) recipients were challenged to create an interpretive response based on evidence. The C₂TR2 level within this category was closely related to the EBCR level. Again, a participant's lesson would have challenged recipients to engage in some aspect of historical thinking but one or more key pedagogical strategies may be explicitly missing. At this level, recipients are asked to create an interpretive response based on evidence as either part of the activity script or as the end assessment. The C₂EBSUB level is used to code lesson plans, which challenge recipients to interact with some component of historical thinking (most commonly evaluating perspective). However at this level, recipients are not asked to actively interpret information. Instead they are encouraged to choose a document or a perspective, which they agree with oftentimes resulting in an opinion-based response without any evidentiary or argumentative backing. The C₂TR1 coding was assigned to lessons, which made a cursory attempt to engage in some act of historical investigation yet recipients may not instructed to come to any kind of conclusion. A class discussion where the participant told their students the correct answer instead of having the recipient engage with any sort of interpretation or opinion-based account. The C₂EBCO coding was used to classify lesson plans, which did not require students to engage in any sort of historical thinking. Instead, recipients were often directed to seek and record information. For example, activities, which commonly received this coding included worksheet completion, read and take notes or answer questions,



become "experts" on a topic, or create simulations as the central focus of their activity script.

Category three: Key procedural strategies. The third category within the Lesson Plan Rubric sought to identify and code key procedural strategies pertaining to historical thinking used by the participant within their activity script. Key procedural strategies in this study are defined as perspective assessment of multiple sources, attribution, identification, and evaluating the reliability of evidence. These strategies and have been cited (Levesque, 2008; VanSledright, 2011) as central components to the process of historical thinking. Similar to the previous category, Category Three attempted to measure the occurrence of these key strategies within participant lesson plans and to assess how they were executed.

A C₃EBCR coding indicates a lesson plan, which challenged recipients to engage in all noted key procedural strategies with the end goal of creating an evidence-based account. To receive a C₃EBCR coding, the lesson plan must clearly indicate the usage of all defined key procedural strategies in coordination with one another signaling a clear move toward historical interpretation. Next, a C₃TR2 coding was given to lesson plans, which attempted to address multiple (and in some cases all) key procedural strategies yet done so in a way that isolated them from one another and/or did not use the skills toward the end goal of an interpretation. The C₃EBSUB coding was given to lesson plans, which focused solely on one key procedural strategy. For example, some lesson plans looked at perspective assessment as the focus of the entire lesson. This might have been done with one document or multiple documents. The C₃TR1 coding was given to lesson plans, which attempted



to use a key procedural strategy, but did so with flaws. For instance, in one lesson plan, a participant attempted to have the recipients of the lesson evaluate the reliability of a document. This participant asked students to "consider the documents author and then choose which would be the right answer to the question". Finally, a C₃EBCO coding was given to lesson plans, which did not attempt to address any of the key procedural strategies. Instead, the C₃EBCO category was often assigned to lessons, which asked recipients to read and answer questions or listen to a lecture.

Category Four: Assessment. The final category within the lesson plan rubric was used to evaluate participant choice of assessment for the recipients of their lesson. Specifically the rubric sought to analyze techniques used to authentically evaluate participant understanding of how to assess historical thinking. This includes use of a prompt with a clear stance on an issue argued convincingly using reliable evidence with rational refutation of other possible interpretations (Alleman & Brophy, 1999; VanSledright, 2010).

The C₄EBCR coding was used to signal assessments, which asked the recipients of the lesson to use key procedural ideas to address a prompt and establishes a clear interpretation based on evidence. Additionally, this argument convincingly refutes other possible interpretations. To obtain a C₄EBCR coding, the assessment would need to include an interpretable question and would clearly require recipients to use the above stated criteria to respond to the prompt comprehensively. The C₄TR2 coding was assigned to lesson plans, which asked recipients to use procedural strategies to address a prompt but may not be clear about the requirement of evidence-usage and/or the refutation of other possible arguments. The C₄EBSUB



category was used to code those assessments, which asked recipients to choose a side or perspective in response to a prompt, but did not require any criteria for selection or evidentiary backing. Plans receiving this code were often singular and one-dimensional. The C₄TR1 coding was used to code plans which asked recipients to summarize information with the added task of including opinion-statements (I think I feel) without any evidentiary backing. Finally, the C₄EBCO category was used to code plans which asked recipients to summarize or reproduce information using a non-interpretive and objective approach. A summary of categorical codes pertaining to the Lesson Plan Rubric is illustrated in Table 3.6. See Appendix N for a coded data sample.

Analysis of Rubric Assignment

To analyze the data resulting from this activity, a scoring rubric was developed based on a measure designed by VanSledright, Maggioni, and Reddy (2012) used to assess teacher understanding of criteria associated with the scoring of historical investigations. VanSledright and colleagues asked teachers to list criteria, which they felt would be necessary in the evaluation of student-constructed historical accounts. To score this data, the authors read through all responses and created categories of emergent themes. The resultant categories were "Technical/General Criteria", "General Reasoning Criteria", and "History-Specific Critical Criteria". Finer grain codes were then developed within each category to allow for the coding of most data.



Table 3.6

Lesson Plan Rubric Summary and Codes

	EBCR	TR2	EBSUB	TR1	EBCO
Category 1: Goals	Active knower/Rigorous Method	Active Knower/Method may be unclear	Knower biased/Choose any account	Knower is "imperfect chronicler"/True account is goal but may be impossible	Knower is absent/ Find and report out objective truth
	C ₁ EBCR	C ₁ TR2	C ₁ EBSUB	C ₁ TR1	C ₁ EBCO
Category 2: Pedagogical Moves	Pose question, provide sources, engage in PAIRe, Create interpretation	One or more strategies missing; Interpretation with non- specified evidence	Uses one strategy; Interpretation based on opinion	Attempt to engage with one strategy; No interpretation or qualified by correct answer	Students are given information and asked to replicate
	C ₂ EBCR	C ₂ TR2	C ₂ EBSUB	C ₂ TR1	C ₂ EBCO
Category 3: Key Procedural Strategies	Perspective assessment, attribution, identification, reliability	One or more strategies missing; Interpretation with non- specified evidence	Uses one strategy	Uses one strategy with flaws	Does not challenge students to engage in strategies
	C ₃ EBCR	C ₃ TR2	C ₃ EBSUB	C ₃ TR1	C ₃ EBCO
Category 4: Assessment	Address a prompt, Establish a clear interpretation based on evidence, Refute other possibilities	Uses strategies but may not be clear about evidence-usage and/or the refutation of other possible arguments	Choose a side; No criteria for selection or evidentiary backing	Summarize information including opinion; No evidentiary backing	Summarize and reproduce information; No interpretation
	C ₄ EBCR	C ₄ TR2	C ₄ EBSUB	C ₄ TR1	C ₄ EBCO

On the basis of VanSledright, Maggioni, and Reddy (2012) and related studies (Maggioni, 2010; Wineburg & Wilson 2001), a scoring guide to fit the data resulting from the rubric task was designed. Using the three categories and codes designated by VanSledright and colleagues, I read through all participant responses remaining open to new aspects of historical thinking emerging from the data. All participant data fit into the designated categories. However, an iterative process surfaced the need for alterations to the specific codes within each category. The emergent codes allowed

for the evaluation of how participants would judge student work, which also spoke to participant beliefs about strategic and procedural knowledge when investigating history. Thus, the data also could provide a sense of how these beliefs aligned or did not align with the goals of the course.

Technical/General Criteria. This category comprises statements made within the rubric assignment pertaining to general structural components of an essay as well as the assessment of basic summarization and argumentation. All codes within this category were superseded by a "T" ("technical") followed by sub-identifiers. Five codes surfaced from participant data. Two codes were specifically related to the writing structure. These were labeled "Ts1" and "Ts2". "Ts1" was defined as "Writing structure – grammar, punctuation, and spelling". This code was applied when participants referenced the evaluation of syntax (e.g. "uses proper grammar and spells words correctly"). "Ts2" was defined as "organization" and was applied to references associated with paragraph strength (e.g. 'logical sequence', "use of transition statements", "adequate use of detail"). The remaining three codes were used to signal rubric items created to evaluate a novice approach to argumentation. "Ta" was used to code statements indicating a basic recounting of documents or a summarization of the text (e.g. "reason or opinion is well defined"). "Tr" was used to code statements pertaining to sound reasoning yet lacking evidentiary backing or reference (e.g. "argument was fully comprehensible"). The final code in this category "Te" was used when participants identified the use of citations as an evaluative factor within their rubric (e.g. "uses evidence to support a stance").



General Reasoning Criteria. This second category comprises statements made within the rubric assignment pertaining to the analysis of how students use reasoning or rationale when constructing histories. All codes within this category were superseded by an "R" ("reasoning/rationale") followed by sub-identifiers. Three codes surfaced from participant data. Two codes were specifically related to the use of reasoning to create an argument. These were labeled "Ra1" and "Ra2". "Ra1" was used to code statements, which assess students on the clear choice of a side or stance (e.g. "strong position or thesis"). "Ra2" was used to code statements, which evaluated students' attempt to address the prompt (e.g. "successfully responds to the prompt"). The remaining code was used to label statements about the use of evidence. "Re" was used to label rubric items, which evaluated students' use of evidence as support for claims made within the constructed response (e.g. "uses evidence to support argument").

History-specific Criteria. This final category comprises statements made within the rubric assignment pertaining to the analysis of how students used the historical method in the construction of their responses. All codes within this category were superseded by an "H" ("history") followed by sub-identifiers. Five codes surfaced from participant data. Three codes were specifically created to comprise statements made about strategies used to make sense of evidence. These were labeled "He1", "He2", and "He3". "He1" was used to code statements which assess students on their ability to corroborate evidence or compare sources to one another in an attempt to evaluate the quality of the document or strengthen a claim (e.g. "sources were used as comparative value as evidence for a claim …all sources of the same



period were compared to judge their reliability). "He2" was used to code statements which evaluated students' attempt to critically identify sources based on the type of the source and the author's intent (e.g. "Fully understanding what is a historical source, and identifying the type and context of the source"). "HSe3" was used to code statements used to assess the contextualization of evidence (e.g. "student analyzed the source well while placing the language and intent in the context of the time"). "HSe4" was used to code rubric statements, which generally or specifically evaluated the use of PAIRe (e.g. "Use PAIRe effectively, Applying every aspect to information gathering"). The final code, "HSp", was used to label statements pertaining to the use of perspective as a tool for strengthening the validity of a rationale used to create a history (e.g. "fully determines and understands the position of the author). Table 3.7 provides a summary of the categories and codes used to assess the rubric assignment. See Appendix O for a coded data sample.

Table 3.7

Rubric Assignment Categorical Codes and Explanations Rubric

General/Techn Criteria	nical R	easoning Criteria	History-Specific Criteria	
Ts1: Writing struct grammar, punctuat spelling		al: Argument—chooses side	HSe1: Evidence— corroborates evidence	
• $\underline{Ts2}$ = Writing structure organization		a2: Argument— ldresses prompt	<u>HSe2</u> : Evidence—critical identification of sources	
• <u>Ta</u> = Basic recount documents	_	e: Evidence—uses it as ipport	<u>HSe3</u> : Evidence— contextualizes	
• <u>Tr</u> =Argument—sh consistent/good rea			<u>HSe4</u> : General reference to use of PAIRe	
• <u>Te</u> = Evidence—in citations	cludes		<u>HSp</u> : Perspective— positive consideration, helps reasoning	



Analysis of Performance assessments.

Rubric framework. Performance assessments conducted throughout the course were coded using a rubric adapted directly from Maggioni (2010), which was used to code data resulting from a constructed response task designed to assess historical thinking, specifically the use of evidence when constructing arguments.

Using the literature and past studies (Maggioni, 2009; Maggioni et.al.,2009)

Maggioni (2010) began with categories representative of copier, borrower, and criterialist beliefs. Then using inductive and deductive reasoning, she created subcategories, which emerged, from her own data. Maggioni's (2010) finalized rubric consisted of two levels of codes. The first level comprised the main constructs of her particular study: epistemic cognition, historical thinking, reading strategies, and other. The second level consisted of a finer grain analysis of each construct using 17 subcategories.

The central component of analysis for the performance assessments associated with the present study is historical thinking. Thus, Maggioni's (2010) level one construct "Historical Thinking" and corresponding sub-categories were of particular use during the process of creating a rubric for the performance assessments. Maggioni (2010) began her analysis for this section of the rubric,

by looking at statements signaling the use of heuristics that the literature suggested typical of historical thinking (Lee & Ashby, 2000; VanSledright, 2002; Wineburg, 2001a). Within this broad category, I found utterances suggesting the use of heuristics clearly signaling historical thinking and



utterances suggesting the use of heuristics clearly incompatible with thinking historically (Maggioni, 2010, p. 135).

From there she added three additional categories, which emerged while analyzing her data set. Specifically she was attempting to capture historical thinking in action. The analysis surfaced the following emergent themes:

(a) explicit reference to a specific document; (b) direct quotations from the documents (appropriate or inappropriate, in the context of the specific student's claim); (c) justification of response (e.g., accepting the view portrayed in the majority of the documents); (d) citation of factual information (correct or incorrect), taken at face value from two or more documents (i.e. cut and paste); e) citation of factual information (correct or incorrect), taken at face value from one document; (f) unwarranted additions to what suggested by the documents (Maggioni, 2010, p.135).

Finally, Maggioni (2010) used these themes to create five sub-categories to code her data for historical thinking. The final categories were defined as,

HTYes (*Historical Thinking Yes*) [which] comprised those utterances signaling that participants were using heuristics (e.g., sourcing, corroboration, and contextualization) characterizing historical thinking ... HTNo, (*Historical Thinking No*) included evidence of use or evidence of knowledge of heuristics clearly incompatible with historical thinking ... CP (*Cut and Paste*) regarded those statements and processes that signal an approach already identified by Lee and Shemilt (2003) in regards to ideas about evidence and defined in that context as "scissor and paste" ... AQ (*Awareness of the Question*) gathers



evidence of participants' awareness of the question they were trying to answer while completing the CRT ... AA (*Awareness of the author*) gathers evidence of such awareness (Maggioni, 2010, pp.134-135).

These categories were used by Maggioni (2010) to code performance assessments, which mirrored those used in the present study.

Rubric development. To analyze the performance assessments within the present study, I used the aforementioned section of Maggioni's (2010) rubric to code participant data while remaining open to nuances and new aspects of historical thinking emerging from my own data. I began an iterative process using Maggioni's (2010) codes adding new categories when my data did not fit those already existing. Similar to Maggioni (2010), I was interested in evidence of historical thinking. More specifically, I was interested in how participants used (or did not use) evidence to construct historical interpretations.

Ten categories in total resulted from this analysis. Four of Maggioni's (2010) five codes remained (HTNo, HTYes, CP, AA) and six new codes emerged. Following the initial coding of the data, inductive reasoning was used for a finer grain analysis of patterns within the codes. Resultantly, shared characteristics based upon the literature and past studies in epistemic beliefs and historical thinking (King and Kitchener, 2002; Kuhn and Weinstock, 2002; Lee and Ashby, 2000; Maggioni et. al., 2004; Maggioni et. al., 2009) emerged and codes were grouped together into three clusters. Within these clusters, key components (Maggioni et. al., 2004; Maggioni et. al., 2009; Maggioni, 2010) of the EBCO, EBSB, EBCR categories began to surface. Thus, each cluster was linked with an epistemic category.



Rubric category descriptions. The EBCO category (See Analysis of BHQ Quantitative Data for explanation of this category) was comprised of two codes, which surfaced from participant data. The first code was assigned to statements, which were clearly the result of a non-interpreted summary of a document. This code was applied to performance assessments, which gave a recounting of a document with no reference to the citation (no mention of evidence) and no position was taken on the question presented. Assessments receiving this code used a summary of one document to indicate the "correct" history or "answer" to the question. "SNp" (summary/no position) was used to label this code. The second code within the EBCO category was used to label statements which evidenced thinking that was incompatible with historical thinking. Like Maggioni (2010) this code was used to signal thinking or strategies which prevented historical thinking from occurring (e.g. "It isn't possible to answer the question because we were not there.")

The EBSUB category (See Analysis of BHQ Quantitative Data for an explanation of this category) was comprised of three codes, which surfaced from participant data. The first code was used to denote instances where participants seemingly "cut and pasted" parts of different documents together in order to form a coherent story or argument based on the stance they were taking. Data incurring these codes did not attempt to make any inter-textual comparisons nor did they attempt to refute conflicting evidence. Instead, it could be inferred that an opinion was formed and the participant attempted to stitch together data, which supported this opinion in order to answer the question. This code was labeled "CP" (cut and paste). The second code was used to signal statements, which suggests that good arguments are based on



a majority rules. In other words, this code was used when a participant indicated that their stance or argument was a result of siding with the position represented most frequently within the evidence. In most cases, participants also directly or implicitly indicated that they used this course of reasoning because there really was no way to know what happened because all accounts were biased. This code was labeled "MR" (majority rules). The final code within this category was used to indicate assessment responses containing evidence to support a priori opinions. Statements yielding this code used evidence to support their preconceived stance on the question as opposed to using the evidence to critically engage with and construct an interpretation.

Conflicting evidence was not addressed. "EO" (evidence for opinion) was used to label this code.

The EBCR category (See Analysis of BHQ Quantitative Data for an explanation of this category) was comprised of five codes, which surfaced from participant data. The first code signaled the use of source corroboration. Specifically, this code was used when a participant considered all sources, including those, which conflicted with the stated position on the issue, as part of their evidence-based interpretation. "CR" (corroboration) was used to label this code. Next, a code was designated to instances where a participant identified or indicated awareness of the document author. "AA" (awareness of author) was used to label this code. The third code used signaled participant critical analysis of perspective as a building block for their interpretation. Participants receiving this code within their assessment primarily focused on the author's intent for writing the document as well as their positionality. Furthermore, this code was applied only when the aforementioned perspective



assessment was used as a part of the analysis. "PR" (perspective) was used to label this code. The next code was used to signal the acknowledgment of historical contextualization. This label was applied to instances where participants mentioned or made reference to the political, social, cultural and/or economic setting surrounding an event or idea. "CX" (contextualization) was used to label this code. Finally, the last code within this category was used to label responses, which incorporated all aspects of PAIRe (perspective assessment, attribution, identification, reliability, evidence evaluation). In order to receive this code, a participant was required to evidence all steps in the PAIRe process. "HTYes" (historical thinking - yes) was used to label this code. Table 3.8 summarizes the codes used to analyze the rubric assignment. See Appendix P for a coded data sample.

Table 3.8

Performance Assessments' Coding Rubric

Epistemic Category	Code	Description
	SNp	A summary of the documents (no mention of evidence) is given and no position is taken
EBCO	HTNo	Evidence of use or knowledge of heuristics clearly incompatible with historical thinking.
	СР	Copy and paste: selecting parts from different documents in order to build a more or less coherent story (no inter-textual comparison; dismissal of conflicting evidence)
	MR	Good arguments are based on a majority rules
EBSUB	ЕО	Evidence used to support a priori opinion (conflicting sources not addresses)
	CR	Considers all sources; Addresses and analyzes any conflicting accounts
	AA	Awareness/Identification of author (in the text).
	PR	Critical assessment of perspective is used to build argument
EBCR	CT	Contextualization; Identifies the context of the situation
	HTYes	Evidence of use or knowledge of heuristics signaling historical thinking (all procedural aspects of PAIRe)



Analysis of the HTLQ, Interview, and Audio Data

Epistemic Beliefs Rubric. The Epistemic Beliefs Rubric (See Appendix Q) developed by Maggioni, VanSledright, and Reddy (2009) was used to identify participants' beliefs, which surfaced in the remaining qualitative data sources. This rubric was theoretically constructed based on relevant literature and prior studies (Lee & Shemilt, 2003; Maggioni et al., 2004; Maggioni et al., 2009; Wineburg, 2001a) and was done so in concert with the BHQ analysis. The researchers began with three emergent categories, which had not been previously identified. Maggioni et. al. (2009) explain,

We used both deduction from principles (our theorizing) and induction from the data in the development of the rubrics. Although we were open to acknowledging new aspects of epistemic beliefs emerging from the data, we also tried to create a parsimonious rubric, adding new categories to the three we began with only when a certain characteristic of epistemic beliefs manifested itself across more than one participant. (p.6)

The resultant categories were the five used to analyze the BHQ data: EBCO (copier), EBSUB (subjectivist), EBCR (criterialist), and the two transitional positionalities of TR1 and TR2.

The design of this rubric was particularly useful to the analysis of data collected for the present study due to its congruence with the course goals. Shifting beliefs about history from novice to more expert positionalities was of central focus to the researcher. Specifically, the course sought to move participant conceptions of the role of the knower, the role of what is known and the role of argument toward a



criterialist understanding. The categories defined within the Epistemic Beliefs Rubric are theoretically rooted in these foundational conceptions and thus serve as a useful measure for participant beliefs.

HTLQ. The HTLQ was analyzed using the Epistemic Beliefs Rubric. The unit of analysis was defined as the complete student response. Specifically, I was looking for participant conceptions of history (i.e. interpretive work versus history is the past), conceptions of the historical method (i.e. disciplinary criteria versus no method), and conceptions of necessary pedagogical moves (i.e. PAIRe guide versus summarize). Participant responses (if addressed) were coded and a comparison of Time₁ and Time₂ administrations were assessed for shifts.

Interviews. Participants engaged in three interview sessions during the course of the semester. Data was collected via audiotape and all sessions were transcribed verbatim. The Epistemic Beliefs Rubric was used to analyze data pertaining to beliefs about history and about history teaching and learning namely the role of knower, what can be known and the role of argument. The unit of analysis is defined as an utterance made by a participant. This was designated as a phrase. Complete sentences were not useful in this analysis as many times conflicting positionalities were expressed in a given sentence. Additionally, due to the conversational approach to the interview sessions, many utterances were verbalized fragmentally.

During the analysis process, three additional coding categories emerged from the data collected. These categories included "Apprenticeships of Observation", "Instructional Feedback", and "Course Feedback". Data collected was more informational as opposed to comparative in nature and were used to better understand



participant contextual frames. "Apprenticeships of Observation" (coded AO) consisted of utterances made with regards to past experiences with teaching and learning in history. Most responses referenced instances of exposure in traditional school settings (K-12). However, this category remained open to all experiences mentioned including but not limited to familial experiences, media exposure, and travel. "Instructional Feedback" (coded IF) was used to code data pertaining to strategies used by the instructor during the course. For example, "Reading the Lincoln docs was really powerful. I had never thought about other perspectives". Finally, "Course Feedback" (coded CF) was use to code general utterances made about the structure and content of the course.

Audio data and anecdotal notes. Relevant data (defined as data pertaining to the research questions) from audio-recorded class sessions was analyzed to substantiate claims, which surfaced from other data sources and to monitor talk among participants for evidence of shifting beliefs. The Epistemic Beliefs Rubric was ultimately used to code utterances again defined as phrases or groups of phrases verbalized by participants. However, before the rubric was applied, utterances were initially coded into two core categories, which resulted from overarching course objectives: (1) beliefs about the nature and discipline history (2) beliefs about teaching and learning in history. Data coded into category 1 included utterances or statements made by participants about the structure and underpinnings of history as a discipline (again centered on the role of the knower and what can be known in history). Utterances made by participants about how they thought history should be taught in educational settings, and how students should go about learning history was



coded into category 2. After data was broken out into these core categories, it was then coded for beliefs via the Epistemic Beliefs Rubric and evaluated for evidence of shifts.

Audio recordings of each class session, as well as anecdotal notes taken by the researcher, were also evaluated for emergent themes pertaining to the nature of the course. Specifically, this level of analysis was used to evaluate the pedagogical strategies used by the instructor with relation to the surfacing, challenging and shifting of participant beliefs.

First, the researcher coded the anecdotal notes for specific pedagogical strategies used throughout the course. These strategies were identified as: "Lecture", "Scholarly Readings", "Self-Reflection", and "Performance Assessments" (these strategies along with a detailed recounting of the course will be discussed in the section that follows). "Lecture" was defined as instructor led presentations of information. This strategy consisted of instructor led "talks" on varying topics, which were perceived to be new to the participant group. PowerPoint presentations were used to highlight key terms and to illustrate information presented to engage audio and visual learners. "Scholarly Readings" was defined as articles, book chapters, and other sources of literature read in and outside of class to inform and to foster critical thought. "Self-Reflection" was defined as class opportunities to intentionally selfreflect on their beliefs. This was done using the aforementioned measurement tools as well as through verbal reports during class discussions and collaborative group work. Finally, "Performance Assessments" was defined as any class activity, which required participants to engage in tasks designed to promote historical thinking. These



included: class mini-activities, document-based exercises, lesson plan assignment, and rubric assignment.

Next, audio-recorded data from class sessions, as well as instructor anecdotal notes were analyzed for emergent themes relational or non-relational to the pedagogical strategies employed. An iterative process was used to investigate how instructional strategies and course design augmented the process of belief shifting among participants. Participant utterances (defined as a phrase) were analyzed according to three categorical themes: "surfacing of beliefs", "challenging of beliefs", and "shifting beliefs". "Surfacing of beliefs" is defined as any intentional statement of beliefs about history or history teaching and learning. (i.e. "I don't think you can ever know history because there is always bias.") "Challenging of beliefs" is defined as statements, which indicate cognitive dissonance. Phrases which signaled this coding often included "now I'm confused" or "but then what do you do with ..." Finally, the category "Shifting of Beliefs" was defined as any statement, which intentionally stated a strategy or instructional practice within the class aided in the changing of beliefs. Stringent measures were taken against the overuse of this code due to the significant implications it could have on resulting claims. The coding designations during this process included the use of an "H" (history-related) or "HTL" (history teaching and learning) qualifier followed by an "-sur" to indicate the surfacing of beliefs, "-diss" to indicate the challenging of beliefs, and "-sh" to indicate clear shifting of beliefs. These codes were superseded by an "L" to indicate, "Lecture", "SR" to indicate "Scholarly Readings", "PA" to indicate "Performance



Assessments", and "R" to indicate "Self-Reflection". These codes are illustrated in Table 3.9.

Table 3.9
Strategies Coding Protocol

	Lecture	Scholarly Readings	Performance Assessments	Self-Reflection
Surfacing of Beliefs	L-H _{sur}	SR-H _{sur}	PA-H _{sur}	R-H _{sur}
	L-HTL _{sur}	SR-HTL _{sur}	PA-HTL _{sur}	R-HTL _{sur}
Challenging of Beliefs	L-H _{diss}	SR-H _{diss}	PA-H _{diss}	R-H _{diss}
	L-HTL _{diss}	SR-HTL _{diss}	PA-HTL _{diss}	R-HTL _{diss}
Shifting of	L-H _{sh}	SR-H _{sh}	PA-H _{sh}	R-H _{sh}
Beliefs				
	L-HTL _{sh}	SR-HTL _{sh}	PA-HTL _{sh}	R - HTL_{sh}

This study investigates the outcomes of a college course designed to encourage prospective history teachers to think deeply about their epistemic beliefs regarding the meaning and the process of doing history. The study's design was rooted in the assumption that a set of stable, productive beliefs preferably linked to criterialist understandings is necessary for the preservice educator to learn to teach history well. The course and its accompanying pedagogical strategies were designed to influence preservice teacher beliefs about history and the teaching and learning of history, toward a more expert way of knowing. Focusing on shifts, this study attempted to make sense of potential shifts in beliefs. Data collection associated with the course used mixed-methodological procedures associated with quantitative and qualitative sources. Resulting data was analyzed using a framework centering on



conceptions regarding the role of the knower, what can be known and argument in history. Table 3.10 provides a summary matrix of data sources, methods of collection, and procedures of analyses.

Table 3.10
Summary Matrix of Methodologies Employed within this Study

Data Source	Data Collection Method	Procedures	Projected Data Analysis
BHQ Quantitative Response	BHQ Likert-Scale Instrument	Pre – Post Design	Weighted Equivalencies/ Categorical Scores Consistency Scores High Bar Comparison
BHQ Qualitative Response	BHQ written explanations Interview data	Pre-Post Design	BHQ Written Responses and Interview Utterances Iterative Coding Protocol
Background Knowledge Survey	Background Knowledge Survey	Pre-Course	Implicit Data/ No analysis needed
History Teaching and Learning Statement	Collection of artifacts	Pre-Post Design	Epistemic Beliefs Rubric
Performance Assessments	Audio recording / Transcription Artifacts	Occurred throughout the course of the Course	Performance Assessments' Coding Rubric
Pedagogical Strategies	Anecdotal Notes Audiotapes	Strategies used throughout the course of the Course	Strategies Iterative Coding Protocol
Lesson Plans Assignment	Artifacts Audio recording/ Transcription	Drafts due at the start of: session 2, session 5, session 8	Lesson Plan Rubric Epistemic Beliefs Rubric
Rubric Assignment	Artifacts	Draft due during session 7	Rubric Assignment Categorical Codes and Explanation Rubric
Interviews	Interview Transcripts	Participants were interviewed at the beginning, middle, and end of the course using a specified interview protocol	Epistemic Beliefs Rubric
HLab Sequencing Task	Ordering Instrument	Administered during the last class session	Deductive Reasoning



CHAPTER IV

DEMOGRAPHIC AND BASELINE RESULTS

The cohort of eight students consisted of five females, Oria, Tameka, Brittany, Sara, and Katerina, and three males, Ben, Tom, and Eric. These students all indicated that they were considering a career in teaching and their content area of choice was history. Five of the eight (Brittany, Sara, Ben, Tom, and Eric) self-reported to be "Caucasian-American". Katerina self-reported to be "Caucasian-Algerian" while Tameka self-reported to be "African-American". Oria self-reported to be "Dominican" (from the island of Dominica).

One of the assumptions central to this study is that K-12 and college apprenticeships of observation drive the beginning beliefs pre-service teachers have toward the discipline of history. Thus, it is necessary to begin this section with the results of a contextual and background analysis on the eight students participating in this study. Written responses to the Background Knowledge Survey along with interview transcripts were used to create a portrait of the participants.

Following the background analysis is a presentation of baseline results. There is a time series component to the design of this study. Data was collected before the start of the course in order to assess the baseline beliefs each participant held about the meaning and process of doing history and was used as a point of comparison.

Baseline beliefs are presented in two sections. Section one, "Beliefs about History", specifically analyzes disciplinary understandings. Section two, "Beliefs about History Teaching and Learning", specifically analyzes understandings, which surround pedagogical decision-making. Both sections are organized according to proximity of



beliefs to an expert way of knowing. Participants with beliefs most closely aligned with criterialism are presented first. A portrait of each participant has been created within each section.

Participant Background Analysis

College majors of study. Four of the eight participants had a declared major in History. History majors at this university are required to take an initial research methods course during either their sophomore or junior years. Based on the course description, the goals of this course are to teach and practice reading and research skills associated with methodological approaches. According to a current instructor of this course, students are "taught how to read a text, how to analyze a text, and how to construct an argument based on primary and secondary sources".

One of the four history majors had completed this course prior to participation with the course. Oria described her experience as "vital" to herself as a student.

Interestingly, she had a difficult time articulating what she learned by way of historical research methods. She stated, "they told us what to look for and how to look for it and the differences. I mean I knew how to do it. [Actually] I don't really know what they told us to do". Later on in an interview she says, "I guess we did read documents but we never learned how to use them". Tom and Ben were concurrently enrolled in the research methods course with this course.

Eric was a declared history major but had not yet elected to take the research methods course. Other declared majors included Elementary Education (Brittany), English (Tameka), and Architecture (Katerina). Sara had not yet declared a major.



Tom, Ben, Brittany, and Eric were at the start of their junior year. Tameka, Oria, and Katerina were seniors. Sara was a freshman.

Educational backgrounds and K-12 apprenticeships. Participants self-reported on their K-12 and collegiate apprenticeships of observations through informal conversational interviews. A protocol of questions was used to lightly structure the boundaries of the interviews to collect data on three selected time periods of schooling; kindergarten through eighth grade (years one through nine of traditional schooling), high school (years 10 through 13 of traditional schooling), and college (years 14 through 17 of traditional schooling).

Six of the eight participants, Brittany, Tom, Ben, Tameka, Sara and Eric, were educated in the United States and all specifically were schooled on the east coast.

Oria was educated K-12 on the island of Dominica in the Caribbean (she came to the United States for college). She added that the British educational system had highly influenced what went on in schools on the island. Katerina was born in Algeria, but moved to England as an infant and was schooled there through grade three. She came to the United States with her family to complete grades four through college.

Five of the eight participants used the words "reading" or "memorization" to capture the essence of their K-8 experiences with history. Katerina recalled "taking notes from transparencies" as the activity most associated with grade school/middle school history (two others also mentioned note-taking). Brittany recalled "fun projects" which she described as follows: "we were the doing civil war; everyone had to dress up as some famous person and learn all about them". Eric could not recall any experiences with history during his K-8 time as a student.



The participants had similar responses when asked to reflect on their high school and collegiate experiences with history. Five of the eight reported a teacher-centered experience in high school characterized by "memorization", "textbook reading", "lecture", and "note-taking". Ben deviated slightly as he recalled a more investigative approach to history in high school through the reading of primary source documents in order to "study perspective and argument intent". Katerina could not recall any sort of activity or experience with history during high school.

All participants responded that their experiences with college history involved some element of lecture. Five out of the eight reported that they used primary source documents. However, each of these five participants disclosed that while they did read and in some cases attempted to interpret the author's argument, they were never explicitly taught a process or method for approaching the documents. Three out of the five stated that they read primary sources in their discussion sections to extend on content from the preceding lecture. Table 4.1 displays a summary of selected participant descriptors.

Students' Baseline Beliefs about History and History Teaching and Learning

Prior to the start of the course, participants engaged in three tasks designed to collect information on their beliefs. Analysis of this pre-course data served as the baseline comparative measure and was used to design the pedagogical approaches and overall structure of the course. First, students were asked to complete the initial administration of the Beliefs about History Questionnaire (BHQ₁), which contained two subscales: Beliefs about History (BHQ-h) and Beliefs about History Teaching and Learning (BHQ-htl). Consistency scores and weighted categorical scores



Table 4.1

Participant Demographics and Selected Data Regarding K-12 and Collegiate

Name	Level	Major	Origin of Education	Research Methods	<u>K-8*</u>	High School*	College*
Sara	Fresh- man	Undecl- ared	United States	No	Textbook reading; Worksheets	Memorization	Lectures with a Powerpoint; Primary source reading in discussion section
Tameka	Senior	English	United States	No	Lecture; Note- taking; Memorization	Lecture; Reading; Outlines; Multiple choice exams	Lectures; No document use
Tom	Junior	History	United States	Enrolled	Memorization; Read a textbook; Complete a workbook; Multiple choice tests	Read primary sources; Studied perspective and argument intent	Lower level classes are lecture; Research course we learn how to interpret documents
Ben	Junior	History	United States	Enrolled	Memorization	Lecture	Upper level classes we read documents and figure out the argument
Brittany	Junior	Educati -on	United States	No	Fun projects	Read textbook; Memorize facts and dates	Read
Katerina	Senior	Archite -cture	England/ United States	No	Outlines from transparencies	(does not remember)	Identification; Regurgitation
Eric	Junior	History	United States	No	(does not remember)	Copying notes	Lecture; Sometimes primary sources are read in the discussion sections
Oria	Senior	English & History	Dominica	Yes	Multiple choice tests; Read; Take notes	Read a book, discussed, teacher gave notes	We read documents but we didn't learn how to use them

(for a breakdown of weighted categorical scores see Appendix R) were calculated within each subscale. Written responses to items on the BHQ₁ were also used. Next students were asked to complete the HTLQ₁, which asked two questions: "what is history?" and "How would you teach history in an school classroom and why?" Finally, all participants engaged in a pre-course initial interview, which used the interview protocol to specifically target data relating to demographic and background information, student apprenticeships of observations, beliefs about history and history teaching and learning, and as a space for students to verbally expand on their BHQ₁ selections.



One additional data collection method was used to create the pre-course portrait of each participant. Participants were asked to construct a lesson plan based on their understanding of what should be central to students when thinking about and learning history. Because this lesson plan was assigned during the first meeting of the course and was due during the second meeting, this assignment provided quasibaseline data as participants could have been influenced by the happenings of the first class meeting. During the first class meeting, students were introduced to the syllabus and were given a short overview of the history of social studies education. A discussion following this presentation took place, which asked participants to consider the current state of social studies in schools including problems pertaining to content and pedagogy. Data resulting from the initial lesson plan could in theory have been tainted by the information, which surfaced from these discussions. However, an overall analysis of the initial plan data would suggest that this did not occur or the influence of this initial class on student understandings of teaching and learning in history classrooms was minimal.

Baseline beliefs about history. The quantitative data resulting from the BHQ₁-h served as a broad stroke measure to initiate the analysis of participant beliefs about history. Consistency scores and categorical weighted scores were targeted as an entry point into understanding participant beliefs. The aforementioned qualitative data sources were coded and triangulated to allow emergent themes surrounding participant understanding of how school students should think about and approach history. These analytical processes resulted in the following snapshots of each participant's proximal beliefs about teaching and learning in history. Specifically,



participant beliefs about what counts as knowledge in history, the role of the knower in history, and the processes used by historians were studied.

Ben. Ben's consistency score on the BHQ₁-h was 69%; one of two occurrences of this score, which was the highest among the participants. He had a strong tendency to disagree with subjectivist items while he often agreed with both objectivist and criterialist items. In this sense he tended to over privilege the role of the objects from the past. Yet at the same time, in agreeing with criterialist items, he signaled a rather significant degree of internal consistency with his beliefs since criterialists attempt to balance the important of the past's objects with the role of the knower in interpreting them.

The HTLQ₁ was administered with the BHQ₁-h. This instrument provided a space to reflect through open-ended response and provided some information about the ways in which Ben's epistemic beliefs were inconsistent. Ben's response to the question "What is history?" centered on some of the key procedural aspects pertaining to how history is constructed. He responded, "history is the study of past events". When asked to elaborate on this response during his initial interview he explained,

[Studying] history is a lot of time with primary sources ... you have to make sure you looked at different sides of the issue look at the arguments from different perspectives and then follow through with getting a wide variety of sources to support your argument.

This snippet illustrates Ben's awareness of key disciplinary heuristics such as acknowledgment of perspective, the need for evidentiary support, and the importance



of considering multiple viewpoints. Furthermore, there is an indication that he recognized the interpretive role of historians. In response to BHQ₁-h item #16 (the facts speak for themselves), Ben disagreed explaining,

[you] need some ability to extrapolate and fill in between the facts". When further questioned about this item during the initial interview Ben explained, "There are only so many primary sources. We need to be able to fill in between what the documents say.

Ben seemed to acknowledge the reliance historians have on conjectural logic when interpreting and creating narratives about the past. At this juncture, Ben's beliefs about how this logic is rigorously attended to remains in question.

Paralleling Ben's criterialist understanding of how the knower actively constructs knowledge in history were his beliefs about what counts as knowledge. A significant roadblock, which Ben ran into, was the privilege he gave to the objects of the past over his own subjectivism. He tended to agree with statements, which gave "facts" the power to tell the story of the past. Relatedly, he often equated the "facts" with primary source documents. In response to BHQ₁-h item #19 (when eyewitnesses do not agree there is no way to know what happened) Ben stated, "what happened, happened. The facts are the facts". He later indicated that as long as historians have primary sources they can "know" what occurred.

In summary, Ben's epistemic beliefs about the nature of knowledge and the role of the knower in history indicated that criterialism held some appeal for him. He understood the role of the knower as interpretive and central to the construction of historical knowledge. Likewise, he articulated strategies for dealing with the presence



of conflicting evidence. However, this appeal toward a more expert way of knowing was tempered by Ben's propensity for objectivism. He flip flopped between the belief that knowledge was based on the strategic construction of evidence (active knower) and the belief that knowledge was the result of arriving at an answer by a relatively simple exploration of the objects from the past that provide the answer without much interpretive effort (passive knower).

Tameka. Tameka's score on the BHQ₁-h resulted in a consistency of 69%, which was equal to Ben's. She had a tendency to disagree with subjectivist and objectivist items while agreeing with criterialist items. However, she did not do so with a high level of internal consistency, which is indicative of her unstable beliefs. Tameka did have a propensity to rely on subjectivism as a way of rationalizing the disequilibrium she felt when discussing knowledge in history and the role of the knower.

Looking first at her understanding of knowledge, Tameka seemed to privilege the role of knower equating what can be known with the opinion of the historian. She hedged on two BHQ₁-h items, #2 (history is simply a matter of interpretation) and #12 (the past is what the historian makes it to be). She "somewhat agreed" with both items. While she did not provide a written explanation for either selection, she did articulate her understanding of both statements during the initial interview. When asked to explain why she feels history is simply a matter of interpretation, Tameka replied,

I feel that way because in my history class, he was saying how the Boston massacre is called a massacre but in school where he's from, he never learned



that it was a massacre. He said only 5 people died. A lot of times people don't say that 5 people is a massacre - when you think of a massacre, people think of hundreds people. Like Wounded Knee, hundreds of Native Americans died, that sounds like more of a massacre than 5 people but in Boston that was the headline in the newspaper.

Tameka seemed to be speaking to perspective as she wrestled with her own understanding of interpretation. Thus perspective, as Tameka understood it, gives the historian the capability to see and construct history in whatever they choose (could be a massacre or a scuffle). Similarly, Tameka agreed that the past is what the historian makes it to be. She explained,

It's all interpretation. If we only have one primary document of an event that we're sure took place, then it has to be. If we believed it happened then it's what he made it to be, even if other people would tell the story differently.

Tameka's use of the word "interpretation" again seemed to be more closely aligned with "opinion" as she did not offer any criteria for the construction of that interpretation. Thus, all knowledge in history would appear to be of an equally subjective nature.

Perhaps related to Tameka's belief that knowledge is subjective in history, is the unrestricted, yet active, role she awarded to the historian. Tameka explained,

[History] is the study of something old, of the past, of - basically anything that we can get our hands on that tells us about something we can't remember or that we didn't live through I guess.



When asked to clarify what "study" meant, Tameka continued, "I feel like historians probably look through records all day and they do a lot of reading, analyzing and then they write." She was considerably more reticent to discuss procedural specifics. However, she was astute to the fact that a procedural methodology did exist. She added,

I feel like there has to be a way - a formula that you find things effectively. Like when you're writing a paper to present your argument effectively, there has to be a disciplined method - I don't know if there is, or if one way would even work ... I don't have the slightest idea of how that would work in history.

This comment illustrated the cognitive struggle Tameka encountered when asked to consider her own beliefs about history. She appeared to be actively seeking clarification for her own internal inconsistencies by demanding a logical method to follow.

In summary, Tameka's pre-course data regarding her beliefs about history indicated a propensity toward subjectivism. There was evidence suggesting that she had an awareness of the role of the knower as central to the construction of historical knowledge. However, she did not articulate how historians go about doing this investigative work. Additionally, she associated historical interpretations with the products of unrestricted knowers (historians) meaning that she does not define limits to what the historians can create. Tameka's main sources of cognitive disequilibrium seemed to come when presented with scenarios involving conflicting evidence (which



she would rationalize by allowing the historian to choose which best fit his argument) and when asked how to procedurally go about constructing an evidence-based history.

Sara. Sara's scores on the BHQ₁-h resulted in a consistency score of 62%. She had a strong tendency to disagree with subjectivist items while she often agreed with criterialist items. Objectivist items presented larger impasses for Sara. She had a propensity to over privilege the objects yet she quite consistently acknowledged the active role of the knower. Such a pattern indicated a fair degree of internal inconsistency with regards to Sara's beliefs about history as she attempted to rationalize her own criterialist inclinations with objectivist beliefs causing a cognitive stalemate.

During the initial interview Sara stated, "I think of [a good history] as a central and concrete history and off of that there are different perspectives ... but all of those are off of the same concrete foundation". Later Sara continued, "I think there is a concrete history where interpretations come off of and that way not anyone can come up with any idea of what happened". Sara's beliefs about the nature of historical knowledge centered on the existence of an objective account, which historians would interpret based on their varying perspectives. These accounts. According to Sara, are characterized by facts, which "speak for themselves". She explained, "You can't negate facts. You know we have that basis of history like you know they wrote the constitution and they did this to protect everyone."

However, Sara's tendency to agree with criterialist items created a significant roadblock when coupled with her conceptualization of historical knowledge. The interpretations, which she described as coming off of the one objective account, had a



level of rigor associated with their construction. She explained, "[Historians] interpret in their own ways but there is still strong evidence and facts [needed to back up claims]". Later during her initial interview, Sara also discussed the need for evidence assessment and the comparison of conflicting accounts. She explained, "I mean the conflicting account can show a lot about the event or the history of the event. It might have been really unclear and people might have thought different things and had different perspectives on the event." She went on to explain that the more perspectives a historian can obtain for research, the better they can understand that aspect of the past.

While Sara articulated a number of criterialist ways of knowing, she hedged on items pertaining to the process historians use to undergo interpretive analysis.

When presented with BHQ item #3 (the historical method is a disciplined process inquiry) #13 (comparing sources and understanding author perspective are essential components in the process of learning history). She chose to "somewhat agree" on both but was unable to elaborate on their meaning. Her previous responses indicated that such items would have appeal to her. However, her limited understanding of how they are used in practice may impede her ability to discuss their intricacies.

In summary, Sara's pre-course data indicated that criterialist beliefs appeal to her understanding of how history is constructed. However, a similar appeal toward history as objective knowledge seemed to create a substantial roadblock for Sara's understanding of disciplinary history. BHQ₁-h data coupled with additional qualitative data sources suggest that Sara had an understanding of the role of the knower as central to the construction of historical knowledge. Additionally, this



knower or historian is held to certain disciplinary criteria to ensure a level of rigor. An impasse Sara struggled to overcome was her desire to fall back on an objective history as the primary source for historical knowledge, which caused her to overprivilege the objects of the past ultimately paralyzing her tendency to understand history as interpretive.

Katerina. Katerina's consistency score on the BHQ₁-h was 62%. She had a strong tendency to disagree with subjectivist items while agreeing with copier and criterialist items. This suggested a belief structure similar to Sara where she overprivileged the objects of the past yet simultaneously desired to give the historian an active role in the construction of historical knowledge. Such a pattern of responses signaled a significant degree of internal inconsistency in her beliefs.

Katerina's data suggested that her tendency to agree with objectivist items centered on her understanding of what counts as knowledge in history. She articulated on numerous occasions, "the facts speak for themselves". Similarly, she said, "what we can't see we can't know". Katerina qualified this further by equating what we *can* see with objectivity. She explained, "what we see ourselves doesn't count as opinions".

This notion of "opinion" appeared as an impasse throughout Katerina's precourse data. On the HTLQ₁, Katerina responded, "History is a series of chronological events. It answers questions." She later articulated, "I think history is a conglomeration of both historical accounts and opinions". When prompted to speak to her understanding of "opinion" relational to the construction of historical knowledge,



it appeared that she faced am impasse when considering the role of the historian. She explained,

I guess historians take everything that's written down or recorded and find a common thread between then in terms of events that happen. Then they offer their opinions and side notes.

There is an appeal to subjectivism within this statement, which was further supported with a hedging response to BHQ item #12 (the past is what the historian makes it to be). She did not provide any written comments to qualify her response.

Further confounding her beliefs about history were Katerina's inconsistent understandings surrounding what historians do to construct knowledge. This was perhaps the result of the objectivist beliefs she held pertaining to what counts as knowledge, and the subjectivist tendencies she held toward the role of the knower. When asked to elaborate on the role of historian, Katerina explained that they set out to find the "right" history; a process she described as "not disciplined". While acknowledging that evaluation of evidence and perspective were key to reaching "the truth", Katerina ultimately responded that she was "not really sure" how historians reached the objectivism they seek.

In summary, Katerina's pre-course data indicated that objectivism holds a strong appeal for the ways in which she understands the nature of historical knowledge. Tendencies toward an active historian seem to create impasses for Katerina who articulated that she was unsure about how historians reach objectivism. While she did reference some procedural understandings through her BHQ₁-h item selections, it was not clear whether or not she knew how to use this knowledge.



Oria. Oria's scores on the BHQ1-h resulted in a consistency score of 54%. She had a tendency to disagree with objectivist and subjectivist items while agreeing with criterialist items. However she was rather inconsistent in her disagreement and agreement across any set of items. Oria had a propensity to privilege the role of the historian when considering the construction of knowledge as unrestricted in their assessment and interpretation of historical evidence and largely flawed by perspective. However, an appeal for criterialism seemed to create an impasse for these subjectivist tendencies causing her beliefs to surface a significant level of internal inconsistency.

Oria's beliefs about knowledge in history centered on the active construction of interpretations based on remnants from the past. Thus, criterialist items pertaining to this process of active construction held some appeal. Specifically, she agreed that evidence and author subtext are critical components of the interpretative process. Furthermore, she acknowledged that historical interpretations were based on "critical inquiry". When asked to elaborate on her understanding of critical inquiry, she responded,

Looking at something critically, or with a critical eye in the sense that even though something is presented as, like - what am I trying to say? Even though something happened, you still have to look at it critically. Why did it happen? Did it happen like that? Or how exactly did it happen? What caused it to happen?

When asked how historians do this, Oria responded,



I mean, they got the facts, and they make the interpretation of it. They try to make - it depends on the perspective - the reasons why they are researching. Is it just to prove a point that they had before to show up some of their colleagues? Is the point of view that they're going into it for gathering the facts? Then, make an interpretation of the facts because the whole thing, the facts always remain the facts but it's how you interpret it is the most important thing.

This response illustrated Oria's attempt to balance the objects of the past with the role of the knower. Furthermore, her response to the HTLQ₁ stated that history is the "study" of the past again signaling that active role. She wanted historians to use "facts" (interpreted as remnants of the past) as the basis for inquiry. Her desire for a method was strong as she stated, "there has to be a method like sociology using quantitative and qualitative measures". However, what appeared to temper Oria's efforts to reach this balance was her tendency to *over*-privilege the role of the knower.

While Oria was clear about her belief that the historian has an active role in the construction of knowledge, her propensity toward subjectivism flawed the knower as being stymied by perspective and/or positionalities. She had a strong tendency to rationalize the existence of conflicting accounts and competing sources of evidence as a result of the subjective role the historian had in the creation of knowledge. To clarify this, Oria gave an example of what she was trying to explain. She said,

The first day of my 156 class, the professor was talking about the Boston massacre and he said in the colonies they called it a massacre, in England they



called it a - I can't think of it right now - skirmish or something like that. So the fact's a fact: people died. To call it a massacre and skirmish is very interpretive.

Later, she returned to this stating that she understood history to be largely the product of historian intent and jaded by the unavoidable presence of bias.

In summary, Oria's pre-course epistemic beliefs about the nature of history indicated a tendency to rely on criterialism when rationalizing what counts as knowledge, while privileging subjectivism when discussing the role of the historian. Thus, while criterialism held a strong appeal for Oria, those beliefs were tempered by the unrestricted role she placed on the knower. Resultantly, Oria viewed historical interpretations as flawed by opinion an author bias calling to question what can actually be known.

Brittany. Brittany's scores on the BHQ₁-h resulted in a consistency score of 50%. She had a weak tendency to disagree with subjectivist items while agreeing with many criterialist items. Her responses on copier items were inconsistent resulting in a neutral stance without a tendency to go in one direction or another.

Brittany's beliefs about what counts as knowledge in history centered on the understanding that "facts", which she defines as "people, dates, and general events that we know happened", are to an extent interpreted by the historian. She explained, "history isn't just black and white and you have to interpret at some point but at the same time there are facts behind it so it's not all interpretation, there's facts to back it up". Thus, a level of objectivism seemed to be somewhat appealing to Brittany as she allowed (in part) facts to speak for themselves.



The role of the historian in the construction of knowledge appeared to serve as the largest cognitive impasse for Brittany. She was particularly drawn to criterialist items on the BHQ₁-h but was often unable to qualify her responses with salient explanations. She agreed with BHQ criterialist items #13, 18, and 21, all of which reference heuristics such as source comparison, author perspective, and evaluation of evidence. However, when asked to articulate how these heuristics are used rigorously by historians Brittany responded,

Critically inquiring? I guess like looking and asking the right questions and determining answers based on those? And looking for evidence to support whatever you think is right? Which I guess is what historians do? I don't know.

She mentioned "evidence" but her understanding of what evidence is or how it is used is not clear. Additionally, Brittany chose NOT to answer item #3, which states, "a historical account is a disciplined method of inquiry". When asked why she did not answer the question she responded, "I don't think I understand what its saying. I have no idea".

Brittany's interview data suggested a propensity toward criterialism, which was tempered by a subjectivist view of the historian. She desired to restrict interpretations to be based on some sort of criteria but simultaneously over privileged the knower and at times relied on objective facts as the basis for knowledge, which caused a great deal of inconsistency in the way she understood the historical process. She explained the role of the historian as "drawing conclusions" from a string of facts and allowing them to "skew [facts] to make [their] own opinion. Toward the end of



the initial interview Brittany voiced some of the cognitive struggle she found herself perplexed by as she looked deeper into her own understandings. She reflected,

Like you can you really know ever for sure what happened? Because in my head I'm like that [fact] is true. But then I think, if no one was actually there and no one can say for sure what happened and then we have primary documents but even those are skewed? I mean whoever writes them wrote them from their own perspectives so?

The limited value she placed on objects from the past coupled with an over privileged knower created a great deal of cognitive dissonance for Brittany.

Brittany's pre-course epistemic beliefs about the nature of knowledge and the role of the knower in history indicated that criterialism held some appeal. She wanted there to be a method or a structured process which historians use to create interpretations but she was unclear as to what these processes might entail. Furthermore, the appeal of criterialism was tempered by a number of subjectivist beliefs centering on the ways in which historians interacted with the past and constructed interpretations. She saw the knower as flawed by perspective, which confounded her understanding of how an interpretation could be rigorous.

Eric. Eric's scores on the BHQ₁-h resulted in a consistency score of 46%. He had a strong tendency to agree with criterialist items while disagreeing with copier items and taking no real position on subjectivist items. Such a pattern indicated that Eric privileged the objects of the past as central to the construction of historical knowledge. A neutral position on subjectivist items coupled with a strong position on criterialist items signaled a lack of balance between the past's objects and the



interpretation of those objects indicated a significant degree of inconsistency in beliefs.

Eric's beliefs about what counts as knowledge in history centered on the interpretation of past objects which he described as "facts". These "facts", Eric claims, are all of equal value He explained,

If you have a set of facts, and then a set of actual facts any person could just say this is what actually happened, but it's not. They both could be equally valid because no one was there and they don't know so the difference is trying to separate which one is legitimate and which one is not.

Here Eric hints at objectivism alluding to the possibility that there may be "legitimate facts" off of which interpretations should be based. However these facts are unattainable due to the active role of the knower, which adds an impervious layer of bias on past remnants disallowing us to ever know exactly what happened. "Primary sources", Eric explained, "are all of equal value and none of them are true". He went on to explain,

There's a truth to what happened, but anything that is left behind, any person could interpret in a different way and it's just a matter of being as true as possible to what actually happened.

Central to this conflict Eric has with objective knowledge seemed to be his over privileging of the knower. He wanted to reach objectivism but the historian stood in his way. He agreed with BHQ item #12 (the past is what the historian makes it to be) explaining,



It has to be because historians are the only ones trying to figure out what it was that happened. So, if they're the only ones interpreting, than it is what the historians make it because the historians the one presenting it.

He later alluded to historians as having "angles" or "opinions" which slant the ways in which they present their own research.

While Eric is drawn toward objectivism when faced with questions about the nature of knowledge, and sees the historian as unrestrictedly subjective, his procedural beliefs about what historians do to construct that (subjective) knowledge seemed to be drawn toward criterialism further confounding his own cognitive equilibrium.

When asked, "what is history" on the HTLQ₁, Eric responded, "History concerns consulting primary sources to recreate or explain what happened reasonably based on available sources and quality of sources". When asked to elaborate on how a historian would go about so this kind of work, he explained,

There are certain ways that you should study the documents. You can't just go through and look for what you are trying to find because it might not be what you want. You have to read it as a whole and figure out exactly what it means instead of just trying to pick out stuff that supports what you are saying. I'll never make a decision unless all the parts are looked at and you can't just have one piece of evidence and base your decision on that. You have to be able to deal with things that contradict each other and try to figure out why they do that.



When asked how a historian might deal with these contradictions, Eric responded, "I don't know much about it. I'm sure there is a higher or better way of looking at these things. The methodology. That's what I'm trying to figure out".

In summary, Eric's pre-course epistemic beliefs indicated that criterialism holds some appeal for the ways in which he thinks about history but is tempered by objectivist beliefs pertaining to what counts as knowledge and subjectivist beliefs about the role of the historian. Eric had strategies for working with historical evidence such as considering perspective, bias, and intent. Likewise, he was inclined toward understanding the rigorous use of this evidence in the construction of historical interpretations. However, the over privilege he awarded to the historian within this process resulted in the interpretation to be devalued and flawed by perspective.

Tom. Tom's scores on the BHQ₁-h resulted in a consistency score of 46%. He had a tendency to disagree with subjectivist items while agreeing with both objectivist and criterialist items. His agreement with objectivist items signaled an over privilege of the role of the objects from the past. However, a simultaneous agreement with criterialist items signaled a significant degree of internal inconsistency as criterialists attempt to balance rather than over privilege past objects and the role of the historian.

BHQ₁-h and accompanying qualitative data sources suggested that Tom's understanding about what counts as knowledge in history flip flopped between objectivist and subjectivist beliefs. He oftentimes spoke of "facts" and "evidence" interchangeably defining them both as "documents, diaries, videos and pictures". About these sources of evidence he explained,



The facts speak for themselves. You can't deny facts ... it is true. It is a firsthand account or something that was close to the event, so yeah, I always believe a primary source. For the most part, I like to think that a video camera doesn't lie, like pictures don't lie just looking at them.

This data suggested that Tom held an objectivist view of knowledge in history. It is attainable and definitive.

However, Tom simultaneously valued the active role of the knower in the construction of history, which contradicts objectivism and signals a significant source of inconsistency in his beliefs. Tom explained,

[Historians must] question and say that why did it happen, how did it happen, who did it, what is their purpose, why, why, why, figuring out why they did it and then move onto other questions after that.

He went on to state that historians use evidence to create historical interpretations although he stated that he does not understand what it was that they did. Most problematic for Tom was the presence of multiple interpretations of conflicting pieces of evidence. When asked to explain how historians might rationalize these occurrences, he responded,

Sometimes people do not have all the facts and sometimes people do not want to back down from their arguments ... they should say 'in my opinion'. You could include both [arguments], you could be like this primary source says this, but on the other hand this other primary source has a different account. You are helping yourself because you had two primary sources; they just said two different things. I guess I really don't know what to do.



He went on to state that he believed most historians write what they want people to know because it's "a money business".

Tom's pre-course epistemic beliefs about the nature of knowledge in history indicated that objectivism held some appeal while beliefs about the role of the knower were more strongly subjective and based on the opinion or intent of the historian.

Tom did have some criterialist strategies for constructing historical knowledge but the temperance of his beliefs about what counts, as knowledge seemed to overpower his cognitive struggle to think about history more rigorously.

Summary. In summary, an analysis of BHQ₁ history subscale consistency percentages, weighted scores (See Table 4.2 for a detailed breakdown) and qualitative responses suggests that all participants began the course with some level of internal inconsistency with regards to their beliefs about historical knowledge and the role of the knower. Each participant had a unique set of roadblocks creating cognitive impasses, which inhibited a working set of criterialist beliefs. Many of the

Table 4.2

Pre-Course History Sub-Scale Categorical Weighted and Consistency Scores

History Items Pre-Course				
	Copier	Subjectivist	Criterialist	Consistency Score
Participant	5, 16, 19	2,8,12,14,22	3, 11, 13, 18, 21	
Ben	-0.7	<mark>-2.2</mark>	2.4	69%
Tameka	-1.0	-0.8	1.8	69%
Sara	-0.3	<mark>-2.2</mark>	1.6	62%
Katerina	0.7	<mark>-2.0</mark>	1.4	62%
Oria	-1.3	-1.2	1.6	54%
Brittany	0.0	-0.8	1.8*	50%
Eric	-1.3	0.0	2.0	46%
Tom	0.7	-0.6	1.8	46%

Note. Red highlighting indicates weighted scores, which do not align with the course goals. Turquoise highlighting indicates scores, which met or exceeded the high-bar set.



participants over privileged the role of the knower, which caused a preponderance of subjectivist beliefs. Criterialist beliefs simultaneously were appealing to many of these same participants. However, the cognitive impasses, which resulted from the inconsistencies in their beliefs, created a great deal of disequilibrium thus hindering their efforts to apply criterialist strategies. For an overview of impasses by participant, see Table 4.3

Table 4.3

History Subscale Cognitive Impasses By Participant

Ove	erview of Cognitive Impasses by Participant Pertaining to History
Ben	Slips and slides between the belief that knowledge is based on the strategic construction of evidence (active knower) and knowledge as the result of simple exploration of objects (passive knower)
Tameka	 Propensity toward subjectivism; Historical interpretations are the result of unrestricted knowers
Sara	 Knowledge as objective holds some appeal; Has a tendency to over privilege the objects of the past paralyzing her attempts at using criterialist strategies
Katerina	 Knowledge as objective holds some appeal; Has a tendency to over privilege the objects of the past; Struggles to understand how historians reach objectivism
Oria	Over privileges the role of the historian; Historian is flawed by opinion or bias
Brittany	Over privileges the role of the historian; Historian is flawed by opinion or bias
Eric	Over privileges the role of the historian; Historian is flawed by opinion or bias
Tom	 Knowledge as objective holds some appeal; Over privileges the role of the historian; Historian is flawed by opinion or bias

Baseline Beliefs about History Teaching and Learning.

The quantitative data resulting from the BHQ₁-htl served as a broad strokes measure to initiate the analysis of participant beliefs about history teaching and learning. Consistency scores and categorical weighted scores were targeted as an entry point into understanding participant beliefs. The aforementioned qualitative data sources were coded and triangulated to allow emergent themes surrounding participant understanding of how school students should think about and approach history. Additionally, data was coded for specific pedagogical moves participants would make within a classroom setting. These analytical processes resulted in the following snapshots of each participant's proximal beliefs about teaching and learning in history. Specifically, participant beliefs about what students can know in history, what skills students need to do history well, and how participants think about teaching history were all studied.

Ben. Ben's BHQ₁-htl consistency score was 78%, which was the highest consistency score on this subscale. He had a strong tendency to disagree with objectivist and subjectivist items while agreeing, albeit more inconsistently, with criterialist items. His beliefs about what students of history can know (knowledge in history) and the skills they need to know in order to obtain that knowledge appealed to criterialism. However, when asked to put these beliefs into practice, Ben's pedagogical content knowledge aligned more consistently with an objectivist way of knowing centering on the delivery and memorization of information.



Criterialist responses appeal to Ben when considering his beliefs about what counts as knowledge to students of history. He emphasized that students should not be permitted to believe that anything goes in history. He stated that this would be "false" and "detrimental for students of history". Instead, he believed they should learn to read history critically using an "unbiased approached". When asked how students might remain unbiased he explained, "there's always going to be a natural bias built in whether or not - I mean even if there's a conscious effort against it".

When Ben considered the skills students of history need in order to do history well, he focused on many of the criterialist beliefs held by expert historians. He agreed that students should be taught to deal with evidence "not only just in history but as a logical approach to life", conflicting evidence, and should be knowledgeable of the historical method, which he described as "something similar to the scientific method". Furthermore, he commented that in addition to good general reading and comprehension skills, students need training in "logic". He went on to explain,

You can't just state something and expect people to agree with you. You have to say your idea and follow it up with logical reasoning and follow with primary sources and other people who agree with you to show you're not crazy and just making this up but like there's actual reasoning behind it. It's not just reading. It's also listening to lectures and listening to how different people interpret a document and what actually happened. So it's not just reading it and then what you read is what's true.

In addition to logic, Ben centered his discussion of necessary skills on a process reminiscent of document corroboration. He continued,



[Students] are going to come across various documents talking about the same event and no, they're not always saying the same thing. So you need to go through each of them, or [look at] what the document is saying and what they have in common ... If seven different people say they saw the same thing, then you can say then that probably happened if there are seven different people who are connected. But if one person says one thing happened and another says another thing didn't happen then you have to...

However, when faced with the occurrence of conflicting sources, Ben reached an impasse. He was not able to articulate what students should do when they came across information that conflicted.

When considering how to teach students the skills he felt were necessary for students to do history well, Ben indicated that he would abandon the traditional read and recite model he apprenticed as student. In response to the HTLQ₁ he responded,

Rather than teaching kids to memorize and recite things I would try to have them learn how to connect different events in history and connect them to one another and then apply them to history.

However when asked to apply his beliefs to practice, he leaned on the objectivism, which comprised his own school experiences with history. When asked how he would connect events and apply them to history, he suggested,

I think it would be like lecture to get the chain of events through and like the base concepts and ideas and have a discussion and let the students kind of explore a bit more.



Ben's initial attempt at a lesson plan was fairly congruent with these ideas. The goal of the lesson was "to teach why D-Day was successful", which he would do through lecture and student-directed note-taking. The assessment he offered was the summarization of one primary source document.

In summary, Ben's epistemic beliefs pertaining to the teaching and learning of history in school had a strong appeal toward criterialism. He was able to speak to many of the expert strategies historians use in the construction of historical knowledge such as the importance of author perspective, source corroboration, and use of evidence. However, when asked to demonstrate his pedagogical content knowledge, more objectivist ways of knowing appealed to Ben perhaps in part due to his own apprenticeships of observation.

Eric. Eric scores on the BHQ₁-htl subscale resulted in a consistency score of 67%. Similar to Ben, Eric had a tendency to disagree with subjectivist and objectivist items while agreeing with criterialist items. This suggested that Eric's beliefs held some level of internal consistency as he attempts to balance the role of the historian with the objects of the past.

Eric's beliefs about what students should understand about the nature of knowledge in history slips and slides between his tendency to over privilege the historian and his attempt to balance the historian and objects from the past. Such a cognitive struggle resulted in a significant degree of inconsistency with regards to Eric's beliefs about what students understand about historical knowledge. He acknowledged that students should understand their own active role in the construction of history, and similarly the active role authors of history have in the



construction of the narratives students read. He explained, "yeah, [students should be aware that history is simply a matter of interpretation]. Essentially it is because the interpretation of historians is what they are reading. It really is interpretation".

Similarly, Eric goes on to state that students need to be aware that history is not something that is "discoverable" instead it is "constructed". However, Eric had a more difficult time when considering the role of opinion. He stated that students "should understand history as not just opinion", but he then hedged slightly suggesting, "well, not always but ...um... sometimes it is". Similarly he went on to agree, "students should understand that history is what the historian makes it to be". When asked to explain he stated,

Uh, it is sometimes. Or most of the time that is true just because a lot of kids who read a lot of books try to know that it's not just random stuff on a page.

There are ways that they got to that but ... I'm totally lost.

This comment signaled Eric's attempt to give historical knowledge boundaries, which was his attempt to balance the role of the knower. However, he seemed to be stymied as he tries to think through what those boundaries might look like and how students could recognize them.

Criterialism holds more of appeal for Eric as he considered his beliefs about what skills students of history need in order to do history well. He explained that students need to understand the process of doing history as a "methodology", which involves "collection and analysis of evidence". Elaborating further, Eric explained that students need to understand,



It's a skill to be able to understand history and what is the primary stuff that is written. It's not just that you can read it and automatically get it. They have to be able to connect everything else and that's a whole other thing that students don't typically do.

Eric had a number of strategies, which he understood as useful to the construction of knowledge and thus necessary for students to learn. He believed that learning how to compare sources, understanding how to deal with conflicting sources, and assessing author perspective were all essential components to the history classroom.

Following a discussion of skills needed, Eric lamented on his own beliefs regarding history in schools. He began by stating that history in schools is "not engaging" and "passive" because "you just sit there and you copy what someone is saying and since you're not making the connections yourself"; experiences he suggested characterized his own apprenticeships with history education. He then expressed what he believed should be central to the history classroom. He explained,

Well, you should have kids be historians every day. Just try to look at something, you're obviously going to have to explain the context of what's happening, but there should be stuff from the time that kids can look at and think, alright, this is why that happened and you can connect all these things.

That's the way it should be. You're not just reading. You're doing something. However, when pressed to talk about what he would do as a teacher, Eric had a tendency to rely on those experiences, which he recalled from his own apprenticeships. He responded,



I would simulate what my high school teacher did because his focus was on creating a vivid narrative in our heads and having us picture what was going on. He also made history funny and this helped me to retain the information.

When asked for an example of how he might do this he stated, "[I don't know.] That's why I'm here. Also, I feel like there might be on the simpler end of things, in terms of primary stuff, that kids might be able to work with and maybe could do it that way. But, obviously I don't know that much."

Similarly, the objectivism associated with his apprenticeships again surfaced within his initial lesson plan. The stated goal of his plan was to "explain the nature of the people living in the United States prior to colonization". The pedagogical strategies he chose in order to effectively communicate the goal of his lesson were to "show a sort film" and to "lecture using a PowerPoint". Eric explained that he would use the movie as a way for students to visualize the content. He commented,

The goal of that short movie would be so that if I'm explaining something, they can visualize what I'm saying. Because there are a lot of kids who need that to help them. So it's not really to watch a movie just to watch something, it's to get an image in their head so they can recall it when something's being explained.

When asked about the PowerPoint he stated that again this would be used as a visual to display "textbook pictures and maps". Finally, as a form of assessing his students, Eric suggested that they become a sort of expert on a certain aspect of Indian society.

In summary, Eric's beliefs about history teaching and learning in schools were characterized by a number of internal inconsistencies. Eric was equipped with many



criterialist strategies, which assisted in his understanding of how interpretations were constructed. However, subjectivism appealed to his understanding of the nature of knowledge, which created a rather significant impasse for his beliefs about the role of students have in the construction of interpretations. Perhaps resultantly, Eric struggled with how to represent knowledge to students of history and relied not on his own criterialist tendencies but instead on the objectivist characteristics of his apprenticeships of observation.

Tameka. Tameka's scores on the BHQ₁-htl subscale resulted in a consistency score of 67%. She had a tendency to disagree with subjectivist items while agreeing with criterialist items. Tameka was inconsistent with her responses to copier items signaling a slight tendency to over privilege the objects of the past.

When considering Tameka's understandings about how students should understand knowledge in history, she attempted to create a balance between the objects of the past and the knower signaling an appeal to criterialism. She viewed the role of the historian as active in the construction of knowledge, which Tameka described as "interpretations". She explained,

[Students need to know that] it's all interpretation. I feel that way because in my history class, he was saying how the Boston massacre is called a massacre but in school where he's from, he never learned that it was a massacre. He said only five people died. A lot of times people don't say that five people is a massacre - when you think of a massacre, people think of hundreds people. Like Wounded Knee, hundreds of Native Americans died, that sounds like more of a massacre than five people but in Boston that was the headline in the



newspaper. And not that those five lives are insignificant it's just not what you would think of with the definition of the word massacre.

Additionally, Tameka made a distinction between opinion and perspective; words commonly used interchangeably. Disagreeing with BHQ statement #6, which reads "students know that history is basically a matter of opinion", Tameka explained, "Opinion is whatever you believe and perspective is based on some hard facts". This signaled Tameka's awareness of criteria associated with constructing history, which worked to balance the role of the knower.

For Tameka, these criteria appeared to center on the availability of evidence. She expressed that she felt all students should be explicitly taught how to work with evidence explaining,

You need evidence. How can I believe you if you don't prove it to me? Like show me something. Evidence is something you can touch and see and look at. Like a primary document - even secondary documents that talk about the primary documents. There has to be [evidence from students], otherwise I don't think they're learning anything. They're just kind of making random statements.

Tameka had a tendency to agree with BHQ₁-htl criterialist statements, which deat with student-centered skill sets such as learning to deal with conflicting documents and to understand author positionality. She stated that the use of evidence, rationalizing arguments and building interpretation were all key skills students need to learn in order to construct historical accounts.



However, Tameka did not elaborate on these strategies during her interview session or through her written responses.

When asked how her beliefs about the nature of knowledge and her understanding of the skills students need in order to do history would manifest themselves in her history classroom, Tameka relied heavily on objectivism, which characterized her own experiences with school history. When asked to respond to the HTLQ1, which asked how she would teach history in school, Tameka responded, "I don't know, I think I would try to have the students remember a lot of information". Her initial attempt at a lesson plan elicited a similar response and again appealed to a more objectivist way of knowing. The goal of the plan was for students to "understand what the Native Americans possessed and what the Europeans would want". Pedagogically, she chose to have students read "background text" followed by a series of questions, which she would use as the assessment. She explained that she wanted her students to "understand the European exploration" by giving them knowledge that they were expected to remember.

In summary, Tameka's epistemic beliefs about teaching and learning in history had a strong appeal toward criterialism. She expressed an understanding that placed students as the active constructors of knowledge. Additionally, she had a number of strategies students could use when working with evidence. However, when asked to demonstrate her understanding of how to put her beliefs into practice, objectivist strategies had a stronger appeal perhaps in part due to her own apprenticeships of observation.



Tom. Tom's scores on the BHQ₁-htl subscale resulted in a consistency score of 56%. He had a strong tendency to disagree with subjectivist items. Simultaneously he had a strong tendency to agree with objectivist and criterialist items. Such a pattern indicated a fairly significant degree of internal inconsistency within Tom's beliefs. These results suggested that Tom over privileged the objects from the past while under privileging the active role of the knower.

Beginning with Tom's beliefs about what counts as knowledge for students of history, criterialism seemed to appeal to the ways in which he understood the nature of the interpretation. He agreed that students should view history as an interpretation while disagreeing that they should equate this with opinion. Tom explained,

They are similar, but interpretation is based off of facts. Like if you have A and C but are missing B you can use some facts to come closer to B. You can figure out what is going on and interpret what happened, but an opinion is like in my opinion this is better or in my opinion this happened you opinion there is no fact backing up your opinion. Interpretation is interpreting what the facts are that happened or why that happened. They are almost fact based.

Here Tom also seemed to allude to the conjectural logic historians use when creating interpretations; another criterialist strategy. However, later in his initial interview, Tom also expressed some appeal for objectivism echoing the inconsistencies, which surfaced on the BHQ₁-htl. He explained that while he believed it was very important for students to read and interpret primary source documents, he also stated that they must be sure to take away certain "facts". He explained,



History is about all the facts, and if you don't get all the facts you aren't teaching the full history of what happened. You get wrong interpretations of history. Students don't get the chance to learn about what happened actually. They aren't given the full details of what happened.

These objectivist tendencies coupled with an appeal for criterialism when considering the nature of knowledge in history created a number of significant impasses. Tom flip-flopped between over privileging the facts and trying to balance the role of the knower resulting in inconsistent beliefs.

Criterialism once again appealed to Tom as he considered his own beliefs about what skills students need in order to do history well. First Tom acknowledged that students must learn "the historical method such as they need to understand the importance and use of evidence like questioning and interpreting". While he expressed that he was not quite sure what the historical method looks like, he attempted to explain its intricacies stating,

Honestly, I think it is about questioning what happened since we weren't there or historians trying to figure out what happened back in the past. And that requires thinking, reading, basically questioning about what happened with primary sources and what not. [I feel] interpreting documents is essential since we were not there to know what happened; interpreting something and questioning things to come up with a conclusion [is history].

Again, Tom acknowledged the active role of the student explaining that to do history well students must.



... think outside of the box. You need to put yourself in the shoes of the people of that time. Outside of box means that you need to start questioning what everyone does like a question about an event or a person, get to what happened. You can't just read about it.

This perhaps signaled an awareness of historical empathy; a skill historians use to attempt to contextualize the actions of those people and objects from the past in order to better understand their circumstances.

Similar to Ben, Tameka, and Eric, Tom had a more difficult time translating the appeal of criterialism to pedagogy. Instead, objectivism characterized his initial lesson plan attempt and his articulations about how he would approach history with students. Like the others, these objectivist ways of knowing were highly present throughout his educational experiences with school history. The goal of Tom's lesson plan asked students "to focus on the important dates and events of the Revolutionary War". Pedagogically, he suggested that he would "lecture" to his students using a "textbook", and would later "administer a multiple choice test on the information disseminated at the end of the class period". He suggested that he chose to model this lesson after the sub plans a local teacher left for him when he substitute taught an eighth grade history class.

In summary, Tom's epistemic beliefs about teaching and learning history are characterized by a struggle to overcome his objectivist beliefs which seemed to derive from his apprenticeships of observations (some very recent) and the appeal criterialism has for the ways in which he understands the process of doing history. His tendency to over privilege the objects from the past are central when considering



his goals for students. While he has many criterialist strategies for understanding the construction of interpretations, he seems to keep these disconnected from the history classroom.

Oria. Oria's scores on the BHQ₁-htl subscale resulted in a consistency score of 56%. She had a strong tendency to agree with criterialist items while simultaneously disagreeing with copier and subjectivist items. This suggested that Oria attempted to balance the role of the knower and the objects of the past to make sense of the ways in which history could be constructed and known.

Oria's responses to BHQ₁-htl questions mentioning interpretation or opinion all resulted in hedges. Her explanation of these hedges appealed heavily toward subjectivism although sometimes flip-flopped with explanations containing criterialist undercurrents. When asked if students should understand history as laden with opinion, Oria explained,

Well, it's - it's...um, it's a matter of opinion and if the [teacher] is teaching you, they come in with their opinions of something, they try to give out a general view about something but at the same time they will still bring their point of view of it - And whatever - to me, history is not really the facts but the interpretation of the facts. So, it's your opinion.

Oria equated "opinion" with "interpretation" which created an impasse for how she understood the role of the knower. These inconsistencies appeared to stymie Oria as she attempted to work through her own understanding of how the knower interacts with the past. Thinking aloud, she responded,



[I thought I disagreed that history was an interpretation but I don't know] because we're still using primary documents, and primary documents are written by someone and that person is biased, so I don't know. It could be that it's absolutely unrealistic to be totally true because it might have happened. They say that something could happen in front of five different people and each of them would give you a different account of how it happened.

This existence of perspective seemed to cause Oria a great deal of dissonance as she attempted to work through her own beliefs, and thus the central goals for her students about what counts as knowledge.

Oria did not speak extensively on the skills she believed students needed in order to do history well. This was perhaps the result of her continued cognitive struggle to understand what counts as knowledge. While BHQ₁-htl criterialist items appealed to her, and she agreed with statements that privileged the student as active in the construction of knowledge (i.e. "learn how to deal with conflicting sources", "understand how to work with evidence", "learn how to work with subtext"), Oria expressed that she was "unsure" how to use many of these strategies. Instead she explained,

Um, I think [students] would need to converse with [each other]. Because you yourself are giving a biased interpretation because of your own views of something so it would be helpful if you would get another opinion on that same topic or issue and you could try and find the middle ground.



Her use of the phrase "middle ground" hints at subjectivism, which perhaps is a strategy Oria is choosing to use to reach a degree of equilibrium as she slips and slides between objectivism and criterialism.

Oria's beliefs about pedagogical practices in the history classroom strongly appealed to objectivism. When asked to explain how she would teach students Oria responded,

I would let them be proactive in their learning of history. Maybe help them create plays, songs, maybe a fake reality show or a game show. Bring their joy of playing into the classroom. They might be excited to research these things and in turn learn along the way - just do something to make it alive instead of....dead.

Dissemination of information, which is characteristic of an objectivist way of knowing, seemed to be a central goal for Oria. Her lesson plan held similar beliefs at its foundation. The student objective for her lesson was "to let the students know who these Indians are, their origins, and their contribution to history and the society in which they live". Pedagogically, Oria asked her "students" to interact with selected artifacts during an "exhibition" walk. Students would then be asked to "walk around and absorb what they are seeing". Afterwards, Oria would have a guest speaker lecture to the students as "an authority on the subject" to give them the answers to questions they had. Additionally, Oria reported that she would give students notes of relevant information she wanted them to know. Finally, to assess student understanding, Oria would hold a "lightning round" where she would ask,



about things discussed during the lesson and from notes given by the teacher.

Once a majority of students are able to answer minimum six out of ten questions correctly then it shows that students have grasp the understanding of the lesson."

Oria's strong appeal to objectivism over privileges the objects of the past and relegates the role of the knower as passive.

In summary, Oria has a tendency to slip and slide between a subjectivist and criterialist view of knowledge in history, which resulted in an inconsistent understanding of the role of the knower (the student). Oria struggled with the differentiation of opinion and interpretation, which sometimes resulted in an over, privileged knower causing a significant impasse as she considered the nature of knowledge. Her lesson plan data and interview comments suggested that objectivist beliefs heavily appealed to her understanding of how to teach and learn in the school classroom perhaps indicative of her own inconsistencies, which resulted in a reliance on past experiences.

Brittany. Brittany's scores on the BHQ₁-htl subscale resulted in a consistency score of 56%. She had a strong tendency to agree with subjectivist items while agreeing with criterialist items. She took less of a consistent position on items, which contained objectivist statements.

Brittany's beliefs about what students can know in history centered on a struggle between interpretation and opinion. She stated that she believed history to be "actively constructed" and that "kids should have to support what they say because - then that shows they really know what they're talking about and not just spewing



something out just because". However, the subjectivist appeal of history "being what the historian makes it to be" seems to resonate with Brittany. Similar to Oria, Brittany was stymied by the awareness of perspective and bias, which in turn "taints" the historical account. She gave an example of her own experience explaining,

I don't know...I guess history is all interpretation. Historians can really skew it...I don't know, I'm trying to read - I was reading A People's History of the United States and then A Patriots History of the United States. They're so different.

She later articulated the differences between the two works as based on the historians ability to "write what they want people to know". These opinions were what Brittany equated with historical accounts. Likewise, she believed "every student has their own historical opinion" which teachers should not question.

Brittany's beliefs about skillsets students need in order to do history well included some criterialist strategies. She explained that she felt it was important for students to learn to rationalize conflicting evidence and to "support" historical arguments. Brittany stated, "good reading and comprehension skills are not enough for students to be successful" responding that they should also,

I don't know ... have skills like - I don't even know how to say it, but like forming your own opinions on things and not just believing whatever.

Reading comprehension is just pretty much you read something and you understand it and you move on.



Criterialism did appeal to Brittany as she explained, "students should be taught how to approach history through investigation". However she qualified this by stating that she "has no idea how to do it".

When considering how to teach history in an classroom, Brittany relied heavily on an objective set of beliefs. In response to the HTLQ₁, she explained,

I would teach history as interactively as possible. I believe that children are creative and must be able to express themselves that way. They do not enjoy memorizing dates and people but can do so unknowingly if the information is presented in a fun way.

In contrast to her response on the HTLQ1, Brittany's goal for her initial lesson plan was "for students to memorize the names of the presidents in order". Pedagogically, she explained that she would have students "listen to a song" and "practice the lyrics". Brittany's activity script stated that she would play a song, which listed the names of the United States presidents and then would have them practice memorizing the lines in partners. To assess their understanding, she said that students would be asked to recite the song without looking at the lyrics and then would have to write all of the presidents' names down on a test. Her reliance on objectivist ways of knowing when considering her lesson plan mirrored her own experiences with school history.

In summary, Brittany's epistemic beliefs, the ones which influence her ideas about teaching and learning history suggest that she slips and slides between objectivist and subjectivist ways of knowing. While criterialist strategies held some appeal for Brittany, they were tempered by her limited understanding of how historians go about their work and make interpretive judgments. Objectivist beliefs



characterized the ways in which she envisions teaching, which are likely rooted in the way she learned history in school.

Sara. Sara responses on the BHQ₁-htl resulted in a score of 56%. She had a tendency to disagree with subjectivist and objectivist items while agreeing with criterialist items. An initial reading of her scores suggests that Sara attempted to create a balance between the objects of the past and the role of the knower. However this balance was tempered by the tendency to over privilege the objects as she works to make sense of the past.

While criterialism held some appeal for Sara as she considered her own beliefs about what counts as knowledge for students of history, these tendencies seemed to be tempered by existing objectivist beliefs. She agreed with many criterialist items pertaining to the structure of knowledge, but abandoned those beliefs as she discussed what could be known by students. At the center of her cognitive struggle appeared to be the existence of facts, which created an impasse as she considered criterialist stances pertaining to the construction of knowledge. Sara's beliefs suggested a tendency to use the objectivity of facts as a foundational basis for knowledge. She explained, "I think there is a concrete history and from there peoples' interpretations come off of that. But history is rooted in historical facts and documents that we know are true". These "facts", Sara stated, are "ultimately what the teacher needs to check for understanding". She went on to explain,

I think it'd be important to just reinforce the facts part. I think it's important to show students that you have to combine what we know about what happened ... You just have to bring back the facts and show them why.



Sara's belief that there are "concrete" histories also suggested that the role of the knower was limited. Thus the quality of histories was a non-issue. She explained, "I don't really think there are good ones and bad ones; maybe just oversimplified ones".

While Sara's beliefs about knowledge seemed to be largely objective, criterialist strategies for the construction of history held some strong appeal for her. Although she could not articulate the meaning of the "historical method", Sara indicated that she felt it was necessary for students to learn. Similarly was the need to be able to rationalize conflicting information. Sara explained,

I guess you have to take into account the reliability and the importance of different accounts. Like if it's coming from some person, some idiot person you know, it might conflict but you can still create a historical account but one might be unreliable. Yeah, I mean the conflicting account can show a lot about the event or the history of the event. It might have been really unclear and people might have thought different things and had different perspectives on the event.

Embedded within Sara's response seemed to be an understanding that not all historical accounts are equal (in contrast from her previous statement) and that perspective plays an important role when considering why or how something was written. She later explained how she felt students should be exposed to such skills stating,

Well, going off my philosophy of including perspectives. I think just learning that it's not just a one person's interpretation and that's it. I think students should be able to take different - whether its documents, or people's views, or



textbooks and stuff and have them combine it into history and learn how to not just be like read one textbook and decide what happens. I think that's an important skill for students to have.

In addition to these types of skills, Sara explained that she felt students need to learn to "ask [the evidence] what was this person thinking about? Ask the questions...."

While criterialist strategies held a strong appeal for Sara as she considered the skills students would need in order to do history well, objectivism remained central to her beliefs about pedagogical strategy. In response to the HTLQ₁, Sara expressed,

I would teach history by relating the topics to the students because they will only be engaged if it pertains to them. I would teach it using a lot of simulations of past events to make history seem alive. I would also encourage students to question why things in history have happened in order to analyze history in a new way.

This response suggested an objectivist stance where the knower is passive (receiving) rather than active (doing). However, her initial lesson plan again surfaced a number of criterialist underpinnings. This suggested quite a struggle between Sara's desire to move toward a criterialist way of knowing yet is tempered by her objectivist beliefs.

The central goal of Sara's lesson plan was for students to "learn the significance and impact of Brown vs. Board". Pedagogically, she chose a few criterialist-related strategies to engage her students. First she indicated that she would give her students two primary source newspaper photos to analyze. By analyze she stated that students would be asked to "interpret the message being portrayed". Then students would be given a "summary article" to read and would be asked to create a



"skit" to reenact what they had read. The assessment asked prospective students to write about "how this case has affected your life". The goal, strategies and assessment embedded within this lesson plan are highly suggestive of a cognitive "tug-of-war" of sorts between criterialist and objectivist ways of knowing.

In summary, Sara's epistemic beliefs about history teaching and learning history were suggestive of a tumultuous cognitive struggle between criterialism and objectivism. Discounting her own classroom experiences as "irrelevant and ineffective", she attempted to abandon those practices to allow her students a more "active and interested" role. Perhaps tempered by her own lack of understanding about what counts as knowledge, Sara began the course slipping and sliding between epistemic beliefs.

Katerina. Katerina yielded a consistency score of 44% on the BHQ₁-htl subscale. She had a weak tendency to disagree with subjectivist items while agreeing with criterialist items. Her consistency on objectivist items was weak resulting in a neutral position. This pattern suggested that Katerina attempted to create a balance between the objects of the past and the role of the knower. However this balance was tempered by her subjectivist tendencies to over privilege the knower she works to make sense of the past.

Katerina's beliefs about what can be known in history appealed to a subjectivist stance. She focused centered almost solely on the existence of perspective as a mitigating factor for histories. She explained,

So, if you're looking at historical accounts of let's say, Baroque times, actually Renaissance - so you have people in Europe who are more anti-religion and



more about pro-science but there's still a portion of the population that was against it. So you can read something from one thing that are pro-Renaissance and I guess some that aren't and you'll understand that this one person can be a historian and this person can be a historian but based on their views, it could alter what they're saying.

Katerina did not discuss the criterialist strategies for evaluating perspective, rather she made mention of it on several occasions as a consideration students needed to always have in the forefronts of their minds as they studied history. Thus, she also purported that author positionality and perspective are of equal value and they should not be judged or questioned. In history classrooms, Katerina suggested, "students opinions should be questioned" as long as they have the right facts explaining,

I don't know maybe because some children who are growing up in certain cultural backgrounds, like I have a friend who's Armenian and one of her teacher's felt differently about [something in history] but they never got into it because there were some basic facts they could agree on.

While the active role of the student was acknowledged, Katerina also suggested that it was also an unrestricted role. Furthermore she agreed, "students can believe whatever they choose since there is no way to know what happened".

While subjectivism appealed to Katerina's beliefs about knowledge, criterialism held some appeal as she worked through her understanding of what skills students needed in order to do history. She agreed that students need to be taught to deal with conflicting evidence and furthermore asserted that they should learn to use evidence in a critically evaluative way. Katerina additionally suggested that all



students should be taught the historical method so that histories could be constructed rigorously. However, when asked how to teach these skills, Katerina responded,

I don't know ... I know it is something more than [just reading and writing] but I really don't know what it would look like. If I were to compare it to architecture, we're taught to communicate our ideas orally, written, and visually. So whenever we come up with an idea we have to be able to show it in 360 degrees and explain it many different ways so I feel like in that sense. I think you need to understand the different perspectives that make a full history otherwise it's just a one-sided, or two-sided view.

Katerina's struggle with what counts as knowledge coupled with a lack of procedural understanding created a sizable impasse as she worked through her own beliefs about history.

Katerina's response to the HTLQ₁ and her initial lesson plan assignment suggested a focus on objectivism. When asked what she thought history teaching and learning should look like in school, Katerina responded,

Instead of focusing history on memorization and facts and figures, I would choose to teach events by juxtaposing them with other events, thoughts or inventions happening simultaneously. I would dedicate an entire semester to one time period.

During her initial interview, she explained that she would have her students "role play ... like lords and ladies"; a technique which she explained as "interactive rather than stagnant". She also used the phrase "technology-related" to explain her teaching methodology. With similar objectivist positionalities, Katerina's lesson plan goal was



for students to "learn that many inventions came from the Industrial Revolution". She asked her students to "chronologize index cards with dates" and to talk as a group about when most of the inventions occurred. There was no mention of an individualized or class-wide assessment of student understanding.

In summary, Katerina's epistemic beliefs, which influence her ideas about teaching and learning history, suggested that subjectivist stances hold some appeal for her. However, that appeal was tempered by objectivist tendencies and a desire for a more structured methodology, which students could use to better understand varying perspectives. The pedagogical strategies she employed centered on objectivism; beliefs likely rooted in the way in which she learned history in school. Furthermore, limiting her understanding of how to teach history appeared to be a lack of knowledge with regards to what historian do and how they go about doing it creating additional cognitive impasses.

Summary. An analysis of BHQ₁ history teaching and learning subscale consistency percentages, weighted scores (See Table 4.4 for a detailed breakdown) and qualitative responses suggests that all participants began the course with some level of inconsistency with regards to their beliefs about teaching and learning in history classrooms. Each participant had a unique set of roadblocks creating cognitive impasses, which inhibited a working set of criterialist beliefs. Similar to the BHQ₁-h scale, many participants over privileged the role of the knower (either historian or student) confounding their own understanding criterialist strategies, which were often appealing. Additionally, most participants had extreme difficulty translating their criterialist beliefs about history to pedagogical strategies choosing instead to rely on



Table 4.4

Pre-Course HTL Sub-Scale Categorical Weights and Consistency Scores

Participant	Copier 9, 20	Subjectivist 4, 6, 10	Criterialist 1, 7, 15, 17	Consistency Score
Ben	-2.5	-2.3	1.8	78%
Tameka	0.0	-1.6	1.8	67%
Sara	-1.5	-1.6	1.3	56%
Katerina	0.0	-0.3	1.2	44%
Oria	-1.8	-1.0	2.0	56%
Brittany	-0.5	-2.3	1.3	56%
Eric	-2.0	-1.0	1.5	67%
Tom	1.8	-2.0	2.0	56%

Note. Red highlighting indicates weighted scores, which do not align with the course goals. Turquoise highlighting indicates scores, which met or exceeded the high-bar set

their own apprenticeships of observation, which were almost exclusively objectivist in nature. For an overview of impasses by participant, see Table 4.5.



Table 4.5

HTL Cognitive Impasses By Participant

Overview of Cognitive Impasses Surrounding History Teaching and Learning Beliefs by Participants				
Ben	Appeal to criterialist strategies with regards to what students can know and how they should approach history tempered by a tendency to rely on objectivist apprenticeships of observations; Pedagogical strategies characterized by objectivism			
Eric	Appeal to criterialist strategies tempered by subjectivist beliefs about the role of the knower; Has a tendency to rely on objectivist apprenticeships of observation; Pedagogical strategies characterized by objectivism			
Tameka	Appeal to criterialist strategies with regards to what students can know and how they should approach history tempered by a tendency to rely on objectivist apprenticeships of observations; Pedagogical strategies characterized by objectivism			
Sara	 Appeal to criterialist strategies tempered by objectivist beliefs with regards to what students can know and how they should approach history; Pedagogical strategies characterized by objectivist view of knowledge with an appeal for criterialist strategies 			
Oria	 Appeal to criterialist strategies tempered by subjectivist beliefs with regards to what students can know and how they should approach history; Had a strong tendency to rely on objectivist apprenticeships of observations; Pedagogical strategies characterized by objectivism 			
Brittany	Appeal to criterialist strategies tempered by subjectivist beliefs about the role of the knower; Has a tendency to rely on objectivist apprenticeships of observation; Pedagogical strategies characterized by objectivism			
Tom	Appeal to criterialist strategies tempered by objectivist beliefs about what can be known; Has a tendency to rely on objectivist apprenticeships of observation; Pedagogical strategies characterized by objectivism			
Katerina	Subjectivism characterizes her view of students' role in creating knowledge and the knowledge they can know; Has a tendency to rely on objectivist apprenticeships of observation; Pedagogical strategies characterized by objectivism			



CHAPTER V

POST-COURSE RESULTS

Results from data gathered over the course of the eight-session course are presented in this chapter, which is broken into two analytical sections: beliefs about the nature of history and beliefs about the nature of history teaching and learning. Both sections begin with a discussion of data resulting from a pre to post comparison of the BHQ measure. In line with the theoretical model, I use this data as a broad strokes overview and initial point of entry with regards to the conversation about beliefs and the shifting thereof. The analysis of the BHQ centers on the consistency score of each participant, which is an indicator of strengthened criterialist beliefs and simultaneously weakened subjectivist and objectivist beliefs. This score creates a snapshot of the overall stability of participant beliefs relational to an expert way of knowing in history. Thus, it succinctly summarizes the storyline of the ways in which participant beliefs shifted over the course of the semester.

Qualitative data were used to augment the consistency score data and results assisted in the creation of an organizational structure based on emergent patterns of shifts. Pre-course data indicated that all participants entered the course in some level of epistemic transition with regards to their beliefs about history and their beliefs about history teaching and learning. Thus, the patterns, which emerged are discussed as "levels of change in transition". Three clusters of participants surfaced, "Some Change in Transition", "Limited Change in Transition", and "Almost No Change/Reverse Progress in Transition". These clusters were based on types of



movements made with regards to participant beliefs, which reflected the varying degrees of efforts to reconcile disequilibrium. Resultant clusters were then used for a finer grain analysis on both subscales.

Beliefs About the Nature of History

Participant clusters on this subscale were based on BHQ-h consistency score deltas and triangulated qualitative data sources. Clusters were further analyzed according to two sub-categories. First, participant beliefs about the nature of facts (objects of the past) and their role in the construction of histories were assessed for shifts. Next, participant beliefs about the role of interpretation including those understandings about the role of the knower and how much licensure one has to use conjectural logic (how far can one go with interpretive liberties) were assessed for movement over the course of the class sessions. A synthetic analysis of these constructs helps us to understand the varying magnitude of struggles participants faced as they worked toward a reconciliation of their own beliefs about history.

BHQ-h consistency score snapshot. The BHQ pre to post course analysis begins with the statements on the history sub-scale. These items deal with beliefs associated with disciplinary history. There are 13 items within this sub-scale: three items, which appeal to objectivism, five, which appeal to subjectivism, and five, which appeal to criterialism or a more expert way of knowing in history.

Overall on BHQ-h items, six of the eight participants (75%) increased their consistency scores thus suggesting a stabilization of their beliefs about history. Tom (no change in consistency) and Ben (decrease in consistency) were exceptions to this pattern. See Table 5.1 for a layout of consistency score deltas.



Table 5.1

Pre to Post Course Consistency Score Deltas

Participant	BHQ-H 1	BHQ-H 2	Delta
	Score	Score	
Oria	54%	85%	+31
Sara	62%	85%	+23
Tameka	69%	85%	+16
Katerina	62%	77%	+15
Eric	50%	58%	+8
Brittany	50%	54%	+4
Tom	50%	50%	0
Ben	69%	62%	-7

Overall, a pattern surfaced which suggested that participants who entered the course with higher consistency scores, thus more stable beliefs about history, were more apt to strengthen their understanding of disciplinary concepts. However, Oria (low pre-course consistency score and high post-course consistency) and Ben (high pre-course consistency and low post-course consistency) are exceptions to this claim.

Oria evidenced the most movement with regards to the stabilization of beliefs pre to post course increasing her consistency score +31 percentage points. Beginning the course with one of the lowest consistency scores, Oria's post-course data suggested helpful shifts were made with regards to her beliefs about the nature of history and the role of the knower. Sara's consistency score delta of +23 suggested similarly helpful shifts in how she understands history. Thus, Oria and Sara were both placed in the cluster designated as having experienced "Some Change in Transition" on the history subscale. With positive consistency score deltas, which were less sizable yet still indicated helpful movement, Tameka (+16) and Katerina (+15), were placed in the cluster designated as "Limited Change in Transition". The remaining



participants, which included Eric (+8), Brittany (+4), Tom (0), and Ben (-7) were placed in the final cluster designated as having "Almost No Change in Transition".

"Some change in transitional beliefs about history". Oria and Sara were clustered together as experiencing some helpful shifts in their transitional beliefs about history as indicated by high consistency score deltas and triangulated qualitative data. Prior to the course, the two participants had differing understandings of both the role of facts and the role of the knower in the construction of historical accounts. Oria understood the interpretive nature of historical facts stating that they were used by historians in the construction of accounts. Sara had a more objective understanding of the facts seeing them as somewhat more concrete and finite. Perhaps due to ways in which they viewed knowledge in history, Oria and Sara also differed in the ways they conceptualized the role of the historian. Oria had a tendency to over privilege the historian allowing him unrestricted licensure to interpret the past. Sara tended to place that privilege on the objects while also hinting that the subjective nature of interpretation (due to lack of facts) held some appeal. Both participants had nominal skillsets associated with how to actively construct histories.

A pre to post course comparison of HTLQ statements from both participants indicated a conceptualization of history, which had shifted toward a more expert way of knowing. Illustrative of the ways in which she perceived the role of facts precourse, Sara approached the HTLQ from a more objectivist stance stating, "history is the events that happened in the past". Post-course she articulated a response which appealed more so toward criterialism as she explained, "History is the interpretation of past events based on evidence". Similarly, Oria began the course stating, "History



is the study of the past". Post-course she responded, "history is the examination, analysis, and interpretation the past". Both participants appeared to shift their understanding of history as a domain to an active and evaluative process of inquiry.

Beliefs about the role of knowledge. A central understanding of expert historians is the role facts play in the construction of interpretations. Prior to the course, Sara had an objectivist view of the facts stating that they "speak for themselves" in response to BHQ item #16 (the facts speak for themselves). She evidenced a helpful shift in response to this item when it was encountered on BHQ2. She explained, "I think there needs to be...there are just the facts, but if you don't interpret them or create some meaning out of them, then they are just the facts. We need to interpret them to have meaning". She goes on to say, "facts are important because they can give us vital information, but we must interpret these facts for them to have meaning". Oria left the course with a similar understanding of the facts stating,

[The facts] really do not [speak for themselves]. Facts should be assessed in the context that they are in. In that way it does not speak for itself. Questions have to be posed for answers to be known. To get answers these facts have to undergo certain tests to validate their authenticity and so forth.

Furthermore, Oria stated that the "facts" are equitable to the "past" explaining, "facts, records and evidence *are* the past that we need to make sense of". While Oria began the course with a conceptualization of "the facts" as meaningless without interpretation, her post-course response to this question embraced a more stable



understanding of their role in interpretation. Criterialism strongly appealed to both participants when considering the role of facts.

Beliefs about the role of the knower. Considerable shifts were also suggested by data pertaining to both participants' understanding of how historians interact with the objects of the past and how they translate those interactions into interpretations. Sara made perhaps the greatest gains when considering her understanding of the role of the historian. Pre course she had a tendency to slip and slide between the historian as passive (discovering the facts and recording) and the historian as subjective (historians put pieces together to fit their intention). Post-course she expressed a more criterialist-aligned response stating,

I think the difference is - I knew historians would take this story and this story and put them together, but I still think that, but it is different perspectives, not just this guy's story about it but also I think that, it is important when creating a history to look at different, opposite perspectives. In the beginning I thought maybe a little, but you are going to find sources that support your perspective. It is important to have a wide range of documents and perspectives and stuff to be able to create a history.

Additionally, Sara seemed to more consistently refer to the role of the knower as interpretive as opposed to unrestricted. She explained, "Historians ... can't make up the past. So history can be more what they make it to be through interpretation with evidence". She sets boundaries for what the historian can do by holding him to certain disciplinary rigors such as the "use of evidence", and the "critical evaluation of conflicting sources". Sara also moved away from using words like "opinion" when



talking about how historians make sense of multiple perspectives and instead talked about the ways in which historians "... sort through what is reliable" and "considers positionality and bias". She stated, "even though there may be conflicting stuff [historians] should be able to sort through and look at bias and reliable". The initially subjective appeal of the role of the historian seems to be tempered now by a more expert way of knowing.

When Oria began the course, her understanding of the role of the knower appealed to subjectivism. She understood that the historian played an active role in the construction of knowledge. However, she did not hold the historian to any sort of disciplinary criteria and thus had a somewhat skeptical view of all historical accounts. Post-course, criterialism began to appeal to Oria who spoke of the work historians do as "interpretive, critical, and disciplined". She expressed that she no longer felt that "anything goes in history". Instead she explained,

History involves analysis, evidence ... I don't think it could just be any one thing. But if you look at something and the context was used, it was written in...and you look at it with a critical eye, the interpretation that you get, and then you have credence, but to say any old thing is historical, then.... No way. Later she went on to explain that historians do not simply create histories based on an

opinion. Instead, they actively construct "using valuable evidence which guides an adequate interpretation of the past". She explained that one "can never know exactly what happened but a reasonable interpretation can be made based on an investigation of the facts".



Beliefs about the role of processes. Data collected from both Oria and Sara suggested that the most significant area of stabilization centered on their beliefs about the ways in which historians engage with historical evidence and ultimately the strategies historians use to create interpretations. Recall that both expressed a strong appeal for criterialist strategies at the start of the course, but neither could articulate what these strategies would entail.

Oria's post-course categorical score within the criterialist category is notable as she scored a +3.0, which indicated strong and consistent agreement aligning with an expert way of understanding how histories are rigorously constructed. Qualitative data substantiated this finding. Pre-course, Oria understood that "historians [studied] the past" but when pushed to elaborate on what that process looked like, she was stifled. Post-course, she appeared to have more strategies for discussing this process. She explained,

History is the product of historical thinking whereby, evidence of the past is analyzed through answering questions about said evidence. It is the examination, analysis, and interpretation of evidence from the past. History is about thinking critically of the past.

She expanded on her understanding of "examination, analysis and interpretation" stating,

History involves analysis, evidence and examination. It's the whole PAIRe thing ... [You have to have] an analytical mind looking at a document. Is it authentic or not? Positionality, assessing it and keeping it reliable in a sense of



can you compare it to another document and does it coincide or are you just using it to justify your claim?

Oria later explained the constituent parts of PAIRe (perspective assessment, author attribution, author identification, reliability assessment and the use of evidence) and was able to articulate how historians use these strategies to create interpretations.

Data collected from Sara indicated similar gains in her transitional stance about historical procedural strategies. Whereas pre-course she was unsure about the meaning of "disciplined method of inquiry", she was able to more clearly talk about how she understands this process during her final interview. She explained,

One must critically analyze the sources or evidence to create a historical account. I think [a disciplined method of inquiry means] going through the process of looking at things and answering and asking questions and being able to use all those to critically think about the past and what happened in history.

She had a more difficult time unpacking "critical thinking" when asked. However, she alluded to strategies such as reliability and perspective assessment. While she consistently explained that the use of evidence and processes associated with "analyzing evidence" were critical to the creation of "good histories", she indicated a limited understanding of the specific strategies used by expert historians.

The "Mystery at Roanoke" performance assessment helps us to better understand both participants' understanding of these procedural strategies. Oria took a clear stance on the question posed and analyzed the given documents using some aspects of the PAIRe strategy. For example, Oria wrote,



Documents one and two propose that the descendants of the Indians were mixed with European descendants: in document one, the language of the Indians has English roots, the Indians possessed European features, and the names of the descendants of the Indians carry the names of the colonists.

Also, in document two, the traditions of the Roanoke colonists are sighted in the Indian culture, the blue-eyed and fair-haired features as well as the amalgamation of Elizabethan words, and the use of last names from the colonists. All these evidence suggests that the colonist assimilated into the culture of the Indians especially after they were met with the realization that they were left to decide their fate.

Sara used a similar process of document corroboration to qualify her interpretation of this event. She wrote,

The people immersed themselves with the Croatoans, as seen by the Croatoans' language, which infuses many European words, and the number of Croatoan children that possessed light hair and blue eyes (documents 8 and 13)... The carving and European features of many Croatoan Indians provide sufficient evidence to support the idea that settlers voluntarily joined the

Croatoans in order to be able to sustain themselves (documents 8 and 13).

Both participants used evidence and attempted to corroborate sources. However both seemed to omit the sources, which conflicted with their stated opinions instead only using the documents that clearly supported their claims. It was unclear whether sources were considered and discounted based on certain criteria or if they were ignored due to the conflicts they presented. Additionally Oria's response indicated



that she might be relying on a "majority rules" decision. She stated in the first two sentences of her interpretation, "Evidence suggests that the English colonist went to live with the Indians and the Croatians who assimilated with the Indians. First off, most of the documents suggest that the colonists were not removed unwillingly." She went on to use information from those referenced documents to back her claim.

Sara's response was more summative in nature, which blurred the line between use of evidence and opinion.

In summary, both Oria and Sara left the course having made some movement toward a more expert way of knowing regarding their beliefs about disciplinary history. While both participants still remain in a state of transition, over the course of the eight class sessions they seemed to sort through some of their inhibiting roadblocks, which stifled them before participating in the course. The most helpful shifts encountered by both participants centered on the role of the historian and the strategies historians use in the construction of histories. Oria would benefit from additional practice constructing historical interpretations to gain a better sense of how to use the procedural strategies she was able to articulate. Sara seemed to still be, in part, stifled by her understanding of what counts as historical knowledge. Her tendency to equate knowledge with a concrete narrative appeared to affect her understanding of procedural strategies. Sara would benefit from continued reflection on her own understanding of what counts as knowledge in history with simultaneous practice with the construction of historical interpretations.

"Limited change in transitional beliefs about history". Katerina and Tameka were clustered together as experiencing limited changes in their transitional



beliefs about history as indicated by consistency score deltas and associated qualitative data. Objectivist beliefs characterized both Katerina and Tameka's understanding regarding the nature of history. Both participants indicated that they felt history was a discoverable truth, which historians then pieced together.

Resultantly, Katerina viewed the role of the historian as one of passive "chronicler" while Tameka wanted to give the historian a somewhat more of an active albeit subjective position. Both participants indicated that they did not know of strategies historians would use to construct histories (perhaps due to the objectivist beliefs they held about the nature of history).

Beliefs about the role of knowledge. Post-course, Katerina and Tameka remained in a state of transition with regards to their beliefs about history. However, analysis of their data suggested that they did experience limited helpful movement toward belief stabilization or internal consistency. Looking first at their understanding of the role of the facts or the nature of history, both participants shifted from an objective to a more criterialist way of understanding regarding knowledge. On the HTLQ1 survey Katerina initially explained, "history is a chronological series of events". Post-course, her response was quite different stating, "history is the critical study and assessment of the past". Her beliefs no longer centered on discovering the true facts. Rather she now believed, "history is about analyzing facts. They cannot possibly speak for themselves ... analysis needs to occur". Similarly, Tameka evidenced a shift in beliefs moving from an understanding of history as facts to history as constructed. Her HTLQ2 statement read, "history is the reasonable reconstruction of the past based on evidence". She explained,



I thought [before this course] that history was the study of the past that historians put together in the history books, but I feel like it is a lot more than that now because history is like viewing the evidence and saying this is the reason we compiled it like this and showing people that history is wider than what we have seen There is a lot more to it, there reasons behind it that aren't really shown to us in history books.

Unlike Katerina, Tameka still appeared to be somewhat stifled by the actual utility of historical facts. She indicated that they could sometimes "speak for themselves".

Tameka's explanation suggested a struggle with this line of thinking. She explained,

I want to say of course the facts speak for themselves because yeah there are facts, but then there are conflicting facts and other things. I was kind of in the middle, because I was like 'this is evidence, this real' but then there are also other things that kind of go against that so I'm not sure.

The difference in understanding between these two participants appeared to be the value placed on facts. Katerina understood them to be interpretative while Tameka still seemed to bounce back and forth between understanding them to be definitive and interpreted.

Beliefs about the role of the knower. Shifting conceptions of what counts as knowledge in history also appeared to foster movement in both participants' beliefs about the role of the historian in the construction of history. Katerina's beliefs shifted to acknowledge the role of the historian as active. This was a sizably helpful shift for Katerina, as she had understood the historian to be a passive "discoverer" of information. Post-course she explained,



True historians use proof and critical thinking [to construct historical accounts]. Taking a bunch of accounts and noticing that different things can be said by different people at different times and therefore creating conclusions on....based on whether or not something is biased and not coming to a vague conclusion of it all, but....like if a certain theme shows up in every single account that would be a theme that would be part of the account you would create from going through all the reading. Historical thinking and good critical thinking are synonymous.

Similarly, Tameka acknowledged the active role of the knower. She stated,

Historians research and they find...and they go through newspapers or diary entries and things that can give them information about the past. That is how they piece together events. Of course we have those hard copy evidences from archives and records from the government, but then they also take those from real people and then they can take sides and piece together sentiments of the moment in which certain things happen. That is how they can really gauge what was happening at that time historically.

While Katerina and Tameka indicated an awareness of the active role of the historian, their data suggested that this active role might be characterized by a subjective, somewhat unrestricted position. Katerina explained,

[I don't see any difference in the words] perspective, interpretation, and opinion. I get more confused about the idea of history because we talked about there are histories I would think histories, since they are from different people; I wouldn't state that as... I would say that is opinions.



Additionally, Katerina suggested that historical accounts are all tainted. She explained, "there is always opinion and bias stacked on top of each other. You have to be wary." Further illustrating her struggle with understanding this role, Katerina replied,

There is this wariness! I feel like I got more wary from this class! There is so much information [to think about regarding historical accounts]. Historical accounts are written by a person. There is always opinion.

Tameka had a similarly difficult time differentiating interpretation from opinion. She explained, "I think there is a difference. I mean there sounds like there should be but I just don't know." Tameka later came to the conclusion that "yeah they [interpretation and opinion] mean the same thing."

Beliefs about the role of processes. Procedural understandings once again appeared to be the source of the most substantial belief shifts when considering this cluster of participants. Neither Katerina nor Tameka was able to articulate strategies used to construct historical interpretation prior to the course. Post-course, Katerina strongly agreed with most statements on the BHQ₂ pertaining to strategies associated with the historical method including the comparison of sources and the analysis of author perspective. She also acknowledged the existence of a "historical method" and a "disciplined method of inquiry". When asked to explain her understanding of the historical method, she replied,

The historical method is looking at text or pictures or whatever else there are and acknowledging there are other perspectives and taking those perspectives that go against what you are thinking and be able to refute them, so not



necessarily ignoring stuff that doesn't support your claim, but using them to refute so if you have something very powerful to refute something it is more likely your historical account will be more accurate.

Indirectly Katerina addressed perspective assessment and corroboration. She specifically pointed to the need to not only consider but also refute conflicting evidence as a strategy for constructing rigorous interpretations.

However, when asked to put these beliefs into practice, Katerina did not use many of the aforementioned strategies and instead created a historical interpretation, which was subjective in nature. Her performance on the "Mystery at Roanoke Island" task did not provide a strong position of stance on the question posed. Instead, Katerina chose to rely on a "majority rules" theory where she cut and pasted accounts, which agreed with one another. She also summarized rather than refuted, conflicting arguments explaining,

There are many different theories as to what happened. The most occurring theory is that the colonists were taken by Croatians or people who named themselves Croatoans (9)—a conclusion drawn from information gathered at later dates (1993) when etymology was better understood. A couple accounts suggested that the colonists joined other Indians on the mainland, however there is some discrepancy as to whether this migration was done willingly or not. There is only one account referring to outsiders (Spaniards) "kidnapping" the colonists.



She ended the task with an inconclusive response stating, "All of these theories *could* be correct, but the reality is most likely one story or possibly a combination of some of them".

Similar to Katerina, Tameka agreed with many of the criterialist items on the BHQ₂ including the comparison of sources and the analysis of author perspective. She also acknowledged the existence of a "historical method" and a "disciplined method of inquiry". Tameka stated,

There is a structure to how you go about gathering information, and there is a way you go about organizing it. It is disciplined; there are very strict rules that are that way in order for you to gather information effectively. [The historical method] is the same thing as with a discipline, the whole discipline method. You have to examine with a fine comb. You have to understand the different perspectives and the different motivations behind something. You have to understand the history as a whole.

She went on to center her discussion of strategies on the assessment of perspective.

Tameka explained,

I was thinking like we have primary sources and they are talking about one thing, but they are saying different things about that one thing. It is all about the perspective. Like who is writing this and why would this person say this thing? They have different motivations for why they say certain things. That is what I was thinking.

However, Tameka's understanding of how historians interact with the past seemed to stymie her understanding of how to use these procedural strategies to create an



interpretation. She explained her understanding of the process as a, "piec[ing] together events" and tak[ing] sides and piec[ing] together sentiments", both of which indicate a cut and paste methodology as opposed to a rigorous methodology. She used this strategy to work through the "Mystery at Roanoke Island" performance assessment choosing to select snippets from a couple of documents, which she summarized, to support her theory. There was no mention or citation of evidence and no acknowledgment of the conflicting sources.

In summary, both Katerina and Tameka left the course having made limited movement toward a more expert way of knowing regarding their beliefs about disciplinary history. While both participants still remain in a state of transition, they seemed to have begun to think deeply about their own beliefs, which suggest some helpful shifts toward a more expert way of knowing. Similar to the last cluster of participants, the most helpful shifts encountered by both participants centered on the role of the historian and the strategies historians use in the construction of histories. Katerina seemed to be grounded in the belief that facts are interpretive and thus require an active historian to interpret their meaning. She continued to struggle with how much interpretive freedom historians have when constructing histories, which at times translated into a level of relativism. Katerina would benefit from more time thinking deeply about the ways in which she understands historical knowledge and the role of the knower. Likewise she would benefit from additional practice working with conflicting sources and constructing historical narratives. Tameka would benefit from additional time considering her beliefs about what counts as knowledge as she still continues to bounce between facts as definitive and interpretive. Additionally,



she would benefit from additional practice constructing historical accounts, which would also allow her to think deeply about the role of the historian.

"Almost no change in transitional beliefs about history". Eric, Brittany,
Tom and Ben were clustered together as experiencing almost no change in their
transitional beliefs about history as indicated by their consistency score deltas and
triangulated qualitative data. Prior to the course, Eric, Brittany and Tom held
objectivist beliefs about knowledge in history relying on facts as fixed and noninterpretive. Ben began the course with more of a tendency to understand facts as
interpretable. Brittany and Tom began the course understanding the role of the
historian as passive chronicler of discovered information while Eric and Ben held
more subjectivist beliefs viewing the historian as active yet unrestricted. All four
participants acknowledged, at the start of the course, that historians likely had a
skillset associated with writing history. Eric and Ben had some strategies for the ways
in which historians approach the construction of history while Brittany and Tom
could not articulate specific skills outside of "critically thinking".

Beliefs about the role of knowledge. Post-course, Eric, Brittany, and Tom all seemed to have held on to their objectivist understanding of facts. Data collected from Eric indicated an appeal to move away from objectivism, but his responses suggested that he continued to rely on facts as playing a concrete role within historical accounts. He chose to disagree that "the facts speak for themselves" suggesting that they might have an interpretive nature. However, later in the interview he explained,

[Historians] can rely on documents [for knowledge]. I mean I don't think you can be 100% positive but you can get pretty close. There are ways to get to



like 99% certainty and once you do that a historian will establish that history without skewing it.

His reliance on reaching "certainty" suggested that an appeal for objectivism may still remain at the foundation of Eric's beliefs about historical knowledge.

Brittany's data also provided evidence of some helpful shifting although contradictory statements indicated that these shifts remained largely unstable. In response to the HTLQ₂, Brittany responded, "History is the accumulation of past events that have been interpreted to give them meaning". When asked to elaborate on this statement she explained,

I originally thought of history as [everything that] already happened and that's the end of it and now I understand that it is more than that and you have to....history isn't just everything - it is an interpretation of what happened. And what did I say? The accumulation of facts that are interpreted? Yeah, so it isn't just what happened in the past, I guess that would be the facts, but it would also be how people interpret it, because you can read about history and it can be completely different from what someone else thinks that happened, whereas the past is the set.

Here Brittany seemed to indicate some helpful movement toward a more criterialist way of knowing in that she viewed facts as interpretive rather than static. However, later in the same interview, she explained,

You can't really interpret the fact ... Yeah. I feel like facts speak for themselves because you can tell someone a fact and there is no further you can go with that one fact ... But a combination of facts and adding perspective to



it like why am I in this room? ... No, I don't think [the facts speak for themselves]. They can get closer and closer together, but you have to fill the gaps and come up with reasons why the facts are what they are.

This response is illustrative of the struggle Brittany continues to face as she works through her own understanding of what counts as knowledge in history. She does not want the facts to be static, but she lacks the necessary skills to understand how to interpret them. Thus, continuing dissonance creates an unstable environment with regards to their role in history.

Tom's post-course data indicated a limited pattern of movement similar to Brittany when considering the role of facts in history. He appeared to equate "primary sources" with facts explaining, "[historians should use] primary sources because they remove all doubt". The latter part of his comment indicated that Tom understood these facts, or primary source documents to be absolutist in nature. However, later in the interview, he stated, "

[Facts speak for themselves]. Yeah because there are facts, but if a historian writes a book and you take everything as a fact, those can be false facts or biased facts, they may be tainted.

Quite similarly to Brittany, Tom's struggle to understand the role of facts in constructed histories was present within this comment. The phrases "false facts" or "biased facts" suggested Tom's awareness that historians have some role in interacting/interpreting data from the past. However, it would appear that he equated this interaction as negative thus discounting the quality of those facts.



While Ben was willing to rely on the interpretability of facts when he began the course, post-course data suggested that Ben had an increased tendency to slip into a more objectivist understanding of facts. He explained, "[I] kind of like the idea there are certain facts that are (true) cause you see them in lots of places".

Furthermore he stated, "to a degree the facts can tell you about the past themselves". In the same interview comment, he went on to contradict himself stating, "actually interpretation of the facts is important". Shortly thereafter he uttered, "History can be justified though because the facts are indisputable ... you can get close to the truth". At this juncture, Ben seemed unsure about the role of facts and ultimately what defines the parameters of knowledge in history.

Beliefs about the role of the historian. Participants within this cluster seemed to struggle the most with their beliefs about the role of the historian and how the historian interacts with the past. A level of skepticism characterized Tom's understanding of this role. He often equated the role of the historian in the creation of interpretations as "tainted" or "skewed". Bias seemed to be of highest concern. Tom cautioned, "historians are somewhat biased and can change stuff". He attempted to rationalize this bias with a somewhat subjectivist theory stating,

People are going to have different opinions and you are going to reach a conclusion almost. But different people are...have their own opinions, so they aren't going to be completely reached, but you can find somewhat in the middle, like mesh your two ideas and maybe come up with something else.

His understanding of how historians should rationalize their own biases suggested a lack of rigor relying more on the subjectivity of the historian to write whatever they



choose. Additionally, Tom often interchanged the words "interpretation" and "opinion" throughout written and verbal responses further supporting his subjective beliefs that historical accounts are fundamentally the opinions of the historians.

Brittany's post-course data surrounding the role of the historian suggested some helpful movement toward a more expert way of knowing, but brief explanations made it difficult to evaluate her beliefs. Brittany responded to the HTLQ2 stating, "Historians think critically about the past and come up with interpretations". Throughout her final interview she often stated, "Interpretation is key" and that historians, "read, interpret and develop perspective". However she was unable to provide an explanation of how they went about enacting these skills. Additionally, Brittany agreed on the BHQ2 that "the past is what the historian makes it to be" suggesting an appeal to subjectivism.

Ben also struggled with his own understanding of the role of the historian. Prior to the course he had understood the historian to be an active interpreter of the past. He disagreed that "the past [was] what the historian makes it to be". Post-course, he agreed with this BHQ item explaining that "they do so through their societal lens" which he later explained to be their opinion. Ben's data surfaced a fluidity with regards to his beliefs about the role of the historian which had him flip flopping between the historian as passive and the historian as active (yet unrestricted). He tried to rationalize this aloud stating, "a historian cannot change what happened and what information is available about that event ... but they can come up with an educated guess as to what happened". Ben seemed to be stymied by his own transitional



understanding of knowledge and relationally how the historian interacts with that knowledge.

Eric's post-course data indicated a helpful shift away from the subjectivism he used to characterize the role of the historian at the start of the course toward a more expert way of knowing setting himself apart from the other two participants within this cluster. When asked how historians interact with the past to create histories he explained,

[Because there is no way to get to 100%] historians have to make interpretations and those interpretations are based on something. They aren't just opinions because opinions could be anything.

Additionally, Eric's response to the $HTLQ_2$ read, "Histories are the accounts created by historians based on a disciplined method of inquiry". He also stated within his final interview, "historians cannot base the past on whatever they think". Eric post-course data suggested that he had a stable belief in the historian as an active constructor of knowledge.

Beliefs about the role of processes. Perhaps resultant from his shifted understanding of the role of the historian, Eric's post-course data also suggested an increased awareness of procedural strategies used by historians in the construction of knowledge. When asked what was meant by a disciplined method of inquiry, Eric responded,

To me it means a very specific way to do the reading and the critical thinking behind it. You look at primary stuff and figure out how they connect and what the motivations were behind each thing and doing it that way. If you are



looking at something that someone wrote, you have to think about what were they thinking while they were writing it and what were they trying to get across if it is a public document? What made them do that? What was the context of the time? How do you think they were affected by that?

This snippet suggested that Eric was aware that perspective assessment, attribution, and identification were all important during the process of historical construction. An ancillary understanding of these concepts further indicated a shifting of beliefs toward a more criterialist way of knowing.

Eric's "Mystery at Roanoke Island" performance assessment also illustrated his appeal for a criterialist approach to constructing history. He made a variety of claims supported by cited evidence and attempted to corroborate documents in a number of instances. However, Eric did not address documents, which were in opposition to his stated theory. Thus, the presence of conflicting documents suggested a continued roadblock for Eric.

Brittany and Eric also indicated that they had gained an awareness of procedural strategies used by historians. However, in both cases this new knowledge seemed to have resulted in a belief shift appealing to subjectivism as opposed to criterialism. Prior to the course, Brittany actually chose not to answer the BHQ item stating "history as a disciplined method of inquiry" replying in our initial interview that she was not sure of the meaning of the statement. On the BHQ₂, she did respond but with a degree of uncertainty. She agreed that history is associated with a disciplined method yet qualified her selection with "I'm not entirely sure what this



means but it sounds right". When asked if history involved critical inquiry, she replied more confidently,

Yes. You have to inquire and think critically about what has happened in the past and.....the past is everything that has happened and it is the bare bones, like a timeline. And then thinking about history is when you take the past and think about it critically and interpret it. The interpretation comes into play when people are thinking about the evidence they are using.

This suggested that Brittany's beliefs had helpfully shifted beyond an understanding of history sought out and reported by historians. However, when asked about the strategies historians used to "think about and interpret evidence" she replied, "[they just] use primary documents, which makes it easier to piece history together". She used a similar "cut and paste" methodology to complete the performance assessment tasks during the course.

Tom's procedural understandings shifted in a way quite similarly to Brittany's. He explained the meaning of "disciplined method of inquiry" by reasoning,

It is like a system I think. You read what you were given and then you question what you just read or while you were reading, like a date or author, those things that you pick up. And then you interpret what you just read and then you make opinions off of that and maybe some other readings.

Tom seemed to reference a number of strategies including the consideration of author perspective and intent as well as the general use of evidence. He also made mention of these strategies throughout his final interview. Tom alluded to the use of evidence,



perspective, and the consideration of bias throughout his final interview. He agreed with many criterialist statements regarding procedural strategies on the BHQ. However, he was not able to discuss how they might be used independently or in concert with one another.

Tom's performance on the "Mystery at Roanoke Island" performance assessment also did not indicate a stable understanding of procedural strategies or a method of rigor in the construction of historical accounts. He relied on one document around which he argued his position on the question. When asked how he came to his conclusion he responded,

I don't want to say that [I did what] we learned about that in class, like the whole PAIRe kind of thing. I don't know how I did it, I basically said all those [documents] were good choices, but since we weren't there we have to make our own opinion up based of those sources. I mean, I always made an opinion, they could have migrated....I mean it would make sense. I don't see why the Indians would carve their name into a tree.

Tom appeared to use an unproductive, relativist approach to the construction of his narrative based on the fact that he was not present at the incident and consequently could not definitively know what happened, which aligned with his response to BHQ item #14 (it is impossible for us to know anything for sure since no one of us was there). Thus, his opinion was given to satisfy the assignment.

Ben's transitional understanding of procedural strategies remained largely unchanged from pre to post course. He entered the course understanding that there was a level of rigor associated with doing history namely associated with the



assessment of multiple perspectives and the use of evidentiary support. He acknowledged the existence of a historical method and the importance of a disciplined method of inquiry, although he was unable to elaborate on specific strategies. Post-course, Ben seemed to remain in a similar state of transition without much evidence of belief shifting. When asked to explain his understanding of the historical method he briefly responded, "I guess just looking at the sources". When prompted for more explanation he continued,

Critique and analyze. Look for similarities within a wide variety of sources and using those consistent similarities, look at the sources in due diligence, like where they're coming from, look at who's writing it, what their beliefs are. Draw from the sources and where there are biases and where there are clear truths. You can take with a degree of certainty that that's fact.

Similar to his pre-course response to this question, Ben chose to focus on perspective assessment, author attribution and the use of evidence as key strategies used in the process of historical construction. However, he remained unable to discuss how these tools were used to create historical interpretations. Additionally, he chose not to use these strategies when asked to construct his own historical interpretation of the "Mystery at Roanoke Island" and instead relied on a cut and paste strategy. His response to this task read,

Based upon the evidence I believe that the people of the Roanoke colony were left in a situation where they could no longer support themselves. They were forced to seek asylum with the Native Americans and integrate into their society. That explains why later Europeans recognized certain physical



features as distinctly European as well as English influences upon the language.

To create this interpretation, Ben appeared to have borrowed statements from the primary sources, which supported his theory and banded them together to form an account. Refutation of conflicting information was noticeably absent from Ben's account as was a rigorous method for analyzing the documents used to support his argument.

In summary, Eric, Brittany, Tom and Ben leave the course having made almost no shifts in their transitional beliefs about disciplinary history. However, the experience seemed to provide a space for them to deeply consider their beliefs.

Although Ben's consistency score delta indicated negative movement, his data suggested that his initial beliefs were unstable. Thus, the introduction of new ways of knowing not previously considered may have created an environment of cognitive dissonance which Ben did not have the time or strategies to remedy. Thus, he leaves the course with beliefs that are slightly less stable than when he began perhaps as a consequence of considering new ways of knowing.

Eric, Brittany, Tom, and Ben all continued to struggle with understanding the role of facts in history as objectivism still holds a strong appeal. Eric and Ben both seemed to be grounded in the understanding that the historian does play an active, somewhat rigorous role in the construction of knowledge. Brittany and Tom continued to struggle with the subjectivity associated with author bias in the construction of interpretations. All four participants seemed to acquire new knowledge about specific procedural strategies. However their use of these strategies



was not seen when attempting the performance assessments. Eric, Brittany, Tom, and Ben would all benefit from more time spent thinking about their own beliefs about history while simultaneously being engaged with new ways of knowing and challenged to create rigorous historical accounts.

In summary, results of this analysis suggested that the course provided a space for all of the participants to think deeply about their beliefs pertaining to history; specifically what can be known in history, the role of the knower (historian) in history, and the procedural strategies associated with the construction of histories. All participants entered the course at varying levels of transition when considering the ways in which they understood history and the past. While all participants seemed to have made some degree of shifts (either toward or away from a more expert way of knowing) with regards to the three subcategories, it seemed as though the most sizable shifts were made when considering the role of the historian. At the close of the course, most of the participants viewed the role of knower as active. However, many also gave this active role unrestricted power to create histories without the consideration of rigor. Shifts were also made when considering procedural strategies; although the application of those strategies was somewhat unpredictable. This is perhaps the result of an unclear view of what counts as knowledge in history, which remained the largest roadblock for many participants. Table 5.2 briefly describes the pre to post beliefs of each participant relating to their understanding of knowledge, the role of the knower, and procedural strategies in history.



Table 5.2

A Summary of Participant Beliefs About History from Pre to Post Course

		Pre-Course Overview of History Beliefs				Post-Course Overview of History Beliefs		
		Knowledge	Role of the Knower	Procedural Strategies		Knowledge	Role of the Knower	Procedural Strategies
Some Change in Transition	Oria	Facts are interpretive and used in the construction of historical accounts	Over- privileges the knower; Knower is unrestricte d	Nominal understanding of procedural skills	•	Facts are interpretive	Knower is active based on a rigorous method	Understanding of the PAIRe strategy
	Sara	Facts are concrete and definitive	Slips and slides between knower as passive and knower as active	Nominal understanding of procedural skills		Facts are interpretive	Knower is active based on a rigorous method	Rigorous method; consider evidence, reliability, and corroboration;
Limited Change in Transition	Katerina	Facts are concrete and definitive	Knower is a passive chronicler	Lacks procedural knowledge relational to the construction of an authentic history		Facts are interpretive	Knower is active but confounde d by bias	Ancillary awareness of sophisticated heuristics such as perspective and corroboration; Naïve strategies for dealing with conflicting evidence
	Tameka	Facts are concrete and definitive	Over- privileges the knower; Knower is unrestricte d	Nominal understanding of procedural skills; does not understand how to construct accounts;		Slips ad slides between facts as definitive and facts as interpretive	Slips and slides between knower as active and rigorous and knower as active and "unrestrict ed"	Historians must rely on a process; consider perspective and evidence; limited discussion about how to use strategies; confused by conflicting evidence



Table 5.2 (continued)

Almost No Change in Transition	Brittany	Facts are concrete and definitive	Knower is a passive chronicler	Bases understanding on "critical thinking"; Does not know how to create a constructed account	Slips ad slides between facts as definitive and facts as interpretive	Knower is active but unrestricte d	Historians must rely on critical thinking and inquiry; consider perspective; no discussion about how to use strategies; confused by conflicting accounts
	Eric	Facts are concrete and definitive	Over- privileges the knower; Knower is unrestricte d	Nominal understanding of procedural skills	Slips ad slides between facts as definitive and facts as interpretive	Knower is active	Historians must rely on critical thinking and; specifically references identification, attribution, perspective; how to rationalize; has naïve strategies for dealing with conflicting evidence
	Tom	Facts are concrete and definitive	Knower is a passive chronicler	Bases understanding on "critical thinking"; Does not know how to create a constructed account	Slips ad slides between facts as definitive and facts as interpretive	Knower is active but unrestricte d	Ancillary awareness of evidence, bias, perspective; not clear to how they should be used; not sure how to deal with conflicting accounts
	Ben	Slips and slides between knowledge based on the strategic construction of evidence and knowledge as a product of opinion	Slips and slides between active/ based on criteria and active/unre stricted	Ancillary awareness of sophisticated heuristics such as perspective and evidence	Slips and slides between knowledge as discovered and knowledge as interpreted	Slips and slides between knower finding the correct account and knower as unrestricte d	Ancillary awareness of sophisticated heuristics such as perspective and evidence but no discussion about what they mean or how they should be used

Beliefs about the History Teaching and Learning

Participant clusters on this subscale were based on BHQ-htl consistency score deltas and triangulated qualitative data sources. Clusters were further analyzed according to two sub-categories. First, participant beliefs about the strategies and/or



skills students need to do history in the disciplinary sense were assessed. Next, the analysis looked at participant beliefs about pedagogical strategies used in the history classroom and the messages those strategies communicated about the ways in which they understood the nature of history. A synthetic analysis of these constructs helps us to understand the varying magnitude of struggles participants faced as they worked toward finding a sense of equilibrium with regards to their beliefs about history teaching and learning.

BHQ-htl consistency score snapshot. The BHQ-htl pre to post course analysis began with the statements on the history teaching and learning sub-scale. These items dealt with beliefs associated with teaching and learning in the domain of history. There were nine items within this sub-scale: two items which appeal to objectivism, three which appeal to subjectivism, and four which appeal to criterialism or a more expert way of knowing when considering teaching and learning in history.

Overall on BHQ-htl items, five of the eight participants (63%) increased their consistency scores thus theoretically stabilizing their internal consistency about history teaching and learning. Brittany and Oria's consistency scores did not change from pre to post course while Ben's decreased. See Table 5.3 for a layout of consistency score deltas.



Table 5.3

Pre to Post Course Consistency Score Deltas

Participant	BHQ-HTL 1	BHQ-HTL 2	Delta
	Score	Score	
Katerina	44%	67%	+23
Sara	67%	89%	+22
Tameka	56%	78%	+22
Tom	56%	67%	+11
Eric	67%	78%	+11
Brittany	56%	56%	0
Oria	56%	56%	0
Ben	78%	56%	-22

Of the five participants who shifted their consistency scores, Katerina's indicated the most helpful movement at +23 percentage points followed closely by Tameka and Sara who shifted +22 percentage points. Thus, Katerina, Tameka, and Sara are clustered together as experiencing "some change" in their transitional beliefs. Tom and Eric's consistency scores both indicated a more nominal level of movement at +11 and were resultantly clustered together as experiencing "limited change" in their transitional stance. With an unchanged consistency score of 56% and a negative delta of -22, Brittany and Ben were categorized as experiencing "almost no change/reverse progress" in their transitional beliefs. Oria was purposefully left out of the clustering process as her data indicated a number of anomalies, which suggested her consistency scores, and her actual beliefs did not align. She will be presented as a separate case following the cluster analyses.

"Some Change in Transition about History Teaching and Learning."

Katerina, Tameka and Sara were clustered together as experiencing some changes in their transitional beliefs about teaching and learning in history as indicated by higher



consistency score deltas and associated qualitative data. Prior to the course, Katerina and Sara relied heavily on their K-12 experiences with history when thinking about how to teach within the discipline resulting in an appeal to objectivism. Tameka referenced some procedural understandings indicating that she would like students to have a somewhat active role. These findings correlated with participants' beliefs about the role of the historian pre-course.

Post-course, data collected from Katerina, Tameka, and Sara indicated that they all had an awareness of skillsets students would need in order to do history and they were able to discuss strategies for how students might use these skills. Katerina's responses focused on students' understanding and use of the "historical method" as a disciplined method of inquiry. She explained,

I would try to introduce the idea of historical thinking on something they are knowledgeable on. I guess what I have been saying along the lines of looking at text or pictures or whatever else there are and acknowledging there are other perspectives and taking those perspectives that go against what you are thinking and be able to refute them, so not necessarily ignoring stuff that doesn't support your claim, but using them to refute so if you have something very powerful to refute something it is more likely your historical account will be more accurate.

Furthermore, Katerina suggested that she wanted students to look at evidence critically and would have them assess it in certain ways. She explained,

[Giving students evidence which conflicts with their own conceptions] is supposed to force the children to look for evidence and not necessarily omit



the stuff that supports their actually views, and to take that into consideration, but be forced to refute it. Evidence, like he ate carrots or something like that and we were already given the claim we were supposed to support, so we were given time to look for stuff.I want them to critically analyze a text, which is what historians do because it can be a pro-Israeli person reading something about Palestine and they have to separate their thoughts from it and read it critically and try and prove something.

References to "perspective assessment" and a description of processes similar to corroboration, assessment of reliability, and use of supporting evidence suggested a shift toward a more criterialist outlook on students' approach to the study of history.

Similarly, Sara focused on students' need to understand the methodology behind historical thinking. She began,

I never really thought about students being mini-historians. In the beginning, I just thought that that's someone's job. Students can't do that. Obviously students can't do it to the extent [historians] do but in teaching it is important to have some replications about what historians do with students. I think that is important.

When asked to discuss what kinds of tools students would need to do this work, Sara explained,

It is important for students to know that history is very relative and different people have different perspectives of what happened and I think in schools a lot, it is so test driven. You have to learn it this way that the book says and that is it ... they have to see different perspectives. They will all have different



perspectives of it, so I think that doing historian work, it will better opens them up to different views and things aren't exactly one way.

In addition to understanding the role of perspective, Sara also explained that students should learn how to use evidence (specifically how to deal with the conflicting sources), which she explained would surface from varying perspectives. She stated, "Students who do not know what to do with conflicting sources will just give up or go with the easy historical account".

Tameka also focused her discussion of necessary student skills around the historical method, which she said was "fundamental for students to know and understand". When asked to explain what about the historical method students should know she explained,

I think it would be good for them to understand how to read historical documents and how to engage in the documents, how to decipher between useful evidence. You have to examine with a fine comb. You have to understand the different perspectives and the different motivations behind something. You have to understand the history as a whole.

Tameka described evidence as "primary source documents or artifacts" which should be used to help students understand how to "compare sources and understand author perspective". To help students better understand how to use these skills, Tameka wanted to allow them to become more interactive. She suggested,

I think students, I think what is missing is there is no interaction, like 'let's look at this, or let's look at this'. They aren't really given that chance to come



to those conclusions, given both sides of the story, they are kind of just spoon fed straight forward.

Tameka expressed that she would like to give her students multiple perspectives to look at as a way of helping them understand the varying ways authors approach documents so that they can in turn do the same.

All three participants made some helpful shifts in their beliefs about how to pedagogically approach history in the school classroom although there was a greater degree of variance regarding the level of shifts made within this category of assessment. Katerina and Sara both responded to the HTLQ₂ with comments suggestive of shifts appealing to a more criterialist way of knowing. Katerina wrote, "I would encourage [students] to be critical and always remind them to have evidence. Students need to be taught the historical method". Similarly, Sara wrote, "We would go through the historical thinking process and students would come up with their own interpretations of what happened in the past". While Katerina and Sara's responses held a criterialist appeal, Tameka's written HTLQ₂ statement which read, "I would show students conflicting points of view to help them retain information" seemed to favor an objectivist positionality. An analysis of performance assessments including the final lesson plan assignment, the rubric assignment, and the Hlab sequencing task help us to better understand the ways in which these three participants were thinking about teaching and learning in history.

Post-course Sara reflected on her belief shifts with regards to what she would do as a teacher. She explained,



I think [I am thinking differently in] part because I have more of an awareness of historical thinking now. I now think you could use simulations, but in whatever activity you do, you have to embed historical thinking into it and not just have the activity. Like if you are having them do a simulation of an event, it is important to not just have them act it out and say that's that, but to have them critically think about it in context within history of the event and stuff. So I think maybe now I maybe think more in any activity you have to put historical thinking into it and not just have the activity. I think that is the big shift.

Sara illustrated this helpful shifting of beliefs through her final lesson plan. The central goal was as follows:

Students will use their critical thinking and investigative skills to explore what child labor looked like in the early 20th century. Students will create interpretations of why child labor occurred and what the movements against child labor were fighting for.

She provided a structure for the ways in which she wanted her students to investigate a variety of documents, which she stated were purposefully selected for their varying perspectives. She explained,

I definitely wanted to do a variety of different types [of documents]. I tried to find ones that were the other side, which is a lot harder because it is a topic that is one sided, so it was difficult to find a document that is the other side.

But I want them to read the documents, to help them, again sort through what, not tell them what sentence is important, but ask them 'do you think this



answer is important in answering this question or is it irrelevant? I want to help them get through the actual reading, so they cannot be stuck on that and move onto the more historical thinking part and move on to answering the questions. I am not going to spend all my time defining words or interpreting sentences, because even just a little of that would be helpful, the reading of documents can be difficult. Then I would give them a document analysis tool. I think having them write it out then their thoughts will be, come up with their thoughts better, instead of reading all this stuff and then having to come up with it. It was a lot of documents, so just being able to refer back and seeing what the purpose of each one was. I think that for most kids, being able to see it in a chart and go back to it.

The document analysis tools that she referred to are from the Library of Congress. They incorporate the PAIRe strategy discussed during the course. Sara's rubric assignment also was suggestive of a focus on historical thinking strategies as she assessed for the critical analysis of evidence.

Katerina's final performance assessments indicated that she struggled to put her beliefs about history teaching and learning, which suggested an appeal toward criterialism, into practice. The goal of Katerina's final lesson plan did indicate a shift when compared to her initial submission. Instead of "simulating events", she asked that her students "construct a claim based on evidence" to support their thinking about the topic of her lesson. However, when asked to unpack her understanding of "construct", a number of subjectivist and objectivist beliefs surfaced. Katerina explained that she wanted students to "find examples from the documents to support



what they thought". Additionally she indicated that students should have "the motive to find examples that will back up their conclusions or their theories". This a priori approach suggested that students should look at evidence with a theory in mind so that they can sort for the documents, which support their position. Thus, Katerina seemed to over-privilege the student just as she over-privileged the historian. Katerina's performance on the sequencing task assignment reinforced her desire for students to work within the space of historical investigation as she selected many items pertaining to student procedural work. However, she also selected items "I" (provide students with the correct answers to solidify historical facts) and "P" (discuss interpretations to solidify historical facts) both of which ultimately give students the answers as opposed to allowing them to authentically construct accounts. This comes in contrast to her belief about the role of facts in history, which indicated an understanding of facts as interpretive. A deviation from this belief suggested that while Katerina understood the interpretive nature of facts (when used by historians), she still wanted her students to come away with what she (or someone) believed to be the truth. The rubric assignment she submitted was based on technical (clarity, organization, mechanics, organization, accuracy) criteria only without any reference to historical thinking strategies.

Tameka's final lesson suggested that she encountered a significant cognitive roadblock when considering how to put her beliefs about history teaching and learning into practice. Her plan was designed around a teacher-centered classroom and a passive student body. Tameka almost apologetically described the goal of her lesson as "to retain information although I really hate that!" To do this she wanted her



students to read a couple of primary source documents and discuss them. She explained,

What I would ideally hope for is that we would be in a circle and I would have a student volunteer read and then we would say, "what did you get from that letter? What do you think George Washington is saying? Why do you think he was so radical? What do you think he added to his cause?' And then his description, and when we read the description, "why do think he described him this way? What do you think his appearance is trying to convey in displaying himself in this way?" And how does appearance impact his importance and what does he try to do by presenting himself in that way?

She did indicate a nominal level of document analysis. Additionally, Tameka's rubric submission suggested that criterialism continues to hold an appeal as she used many of her categories to assess students on their historical thinking skills namely, "the use of PAIRe effectively applying every aspect to information gathered".

In summary, the data collected from the three participants in this cluster suggested the most helpful shifts about history teaching and learning when compared to the cohort as a whole. Specifically, they experienced movement toward a more criterialist way of knowing regarding their beliefs about what strategies students need to do history well, and the pedagogical strategies they should use as teachers to help educate their students about disciplinary history. Katerina, Sara, and Tameka all experienced helpful shifts in the ways they think about history teaching and learning. However, with the exception of Sara, they struggled to put those beliefs into practice as measured by their performance on pedagogy-related activities. The movements



made on this subscale suggested a correlation to those shifts seen on the post-course history subscale. Sara showed stability in her understanding of facts as interpretive, the role of the knower as active and rigorous, and the strategies historians use to create interpretations. Likewise, Sara showed stability in her understanding of the strategies students need to do history and the pedagogical moves she would need to make as an educator. Katerina continued to struggle post-course with the role of the historian in the construction of interpretations often awarding them unrestricted power to create their own opinions. She awarded students a similar role as constructors of opinions in the classroom. Tameka's beliefs on the history subscale were unstable when considering the role of facts and the historian as she flip-flopped often between ways of knowing. Her data on the history teaching and learning subscale suggested a similar level of instability as she struggled with her beliefs about how students should be taught to actively construct historical interpretations. Additionally, she struggled with how to put those skills she could articulate into practice.

"Limited Changes in Beliefs about History Teaching and Learning". Eric and Tom were clustered together as experiencing limited changes in their transitional beliefs about teaching and learning in history as indicated by their consistency score deltas and associated qualitative data. Prior to the course, both of these history majors entered the course with a basic understanding of how to analyze evidence in order to create an interpretation. However, both were reliant on the attainability of a true history. These unproductive, objective beliefs also characterized their pre-course understanding of teaching and learning in history. Both participants referenced their



past experiences (lecture and PowerPoint) with history as a guide for understanding what pedagogical moves to make. Neither could coherently articulate strategies or skills students would need to learn in order to do history well. The limited shifts encountered by both participants occurred when considering the skills students need in order to do history well and less so if at all when thinking about how to pedagogically approach an history class.

According to Eric's final interview data, the course seemed to help him stabilize his beliefs about how students should approach the study of history. He explained,

Based on what I learned in this class, teaching kids to actually do history by looking at primary sources is extremely important, and I would go about this in as fun a way as possible. I would try to incorporate this "detective" game into the source analysis to make it more engaging for the kids.

This data suggested that he made a helpful shift from his initial objectivist stance of wanting to give students a narrative to remember, to a more active and criterialist way of knowing. He later stated, "I think, like the word fact. I don't like the notion of that being history. I don't believe that when you are teaching kids historical thinking; I don't think you should focus on what are facts. You should focus on how they get to the end interpretation." When asked to discuss some of the specific procedural strategies student might need to learn in order to do this Eric responded,

The way you laid it out, I never thought of it that way, but as you did out each step, I kind of realized that I am doing that and I never really thought of it in that categorized way. I guess that helps because now in the future I will think



about [teaching my students] it that way, like who do you attribute this to, and stuff like that.

He lamented that students and teachers alike have a lot more work to do than he had previously imagined. Eric explained,

It is a lot more difficult than reading and understanding what is in the documents. There is a lot of other stuff that you have to be able to worry about, like where it is from and things like that and if you aren't thinking about that then you forget it. If you are looking at something that someone wrote, you have to think about what were they thinking while they were writing it and what were they trying to get across if it is a public document? What made them do that? What was the context of the time? How do you think they were affected by that?

Admittedly this overwhelmed Eric and at the end of the final interview he expressed that he was daunted by the task of teaching.

While Tom also made shifts with regards to his knowledge of necessary student skillsets, they were more discrete when compared with the movements made by Eric. Post-course, Tom continued to have an objectivist understanding of facts suggesting that "students need to know the facts are the facts", while simultaneously holding subjectivist beliefs about the role of students corresponding to the struggles he had understanding the positionality of the historian. A roadblock, which suggested a source of cognitive disequilibrium, came when Tom considered the conjectural "freedom" students had when creating interpretations. He afforded them an unrestricted position placing the focus on opinion over interpretation explaining that



students need to "make opinions based off of what they are reading". Tom did attempt to explain the "historical method" which he felt students should use to create these "opinions". He stated,

It is like a system I think. You read what you were given and then you question what you just read or while you were reading, like a date or author, those things that you pick up. And then you interpret what you just read and then you make opinions off of that and maybe some other readings.

Similarly subjectivist beliefs characterized the ways in which Tom continued to view the role students play in the construction of knowledge. He often referred to their products as opinions suggesting that teachers should "always encourage [students] to have an opinion ... as long as it has to do with the topic". Tom suggested that those opinions were based on student investigation and selection of evidence, which fits their position.

The objective appeal of facts and subjective appeal of the historian both surfaced through the pedagogical activities Tom submitted at the close of the course. Additionally, these exercises provided evidence of the limited shifts he made during the course. The primary goal of his final lesson plan was for students to "understand the Alamo and its significance to Americans". He explained, [I don't want students to just spit out the facts] but they also need to know why this was important, so ask the kids why this was important, what was the significance of the battle". Unlike his first lesson plan, Tom did attempt to integrate strategies discussed during the course into his final lesson plan. Instead of simply lecturing and showing a PowerPoint (as he did



with his initial lesson plan), he chose to incorporate primary source documents. He explained,

The diaries would be my main guns, because I was looking them up and, and there are diaries written from the commander Crocket and the other guy.

Basically it would give a firsthand account of what they were seeing everyday kind of thing and the letters between the commanders asking more, behind the scenes almost. With the diaries, I would use them for like giving a perspective of what people were looking at the time, because that is the only thing you have right now is the diaries or letters or anything. Kind of giving a sense of how they felt so the students can see how it was it their shoes. Kind of want to make it, basically have the students have a sense of what was happening in that period the whole battle and what not.

While Tom does put the documents in the hands of the students, it is unclear what the students would be doing with them. When asked about this, Tom responded, "Students would just read them and come up with an opinion". This was the designated assessment with Tom's lesson.

The rubric he designed consisted of three categories assessing for "grammar and punctuation", which were technical in nature. Then he created categories for "identification of facts" and "summary of documents", both of which treat the primary sources as the objective source for information. Similarly, on the Hlab Sequencing Task, he elected to "offer students the correct interpretation to avoid confusion" and "provide students with the correct information from the textbook"



when presented with the opportunities. He did not choose either of the assessment statements.

While Tom's beliefs about the role of facts and the role of students as assessed though his BHQ₂ and qualitative data sources remained consistent throughout the course exercises, Eric's beliefs did not suggest the same consistency. Eric, whose beliefs about history teaching and learning appealed toward criterialism at the close of the course, had a more difficult time translating these beliefs into practice. The goal of his final lesson plan did not deviate much from the goal of his initial lesson plan (both asked that students learn information about a topic). The pedagogical strategies employed did indicate some helpful shifts in ways of knowing. He started out with a PowerPoint, which was how he began his initial lesson, and stated that it will be used "to provide a narrative from beginning to middle. It is just me telling a story how everything happened". He later explained it as necessary background information. From there, he had his students look at a presidential speech. He stated that he would like his students to read and discuss the speech. Specifically he provided his students with questions, which he described as "pretty loaded" and should be used "like the document analysis assessment type thing". However, an analysis of these questions indicated students would simply recall information while possibly assessing for perspective. To close the lesson, Eric asked his students to respond to a series of questions with their own "opinion". When asked to expand on student expectations for the assignment, he explained,

I think they should be able to...pull out where they are getting their opinion from the speech. Any person can interpret a sentence in a million different



ways and I am hoping that I will be able to ask questions that will get them to think of the other way. And realize there are so many people and so many opinions that you have to be able to come up with your own.

An assessment of Eric's rubric assignment submission indicated that while he focused (3/4 categories) on technical writing aspects, he also included a section on "source analysis", which he defined as "analyzing the source well while placing the language and the intent in the context of the time" indicative of an awareness of pedagogical strategies. Finally, Eric's sequencing task submission indicated an appeal to criterialism with regards to what he should do as an instructor and what students should do as investigators.

In summary, data associated with Tom and Eric suggested limited movement with regards to their transitional beliefs about history teaching and learning. Specifically, Eric's data was suggestive of shifts toward a more expert way of knowing when considering the role of the student in the classroom, which he began the course understanding as rather passive. Similarly, Eric's data suggested an understanding of necessary skills students need to learn in order to effectively partake in the historical method. Both of these shifts align with movements made on the history subscale, which indicated an understanding of the historian as active and the processes they use to construct interpretations. Eric had a more difficult experience when attempting to translate his beliefs into practice instead relying on an objective approach characteristic his own educative experiences and his initial lesson plan attempt. Tom's beliefs about the role of students and the strategies they need to do history shifted nominally and also correlated with his movement on the history



subscale. His pedagogical attempts aligned with his subjective understanding of the role of the student and the objective appeal of historical facts.

"Almost No Change/Reverse Progress in Transition" about History

Teaching and Learning. Brittany and Ben were both placed in this category based on their consistency scores and qualitative data sources. Data associated with Brittany suggested that she made nominal shifts while Ben's data was suggestive of some reverse progress. Recall that Brittany was the sole education major within the cohort. She began the course with an understanding of teaching and learning in history, which mirrored her own apprenticeships of observation characterized by a read and recite methodology. She stated that she did not have an understanding of the historical method although she did allude to perspective and evidence as tools historians consult to "find" the facts. Brittany suggested that histories were constructed but was unable to provide any explanation regarding the processes historians use. Similarly, she was unable to articulate a methodology for students.

Ben began the course with the highest consistency score on the teaching and learning subscale. His data suggested that he had some knowledge of procedural strategies students would need in order to implement the historical method such as dealing with conflicting evidence, corroborating documents, and using evidence combined with logic to create interpretations. While he was able to name these strategies, he was unable to discuss the ways in which they would be used by teachers or students within the classroom. While lecture and memorization characterized his apprenticeships of observation, Ben's pre-course data suggested a helpful appeal to criterialist strategies, which allowed students to interpret documents.



Post-course, data associated with both participants suggested that helpful shifts were made when considering the skills students need in order to do history well. Brittany's responses were indicative of a nominal level of shifting away from classifying the role of students in the classroom as passive and objective toward one that is more active. However the active role she now associated with students was unrestricted with their end "interpretations" based on "opinions" rather than rigorous analysis. She stated, "I want students to be able to come up with their own opinions about things even if it isn't what I personally thought would happen". Additionally she explained, "I think we can't say a kid is wrong because they are a kid and came up with something that is different from us doesn't mean they are wrong, they may be very smart and we just never thought of it". Additionally, Brittany continued to struggle with her beliefs about strategies students need in order to think historically. Specifically, she stated that she continued to be unclear about the meaning of "disciplined method of inquiry" and "historical method". She commented, "The whole class we did on PAIRe, I found that really helpful. I am still a little confused about it, but I am going to go back through and take some notes". Brittany did attempt to explain some strategies she described as "new ways of thinking" resultant from the course. Brittany explained,

Being able to read and interpret different peoples perspectives of a story and understand they can be biased, and being able to think critically and use the tools that are given to them in the different documents that are given to them and know how to read them and how to analyze them and how to come to the conclusions they need to come to.



This response did indicate some awareness of document analysis. However a follow up comment suggested some instability with regards to her beliefs about how to do such work. Brittany said, "I think they would need to be able to interpret the document. See who is writing it and who it is to". When asked how students might go about doing this Brittany responded, "Like specifically? I am not really sure what they would need to do, but generally and vaguely know what they are talking about and be able to cite evidence".

Ben's data suggested that his knowledge of what skills students need in order to do history was less consistent when compared with his comments prior to the start of the course. He continued to indicate an awareness of knowledge as constructed. However, his comments were less specific and more generalized. Ben explained,

[Students need to] understand the idea of constructing an argument and how to support that argument and present that argument in a persuasive manner. That's not really a skill that is addressed in math, or science, or English. So it's really a skill that is unique to the history field or social studies as it is in school now.

To do this successfully he stated,

[Students need to] look at the sources in due diligence; looking at where they are coming from; the background of the sources itself and not just the background of the event; looking at who's writing it, what their beliefs are.

Ben was more reticent to expand on these beliefs and indicated that he was unsure, which deviated from his pre-course explanations where he was able to go into more detail about what skills students need and how they should use. He also struggled to articulate what students would do with this information once it was acquired



suggesting that opinions would suffice. This was perhaps the result of Ben's beliefs about the role of students. His data suggested that he understood the role of historians to be the constructors of "interpretations" while students create "opinions". When asked about how students should negotiate varying interpretations he explained,

If they read multiple accounts or multiple interpretations of the same series of events, they're not all going to be the same interpretation. So they realize that there are different outcomes you can get from the same series of events. So they have to take each account with a grain of salt and each historian is going to have a slightly different interpretation of what led up to the event and what resulted from the event.

However when he discussed what teachers might have students do in a classroom he responded, "teachers should make sure students have come up with these historical opinions in the proper manner and have the information to support their opinion".

Ben did not provide criteria for what comprises an interpretation or opinion.

Both Brittany and Ben made nominal shifts when considering their beliefs about effective pedagogical strategies in the school classroom. Brittany's final lesson plan suggested that objectivism in the classroom still held an appeal. She indicated that she wanted her students "to understand the hardships early Americans put Native Americans through". To do this, Brittany used a teacher-centered model where students are largely inactive. She stated, "I am more interested in lecturing as a way of getting them to know the facts". She explained,

The actual facts, I want them to get down, what happened, when, where, why?

Also, understand what happened and how people felt and why it was bad or



why it wasn't bad and get them to start thinking about why the Colonists have done this, was it a popular idea, were people against it? The facts would hopefully come from the lecture I would give them or any information.

The unproductive, objectivist appeal of providing students with the correct answer again surfaced through Brittany's submission of the sequencing task exercise. She elected to "offer the correct interpretation of sources in order to avoid confusion" when students encounter conflicting viewpoints and also chose to "provide students with the correct answers to solidify historical facts". Brittany did not complete the rubric activity.

Data collected from Ben's performance assessments during the course continued to suggest that his beliefs about teaching and learning were unstable. The goal of his final lesson plan did not change much from his initial submission. In both instances, he wanted his students to better "understand" a given topic. His final lesson plan did add a layer of investigation, which he described as,

Kind of similar to the activities we did in class. Like the nuclear bomb attack activity where you give them a document and say 'what happened at the battle of Lexington and Concord?' Pose that question then give them the document and say look at the sources, look at where they are coming from and say try and give me an idea of what happened.

While Ben would like his students to look at sources, he didn't provide any context or criteria for how they should be assessed or for the final product, which suggested that an opinion would be an appropriate response. Likewise, Ben's rubric assignment contained only one category pertaining to historical thinking entitled "use of



historical evidence" and the assessment component of the category focused on the use of evidence to support an already decided upon conjecture. Additionally, because Ben stated that he would give his student multiple sources, he was questioned about how he would teach them to deal with conflicting sources. He responded,

I don't know. I didn't think about that. I've never had someone teach me how to do that so I don't have firsthand knowledge to go back and pass that on.

Trial by fire to a degree. Start with the easier documents and then as the year goes on, move on to more advanced ones.

To conclude the lesson, Ben asked that his students "create an interpretation based on evidence". However, the final pedagogical move he made was telling his students "the right answer". This fall back on traditional methodology again appeared within the sequencing task as Ben culminated his ordering with "Provide students with the correct information from the textbook".

In summary, data associated with Brittany and Ben indicated limited movement with regards to their transitional beliefs about history teaching and learning. Both participants' data sources suggested subjectivist tendencies when considering how students should function in the history classroom. For Ben, this shift suggested a nominal level of reverse progress when considering his transitional beliefs. Pedagogical moves also presented specific cognitive challenges for Brittany and Ben. Brittany continued to struggle with her understanding of procedural strategies perhaps contributing to her tendency to rely on objectivist pedagogical choices. Ben's responses suggested an awareness of necessary pedagogical strategies (such as providing students with conflicting documents and giving them tools for



analysis), but his ability to translate them into pedagogy continues to remain unclear.

Thus, both participants leave the course in a state of transition characterized by unstable and fluid beliefs about history teaching and learning.

"Outlier". Oria was purposefully left out of the clustering process on the teaching and learning scale due to anomalies encountered with regards to her consistency scores and associated qualitative data sources. While the quantitative and qualitative data sources corroborated one another in most cases, Oria's history teaching and learning data surfaced some inconsistencies and thus is being presented as a separate case study.

Prior to the course, Oria was able to articulate some of the skills needed to successfully implement the historical method (use of evidence and analysis of perspective) but indicated that she did not know what skills students needed in order to do history well in school. The pedagogical moves associated with her initial lesson plan were characteristic of a read and recite methodology.

Post-course, despite a consistency score of 56%, which remained unchanged, Oria's data suggested that her beliefs experienced some helpful shifting and a degree of internal stabilization. An analysis of Oria's BHQ-htl selections and corresponding verbal responses helps us to better understand the disconnect between her unchanged consistency score and her seemingly shifted beliefs about history teaching and learning. First, many of Oria's Likert-scale responses contradicted her verbal explanations of those items indicating a possible misreading of the statements. There were a number of instances where Oria would select a response on the scale (strongly agree, agree, somewhat disagree etc.), but would than qualify the response with a



written or verbal statement, which would attempt to change the meaning of the original statement. For example, she agreed, "Good general reading and comprehension skills are enough to learn history well". However, she qualified her answer selection responding,

I agree as far as in one needs to have these skills, however, learning history requires more than that. The usage of PAIRe for example is skills needed to learn history. You still need the scientific approach of the historical thinking.

Oria did not answer the question true to the wording. She agreed that reading and comprehension were important when learning history but not "enough" to learn history. In fact, she went on to articulate a number of more expertly-aligned understandings pertaining to what students need to know. She stated,

[Students need to be taught to deal with conflicting evidence]. By being taught they are able to critically look at evidence of the past and come up with an interpretation of what happened rather than just shut themselves up if they can't deal or simple choose a side of history because it is more convenient.

She went on to explain,

They also need to understand the method. If they don't know about the historical method their opinions of history might just be fixed in the capital H history, which is a polished version of history. Without knowing the historical methods their understanding and approach to learning history will be skewed. It's the PAIRe thing again. An analytical mind looking at a document. Is it authentic or not? Positionality, assessing it and keeping it reliable in a sense of



can you compare it to another document and does it coincide or do you use it to justify your claim or not

Another example surfaced when Oria discussed her understanding of how students should view history books. She "agrees", stating, "students who read many history books learn that history is what the historian makes it to be". However, she explained,

Through reading, they are able to come to the realization that the books are interpretation and understanding of the past by each author and conclude that is not that the past is what historians make it to be but understand it to be. They realize each of the history books are not the same, even though they have the same events, it is interpreted differently.

While the statement suggested a subjectivist understanding of history characterized by a lack of rigor, Oria again explained her interpretation of the question, which deviated from the intent of its original meaning. She did this yet again when asked if students should understand history as a matter of interpretation to which Oria disagreed. She explained, "I think interpretation is the end factor of what history really is. History is about thinking critically of the past. It is a matter of interpretation, but in a sense that the interpretation has to be backed up".

Thus, an analysis of Oria's data suggested that she made some moderately helpful shifts, arguably the most sizeable movements, toward criterialism when considering the ways in which students approach history. Prior to the course, she was not able to articulate strategies used by historians or students alike when approaching history. Instead, she relied on her own apprenticeships to negotiate the space. Postcourse she was able to articulate a number of the procedural skills discussed and



likewise was able to coherently articulate the ways in which students should use these as a way to approach history in the disciplinary sense.

Additionally, Oria was able to translate these shifted beliefs into practice demonstrated through the performance activities completed during the course. Similar to her knowledge of procedural strategies, Oria's beliefs about how to pedagogically approach the teaching of historical thinking appealed to an expert way of knowing, perhaps more so than any of the other participants. Looking first at her final lesson plan submission, Oria chose to "investigate the life of Eleanor Roosevelt" by "reading a variety of primary sources" and analyzing them looking specifically at "perspective, attribution, and identification". She elected to culminate the lesson with a prompting question she would ask students to answer using evidence. When asked about what evidence she would consider providing to her students she explained,

I think she had a radio show, but I have never heard it. But I want them to hear that. Showing them pictures on a screen of her and different....like one group, there is a picture of her and Kennedy, stuff like that.... She has an autobiography and there are other biographies on her. I also want FDR's autobiography so you could get how he felt about their relationship and so the whole idea of different sources, they might be conflicting because all of them are different, but all of them can help give a more concrete....

Compared to her first lesson plan where she wanted students to "learn and give back information" after "absorbing information" and having a "lightening round", Oria's beliefs about the central goal for students as demonstrated through her lesson plan suggested a shift toward criterialism.



Both Oria's rubric assignment and her sequencing of tasks on the Hlab exercise suggested a marked shift toward a more expert way of knowing. She created a rubric based on five categories; four of which were conceptually linked to the PAIRe strategy taught during the course. Oria's description of each of these categories also displayed a higher-level understanding of historical thinking. She wrote,

Category One: Perspective Assessment - Fully understands and determines the position of the author, the historical context and the historical sources were/it was produced in. Category Two: Attribution -Fully recognize that someone with historical contextualized views constructed a historical source for a purpose and using that knowledge to successfully argue a claim or an interpretation of the past.

Category Three: Identification - Fully understanding what is a historical source, and identifying the type and context of the source. Asked leading questions to further understand and determine the source.

Category Four: Reliability Judgment- Fully showed how well sources were used as comparative value as evidence for a claim, and how well and if at all sources of the same period were compared to judge their reliability.

Category Five: Grammar-Fully comprehensible argument, no grammatical or spelling mistake.

Again, Oria's purposeful selection of these categories and articulate description of each one indicated a shift in her understanding of what and how students learn history.



Overall, Oria's qualitative data suggested moderate shifts toward criterialism when considering her beliefs about the procedural skills students need in order to do history well and the pedagogical strategies needed to foster such learning in an classroom. Oria's unchanged consistency score seems to be a result of a misreading of the BHQ-htl statements as her written and verbal responses deviated from the central meaning of many of the statements. Thus, Oria left the course with a fairly consistent set of beliefs about history teaching and learning which appeal toward criterialism.

In summary, results suggested that the course provided a space for participants to consider strategies for teaching and learning history, which in most cases directly challenged their own apprenticeships of observation. The presence of this dissonance may have allowed for the construction of new ways of understanding how students think and learn within the discipline. Similar to the history subscale, the most helpful shifts seemed to have occurred as participants began to think more deeply about the central goal of the history classroom and the ways in which students should be taught to approach history. While many participants evidenced a growing understanding of pedagogical strategies, which could be used to teach historical thinking, a majority of the participants continued to have great difficulty translating this new knowledge into practice as observed through the lesson plan, rubric, and sequencing task assignments. Table 5.4 briefly describes the pre to post beliefs of each participant relating to their understanding of knowledge, the role of the knower, and procedural strategies in history.



Table 5.4

A Summary of Participant Beliefs About History Teaching from Pre to Post Course

	Overview of H	Pre-Course istory Teachin Beliefs	ng and Learning	Post-Course Overview of History Teaching and Learning Beliefs		
	Knowledge	Role of the Knower (student)	Procedural Strategies	Knowledge	Role of the Knower (student)	Procedural Strategies
Tameka	Students should understand history as an interpretation based on evidence	Students should passively remember a lot of informatio n	Acknowledges that students need strategies but does not know what these are or how to teach them / Falls back on a read and recite method	Students should understand that knowledge is actively constructed but ultimately tainted by perspective	Critical thinkers/ Active constructors stifled by opinion	Unsure about what strategies historians use. Thus does not know what to teach students / Falls back on a read and recite methodology
Sara	Students should understand that knowledge is constructed based off of a concrete history	Students should learn the facts	Acknowledges that students need strategies but does not know what these are or how to teach them / Falls back on a read and recite method	Knowledge is based on a interpretation s and opinions	Active constructors based on PAIRe	Acquired knowledge of strategies (PAIRe Guide) but still has students create opinions
Katerina	Students should understand that knowledge is constructed based off of a concrete history	Students should learn the facts	Acknowledges that students need strategies but does not know what these are or how to teach them / Falls back on a read and recite method	Knowledge is actively constructed but tainted by opinion	Active constructor of opinions	Acquired knowledge of strategies but struggles to incorporate them into a lesson
Eric	Flip flops between: Students should understand history as an interpretation based on a methodology; Students should be aware that history is opinion	Students should be active constructor s of knowledge	Does not know what this would look like in a classroom or how to teach the methodology	Students should understand knowledge is constructed but also tainted by opinion	Active constructor of opinions	Strategies are necessary to construct interpretations but is unsure how to teach this /Falls back on students answering questions



Table 5.4 Continued

Tom	Students should understand that history is an interpretation and they should learn the facts	Students should focus on and learn the facts	Does not know how to teach students the strategies they need to create interpretations / Falls back on a read and recite model	Knowledge is based on discoverable facts		Investigate primary sources/ ultimately gives the answer
Brittany	Students should understand that history is constructed and evidence should be used as support	Students should memorize informatio n	Does not know the meaning of historical method and does not know how to teacher this to students.	Students should understand that knowledge is actively constructed but ultimately tainted by perspective	Critical thinkers/ Active constructor s stifled by opinion	Unsure about what strategies historians use. Thus does not know what to teach students / Falls back on a read and recite methodology
Ben	Students should understand knowledge is constructed but is tainted by bias	Students should read, listen and remember	Does not know how to teach historical thinking to student s / Falls back on a read and recite method	Students should understand that knowledge is actively constructed	Active constructor / Stifled by opinion	Investigate multiple accounts using strategies / Not sure how students should deal with conflicts / ultimately gives the answer
Oria	Students should understand knowledge is constructed but is tainted by bias	Students should critically think about history	Does not know how to teach a historical methodology / Falls back on a read and recite model	Students should understand knowledge is constructed	Active constructor based on criteria	Acquires procedural knowledge and is able to translate them into pedagogy

Meta-Analysis of Perceived Growth and Problematic Impasses.

In conclusion, resultant data suggested that the course provided a space for the participants to consider their own beliefs about disciplinary history and history teaching and learning. The simultaneous introduction of new ways of knowing may have created a level of dissonance when it conflicted with pre-course ways of knowing. Some participants were able to make helpful shifts toward criterialism possibly as a result of this dissonance while others were not able to reach a productive



equilibrium, which would allow productive shifting to occur. All participants left the course in varying levels of transition suggesting that more time was needed to work through the struggles associated with their existing belief structures and the roadblocks which surfaced as a result of contemplating new ways of knowing. The following meta-analysis looks more specifically at the perceived patterns of growth and problematic impasses, which appeared to surface from the categorical case studies previously discussed.

Patterns of Growth. Using the previous analysis of data as a proxy for measuring growth in participant beliefs about history teaching and learning surfaced a number of patterns with regards to the ways in which beliefs appeared to shift over the course of the experience. These patterns center on the three constructs measured throughout this research: the role of knowledge, the role of the knower, and the role of processes. Patterns within and across constructs, as well as across subscales, are described in the section that follows.

Consistency Score as an indicator. Initial consistency of beliefs as measured by the BHQ-1 consistency score algorithm seemed to be an indicator of the level of shifts made on the history subscale. Those with higher pre-course consistency scores appeared to make more productive shifts toward criterialism as evidenced by their post-course deltas. Those participants with initial consistency scores at or above 60% seemed to have the most success when considering helpful shifts in their beliefs toward criterialism. Participants who began the course with consistency scores below 60% returned moderately lower deltas when looking at the cohort as a whole. Oria and Ben were interesting exceptions to this pattern. Initial consistency of beliefs did



not seem to be an indicator of movement on the history teaching and learning subscale.

Growth within constructs. When considering participant beliefs about history (data pertaining to the history subscale) the most growth was perceived to be with regards to the role of the historian in the construction of interpretations and relatedly, the processes they use. Prior to the course, four of the eight participants understood the role of the knower to be one of passive chronicler. The other four participants understood the role of the knower to be active yet largely unrestricted in the ways in which they constructed histories. At the close of the course, all participants suggested an internally consistent understanding of the knower as active in the process of creating histories. Two of the participants suggested a consistent understanding of the disciplinary rigors historians must abide by. The others remained in a state of transition, understanding the active role of the historian as unrestricted and at times confounded by biased.

Similarly four of the eight participants indicated that had a nominal level of the specific procedural understandings historians need in order to construct histories. Most commonly, this meant that they understood historians look at documents for evidence. However, none of the participants indicated at the start of the course, that they understood how histories were rigorously constructed. At the close of the course, all of the participants suggested a helpful awareness and a varying level of understanding with regards to the specific procedural strategies needed to rigorously construct histories. All participants were able to articulate disciplinary strategies when asked to describe the process of doing history.



Almost mirroring the history subscale, the greatest perceived areas of growth within constructs on the history teaching and learning subscale came with regards to how participants understood the role of students in the classroom when doing history and what skills students should possess in order to successful engage in historical thinking. Prior to the start of the course, all students with the exception of Eric, viewed the role of the student in the history classroom as passive with the primary goal of memorizing information. At the close of the intervention, all participants indicated that they understood the role of the student to be active constructors of historical knowledge. Again, the class was split on their specific understanding of this role. Half saw the student as an active constructor based on criteria while the other half saw them as disseminators of historical opinions. Similarly, all participants at the start of the course indicated that they did not know what skills (other than reading) students would need in order to do history well. At the close of the course, all students suggested that they understood at some level, the strategies students would need to be taught in order to construct a rigorous interpretation.

Growth across constructs. Patterns suggested a correlative relationship when considering growth across the constructs on both subscales. When participants understood the role of facts as objective, they often viewed the role of the historian as passive and objective resulting in a struggle to acknowledge active procedure processes. Similarly, when participants understood the facts as interpretive, they also understood the role of the historian as interpretive. Differing conceptions of "active" (in some cases rigorous and in other cases unrestricted) also indicated greater or lesser shifts when considering procedural strategies. Similarly, when participants



viewed knowledge as discoverable on the history teaching and learning subscale, they had a tendency to view the role of the student as consumer of knowledge and relatedly could not articulate skills students would need to undertake this process. When participants shifted their understanding of knowledge as interpretable, they also had a tendency to shift their understanding of how students should interact with knowledge (actively and not passively). They simultaneously were able to articulate strategies needed to do this type of work. However, as seen on the history subscale, participants were varied in their understanding of these strategies and their ability to implement them when tasked.

Growth across subscales. Participant data suggested that the cohort made greater shifts on the history subscale when compared with those made on the history teaching and learning subscale. A comparative analysis of results obtained from the history and the history teaching and learning subscales suggested that there may be a correlation between knowledge of the discipline (what counts as knowledge, the role of the knower, and procedural strategies) and pedagogical decision-making in the school classroom. Those participants who made greater shifts toward criterialism on the history subscale also made greater shifts on the history teaching and learning subscale. Likewise, the sub-categories within the two scales seemed to correlate. Participants who shifted their beliefs about the role of the historian toward criterialism also had a tendency to shift their beliefs about procedural skills on the history subscale, they had a tendency to shift their understanding of the specific skills



students needed. Thus, participants who were more consistent with their disciplinary beliefs appeared to be more consistent with their beliefs about teaching and learning.

Problematic impasses. While the resultant data suggested that each participant engaged in some helpful movement with regards to their beliefs, the degree of helpful shifts encountered on both subscales was minimal. This finding is suggestive of how difficult it is to surface, challenge, and shift ways of knowing. The participants in this study continued to struggle with what to privilege. They flipflopped back and forth between privileging the objects of the past (facts as objective) and privileging the interpretation of those objects (subjective role of the historian as unrestricted in his interpretation). The participants also struggled with the source of their beliefs. Their apprenticeships of observation had long-since taught them to privilege the objects; namely their textbook. Thus, they had also been taught to distrust their own subjectivity. This all translated into unstable and transitional beliefs about history and history teaching and learning. The inconsistencies, which prevailed throughout the participants' beliefs as indicated through this analysis were illustrative of the struggles they continue to face.

Over-privileging the role of knower. An impasse, which seemed to permeate throughout the course and thus inhibited growth on a larger level among participants was the over-privilege participants gave to the knower. In terms of the subscales, this refers to the privilege given to the expert-historian (history subscale) and the student-historian (history teaching and learning subscale). While all participants exited the course with an understanding of these roles as active, many struggled with the amount of licensure these individuals should have when considering the construction of



knowledge. On both subscales, six of the eight participants viewed the historian as confounded by bias and likewise, the student stifled by opinion. The two who did not subscribe to these beliefs, Oria and Sara, consistently resisted these positionalities across the two subscales.

The effects of such unproductive beliefs were quite pervasive inhibiting participants from reaching fully productive epistemic ways of knowing. The largest roadblock associated with these beliefs came with the construction of histories. Participants had a tendency to react in three different ways when stifled by this type of subjectivism. Some would choose a position on a historical question and would then focus solely on information that supported these a priori assumptions.

Documentation, which conflicted with their opinion, would be set aside and not addressed. Others would look at all of the evidence available and would go with a "majority rules" strategy meaning whatever perspective was most represented would be used as "the answer". Again, conflicting information would be set aside as problematic and not useful. Finally, others would step away from the task completely as the existence of conflicting information presented an impasse, which left them unable to continue working.

Working with conflicting documents. Related to the over-privilege so many (6/8) participants awarded to the knower, seemed to be the struggle this same group of participants had with the existence of conflicting documents. When documents conflicted, participant decisions suggested that they were not equipped to deal with such an impasse causing them to fall back on subjectivism. This perhaps speaks to the internal consistency of beliefs pertaining to the role of facts. If participants do not



fully understand the role of facts in the construction of history, they may have a tendency to rely on a definitive or discoverable answer to surface from investigations. At the center of this struggle was perhaps the lack of knowledge surrounding the use of conjectural logic. All of the participants regardless of shifts made toward criterialism indicated that they were confused by the presence of thin and indiscriminate evidence trails. They did not know what to do when evidence conflicted and they also did not know what to do when all the pieces were not there.

Putting theory into practice. Perhaps resultant from the previous impasses discussed came the over-whelming struggle participants had with putting theory into practice. Evidence of over-privileging the role of the knower and a lack of understanding surrounding conflicting documentation surfaced in most participants attempt to construct histories on performance assessments and when they attempted to create lesson plans, which were two of the largest indicators of ways of knowing assessed throughout the course. On the performance assessments, six out of eight participants chose to use a "majority rules" approach to the "Mystery at Roanoke Island" task. In doing so, all six of these participants chose not to use/mention the conflicting documents. Of the remaining two, Tom decided to focus on one document, which he used to support his a priori opinion and Brittany chose not to complete the task. Similarly, seven of the eight participants chose a related subjectivist stance when constructing their lesson plan assignments. These seven asked their prospective students to look at documents and come up with an opinion of what had occurred. None of these seven required students to use criteria for judgment or to write up their accounts using rigorous standards. Participants' ability to speak



coherently about constructs, but remained unable to put these understandings into practice suggested the fragility of knowledge participants seemed to posses at the end of the course. The exception to this observation was Sara who gave her students conflicting documents, a tool to work through them, and a rubric for how they should construct their historical interpretation.

In the final chapter of this dissertation, I look carefully at these patterns of growth and continued cognitive impasses and provide a commentary inclusive of how I perceived the course to have influenced the participants. A scholarly reflection on the course coupled with participant feedback provides a rich layer of analysis out of which surfaces a number of emergent themes holding significant implications at their center.



CHAPTER SIX

DISCUSSION AND CONCLUSIONS

This study adds to the existing body of literature on issues in history teaching and learning moving past an analysis of the problem of teacher knowledge in history by investigating the theoretical design and results of a course intended to shift participant beliefs toward a more expert way of knowing. A discussion of these results is presented within this chapter, which is comprised of four sections. First, I acknowledge and discuss the limitations of the study with the goal of hoping to help shape similar studies in the future. Next, I engage in a scholarly reflection on the course from my perspective as a teacher-researcher and from the perspective of the participants. The third section of the chapter explores key findings and emergent trends, which surface from the data. Finally, I discuss the implications this study has for the knowledge base of teacher educators and the structure of teacher education programs.

Limitations

Maggioni, VanSledright, and Alexander (2009) argue, "researchers are still struggling with theoretical and methodological issues in the study of epistemology leaving issues of generalizability to debate" (p. 189). Such issues are also present within this study. First, the data collected can only serve as proxies for shifts in beliefs making it difficult to fully understand the extent of meaningful shifts.

Additionally, Maggioni, VanSledright, & Alexander, (2009) and related past studies (King & Kitchener, 2002) speak to the possible strong social desirability effects for



criterialist-type items on the BHQ, questions during the interview, and even associated activities.

The data collection procedures within this study are rigorously designed to assess proximal data sources and to triangulate the findings in order to generate claims about changes in participant beliefs in relation to the course. In a majority of the cases, this proved to be a reliable means for making sense of the data as qualitative and quantitative sources complimented one another indicating a degree of reliability within and between measures.

However, a comparison of Oria's BHQ data and her associated qualitative data sources suggested an outlier to this theory, as the two did not align. This appeared to be the result of one major problem: misinterpretation or perhaps misreading of the measure. Her BHQ Likert-scale responses did not match the written comments she provided and relatedly, did not match her interview comments or performance assessments. It would appear that she attempted to fit her understandings into the BHQ statements. She tried to force statements to fit her own way of thinking. For instance, Oria agreed with item #9, which read "Good reading and comprehension skills are enough to learn history well". However, she qualified her answer with "I agree as far as in one needs to have these skills, however, learning history requires more than that. The usage of PAIRe for example is skills needed to learn history". Oria had a tendency to answer part of the question as opposed to the whole, which then skewed her quantitative results.

There were occasional instances of similar misreads across the participants but on a much lesser scale and did not effect their overall results. This problem brings to



the surface the necessity of using multiple data sources when doing this sort of work.

Results of this study in particular indicate that reliance on the BHQ independently of other data sources may yield false claims.

Time was an additional limitation associated with the design of the study. Because of the one-credit designation of the course, university policy allowed approximately 800 minutes of instructional contact. This could be weekly at 50 minutes per class session or bi-weekly at 100 minutes per class session. The latter option was chosen due to the extended class periods needed to fully engage in the material and activities planned. However, eight sessions was not enough time to foment solid shifts in ways of knowing. Resultantly, any changes in beliefs could potentially shift again now that they have moved beyond the course.

Sample size was yet another limit to the generalizability of the study. While I received many inquires indicating interest, schedule conflicts seemed to be the factor, which deterred many potential participants from registering for the course. Thus, a final sample size of eight became the focal group for the study. While such a small group calls to question the generalizability of claims made, it is worth noting that the shifts made within this study echo those made in studies of similar constructs with larger sample sizes (Maggioni, VanSledright, & Alexander, 2009; Reddy & VanSledright, 2010).

While data proximity, time and sample size place constraints on the generalizability of results, making long-term claims about the beliefs of participants problematic, a better understanding of the content, instruction, and strategies associated with shifting beliefs about history teaching and learning are useful in



shaping teacher education, pedagogical practices, curriculum opportunities, and program design for preservice educators. Additionally, this study adds to the conversation about the complexity of beliefs in history and the need for domain-specific preparation. A scholarly reflection on the experiences and key findings from the perspective of the participants and the instructor follows.

Scholarly Reflection on the Course

Belton, Gould, and Scott (2006) define reflection as "the process through which one considers an experience by thought, feeling or action ... [occurring] in conjunction with the experience or after it and is an attempt to create meaning" (p.151). Engaging in reflective practice fosters critical thought about epistemic beliefs, which promotes a contemplative environment for pondering what it means to know something. Thus, as I consider the influence of the course and the implications for the teaching and learning of history, I find it necessary to begin with a scholarly reflection.

From the dual perspective of the primary researcher and the sole instructor of the course, I begin the reflective section of this chapter with an overview of my original goals for the course, which ultimately shaped the course design. Additionally, I discuss how I had hoped the course would influence participant beliefs. Next, I shift voices to allow the participants to articulate their perceptions of the experience. They offer a reflective discussion on the structure of the course, pedagogical strategies used within the course, and their understanding of how their beliefs shifted (or did not). I end this section with an ex post facto discussion of what I understood to have happened throughout the experience, comparing resultant claims with my goals as the



instructor and participant perceptions. Evaluative activities similar to the ways in which the participants were asked to reflect on the course and their own epistemic beliefs coupled with my reflective notes play an essential role in understanding and evaluating these educative processes (Cowan, 1998).

Researcher-Instructor Reflection Part One: What I Wanted To Happen

As both the instructor of the course, and the primary researcher of this study, my perspective is twofold. I designed the original goals for the course and its structure from this dual-perspective of teacher-researcher. The text, which follows, is a very personal reflection of my motivating hopes for the design and implementation of the course.

My goals for the course were seemingly quite simple: I wanted to change the way prospective teachers thought about the study of history and how they thought about teaching it within a school setting. In an ideal world, I had hoped that I would be able to take this cohort of students, erase their years of adversarial experiences with teaching and learning history, and provide for them the necessary space to shift their beliefs toward a more criterialist way of knowing. I designed the eight class sessions with these central goals in mind. I knew that I had three primary sub-goals to tackle in order for my intentions to come to fruition.

First, I wanted to help the participants to surface and think deeply about their own beliefs about teaching and learning in history. My preconceptions about what these beliefs would look like were based on research and my own experiences both as a student and an educator of pre-service teachers. I suspected that most, if not all, of the participants would have limited disciplinary knowledge and would rely heavily on



their own experiences as students as a framework for how to teach. In order for students to move toward criterialism, they would need to identify the origin and status of their existing beliefs.

My next goal was to introduce the participants to expert ways of knowing in history and history teaching. I anticipated that much of this knowledge would be relatively new to the participants based off of my perceived understanding of the belief systems they would bring to the course. I knew that I would have a few upper level history majors who would possibly be more advanced in their understanding of how to do history. I planned to approach the introduction of new knowledge using two primary strategies: explicit instruction and application through activities. I attempted to create easily accessible and concise summaries of necessary concepts with the hope that participants would find the introduction of complex topics less threatening and thus would be more apt to think about them in terms of their existing beliefs. My intent in using the various activities was to afford students the opportunity to apply newly learned theories and skills. I hoped that the introduction of knowledge coupled with its application through activities would provide students the necessary platform for understanding more expert ways of knowing.

Finally, after participants had surfaced their beliefs and had obtained this new information, my biggest challenge was to shift their existing belief structures to a more criterialist way of knowing. Admittedly, my ambitions were quite high. I had hoped that most participants would make significant shifts toward criterialism with regards to their beliefs about history and history teaching. Specifically, I was interested in shifting their conceptions of what could be known in history, the



historians role in the construction of this knowledge, the skills associated with the construction of knowledge, and the pedagogical strategies associated with teaching this knowledge to level students. I knew that it would be a difficult task. However, I considered it entirely possible.

I anticipated a period of destabilization followed by the attainment of equilibrium, which would promote consistent and stable beliefs. Such a dramatic shifting would require motivation and dedication from both the participants and myself. Due to the elective-nature of this one credit course (participants chose to take this in addition to their program requirements), I believed that participants were genuinely interested in learning about this topic and were open and willing to new ideas. My final hope was that participants would take their newly stabilized and productive ways of knowing and apply them to future encounters with history and history teaching. Before I reflect on the actual results of the course, it is helpful to consider participant perceptions of what occurred. In this next section, I attempt to answer the question: what did the students think happened?

Participant Reflections

During the final interview session, participants were asked to reflect generally and specifically on various aspects of the course including the structure and design of, the instructional techniques used, and their perception of what they learned and/or still wished to know. While social desirability could certainly be a mitigating factor in the authenticity of participant responses, especially considering the sensitive nature of the questions and the face-to-face interaction, I feel confident that the mutual level



of trust and respect established over the course of the semester allowed participants to speak candidly.

Structure of the course. Two emergent themes surfaced from participant reflections on the structure of the course. First, all of the participants commented on my choice to focus half of the course sessions on the exploration of beliefs surrounding disciplinary thinking and using the second half to explore beliefs about history teaching and learning. Tom explains,

You have to learn history first and then transfer it to the students because if you do the reverse it doesn't work. You have to learn how yourself and then get a better understanding of that and then transfer that to your students, or they won't understand what you are doing. I feel that you have to learn how to do something first, then you can be able to fully teach it to the students.

Similarly, Tameka replied, "It was important for me to learn about the historical thinking in order to properly apply it to teaching". Brittany and Eric also stated that it was beneficial to think about the meaning of history before attempting to think about how to teach it.

The second component of the course, which drew the most comments from participants, was the length of the course. All participants (with the exception of Eric) reflected on the brevity of the course and the need for more time to expand on the concepts discussed. Tameka replied,

I wish the class was longer, because I feel like I didn't get a chance to really grasp the information all semester. Like I get what you are saying, but I feel like it could have been more deeply ingrained if I had more time. Like your



whole finding primary sources, introducing two different sides, things like that, that would have been nice to have growing up.

Similarly Tom responded, "Yes it was too short" while Oria replied, "I did learn a lot in the space of time that we had".

When asked how more time would be of benefit, an analysis of responses indicates that participants were interested in learning more about specific strategies and were interested in additional guided practice in order to better understand how to implement and teach these strategies. Tom and Eric, both history majors, wanted to know more about "the discipline of history and how to analyze historical documents". Tom also requested more strategies for dealing with the presence of conflicting arguments. Oria echoed this remark. Sara's remaining questions centered on teaching. She stated,

I would have liked to see more time on the teaching part and maybe more of the process of making a lesson together. Also, going through assessments more thoroughly would have been helpful. Also, more direction in finding documents and sources would be useful.

Likewise, Tom wanted to "teach a lesson we created to the class, be it our class or an actual class with young students so we could get the full experience of what would happen". A few of the participants commented specifically on the desire for more time to "practice PAIRe" while others commented on the need for longer periods of time to truly dig into documents in response to historical questions.

Strategies used to teach the course. Three emergent themes surfaced from participant reflections on the strategies used to teach the course. First, participants



commented on the usefulness of the assigned scholarly articles and the class discussions, which surrounded their content. Oria stated "the combination solidified [theories] for me". Eric noted that the "clarity and conciseness of [my] PowerPoints helped me to understand the hard concepts".

The "PAIRe" strategy was also mentioned by numerous participants as being critical to their "take-away" understanding of how to both learn and teach history.

Brittany commented, "The classes on PAIRe helped everything to make sense to me.

I found them really helpful". Ben said,

PAIRe. That way to analyze primary sources kind of reinforced and made me more aware of things I might have been doing intuitively in the past and made me think about them and register them and actually see the process I was going through.

Similarly, Eric replied, "[PAIRe] is like a structuring of things I picked up over time. I thought it was another more organized perspective of the discipline of history".

The strategy, which elicited the most reflective comments from participants overwhelmingly, centered on the document-based activities used throughout the course. Every participant commented on the value of engaging in these exercises.

Oria's comment summarizes the sentiment of the cohort as a whole. She explained,

We began with the theories and stuff like that, and then after you taught us the theories you gave us exercises with the documents. So basically, we are applying what we learned to the documents. I love the activities, it made me think, even though I don't always know what I am doing step by step, I now kind of have an idea of what I am looking for.



Similarly Eric replied, "the documents were definitely helpful especially after you went over the lessons of what the stories actually do. I kind of applied that to the activities". Tameka suggested that the exercise "made her see things differently".

Tom commented on one specific exercise associated with Abraham Lincoln, which was particularly powerful to him:

The Abraham Lincoln readings definitely helped open my eyes. Yeah, that whole exercise just blew my mind. These were actual facts, but I had never read them! I was conflicting my own ideas about Abraham Lincoln with the facts that are sitting before me!

While most participants associated the document-activities with their own developing conceptions of what it means to think historically, Sara also reflected on how it helped her understand how to teach. She commented,

I think doing the documents yourself [sic] helped. I mean I have looked at documents when I was in school, but when thinking about it as a teaching thing, it is different, harder almost. Doing those I think helped me see how the students are going to have to do it and the problems they will run into.

While the document activities were used throughout the course, the first four sessions prompted participants to approach the documents as "historians" while the last four sessions asked them to approach the activities as "teachers". Participants consistently associated these activities with the development of their own understanding of how to think historically which yet again suggested that these participants (through the last session) were continuing to grapple with how to think historically thus "sidelining" their attempts to apply this to teaching.



Perceptions of knowledge growth. All of the participants commented that they felt in some way more knowledgeable about disciplinary history or teaching and learning in history at the conclusion of the course. Specifically, a common thread throughout participant responses suggested that the course helped influence their understanding of what historians do and how they do it. Oria replied,

You taught us to think like a historian. I am now seeing that in my other classes here. They gave us documents to read and we could discuss. [This class] helped me to understand what to do.

Tameka 's response suggested a level of frustration. She expressed,

Your strategies make sense. They are not regurgitation. It made me feel like everyone who has been teaching me history all these years has been lazy, and I really didn't retain any information, and I felt bad. But now I'm like I have been learning this wrong.

Other participants expressed a feeling of "advantage" over other students after having completed the course. Tom explained,

I think the class helped along with the other history course I am taking, so kind of like a duel threat. So I think that definitely helped. All the reading, questioning and topics we covered in class. The whole exercise we have been doing about reading multiple sources ... those kinds of things, exercises we did and basically reading the context, taking into consideration the date, who it was written by, all those facts. I have never been explicitly told to make it well known, it definitely helped me later on reading other sources, doing what we did in this class and applying it to other classes.



Likewise, Oria commented that she felt "more prepared" than other students having gained a background in disciplinary history.

Still others felt that their greatest take-away from the course was their knowledge about how to teach history. Katerina explained that she took the course thinking it was going to provide lesson plan ideas, as she had never considered the need to know *how* to teach history. Brittany also suggested that she had a new conception of how to teach history. She explained,

This class helped me figure out to different ways to go about teaching and using primary sources and getting the kids involved and engaged, using their minds rather than just memorizing. Like basic history classes have all been straight memorization, and I knew it sucked to do it that way, but I didn't know what the alternative was.

Sara stated that her thoughts were "more cohesive". Additionally she now felt she had a skillset that allowed her to understand what kids needed to know and how to teach it to them. She responded,

I had never really thought about students being mini-historians. Now I think I have more of a step-by-step thing and understand that they don't just read and come up with something. If the kids don't have the skills to do [history] it is not going to go well and they are not going to get anything out of it.

Finally, Eric, who had begun the course wanting to pursue teaching, left the course with a somewhat daunted perspective. He explained, "I think it was really good. I kind of have an idea of what teaching history would entail and now I don't think I want to do it!" When questioned about this drastic change in perspective, he replied,



"Like there is obviously this whole process and than you have to consider what other people have done" [student apprenticeships of observation].

In summary, participant reflections regarding the structure, strategies, and results of the course suggested that all believed it to be beneficial in that it helped influence their understanding of expert ways of knowing with regards to disciplinary history and history teaching and learning while simultaneously considering their own beliefs. The cohort felt that the teaching of disciplinary knowledge prior to the introduction of how to teach that knowledge to others was a critical component to the design of the course. Time remained the biggest concern among participants as many expressed a desire for the course to continue through the following semester so that they could work through some of the new understandings they had gained and the associated cognitive roadblocks created. Participant responses suggested that they favored the document-based activities citing them as the strategy, which helped them best understand and apply historical thinking. Finally, participants indicated that the knowledge and skills presented within the course were not repetitive of those found in other courses they had taken; a few specifically commented on the absence of such concepts within their formal educational programs.

Researcher-Instructor Reflection Part Two: What happened.

If I were asked to neatly summarize the happenings of course in comparison to my goals as a teacher and researcher I would whole-heartedly report out that the experience was productive. However, to understand my definition of "productive", it is necessary for me to clarify my criteria for making such a claim and to describe how that criteria changed over the course of the experience.



Revisiting the theoretical model. At the onset of the course, my conception of having run a "productive" course centered on the dramatic shifting (reaching the high bar set for criterialism as defined by the BHQ with supporting qualitative data) of participant beliefs about teaching and learning in history, which was central to my theoretical model. The course designed and implemented within this study was created with the central goal of providing preservice educators with the time necessary to influence beliefs about history teaching and learning toward more criterialist or expert ways of knowing. The course was then built on the theory that that the surfacing of existing beliefs and the simultaneous challenging of those beliefs by way of introducing conflicting ways of knowing would create a level of cognitive dissonance which would then motivate individuals to seek more stable and productive ways of knowing.

With the ambitious goal of growing criterialists, I moved forward with the course at a rapid fire pace, as I was keenly aware of the limited time span I had with these students. Participants readily surfaced their own beliefs about history teaching and learning with the assistance of the BHQ instrument, class discussions and one-on-one interview sessions in accordance with my original framework. It was fascinating to hear the similarities in belief structures considering the cultural and educational diversity of the group. Additionally, their apprenticeships of observation almost mirrored one another regardless of where they went to school or what types of schools they attended. Thus, my generalized preconceptions about how the group would understand history teaching and learning, and resultantly the framework for which I built the course, were confirmed.



Following this initial surfacing of beliefs, I began introducing the foundational concepts on which I built the course including what it means to think historically and how to teach it. After the first document-based activity, I began to feel the stress and anxiety rise in the room; not only from my students (encountering the cognitive dissonance I had hoped they would experience) but also from myself as I was quickly beginning to realize the magnitude of the task that lay ahead. Although the participants as a cohort entered the course with similar belief structures and prior experiences with history teaching and learning, they began to cognitively flip and flop in all different directions on various epistemic levels. There was nothing neat and tidy about the ways in which their beliefs were shifting or were attempting to shift. Likewise, the shifts that were occurring were quite nominal. While I may have been initially discouraged by the minimalist nature of the shifts being made, in hindsight evidence of these ancillary shifts is the first very important step in a complex journey to acquire new ways of knowing.

What happened: Reflective analysis of course results. In this section, I reflect back on my goals for the course comparing them with participant perceptions of what occurred and the actual results drawn from the data. My first goal was to surface participant beliefs so that they may identify the origin and status of these beliefs. For the most part participants did this with minimal struggle using the BHQ and the initial interview session as a space to think about and process the ways in which they thought about history teaching and learning. This was critical to the start of the course as participants needed to acknowledge their own positionalities prior to delving into new ways of knowing. I found their BHQ responses and associated



them think about the core questions associated with history teaching and learning. When asked to reflect on the course, none of the participants mentioned this initial surfacing of beliefs. Thus, I deduced that this process occurred naturally and without much dissonance, which was expected as participants at this stage were simply being asked to voice their thoughts.

My second goal was to introduce expert ways of knowing using explicit instruction and application strategies. Because of the dual focus of the course (history and history teaching), I chose to break the course into an equal amount of sessions for each topic. My theory for doing this was that one must understand the disciplinary theory before being able to translate it into pedagogy. The participants largely agreed indicating a need for some sort of conceptual framework before being able to think about how to approach this work with students.

However, most participants agreed that four sessions for history and four sessions for history teaching were far too little. They explained that they needed more time to process the concepts, which were new to them and likewise needed more time to think about how to put these theories into practice. I found this to be an instructional dilemma from the very beginning. After assessing their initial beliefs, it was clear that they required a great deal of substantive and procedural knowledge in order to be able to do the type of work I was hoping they would do by the end of the eight sessions. Thus, class sessions were often fast-paced, intense, and ended abruptly at times leaving participants puzzled and unsure. I even found the distance between



sessions to be problematic as some of the "progress" made with student beliefs seemed to be lost when they returned a week (sometimes two weeks) later.

Additionally the participants spoke to the two main strategies I used to introduce new knowledge. Similar to comments made about our lack of time together, many participants commented on the need for more focused discussions on the theoretical concepts presented and they overwhelmingly requested more dedicated time working with the documents. Specifically considering my use of explicit instruction, my goal was to provide a platform for application. I had anticipated that the participants would read the content prior to the class session and that they would be prepared to discuss the foundational understandings thus cutting down on the need for a lot of lecture and explanation on my part. While most appeared to have completed the reading assignments, as a group, they had a really hard time digesting the central points, which required extended class discussions. While I wonder today if the content was too advanced, I struggle with knowing that these scholarly readings are key to building the necessary criterialist understandings, which I sought to indoctrinate. Thus, they must be taught and participants needed to thoroughly understand these scholarly readings regardless of the time needed by students to comprehend.

Directly related to the time spent on theory, was the lack of time spent on practice. I had planned to spend the last half of each class session (50 minutes), allowing the participants to work through document-based activities as a way to apply newly encountered theory into practice. While some classes did allow for this period of time, many did not. Therefore, participants were left with incomplete opportunities



to process and seek assistance with cognitive roadblocks. Specifically participants mentioned that they felt unprepared to deal with the problems associated with conflicting arguments. They repetitively asked for more explicit instruction with regards to how to negotiate these issues. While there were additional pieces I could have added to their reading repertoire, which would speak directly to these issues, working with documents remains the most poignant strategy for helping students familiarize themselves with the evaluation, corroboration, and use of conjectural logic within source material. Similarly, participants asked for more time working with the PAIRe strategy. Both of these requests beg the need for additional course meetings.

My third goal for the course was to shift participant beliefs specifically about knowledge, the knower, and the processes used by the knower to create knowledge by creating periods of destabilization resulting in a motivated search for equilibrium. Participant reflections indicated that most felt that the course made some sort of impact on the ways in which they thought about history and history teaching and learning. Most stated that they felt like they gained a greater understanding of the discipline of history while a couple of the participants also spoke to an increased knowledge base for teaching history in schools. Data collected indicated that small gains were made by a majority of the participants on both of these scales.

Additionally, a few participants (the history majors) also indicated that they felt a degree of advantage over other history majors because they now had definitive strategies and a working vocabulary to talk about what they were doing.

While on the surface my original goal of shifting participant beliefs about history and history teaching and learning seemed to have been met with some level of



success, more valuable contributions seem to come from a discussion of the complexities associated with these shifts. A careful reflection on my own goals coupled with participant reflections and rigorous data sources assisted in the identification of a number of emergent themes. These emergent themes not only speak to the question of "what happened as a result of the course", but also represent the key findings associated with the study.

Emergent Themes

The course seemed to serve as a point of entry for most participants with regards to disciplinary beliefs about history. It attempted to offer a roadmap and set of tools aimed at assisting participants in the successful navigation of theoretical and procedural content along its path. Participants interacted with the strategies associated with the surfacing, challenging and shifting of beliefs in a variety of ways resulting in a number of emergent themes, which represent the key findings of this study answering to the original research question.

The Difficult Task of Shifting Beliefs.

While all participants within the study experienced some instance of belief shifting, the shifts made (even by those characterized as having experienced the most change from pre to post course) were minimal at best. Most of the participants increased their awareness of larger, more general conceptual understandings about history teaching and learning. They left the course with an increased awareness of history as a constructed work based on past remnants. Relatedly, all of the participants left the course understanding the role of the historian as active as opposed to that of a passive chronicler. Most could articulate some of the concrete procedural



strategies used to create histories such as "using evidence", "identifying the author", and "taking perspective into consideration".

However, those beliefs about knowledge, which were less literal and somewhat more abstract, proved to be consistently more difficult to shift among participants. Specifically, they struggled with the role of the historian. While they shifted their understanding of this role from passive to active, the interplay between knower and what can be known stifled many if not all of the participants. The innate problem of "bias", and the licensure to use conjectural logic to fill in the gaps along the evidence trail cognitively paralyzed their belief structures. In extreme cases, this resulted in an appeal to subjectivism, which allowed participants to believe that any historical opinion was acceptable; criteria was not necessary since accounts were terminally compromised by bias. Even those participants, who did not ultimately subscribe to such a belief, still struggled to understand or rationalize the level to which historians could use reason to bridge thin lines of evidence. Relatedly participants struggled tremendously with the teaching of historical thinking likely due to the fact that they did not have a deep enough understanding of the disciplinary concepts, which lay at its foundation.

Thus, the ultimate goal of the course, which was to influence beliefs about history teaching and learning in a way that shifted them toward criterialism while simultaneously shrinking associations with objectivism, was likely accomplished at a very ancillary level. However, such a statement does not imply that criterialists or experts were created as a result of the course. All of the participants remained in a state of transition quite similar to where they began. However their beliefs about the



knower, what can be known, and the procedural strategies necessary to create knowledge, did shift at varying levels of internal consistency and stability. Remaining inconsistencies within their belief structures made doing and thinking about history very difficult and inhibited productive investigation of the past. These beliefs required significantly more sustained attention. Based off of my own observations and the participant reflections on the course, this sustained attention likely would be best suited to come in the form of practice with document-based activities in a formal educational atmosphere similar to the course. In summary, these participants needed more time.

The Time Needed to Shift Beliefs.

The course discussed throughout this study met for about 100 minutes, eight times over the course of the semester. This translates into a little more than 13 hours of instructional contact. Course readings, assignments, and reflective interviews conservatively add another couple of hours to that number. Even with heroic efforts, this block of time is entirely too little for the kind of focused and intensive work needed to effectively surface, shift and stabilize beliefs each of which takes dedicated focus and deep thought (see also, McDiarmid & Vinten-Johanson, 2000).

The first class session was almost entirely devoted to the surfacing of participant beliefs. Even at this juncture, many thought they understood their own ways of knowing but they were very much still trying to articulate (verbally and in writing) their beliefs about history teaching and learning. Similar discussions took place during the initial interview. So in reality, I was already "losing" (although this time spent was crucial as participants needed to first surface their beliefs before they



could be shifted) a couple of hours of instructional contact before we even began.

That set me back to seven class sessions in which I needed to introduce, discuss and engage participants in the complex concepts associated with the course goals. Thus, time was one of my main obstacles and created some real limitations from the very beginning.

The rest of the class sessions were extremely fast-paced and intense almost to a detriment. After an initial assessment of participant beliefs, it was clear that their knowledge of disciplinary and pedagogical practices associated were novice (expectedly so). This meant that I had a lot of new information to present, and they had a lot of engaging to do with both the theoretical concepts and practical strategies. I found that many class session minutes were used for presenting, discussing, and answering questions about the tools and strategies introduced. They were foreign to the participants and in many cases came in direct contrast with what they believed history to entail. The dissonance created, perhaps influenced participants' beliefs by fostering an environment of confusion and curiosity both of which needed clear and focused attention. Resultantly, the document-based activities often felt rushed and incomplete. In hindsight, I might consider sending the PowerPoints of new ideas I created for each class session, to the participants along with the scholarly articles I selected, prior to the session so that they could read, think about, and process the concepts, which in turn may free up some more time for document work; especially because many participants expressed that the document work had a greater impact on their belief systems.



With that said, even if every minute of those 13 hours was spent engaging in the concerted, sustained practice of working with the knowledge (tools, criteria, judgment strategies) taught during the course, I do not believe the results of the would have been much different. Belief shifting takes time. Add to that the complexity of overcoming years of apprenticeships of observation (potentially 13+ *years*) and the sheer difficulty of disciplinary history, it is clear that the time (13 *hours*) within one school semester is just too limited of a space to engage in the necessary sustained practice of working with the ideas (tools, criteria, judgment) the course taught if disciplinary experts (criterialists) are the end goal.

The Knowledge Students Need in Order to Shift Their Beliefs Toward Criterialism.

Emergent themes from the data repeatedly indicated the need for students to clearly understand three critical roles when considering history teaching and learning in order to shift and stabilize their beliefs to align with criterialism: the role of the knower, the role of knowledge, and the role of procedural strategies. I have referenced these constructs many times throughout this study not only because of their centrality to the study of disciplinary history, but also because they were the areas which drew the most points of discussion and contention from participants. I theorized at the start of the study about the importance of participant beliefs about such roles in the shifting of more novice beliefs about history toward a more criterialist way of knowing. Namely that ways of knowing within and between constructs remain consistent and stable. Additionally, I initially theorized that participants with stronger criterialist ways of knowing in history may have a more



productive experience shifting their beliefs about history teaching and learning. The results of this study suggest that such theorizations hold a degree of validity.

Likewise, the study suggested additional relationships between these three constructs and the two subscales (history and history teaching and learning), which were not considered prior to analysis of the course.

First, their appeared to be an associative relationship between the role of the knower, what can be known and the processes used to construct knowledge. When they did shift, they often did so in concert as opposed to independently. For example, participants who viewed knowledge as static, had similar beliefs about the role of historians categorizing them as passive consumers and resultantly had minimal (if any) understanding of the tools used to create knowledge. Intuitively this makes good sense. If one understands knowledge as static (received) then there would be little need for an active historian and no need for tools of any sort; the past would speak in its own voice. Relatedly, participants who began the course working under such assumptions who then shifted their view of what counts as knowledge toward something that is actively constructed, also had a tendency to simultaneously shift their beliefs about what the historian does and how they go about these active constructions.

It is important to note, however, that while these associative shifts often moved participants toward a more expert way of knowing, they were still relatively minimal and often left participants in a state of cognitive disequilibrium equal to or even greater than where they began the course. A majority of the participants left the course having shifted their beliefs about the historian toward one of active



constructor. Likewise they acquired knowledge of tools historian use in order to construct this knowledge. These shifts certainly align with a more expert way of knowing. However, most participants were not able to fully rationalize this active role or how their newly acquired knowledge of strategies should be used. Consequently, most (if not all) of the participants left the course having shifted away somewhat from over-privileging the past's objects to over-privileging the role of the historian. That is to say they gave the historian unlimited decision-making (or in the case of many of the participants "opinion-making") power ultimately negating some or all of their responsibility for rigor. Such a positionality is counter-productive to their ability to make sense of the past in the disciplinary sense. Thus, the results of this study suggest the necessity of fully rationalized and thoughtfully considered belief shifts within and between all three constructs in order for productive and stable criterialists to emerge from those starting from a novice understanding of history teaching and learning.

In addition to the correlative nature of constructs within each of the subscales, analysis of data associated with this study indicates that there was an associated correlative relationship between construct shifts across the two subscales. For instance, participants who shifted their beliefs about the role of the historian on the history subscale also had a tendency to shift their beliefs about the role of students on the history teaching-learning subscale. Similarly, when participants gained knowledge of the tools historians use to construct histories, they were more inclined to associate these tools with strategies useful in classrooms. However, this claim held true only in theory; not so much in practice. Participants would often *talk* about these strategies in terms of use by historians or students but they less frequently put them into practice



within document-based activities or lesson plan assignments. This is perhaps suggestive of the unstable and inconsistent nature of participant beliefs.

Another interesting pattern, which surfaced from the participants' data, was the tendency for those coming into the course with more stable beliefs about history to make greater shifts toward criterialism over the course of the experience. For example, Sara, and Tameka, who began the course with two of the highest consistency scores on the history subscale, both also made the most shifts toward criterialism (using the BHQ and qualitative data sources for the comparison). Similarly, Tom and Eric, who began the course with the lowest consistency scores on the history subscale, left the course having evidenced the least shifting toward criterialism.

Based on my own observations as the primary instructor, analysis of data from the perspective of a researcher, and participant reflections, those participants who entered the course with more stable ways of knowing required less time to process the information presented. In other words, participants who began the course with more productive ways of knowing with regards to the role of knowledge and the knower in history, and likewise had some understanding of the tools used to create this knowledge, were at an advantage as the information presented was not entirely knew. Therefore, they were able to spend more time reflecting on their own beliefs about history and how they aligned (or did not) with what I was teaching them. Likewise, this also freed up more time to actively work with the strategies when tasked with the document-based activities. Participants, who were seeing these strategies for the first time, spent significantly more time asking questions and requesting guidance, which



took time away from their experience actively constructing histories. Thus, the mitigating factor once again is time; specifically time working with the criteria and tools taught throughout the course. Those participants who required less time intaking new information, had more time to process, and resultantly made greater shifts toward criterialism.

Finally, a fourth pattern emerged from the data suggesting that participants who made greater shifts on the history subscale simultaneously made greater shifts of the history teaching and learning subscale. Likewise, the sub-categories (role of the knower, knowledge, and procedural tools) also seemed to correlate. Theorization about this pattern suggests a similarity to what was previously discussed about participants who made greater shifts when they began with more stable beliefs. Those with more stable beliefs about history had a more productive experience shifting their beliefs about history teaching. This appears to have occurred as a result of the correlative relationship between knowledge and belief shifts. Again, those who were able to spend less time in-taking new information were able to spend more time thinking about how to take that information and put it into practice. Again, this belabors the necessity of time when considering the shifting of beliefs.

Implications

The results of this study compliment those of similar studies (Maggioni, VanSledright, & Reddy, 2009; Reddy & VanSledright, 2010), which indicate a clear shortage of knowledge among preservice teachers with regards to disciplinary history and relatedly how to teach history according to disciplinary standards. The study raises questions about what teacher educators of history and social studies need know



in order to assist their students in learning to teach and where that knowledge should come from. Additionally, it adds to the body of literature surrounding epistemic beliefs in history and how those beliefs shift among preservice educators.

Implications of this research are suggestive of the knowledge base teacher educators of history need in order to educate preservice teachers and more broadly, the structure of current teacher preparation programs.

The Teacher Knowledge Problem in History Education Re-visited

It would be prudent at this juncture to revisit the theoretical model introduced in chapter two which illustrates the endemic cycle of knowledge in history education. This four-phase model has preservice teachers beginning their training as young students apprenticing their own teachers of history, which teaches them what is important (over-privileging the objects) in history and how it should be taught (lecture and memorization). Next, these students enter formal teacher education programs where they receive minimal history-specific education (Wineburg, 1999; Calder, 2006), which appears not to be enough to counter their powerful K-12 apprenticeships (Lortie, 1975). Phase three takes them into the classroom where lack of preparation, coupled with school-based curricular standards and accountability measures that do not align with disciplinary thinking, propagate objectivist ways of knowing. Consequently, newly prepared teachers are ill equipped to deal with history in the disciplinary sense. The final phase illustrates the implications for student learning, which once again teaches future educators to over-privilege the objects thus hindering their ability to think like criterialists



The participants in this study exemplify the teacher knowledge problem in history education. All of them characterized their elementary and high school experiences with history as centered on lecture and memorization. While most associated these types of experiences with negativity ("boring", "ineffective", "memorize and forget"), they turned to these specific ways of knowing and teaching when asked to reflect on their own beliefs at the start of the course. Even those students who were history majors and had spent a considerable amount of time in the history department studying, had objectivist-aligned beliefs about the nature of history. They would later comment that their history courses taught them to accumulate knowledge, to over-trust the past's objects that ostensibly rendered that knowledge possible, but yet were never explicitly educated on how historical knowledge was created.

Recall that my own teacher preparation started out almost mirroring those experiences discussed by the participants. As a first year schoolteacher of history I had to rely on my memories of how I was taught history and how history was presented to me in college. My early lesson plans (which I found filed away in binders for reference) looked like those submitted by the participants at the start of the course. They were based on fixed knowledge that my students were expected to memorize. The facts were substantially over-privileged and the role of the knower was perceived to be virtually non-existent beyond that of a memorizing agent.

My beliefs about history teaching and learning today, are quite different from what they were when I started teaching 10 years ago. My own shifts came as a result of an influencing experience, which directly challenged the ways in which I thought



about history; specifically my understanding of how knowledge was constructed. It was not an experience I had sought, as knowledge of an alternative way of knowing was not something I had ever considered. Rather, I was in essence blindsided by it during graduate school. Just as Lendol Carter's (2006) thinking was "revolutionized" after studying his own history survey course, my thinking began a similar process of transformation following the surfacing and challenging of my beliefs.

I would like to think that the participants in this study had a similarly impactful experience. However, there is a key difference in the pathway toward expert knowledge acquisition, which I was afforded and that of the participants: time. I spent a majority of my time as a master's degree student and doctoral student studying the knowledge, both substantive and procedural, I needed in order to do and teach history in the disciplinary sense. This equates to years of dedicated attention to theory and practice. That is a far cry from the thirteen hours to which the participants in this study were privy. The course served as an entry point in a belief shifting process that requires dedication and focus similar to my own doctoral work. I acknowledge that this kind of time is not realistic when considering undergraduate teacher education. Thus, we must identify the critical beliefs so that teacher educators can target these ways of knowing in the tiny spaces they are currently allotted. Reflecting on the knowledge required to build and instruct the course may help us to better understand what teacher educators need to know in order to expertly prepare preservice teachers to think and teach like criterialists.



What Do Teacher Educators Need to Know?

The participants in this study, whose prior apprenticeships of observation were largely characterized by objectivist ways of knowing (specifically the over-privileging of objects), represent the experiences most undergraduate students have with the study and teaching of history. They have long-since been taught that schooling provides answers and they associate learning with finding these answers. Therefore, teacher educators like myself, whose goal is to help students understand how to think and teach according to criterialist ways of knowing, have the very difficult task of trying to shift these deeply ingrained beliefs. To do so requires a set of fundamental beliefs about the problematic nature of the past, progression in student thinking about history, and the pedagogical strategies used to shift non-productive beliefs while simultaneously pointing out more expert ways of knowing.

Understanding the problematic nature of the past. School experiences with history (and many other subjects for that matter) teach students that the answers they seek are in the objects. In other words, they can find the definitive historical truth if they look hard enough, and in many cases, they need not look very far. Their textbooks, reinforced by multiple-choice tests give them everything they need to neatly replicate history, which is easily stored in their short-term memory for recall (VanSledright, 2002; VanSledright, 2008a). This creates a misrepresentation of the role of knowledge. It is a misrepresentation, as we have seen illustrated by the participants in this study, which many preservice teachers hold at that foundation of their beliefs about history. However, when students are introduced to historical thinking, they discover that the past does not provide these easy answers, which



causes a great deal of anxiety as they continuously seek that definitive line. Thus, the arduous task of shifting beliefs about the nature of history seems to be rooted in a reliance on the objects of the past. As such, it is critical that teacher educators understand the complexity of the past as shifting this belief (a quest for "The" answer) is central to the process of growing criterialists.

Before moving further, one must understand a distinct difference between "the past" and "history"; words often used interchangeably but incorrectly. After being awarded the 2004 Kluge Prize by the Library of Congress, Polish philosopher Leszek Kolakowski remarked, "the past is an ocean of events that once happened" ("History vs. Past"). What we know about the past comes from the remnants (the objects many over-privilege) left behind. "History" is the reconstruction of these past remnants. It is this process of reconstruction, which propels one into complex cognitive challenges requiring sophisticated thinking. VanSledright (2004) describes,

There is a distinct difference between history and the past. Not everything that happened in the past is available to us in the present and that what does remain is organized from someone's perspective. As a result, historians reconstruct the past based on questions they attempt to answer [through the discovery of past artifacts and traces]. The product, "a history", is subject to peer criticism based on certain criteria (VanSledright, 2004, p. 230).

Lee and Ashby (2000) explain that there are certain "powerful understandings about the discipline of history" (p. 200), which must be conceptualized prior to engaging in the "intellectual situations" (VanSledright, 2002) or process of historical thinking used to create these histories.



The role of the knowledge. First, one must clearly understand the role of knowledge. Many students, including some of the participants within this study, equate sources with information. In other words, the objects of the past are seen as telling the truth about the past. This creates a crippling cognitive impasse when confronted by contradictory sources (Lee & Ashby, 2000). With no one from the past here to tell us which one is the correct answer, we are paralyzed and thus are able to know nothing about the past. It becomes inaccessible (Lee, 2005). Criterialists understand that knowledge in history is not fixed or absolute. Past remnants are transformed into evidence, which is used rigorously to create "reasonable reconstructions" (VanSledright, 2004).

The role of the knower. Next, one must consider the role of the knower or the individual reconstructing the past. A view of knowledge as fixed will often result in a view of the historian as nothing more than a chronicler of discoverable truths. While many of the participants in this study were quick to move away from this understanding, they had a more difficult time rationalizing the active role to which they assigned to the historian. When we began thinking about perspective and intent, a level of skepticism (and sometimes cynicism) often clouded their understanding of how the knower interacts with the past thus leaving them thinking that all histories are simply opinions.

Expert historians are attuned to the many human factors, which complicate the role of the knower. At the forefront is what VanSledright (2001; 2002) refers to as our historical positionalities; the assumptions we use to make sense of the world. These perspectives are impossible to escape and historians are faced with the conundrum of



trying to understand a place that Lowenthal (1985) describes as a "foreign country". We use "temporal bearings" to "assign significance, assess traces and accounts, conceptualize change, judge progress and decline, and employ empathy, moral judgment and the ideas of human agency" (Sexias, 1996, p.778). Wineburg (2001) explains,

Historical thinking requires us to reconcile two contradictory positions: first that our modes of thinking are an inheritance that cannot be sloughed off, and second, that if we make no attempt to slough them off we are doomed to a mind-numbing presentism that reads the present onto the past. (p.12)

This presentism, as Wineburg (2001) describes, is "our psychological condition at rest, a way of thinking that requires little effort and comes quite naturally" (p. 19). Thus, expert historians must practice coming to know others. "Mature historical knowing teaches us to do the opposite [of egocentrism]: to go beyond our brief life, and to go beyond the fleeting moment in human history into which we have been born (Wineburg, 2001, p. 24). Thus, the criterialist views the role of historian as much more than an active contributor whose account is laden by position and choice. They see him as a reconstructor who weaves together evidence in accordance to rigorous criteria based on questions asked acknowledging that it is the nature of accounts to differ (Lee & Ashby, 2000).

The role of conjectural logic. Finally, one must understand the rigorous processes associated with historical thinking. In his 2001 treatise describing history as an unnatural act, Wineburg laments on the complex cognitive challenges studying the past presents upon its investigators. He states,



Historical thinking, in its deepest forms, is neither a natural process nor something that springs automatically from psychological development. Its achievement, I argue, actually goes against the grain of how we ordinarily think, one of the reasons why it is much easier to learn names, dates and stories than it is to change the basic mental structures we use to grasp the meaning of the past. (p.7)

Perhaps the most troublesome of these processes is the licensure historians have to piece together thin trails of evidence. This was a point of contention for many if not all of the participants within this study. VanSledright (2002) explains, "history operates on the powerful connection between reality and interpretation" (p. 37). This "interpretive paradox" (VanSledright, 2002, p.36), centers on the understanding that historians "must often imaginatively construct the missing pieces" (VanSledright, 2002, p.37) of indeterminate evidence trails in order to create coherent interpretations. The licensure for such interpretive practice is "circumscribed by the parameters of the historical context and evidence at hand" (VanSledright, 2002, p.37). More skilled investigators appear to have honed their capacity to create defensible judgments as they navigate the relationship between themselves and what they are trying to understand. They work from judgment criteria that they appear to trust and they understand that a level of disciplined conjectural logic is essential in order to produce knowledge in history.

This interpretative paradox is a tension even the most expert of historians wrestle with as they investigate the past (VanSledright, 2002). Discussions over "too much" or "too little" conjectural logic used when constructing histories have been



taking place within the field of history for quite sometime. One notable dialogue, which seems to embrace the differing viewpoints about how this strategy should be rigorously used came between historians Natalie Zemon-Davis and Richard Finlay in a 1988 AHR forum entitled: "The Refashioning of Martin Guerre". According to Finlay, Davis over-interpreted Martin Guerre and his story. He claimed that she took too much licensure, and thus broke the disciplinary rules. She countered that historians must use conjectural logic when the evidence is weak or inconclusive, but they must do so cautiously, within boundaries circumscribed by evidence and through reasonable conjectural leaps that can be defended.

Likewise, I found that the experience of the course influenced my own struggles with this inescapable tension. How much freedom does the historian have to connect thin and indiscriminate evidence trails? How much licensure do they have when they need to make assumptions in order to construct coherent histories? Participants on a weekly basis posed derivatives of these questions. I attempted to help them rationalize this arduous cognitive debate, but it seems to have been a weakness on my part as their instructor.

In terms of my own struggle, just as the participants in this study seemed to benefit from more practice with document-based historical construction, I too seemed to require more practice with the sort of conjectural logic needed to construct histories. Such practice would not only strengthen my own beliefs about issues similar to those debated by Zemon-Davis and Finlay, but will also allow me to more confidently and coherently help my students work through these very problematic issues in history.



Knowing this, why was I unable to influence the beliefs this group of seemingly motivated and eager participants more significantly? Resultant data suggested that I successfully taught students to *be skeptical of* the objects. They left the course with a fairly consistent view of knowledge as constructed. However, this is where many of them remained; in a state of confusion and in some instances, doubt regarding the study of history. Frustrated by their inability to find answers, and even more so by the knowledge of the absence of answers, participants worked feverishly to reach some level of equilibrium, but limited time greatly hindered their efforts. It seemed as though just as some participants were beginning to understand, and could thus benefit from intensive practice, we needed to either move onto new material or new activities.

Knowledge of progression in student thinking about history. The participants in this study shifted at all different levels on varying constructs. Some were able to rationalize the role of the historian, but were stuck grappling with the tools they use to create knowledge. Others were unable to process this role likely due to the fact that they were not entirely divorced from the concept that the objects are the answers. It seemed to depend on where their beliefs were when they entered the course and how much time they were able to devote to processing and applying their new beliefs.

These conclusions echoed those found in Lee and Ashby's (2000) longitudinal study, which indicated that students' historical thinking "developed in different conceptual areas at different times" (p. 213). This necessitates teacher educator knowledge of far more than just expert ways of knowing. They must also understand



the progression of student historical thinking so that pervasive ideas, both productive and non-productive, can be "addressed in teaching and simplifications that might too easily be assimilated to those preexistent ideas avoided" (Lee & Ashby, 2000, p.213). Navigating this space as the instructor of the course required a working understanding of how students' thinking about history progressed. My understanding of this fluid space was foundationally grounded in the work of Lee and Ashby (2000) coupled with the work of Maggioni, VanSledright, and Alexander (2009), which surfaced three key understandings of the nature of progression in student thinking about history:

- It is necessary to understand students' preconceptions about the
 nature of history and history teaching so that teacher educators can
 correct misconceptions and build on students' ideas (Lee & Shemilt,
 2003).
- 2. Teacher educators must be alert to varying conceptions of the role of the knower, the role of what can be known, and the role of evidence (see Lee & Ashby's (2000) progression model, Maggioni, VanSledright, and Alexander (2009), and Sexias (1996) for an explanation of these fluid categories).
- 3. Progression models are not intended to be hierarchical. While there were cases within this study where beliefs about disciplinary concepts (role of the knower, knowledge etc.) shifted in tandem, this should not be perceived to be a generalizing statement. Shifts in student beliefs about disciplinary concepts may (and often do) occur



at varying stages of intervention (Lee & Ashby, 2000; Lee & Shemilt, 2003; Sexias, 1996).

These key understandings aided me in my understanding of how participant beliefs were shifting allowing me to adjust the pedagogical strategies needed to help them navigate what proved to be a muddy and cumbersome terrain.

Knowledge of pedagogical strategies used to shift non-productive beliefs while simultaneously creating expert ways of knowing. Teacher educators have the laborious job of not only knowing the theoretical and procedural intricacies of disciplinary history, but also deeply understanding how to translate this knowledge into pedagogical practices, which will help to shift and stabilize beliefs toward a more criterialist way of knowing. First, non-productive beliefs need to be surfaced (Dole & Sinatra, 1999; VanSledright, 2002). Then beliefs need to be disrupted by the introduction of new ways of knowing, which will oftentimes provoke students to seek a degree of equilibrium (Benedixon, 2002; Dole & Sinatra, 1998; Gill, Ashton, Algina, 2004; Kienhues, Bromme, & Stahl, 2008). Finally, a thorough experience, which necessitates a proper allotment of time, is needed to engage in the stabilization of new theoretical and procedural understandings. The following pedagogical strategies proved useful in my own attempted to shift and stabilize beliefs.

Surfacing beliefs through identification. Providing students with questionnaires has been used as a strategy to surface beliefs in previous studies (Maggioni, VanSledright, & Alexander, 2009, Qian & Pan, 2002). This technique, coupled with an interview, which gave participants the chance to explain their responses, proved to be an effective strategy for surfacing beliefs. Alternatively, an



open-ended essay (Benedixon, 2002) could be used to help develop an awareness of one's existing beliefs. Such activities should be designed in ways, which prompt students to think critically about what it means to know something.

Challenging and stabilizing beliefs using key pedagogical strategies. Once the teacher educator has successfully surfaced beliefs, it is necessary for students to be afforded meaningful opportunities to delve into new ways of knowing. I found two strategies to be especially useful in helping to stabilize my own beliefs about history teaching and learning and in my attempts to stabilize participant beliefs throughout the course. First, I exposed students to what I refer to as "revolutionizing literature" with the goal of explicitly instructing students on disciplinary knowledge. Then, I challenged students to put this new knowledge into practice through authentic disciplinary tasks.

Revolutionizing literature about history teaching and learning. Probably the first and in some ways the most revolutionizing experience I had with regards to the shifting of my beliefs about history teaching and learning came from the reading of seminal pieces of literature. While my own knowledge of history teaching and learning has stemmed from the reading of many authors (See Chapter Two: "The Teacher Knowledge Problem in History" for notable history teaching and learning citations), I highlight three here whom I think were most transformative to my own beliefs and who I believe should be read by all teacher educators as they prepare to educate preservice teachers of history. While they all contribute substantially to multiple areas of history education, I attempt to label each as pivotal in a designated field of research.



extensively to the body of literature, which considers how knowledge in history is created. His 2001 book, *Historical Thinking and Other Unnatural Acts*, seeks to understand the procedural differences employed by historians and students when reading and comprehending historical text. Emphasizing the potential implications current placement of history in school curricula can have on the discipline of history, Wineburg's research focuses on the relationship between historian and student definitions of "knowledge" and how this lens shapes their understanding of past events⁴. It conceptionalizes for its reader "what counts" as knowledge when studying the past in the disciplinary sense. He calls on teacher educators to challenge their students to reconceptualize their beliefs about how knowledge in acquired from texts (Wineburg, 2001).

Student thinking in history. Peter Lee, by himself and in concert with others (namely Rosalyn Ashby and Denis Shemilt), has written extensively on progression and progression models related to the ways in which students' ideas change within different constructs over time. The model he describes in *Progression in Historical Understanding among Students Ages 7-14*, was used as a theoretical frame for the ways in which I thought about belief shifts among participants. This model conceptualizes how varying levels of historical thinkers can and do progress in their level of historical understanding relational to the role of knowledge and the role of the author. In *A Scaffold Not a Cage: Progression and Progression Models in History*, Lee's discussion extends on these ideas to include how students' ideas about evidence

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⁴ Wineburg's essay "Reading Abraham Lincoln: A Case Study in Contextualized Thinking" is included in this book and was the source for the "Lincoln" document based activity used during the course.

shift. These models can help educators to better understand students' prior conceptions and to think about the tools students need to understand how to think like criterialists.

Teaching historical thinking. Bruce VanSledright has influenced the field of history education with the research and theory he has written surrounding the teaching and learning of historical thinking. His formative book-length case study, In Search of America's Past: Learning to Read History in Elementary School, investigates the dual process of how school students learn the disciplinary techniques of reading and interpreting history through multiple perspective primary source documents, and how teachers can employ this method under rigorous curricular standards and pedagogical challenges. VanSledright focuses on the consequences of teaching and learning through situational interpretation and judgment of teacher method and student understanding.

In 2011, VanSledright published *Rethinking History Education: On Practices, Theories, and Policies*. Using exemplar teachers, he creates a comprehensive guide to theory and practice in history education. It is a seminal source for the knowledge teachers need in order to understand and teach historical thinking. More recently, VanSledright and colleagues (Liliana Maggioni and Patricia Alexander) have offered a series of scholarly journal articles and papers (Maggioni, Alexander & VanSledright, 2004; Maggioni, VanSledright, & Alexander, 2009; Maggioni, VanSledright, & Reddy, 2009) surrounding the topic of epistemic cognition and belief shifting in history. These articles, coupled with both of VanSledright's books add considerable depth to the body of literature on history teaching and learning and



serve as fundamental scholarly reads for teacher educators and students alike aspiring to think and teach like criterialists.

Authentic disciplinary work. VanSledright (2010) urges teacher educators to engage their students in the complex source work associated with delving into the past. Teacher educators should be careful to create exercises for students, which are structured (see VanSledright, 2011) and provide the necessary tools in a deliberate attempt to avoid creating historical relativists. Such opportunities promote a sense of ownership and meaning within the discipline. The present study in particular indicates the impact of such work on individuals who are trying to work through their understanding of disciplinary history. Their reflections overwhelmingly suggested that the document-based work with which they engaged helped them think more profoundly about the theoretical concepts I introduced.

In summary, the knowledge demands of teacher educators preparing students to teach history in the disciplinary sense is quite rigorous. Extensive knowledge of discipline-specific conceptual frameworks as well as methodological processes are necessary for teacher educators to create consistent and stable ways of knowing. Additionally, because most students will enter their teacher preparation courses with beliefs about history that fundamentally differ from (and in some cases stand in opposition to) more expert ways of knowing, teacher educators must understand how to navigate the complex terrain of belief shifting. Finally, a working knowledge of pedagogical strategies, that clearly translate theory into practice and explicitly teach



students the ways in which expert historians do history, is crucial to the successful preparation of criterialist-oriented educators.

Knowledge demands of this caliber have significant implications for current teacher preparation programs. First, the time needed for knowledge acquisition of this depth exceeds the current structure of most teacher education models. Even with a substantial increase in time, only the most highly qualified individuals will be successful in the sort of belief shifting a majority of preservice teachers require. This calls to question the individuals we place in these positions as teacher educators and how they are selected. Finally, departments of history must acknowledge the fact that teacher educators cannot do this alone. They require a close partnership to reinforce the disciplinary and pedagogical complexities associated with historical thinking. To do so will likely mean that historians would benefit by learning the vocabulary of the history education research I referenced in the previous section and applying it in their history courses.

Implications for Teacher Education Programs

Institutions of higher learning, the primary site for formal teacher preparation, continue to offer extremely limited (if any) opportunity for preservice teachers to think deeply about the nature of history, how to teach it, and the impact that their teaching has on the way future teachers think about and teach history. The teacher knowledge problem is systemic and has created an endemic cycle promoting beliefs about history that are in direct contrast to those practiced within the discipline.

One might think that the history-knowledge-problem exists only among those students on a traditional path toward teacher certification. Under such an assumption,



one might also believe that the solution to the history knowledge problem among educators is more courses in the history department. However, data collected from the participants in this study suggest that this is not the case.

Half of the participants had some sort of direct affiliation with the department of history (either as a declared major, or double major). Additionally, they were advanced in their undergraduate careers (junior or seniors) indicating that they had taken numerous history-centered courses. An analysis of their belief structures at the start of the course compared with those who were not directly affiliated with the history department (non-history majors) did not indicate much if any advantage (by way of more sophisticated, criterialist-aligned beliefs). Thus, it would appear that disciplinary knowledge of the sort taught throughout the course (role of the knower, knowledge and procedural tools) is either not being taught, or is not being taught in a way that translates coherently into workable knowledge within or outside of formal history or teacher preparation programs.

Additionally, those participants, who were simultaneously taking a course specifically in history research methods, commented that the strategies learned during the course were quite helpful in their understanding of how to do history but had not been explicitly taught elsewhere. So, if it is not being taught in the department of history and it is typically not taught in the teacher education programs, where then are preservice educators going to get the knowledge they need in order to shift their beliefs toward a more expert way of knowing so they can then teach students of their own to become criterialists?



Currently, teacher education programs in this state have limited requirements for preservice educators. Low-bar certification and licensure requirements further propagate the teacher knowledge problem. Formal education programs do not provide the resources future teachers of history need in order to shift the beliefs they have formed as a result of years of unproductive apprenticeships of observation. As illustrated by the participants within this study, without some sort of influencing experience to teach them how to shift their beliefs, the history knowledge problem among teacher educators will undoubtedly continue.

VanSledright (2011) proposes five "preparation pillars" which would provide opportunities for future teachers to work with the complexities of teaching and learning history. He advocates for a substantial "investment in teachers" (VanSledright, 2011, p193) which would require teacher preparation programs to pay close attention to,

a.) structures of the discipline, b.) learning theory and research that is subject specific, c.) curricular shape and practice configurations, d.) assessment design linked to diagnostic feedback and e.) the sociocultural landscape on which diverse learners are situated (pp.193-194).

These were the pillars used in creating the overarching structure for the course.

But is one course enough? The quick and easy response to such a question is: certainly not. The "investment in teachers", which VanSledright (2011) calls for, is much more than the 800 minutes of focused theoretical and practical work proposed by the course. It was not enough time for preservice educators to counter the many challenges that linger outside of their teacher preparation courses, those that subtly



attempted to undo any progress made when considering shifts toward criterialism. In addition to the years of apprenticeships of observation, formal teacher education programs mandate perhaps one of the more threatening of these challenges; the student-teacher field experience.

While preservice teachers are completing a majority of their teaching methods courses, they are simultaneously placed in active classrooms alongside a mentor teacher. The role of this mentor teacher is to provide students with exemplary teaching practices and to serve as a resource for what and how to teach. For future teachers of history, these placements can be disastrous. On the one hand, any shifts participants have made toward more criterialist ways of knowing (such as the ones evidenced by the participants within this study) are often thrown to the back-burner as student-teachers are forced to follow school-based regulated curriculum manuals, which rarely incorporate historical thinking or promote disciplinary beliefs. Seeing this every day for hours a day certainly has the potential to wipe away any criterialist centered beliefs, which may have been acquired through formal teacher preparation.

On the other hand, "historical thinking" has seen some recent attention as it has become one of the latest educational popularity trends. This makes the opportunity for preservice educators to encounter historical thinking in the curriculum slightly more likely. Dependent upon the level of exposure the preservice teacher has had, this may or may not foster great experiential learning opportunities. If the student teacher had an experience similar to the course described *before* their placement, they may have enough of a knowledge base to teach their students ancillary skills to work with historical documents to some level of success. However,



without explicit education, student teachers can create a world of trouble for both themselves and their students; historically speaking.

Currently, history educators like myself, are forced to squeeze disciplinary instruction into one or two short methods *classes*. Results of this are often quite superficial. The take-away message is usually "use primary source documents in the classroom". Sometimes the message sent goes a step further as students hear "use conflicting primary source documents in the classroom". Resultantly they go into their field placements and pass out a bunch of documents. Sometimes they pose a question and ask students to come up with an interpretation. However, skills for doing this sort of work are almost never taught, in methods courses or classrooms, plunging students into a variety of cognitive impasses, which their instructors (the preservice teacher) are ill equipped to handle. Thus, the preservice teachers get frustrated and revert back to their own apprenticeships, which provide for them a manageable template to follow (read and recite). Classroom students welcome the equilibrium and the attempts at working towards criterialism are all but forgotten. This raises some provocative questions about how to teach disciplinary history effectively in the tiny spaces we have and about the individuals we hire to do such arduous work.

While a complete overhaul of history education and instructional practices at the elementary, middle, high school, college and even graduate levels is beyond the scope of this study, the small but productive shifts made by the eight participants suggest that the influence of a course occurring early on in a formal program of teacher education may help preservice teachers in some instances gain enough knowledge about the role of the knower and the strategies they use to construct



knowledge to then translate this knowledge (at some level) into pedagogical practice. This would be a start. Just as mathematics and reading have multiple spaces for teachers to think about teaching and learning, history education begs the same attention as a core subject in school curricula. The insertion of a history methods course (in addition to the catch all "social studies" methods course) may allow preservice teachers a space similar to what the participants in this study experienced where they could ideally work toward surfacing, shifting and stabilizing beliefs about history. Results of the current study indicate the need for such time and space. An influencing experience, such as the course designed for this study, is by no means the answer to the teacher knowledge problem in history education but it certainly poses a silver lining to a decades long cycle.

Teacher preparation programs can only do so much. The complexity of learning how to teach and learn history surpasses the scope of formal teacher preparation alone. There needs to be joint partnerships and disciplinary alignment between departments of history, departments of education, and cooperating school districts (including mentor teachers) based on authentic interrelationships between knowledge of the discipline of and how teach it grounded in VanSledright's (2011) five pillars. Historians need to be cognizant of their role as teacher educators. They need to be more transparent with the strategies and tools used to construct histories so their students do more than absorb their findings.

Conclusion: The Future of History Education.

I am arguing not only on behalf of the preservice education teachers who continue to receive inadequate preparation to teach history in the disciplinary sense,



but also for those students who sit in school classrooms today and tomorrow apprenticing ways of knowing that are creating cognitive roadblocks, which become increasingly harder to overcome as they fall deeper and deeper into this endemic cycle. We owe it to them, the students who put their trust in our knowledge, to be smarter and better prepared to teach them productive ways of knowing from the beginning. However, to grow smarter teachers we need smarter teacher education programs. Resultant data from this study coupled with the results of similar investigations (Maggioni, VanSledright, & Reddy, 2009; Reddy & VanSledright, 2010), suggest that more intensive research-based instruction in history teaching and learning, which necessitates longer preparation periods and extended (authentic) internships become the prerequisites for more rigorous licensure requirements. Similarly, policymakers need to address the external factors (testing, skewed accountability etc.), which play a significant role in preventing teachers from stabilizing and practicing the coordination of beliefs, which promote criterialism. Without such programmatic and policy changes, the dangerous problem of teacher knowledge in history education will continue to fester. Who suffers the most? The children we equip to continue this cycle. As teacher educators, we shape the future of history education today. I believe we have a moral and ethical responsibility to do what we can to end the problem. A course is not the solution, but in my humble opinion, it is certainly a necessary step in the right direction.



Appendices



Appendix A Official Course Announcement

EDCI288f (1-credit)

Investigating History: An Introduction to the Teaching and Learning of History in Elementary School

Want to learn how to create a meaningful history classroom context where history is brought to life through investigation? Then sign up for this course!







We will be exploring why history classrooms in the United States seem so far removed from teaching the practices associated with what historians would define as *doing history*. School history teaches students that history is dead, that the story is already known, and all that is left to do is memorize it. But history is still alive! New stories can be told! Come find out how historians investigate the past, and learn new ways of teaching this exciting process to students.

Together, we will address the follow questions:

- 1.) What does it mean to think historically?
- 2.) How do students learn to think historically?
- 3.) What teaching strategies do teachers engage in when teaching students to think historically?

The EDCI288f course experience seeks to create a space where those thinking about becoming education teachers may reflect on their personal beliefs about the teaching and learning of history, and simultaneously acquire knowledge about what historians do, and how that knowledge can be translated into meaningful teaching practice.

WHEN: Fall Semester 2010 / Every other Thursday 2:00-3:40pm

WHERE: T.B.A

INSTRUCTOR: Kim Reddy

MORE INFORMATION: kreddy@htrinity.org



Appendix B Course Syllabus

Department of Curriculum and Instruction

2311 Benjamin Building University of Maryland, College Park

EDCI 288f

Investigating History: An Introduction to the Teaching and Learning of History in Elementary School (1-Credit)

Thursdays (*See Schedule*) 2:00-3:40 p.m. 0202 Benjamin Building

Kimberly Reddy
History/Social Studies Teacher Education Program
Cell: (443) 336-0673
kimberly.m.reddy@gmail.com







The EDCI288f course experience seeks to create a space where those thinking about becoming education teachers may reflect on their personal beliefs about the teaching and learning of history, and simultaneously acquire knowledge about what historians do, and how that knowledge can be translated into meaningful teaching practice. This course will offer opportunities for prospective history teachers to understand history teaching and learn powerful research-based practices.

Together, we will address the follow questions:

- 4.) What does it mean to think historically?
- 5.) How do students learn to think historically?
- 6.) What teaching strategies do teachers engage in when teaching students to think historically?



Required Text

There are no required books for this class. All class readings will be available via Blackboard. In registering for EDCI 288f you have been subscribed to Blackboard which you can access by visiting www.elms.umd.edu. On Blackboard, you will find a copy of your syllabus, required readings, class materials, and other tools we will use throughout the semester.

Suggested Text

Donovan, S., & Bransford, J. (Eds.) (2005). *How students learn: History in the classroom*. Washington, DC: National Academies Press.

VanSledright, B. (2002). *In search of America's past: Learning to read history in schools*. New York, NY: Teachers College Press.

VanSledright, B. (2011). The challenge of rethinking history education: On practices, theory,

and policy. New York, NY: Routledge Taylor/Francis Group

Course Assignments

I prefer that assignments are submitted electronically via email prior to the start of class on the due date. However, I will accept hard copies of assignments in class. All assignments submitted digitally will be returned electronically with track changes embedded.

Lesson Plan Activity:

For this assignment, you will create a history lesson that could be taught to elementary/middle level students based on the principles of learning history we are studying in class. I will be using this draft lesson plan activity to better understand how you think about history and how history can/should be taught to elementary/middle school students. Understanding that most students enrolled in EDCI288f have little or no experience with formalized lesson plans, I will treat these activities as drafts assessing you on your effort and attention to feedback. You will turn in three lesson plan drafts throughout the course of the semester:

Initial Draft Due: September 23 Secondary Draft Due: October 14 Tertiary Draft Due: November 18

Please Use the following general format for crafting your lesson:

Your Name Topic/Idea



Grade Level

Central Goal of the Lesson Activity: What do you want your students to know or be able to do?

Key Concept(s): What are the key concepts you want your students to understand?

Resources To Be Used: What materials will you need for this lesson? (text, pictures, film ...)

Assumptions about Students' Prior Knowledge of the Topic/Idea/Concept(s):

What are your assumptions about your students' beginning knowledge surrounding the key concepts you will be addressing?

Activity Script: How will you teach the central goal and key concepts of this lesson? Specifically, what pedagogical moves will you make? Be sure to include as much detail as necessary. Additionally, explain why/what you hope to accomplish with each specified move.

Assessment/Concluding Statement: How will you assess whether or not your students have achieved the goals you initially set?

NOTE: This is to be YOUR OWN UNIQUE LESSON. Do not go online and reproduce a lesson!!

Grading

		Scale (+/- may be
used)		
Participation in Discussion and Activities	25%	100-92=A
Draft of Lesson Activity #1	25%	91-83=B
Draft of Lesson Activity #2	25%	82-74=C
Draft of Lesson Activity #3	25%	73-65=D
Ž	100%	≥65=F

UNIVERSITY OF MARYLAND HONOR PLEDGE

The University has a nationally recognized honor code, administered by the Student Honor Council. The SHC proposed and the University Senate approved an honor pledge. The pledge reads as follows:

"I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination."



ACADEMIC ACCOMMODATION

If you have a documented disability and wish to discuss academic accommodations, please contact me as soon as possible.

ADDITIONAL RECOMMENDED PROFESSIONAL RESOURCES

Effective teachers use high quality resources to stay current with research on

Session Date	Topic/Overview	Readings/Assignments Due
Session One: Sept. 2, 2010	 Introductions Goals of the Course BHQ₁ History teaching and learning position statement 	Read: Cuban, L. (1991). History of Teaching Social Studies.
Session Two: Sept. 23, 2010	 What is history? What does it mean to think historically? Abraham Lincoln Investigation 	Read: VanSledright, B. (2010). What does it mean to think historically and how do you teach it? Andrews, T., & Flannery, B. (2007). What does it mean to think historically? DUE: Initial Lesson Plan
Session Three: Sept. 30, 2010	 Critique of Lesson Plan 1 Understanding and applying PAIRe Atomic Bomb Investigation 	Read: VanSledright, B. (2011). The challenge of rethinking history education (<i>Chapter 3</i>) Levesque, S. (2008). Thinking historically: Educating students for the twenty-first century. (<i>Chapter 2</i>)
Session Four: Oct. 7, 2010	 Understanding and applying PAIRe (cont'd): Considering historical significance and author positionality Jamestown Starving Time Investigation 	Read: Levesque, S. (2008). Thinking historically: Educating students for the twenty-first century (Chapter 3- Historical Significance) VanSledright, B. (1998). On the importance of historical positionality to thinking about and teaching history.
Session Five: Oct. 14, 2010	 How do you translate PAIRe into pedagogy? Considering student thinking. Jamestown Starving Time Investigation (continued) 	Read: VanSledright, B. (2011). The challenge of rethinking history education (Chapter 4) Lee, P., & Ashby, R. (2000). Progression in historical understanding among students ages 7-14
Session Six: Oct. 28, 2010	 Critique of Lesson Plan 2 How do you translate PAIRe into pedagogy (cont'd)? Roanoke Island Investigation 	DUE: Secondary Lesson Plan Read: VanSledright, B. (2011). The challenge of rethinking history education (Chapter 5) VanSledright, B. (2002). In search of America's past: Learning to read history in schools (Chap.3) Drake, F., & Brown, S. (2003). A systematic approach to teaching historical thinking.
Session Seven: Nov. 4, 2010	 Creating Meaningful History Assessments Boston Massacre Investigation 	Read: VanSledright, B. (2011). The challenge of rethinking history education (Chapter 6)
Session Eight: Nov. 18, 2010	BHQ ₂ History teaching and learning position statement	<u>DUE</u> : Tertiary Lesson Plan

children's thinking and research on teaching techniques. Effective teachers also use high quality resources to aid them in the instructional decisions they make. Make it a personal goal to learn about and start to use such resources this semester. Many of the resources below can be found on-line, in the Curriculum Library in the basement, other libraries on campus, and in the professional library of your internship PDS school.

Journals:

Social Education
Theory and Research in Social Education
Education Week (www.edweek.org)

Journal of Economic Education (www.indiana.edu/~econed/index.html)

Phi Delta Kappan

Scholastic

Teacher Magazine

Professional Organizations and Centers:

National Council for the Social Studies (NCSS) www.ncss.org

Organization of American Historians: www.oah.org
National Council on Economic Education: www.ncee.net
National Council for Geographic Education: www.ncge.org

National Center for History in the Schools: www.sscnet.ucla.edu/nchs

Center for Civic Education: www.civiced.org

American Planning Association: http://www.planning.org/

Documents and other Instructional Resources:

American Memory at the Library of Congress: memory.loc.gov/

National Archives Digital Classroom: www.aarchives.gov/digital classroom

Our Documents: www.ourdocuments.gov/

EdSitement: edsitement.neh.gov

Historical New York Times Project: www.nyt.ulib.org/ Internet History Sourcebook: www.fordham.edu/halsall

Museums and other Informal Education Organizations:

Smithsonian National Museum of American History: <u>americanhistory.si.edu</u> Smithsonian National Museum of the American Indian: <u>www.nmai.si.edu/</u> Smithsonian National Anthropological Archives: <u>www.nmnh.si.edu/naa</u>

Smithsonian National Portrait Gallery: www.npg.si.edu/

National Gallery of Art: http://www.nga.gov/education/index.shtm



Appendix C Extended Commentary on Course Happenings

Session One. Session one began with an administration of the Background Knowledge Survey, BHQ, and History Teaching and Learning Survey. These instruments were used as a way of surfacing the epistemic beliefs participants brought to the start of the course. They were designed to get students to think deeply about the assumptions and the epistemological underpinnings associated with how they think about teaching and learning in history.

After all students arrived, I distributed the instruments and discussed the purpose and directions for the activity. I explained,

Please take some time to complete these three surveys I've just distributed. The Background Knowledge Survey asks you about your past experiences in and out of school with history. The other two contain a series of statements or questions about things pertaining to history and the teaching and learning of history. These instruments were designed to collect information from you to inform my practice and to better understand the perspective you all bring to our small group. They are not graded and will not be assessed for correctness. Rather your answers will be used to guide the approach I use to meet your goals as students and my goals as an educator of history.

Students were given an unlimited amount of time to complete the questionnaires. Most spent approximately 30 minutes to complete all three. This data, coupled with the initial interview, served as a proxy for participant baseline beliefs prior to any course instruction.



Following the completion of this initial data collection session, participants were asked to share their names, current majors, and personal goals for the course. Most stated that they were interested in pursuing a career in teaching; specifically participants expressed an interest in teaching history. Claire's response was quite representative of the class as a whole. She stated,

I think I am interested in teaching but I'm not quite sure. I also really like history. When I saw the course announcement for this course I thought that this might be a good place to think more about whether or not I really want to do this and if so how!

After this brief sharing, I expressed the goals that I had at the onset of the course, which I simply read from the syllabus. I read,

The EDCI288f course experience seeks to create a space where those thinking about becoming education teachers may reflect on their personal beliefs about the teaching and learning of history, and simultaneously acquire knowledge about what historians do, and how that knowledge can be translated into meaningful teaching practice. This course will offer opportunities for prospective history teachers to understand history teaching and learn powerful research-based practices. Together, we will address the follow questions: What does it mean to think historically? How do students learn to think historically? What teaching strategies do teachers engage in when teaching students to think historically?

Then, as a class, we read through the rest of the syllabus including the course assignments and proposed calendar. We spent a good deal of time talking about the



initial lesson plan assignment, which was scheduled to be due prior to start of the next class session. Most were nervous because (with the exception of one student) they had never been exposed to or written a lesson plan. Students were given a template to follow and were encouraged to design an "ideal history lesson for or middle school students incorporating the ways in which [they felt] history should be taught in order to achieve the most desirable student outcomes". Common questions were "How long does it have to be?", "Does it have to be about a certain topic?", and "How will you grade this?" I explained that there was no set minimum or maximum, it could be about any topic of their choosing, and that they should not worry about the grading but rather think about it as "an initial conversation between you and me about your approaches to teaching history".

The remainder of the class was used to give students a background on history/social studies education in America. Cuban (1991) "The history of teaching social studies" was used as a central point of reference. Lecture accompanied by a PowerPoint presentation was used to initiate a conversation about this topic. Students were quite hesitant to participate or ask questions resulting in a predominantly teacher-centered end to this first session of the course.

Immediately following Session One, I began to hold initial interviews with participants. During these interviews, I used the aforementioned Interview Protocol to loosely structure the conversations and to gather data on three predominant topics: apprenticeships of observation, beliefs about disciplinary history, and beliefs about history teaching and learning. In addition to the interview protocol, the initial



interview was used as a space for students to reflect on and articulate their responses to the BHQ. All initial interviews were completed prior to the start of Session Two.

Session Two. Prior to arriving at class session two, students were asked to read two scholarly articles: "VanSledright, B. (2010). What does it mean to think historically and how do you teach it?" and "Andrews, T., & Flannery, B. (2007). What does it mean to think historically?" These articles were selected because they both provided thought provoking and easily accessible commentaries on historical thinking and how it can be taught in schools. My goal was to use inquiries surfaced by these articles as a launching point for classroom discussion. Additionally, the initial lesson plan assignment was due at the start of class. All eight participants sent me an electronic version of their initial lesson plan no less than three days prior to our second-class meeting.

Session two opened with a reflective discussion surrounding their first attempt at writing a history lesson plan. Comments were scarce but all centered on the task being much more difficult than they had anticipated. For instance, Oria blurted out, "I had to *think*. A lot! When asked to elaborate on this she replied, "Man I had to think to myself – how will I structure this? What I am doing? Why am I doing this? My head hurt me!" Ben chimed in that it was very hard for him to select a topic of focus "that was not too narrow or too broad" for a class period. He said that making these decisions made him think about how you cover everything in a year. Finally, Katerina mentioned that she had difficulty negotiating the amount of time tasks and activities would take; a sentiment echoed by just about all of her class peers.



Following this discussion, students were asked to engage in their first performance-based activity. Students were introduced to a number of primary source documents and were challenged to answer the associated question, "Was Abraham Lincoln the Great Emancipator?" The focus question and primary source selections were borrowed from Sam Wineburg's (1998) study of how expert historians think about and read evidence. As noted in his article, Wineburg deliberately selected documents to contain varying perspectives and conflicting information in order to directly observe the ways in which historians dealt with such information. My goal was slightly different from Wineburg's as I was not observing veteran historians with processes for engaging in such work. Rather, my goal for this activity was to use the exercise as a way to directly surface participant beliefs about doing history and potentially challenge these sets of beliefs, which theoretically would result in a level of dissonance. This vulnerable environment would then be used as a space to begin deconstructing naïve and unproductive ways of knowing while infusing more productive positionalities aligning with criterialist understandings.

Anticipating that a majority of the enrollees would hold objectivist or subjectivist stances, such an activity was intended to directly challenge the ways they thought about doing history. The outcomes of such an activity had the potential to result in the participants feeling stifled by their own understandings of how to deal with the past. *Objectivists* who wished to simply "find the answer" would be confused by the existence of conflicting interpretations and *subjectivists* who attempted to cut and paste accounts together would be troubled by inconsistencies and produce interpretations that they had difficulty defending. Both situations would create



cognitive dissonance, which would encourage students to ameliorate tension by seeking out new ways of knowing.

To do this, first I asked students to brainstorm words, thoughts, and other identifiers associated with the name "Abraham Lincoln". Then, I distributed copies of seven primary source documents. Students were not given any sort of guidance with regards to how they should approach the documents or what exactly they should do with them. Instead, they were asked to come up with an evidence-based response to the question posed. I chose not to give them structured guidance for this initial performance-based activity as I wanted to see how each participant innately approached the task and afterwards, I wanted students to reflect on what they did as yet another way of surfacing their own understandings. Students were given approximately 30 minutes to work through the text in pairs. By the end of the allotted time, all groups stated that they required additional time to work through the questions they had. Classroom time constraints did not make it possible to grant this request.

As a class, we spent the next 15 minutes sharing questions about the documents, which surfaced during the activity. The first glimpse of scholarly debate between participants over interpretations also appeared. Ben seemed to dominate the discussion urging his fellow classmates, who were now disgusted with Lincoln, to consider the historical context of the situation and to leave modern-day ideals out of the cognitive act of sourcing; this would be a theme we would revisit as a class frequently.



In addition to questions about the text, students were also asked to reflect on what they had just done; specifically they were asked to ponder their approach to the main question and the strategies they used to work through the documents.

Participants did not reference formal names for strategies. However, Oria mentioned that she looked at "dates" while Ben and Patrick stated that they considered the purpose of the documents ("he was running for Senate"). Others in the class, namely Brittany and Tom remained almost silent throughout the entire discussion.

To wrap up the class session, and to address the dissonance that had clearly surfaced in many if not all participants, I led a reflective discussion on the readings, which were due that day. Unfortunately, it seemed evident by the lack of participation and knowledge on the subject that many had chosen not to read these pieces ahead of time. To supplement, I led an informal lecture on topics pertaining to what historical thinking means, what historians need to know in order to approach the past authentically, and what tools historians use to work through artifacts.

Session Three. The third course session began with a peer critique of their initial lesson plan drafts. Participants were asked to exchange lesson plans with another student and perform a critique. Specifically participants were encouraged to ponder the questions, "what do you find commendable about the lesson plan?" and "what suggestions can you make?" A written rationale for all comments made was required. After the critique was completed, partners were asked to interview one another using the following protocol questions: What is/are the goal(s) of the lesson? What target understandings does the lesson intend to cover? What does the lesson value as important with regards to historical knowledge / historical procedure? List



the pedagogical moves made throughout the lesson. Explain the significance/purpose/goal or each move. When the brief interviews concluded, the class shared what they had learned from one another during a seminar style discussion. My goal in facilitating this lesson was to give participants a deliberate space to surface their own beliefs about history as they analyze their own decisions.

Following the lesson plan discussion and simultaneous surfacing of beliefs, participants were asked to reflect on the readings that were due for that class session. They included the third chapter of VanSledright (2011). The Challenge of Rethinking History Education, which was entitled "The Case of Thomas Becker: Using Knowledge of History as a Domain to Structure Pedagogical Choices?" Additionally participants were asked to read Levesque (2008). The goal of session three, in addition to surfacing beliefs, was to begin introducing participants to the procedural knowledge necessary to employ disciplinary history. VanSledright (2011) states in the introduction of this book that chapters three through six focus on what teachers need to know to teach history as an investigative process. Specifically, session three would focus on making the distinction between substantial and procedural knowledge as well as the strategic capabilities used to create these types of knowledge. VanSledright's acronym of PAIRe (perspective assessment, attribution, identification, and reliability judgment) coupled with Levesque's discussion of internal (reliability and contextualization) and external validity (identification and attribution) were both used to drive a conversation about how to use background organizing concepts in concert with specific analytic strategies as a way of coming to understand the past. Figure 4 displays the theoretical underpinnings of the class discussion.



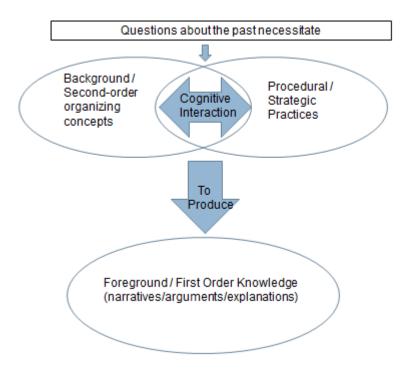


Figure 4. Theoretical Framework for Session Three

To further engage with these ideas, participants were asked to analyze VanSledright's (2011) fictitious "history-teacher protagonist" (p.3) Thomas Becker considering why he was dissatisfied with the traditional approach to history, what he decided he wanted to do with his students and what moves he used to strategically approach what he wanted to do. Likewise, I asked participants to consider Becker's assumptions and beliefs about history and how these ways of knowing afford him the opportunity to plan the way he does. This exercise actually resulted in a lengthy discussion surrounding "belief systems" and how beliefs drive ways of knowing.

To close Session Three, participants were asked to engage in their second performance assessment task. This time, they were asked to consider several documents about the United States' decision to drop atomic bombs in Japan.



Specifically students were asked to respond to the following prompt: "Did President Truman decide to drop the bomb or was the decision to use the atomic bomb inevitable?" Unlike their first investigation, participants were explicitly told to use PAIRe as a strategy for working through this historical investigation. Additionally, participants were given a copy of the "PAIRe Toolkit for Reading and Assessing Historical Documents" (VanSledright, 2011) to use as a strategy for approaching the investigation. This toolkit laid out the components of PAIRe and how they should be considered when investigating history. I also gave them the PAIRe Tool Guide (VanSledright, 2011), which could be used alongside the Toolkit for analysis. The Tool Guide consisted of the following components:

- 1.) <u>Identification</u>: What is the document or image? (Examples: a diary? A portrait? A newspaper?) When was it made or written?
- 2.) **Attribute**: Who is the "author"? What do you know about the author? Why might the author have created this account or image?
- 3.) <u>Perspective</u>: What is the author's perspective? What is he/she trying to communicate? To whom? Why?
- 4.) **Reliability**: How might this account or image and the perspective it contains be used to address the question you are asking? Would it be reliable evidence in answering your question(s)? Why or why not?

Participants worked on this exercise in pairs and were asked to construct an evidence-based response. Most were unable to finish in the amount of time, which remained in the session. However, participants did share what conclusions they had drawn.

Anecdotal notes taken after that session indicated most students found PAIRe to be,

... helpful in organizing a process to approaching the documents. Yet many students [were] still are having trouble making sense of the conflicting



information. To remedy this dissonance, two of the four pairs did not reference documents, which were in opposition to the conclusion they had drawn. Also, it seems that most pairs made a priori claims and used the documents to validate them.

My notes also indicated that I was pleased with the progress students were making (with regards to their understanding of the historical process). However, I was increasingly concerned about the amount of time allotted for the course. With that in mind, I decided to email the participants asking that they complete the "atomic bomb investigation" so we could discuss processes used at the start of the next session.

Session Four. Session Four marked the mid-point of the course. It would be the last class centrally focused on topics pertaining to knowledge in the domain of history and the procedural strategies historians use to construct knowledge.

VanSledright's PAIRe was again used to begin the discussion. However this class session was used to consider the concepts of historical significance and historical positionality. Session Four was used as a space to investigate how our individual identities affect the ways in which we approach not only historical evidence, but also the historical questions we are asking.

To begin, participants were asked to work in pairs to analyze the work they had done with the atomic bomb investigation. Specifically, each pair was tasked with explaining how each part of PAIRe was used to engage with the documents.

Resultantly, it became apparent that participants were grasping the underlying concepts of PAIRe. However, writing interpretations up as something other than a straight summary of documents still remained a challenge.



Following the revisit of the atomic bomb investigation, the class opened with a "quick write" where participants were asked to list five events in American history they felt were significant and why. Additionally they were asked to list five people in American history they felt were significant and why. This exercise was adapted from Epstein (1998) and an observation of an undergraduate class led by Bruce VanSledright. Following this activity, participants were then challenged to list their "identities". Once all participants had finished their responses, we analyzed the class data drawing conclusions about how individual identities and cultural frameworks shape the ways in which they approach and construct histories. My goal in this activity was to begin to get participants thinking about the role perspective plays not only in the histories that they read, but the moves they make as investigators, and eventually, as teachers of history. Additionally, this was yet another way to explicitly surface the ways in which they approach history considering the unique lens through which they see things. For example, Katerina shared,

Well you know I'm British and Algerian ... and lived in both of those places so I have I guess a different way of looking at some things in history. Also I have parents who think completely different from me like about historical stuff which is confusing because I learned a lot about like what I know about Algeria based on them because you don't get a lot of history of Algeria here.

Following our discussion of identities, we began reflecting on the scholarly readings, which had been assigned for that class session. They included, the third chapter of Levesque (2008), which was entitled "Historical Significance", and an article written by VanSledright (1998) entitled, "On the importance of historical positionality to



thinking about and teaching history". These readings were used as a strategy to challenge the predominantly held class-wide belief that they goal of history is objectivity. Specifically, we discussed how the lens through which we see the world (our positionalities) often determine what we view as significant and thus what we chose to investigate and how we go about the process. Figure 5 was used to help students better understand the interplay between positionality, significance and historical thinking.

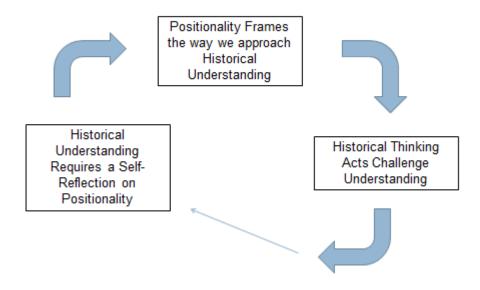


Figure 5. Interplay of Positionality, Significance, and Historical Thinking

With an ancillary understanding of significance and positionality, participants were challenged to think about why these concepts are important to consider not only their own positionalities, but also the importance of considering student positionalities. To breech both topics, I asked participants to take out their initial lesson plan drafts and to consider: 1) their own positionalities and understanding of significance in history. How did both affect what you are teaching and how you were going about teaching



it? 2.) their assumptions about their students' prior knowledge. What were your assumptions about your students' knowledge? How did these assumptions shape the design of your lesson?

Finally, just as we had done for the last few class sessions, participants engaged in an investigative activity. Pedagogically, I had decided to use an investigative lessons during all (with the exception of Session One) class sessions on the theoretical basis that more exposure to such activities while increasing procedural knowledge would assist in a meaningful shift in beliefs. The topic of the investigation was the Jamestown Starving Time. The documents and associated questions for this activity were borrowed from VanSledright (2002). The intent was not to finish the activity before the end of the class. Prior to participants leaving for the afternoon, I reminded them to schedule a second interview with me. I asked that the second lesson plan draft (which was due during Session Five) be submitted prior to our second interview meeting. I made this request so we could discuss the revisions made during the interview meeting.

Session Five. The start of Session Five marked the transition from a focus on "what is history" to "what does it mean to think historically. Specifically, techniques for translating PAIRe into appropriate pedagogical strategies were the focus of this class session. Prior to delving into this, I felt that it was important to discuss student thinking with the participants. Thus far, they had been centrally focused on themselves (as was the intent) in order to better understand and potentially change the way they thought about history. At this stage of the course, we were beginning to



transition from theory to practice and it was necessary for participants to shift their mindsets.

To begin, I asked participants to consider where students learn what history means and how to do it. Likewise, I asked them to consider how these student perceptions influence how they feel they should learn about and interact with history. Many of the participants responded that students learn about history through school. Specifically, their history classroom teacher and the materials they choose to use. A short discussion centered on apprenticeships of observations (Britzman, 191; Kennedy 2005) ensued. I used the graphic found in Figure 6 to illustrate my own theoretical understanding of how apprenticeships influence an individual's beliefs.

Participants were asked to read chapter four in VanSledright's (2011) The Challenge of Rethinking History Education as well as Lee and Ashby's (2000) article on progression in historical understanding. Both articles were selected to illustrate epistemic beliefs within the

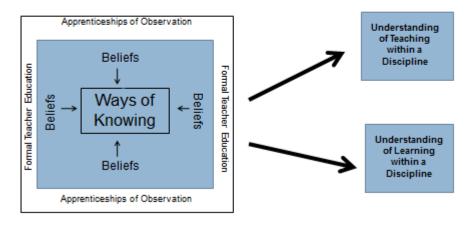


Figure 6. Relationship Between Apprenticeships and Beliefs



domain of history. These readings were used as the basis for discussion. Specifically, we looked at epistemic beliefs in history according to VanSledright's (2011) naïve realist, naïve relativist, and critical pragmatist categorizations and how each category views the nature of history, how history is constructed, how the investigator should deal with bias, and what potential problems may surface for students. Participants were asked to complete the following chart to the best of their ability as a strategy for working through some of the complexities associated with the readings (and to help prepare them to have an informed discussion). Figure 7 displays the blank chart participants were asked to complete while Figure 8 displays it as completed.

Ways of Knowing

	What is History?	How is History Constructed?	How Should the Investigator Deal with Bias?	Potential Problems for the Students
Naïve Realist				
Naïve Relativist				
Critical Pragmatist				

Figure 7. Epistemic Beliefs Chart (blank)



Ways of Knowing

	What is History?	How is History Constructed?	How Should the Investigator Deal with Bias?	Potential Problems for the Students
Naïve Realist	Equivalent with the past	"Falls out of the sky" – You can "find" objective history	Somebody got it wrong. There is a right story.	When pressed – they face a debilitating impasse
Naïve Relativist	Someone's perspective about the past	Stories are cut and pasted together	Everyone's opinion is equal	"anything goes"
Critical Pragmatist	Strategic investigation into the past	Interaction between the knower (the investigator) and what's to be known (the past)	Criteria-laden tools allow the investigator to assess poorer from better accounts	

Figure 8. Epistemic Beliefs Chart (completed)

The discussion surrounding these epistemic categories was quite intense. According to my anecdotal notes "the VanSledright (2011) / Lee and Ashby (1998) discussion seemed to engage the participants more so than our previous discussions". It seemed as though the deliberate labeling of the categories and the breakdown of epistemic beliefs within the domain of history (using the chart above) helped students to create a framework for some of the old and new ideas, which for many were quite jumbled in their heads.

Following this discussion, participants were asked to engage in two tasks.

First, they were asked to complete the Jamestown Starving Time exercise, which they had begun during the last class session. During this investigative session, it was clear that the participants' comfort level with the documents and their understanding of what do with them had increased. Audiotapes captured numerous incidents where participants worked through the documents together, debated among one another, and



ultimately shared fairly strong interpretations. They were encouraged to return to their PAIRe Tool Guide as a way of productively engaging with the documents.

As mentioned previously, the Jamestown Starving Time activity was borrowed from VanSledright (2002). In this publication, VanSledright used the documents with fifth grade students (as opposed to prospective educators as I did). On the heels of our discussion surrounding student thinking and our use of the documents, I felt that it would be productive for participants to read through the fifth grade interpretations. Specifically, I asked participants to consider the ways in which the fifth grade students approached the process of doing history and to also consider the underlying assumptions these students likely held toward the domain.

The second draft of the lesson plan was due during Session Five. All participants had emailed me their draft prior to the start of the fifth class session. However, I had not had a chance to review and comment on them until after the fifth class session had concluded. The afternoon following that class session, I reviewed the drafts. It became immediately clear to me that the participants really did not have a foundational understanding of assessment. I noted to myself the need for some kind of exercise pertaining to the creation of a rubric.

Session Six. My anecdotal notes indicated that Session Six was a "pivotal class session". The goal was to teach participants how to translate the conceptual framework of PAIRe into pedagogical strategies to use within the classroom. By this point in the course, numerous students had asked me when we were going to learn "how to do all of this stuff with kids". Participants were very anxious presumably because their own beliefs had been somewhat disheveled and were in a state of



transition. Unfortunately, due to the time constraints of the course, participants were likely unable to stabilize their own beliefs about history before we moved on to a discussion of pedagogy. My anecdotal notes indicated that this could certainly be a hindrance to the effectiveness of the second half of the course.

I opened the class asking the participants how they thought they would engage with the concepts we had discussed over the course of the past few weeks with students of their own. The silence, which followed, was somewhat shocking to me. Finally, Ben said "I guess you have to help them learn by doing. You essentially need to teach them how to think". Other participants chimed with "debate and discuss", "read and write" and even "construct arguments". However, no participant could give concrete strategies, which they would use.

Together we started with a web-based pedagogical case study entitled Learning How to Think Historically (designed by the author). Theoretically, the case provides readers and viewers the opportunity to work through the dilemmas associated with traditional social studies pedagogy, and to provide a space where prospective educators can better understand how to teach students to think like historical investigators and how to teach students the disciplinary heuristics associated with doing history. A short summary of Learning to Think Historically follows:

Ms. Parker feels her undergraduate teacher education program prepared her to teach reading and math, but she doesn't feel prepared to teach social studies, Ms. Parker relies on her love of history to assure herself that she will be able to effectively teach social studies to her students. Ms. Parker decided to use



the skill and drill method to teach her students social studies so she could devote more planning time to reading and math in preparation for the state assessments in these subjects at the end of the school year. In Ms. Parker's estimation, the beginning of the school year is going smoothly, and the students are doing well in their weekly social studies quizzes, which ask students to recall specific facts and dates. One day, Ms. Parker hears groans and complaints when she asks her students to take out their social studies textbooks and write down the important points of the chapter. When Ms. Parker discusses this with one of her students she quickly realizes that the skill and drill method is not teaching hers students to make connections between important historical events or even to appreciate social studies as a content area. Ms. Parker seeks the advice of her uncle, a professor of history at a nearby university, who tells her she needs to teach her students how to do history, not just memorize history.

This case study can be accessed by visiting www.casestudies.umd.edu. It is comprised of five sections. At the end of each section, students are prompted with a variety of questions, which fall under three categories: Basic Perceptions (summarize and bring to initial questions to the surface), Connecting Theory and Practice (brings the work of educational theorists to bring theory and practice), and Reflection and Application (a space to reflect on beliefs and pedagogy). Participants were asked to read, watch and engage with the prompts associated with each of the case study sections. My goal for this activity was to allow students the opportunity to explore their own beliefs



about teaching history while simultaneously obtaining new knowledge about the process.

Following the case study discussion, participants had lots of questions with regards to how they should actually approach this work with students. I had prepared a PowerPoint of slides, which I planned to use as an accompaniment to a lecture on the topic. Both the PowerPoint slides and the lecture were based on the readings which were due for that class: chapter 5 ("Teaching about Indian Removal:

Describing and Unpacking the Investigative Approach") of VanSledright (2011) The Challenge of Rethinking History Education and Drake and Brown (2003) A systemic approach to teaching history. In my anecdotal notes (this entry was submitted PRIOR to the class session), I wrote:

I believe this to be one of the most important sessions of the course. While some students do receive education about the process of doing history, I have not found the investigative approach to be explicitly taught anywhere in an undergraduate's course of study. It is the deliberateness of the instructional techniques I will present to them today, which I think is absent from most if not all undergraduate social studies education programs.

I began what I referred to as "a deliberate approach" by mapping out a procedural strategy for planning and implementing investigative history into classrooms based largely on VanSledright (2011). Beginning with the planning stages of the lessons, participants were taught to: develop authentic and reflective investigative questions to probe topics of interest, to choose sources which were age-appropriate, readable, and retained a sense of conflict and tension among perspectives, to give students the tools



necessary to engage with the materials, and to assess them on their experience. We talked at great length about the selection of documents. Participants were most "concerned" about this part of the planning process asking where to find them and how to assess and couple them. They really wanted set criteria for the selection of sources. We discussed Drake and Brown's (2003) theory of selecting and combining first order and second order sources as a means for creating an authentic comparison.

Next, we spent some time discussing VanSledright's (2011) series of investigative lessons as presented. Additionally, they were given "Becker's Investigative Template" which lays out the strategies for investigating historical research questions. This template was broken out into two parts: Part One: "A Guide for Investigating Historical Research Questions" and Part Two: "A Guide for Presenting, Discussing and Writing Up Results of your Research". This comprehensive template was given to the participants to be used as a method for approaching investigations with their students.

After we talked about the planning process, we naturally transitioned to the act of implementing these lessons in a classroom. I again distributed the PAIRe Tool Guide (VanSledright, 2011), which upon disseminated Brittany exclaimed "right!" When asked what she meant by that she explained, "I was trying to think about what I could give students to help organize their thoughts and I didn't even think about this! It's perfect!" Not all participants, however, were as enthusiastic. Vanessa asked, "Isn't this going to be really hard for them to understand?" I explained that they would certainly need to lay the framework for using such a tool; just as I had done



during the course. Time once again was a concern (meaning the amount of time they would have in a classroom to go through all of these procedures).

With only about 15 minutes of the class session remaining, I wanted the participants to experience these procedures in action. Unfortunately I did not have the time or space to allow the participants to do this in person. However, I found VanSledright's (2011) case of Thomas Becker, and the class-by-class commentary of his experiences to be reminiscent of my own experiences while engaging with such practices alongside students. I explained to the participants:

Thomas Becker teaches six classes. Through these six classes he works with these ideas of historical thinking. What I am going to do is give each pair two classes and some questions that go along with them. What I would like for you to do is summarize what is going on in Becker's classroom and then reflect on these two questions [on board: "What pedagogical moves does Becker make?" and "How do his students respond?" I just really want to put some of this stuff into context for you.

The participants spent the remainder of the class reading and analyzing Becker's pedagogy. At the last minute I decided not to use Becker's sixth class as it had to do with assessment, which we would cover in our next class session.

I had originally planned for the students to engage with another investigative activity. We simply ran out of time. In fact, my anecdotal notes indicated in all capital letters: "NEED MORE TIME! Only made it through about ¾ of what I had planned". Still, I knew the participants needed more practice with the documents. I decided to send the activity home with them requesting that they email me their written



interpretation prior to the start of our next class session. All agreed (and rather willingly might I add). The topic of focus was the Lost Colony of Roanoke. Unlike the other sets of documents, I created this compilation and sent the participants the strategies I used to collect and select the documents. Also, I approached this investigation from a slightly different angle. In addition to asking for a historical interpretation as I had done in the past, I asked the participants to "Create an investigative history lesson for a grade of your choice using the documents provided. Include explicit directions. What will the teacher do? What will the students do? Create/include all necessary materials".

Session Seven. Session seven began as a continuation of our last class.

Participants shared the "answers" to the questions provided to help them analyze

Becker's pedagogical moves. My notes indicated that this was time well spent.

Participants responded that this allowed them to really "see" some of the techniques we had been discussing. Also they were quite interested in the "normal" teaching challenges, which surfaced such as Becker's time management, varying student ability and student behavior.

Following the analysis of Becker, I took some time to recap all of the strategies we had discussed throughout the past couple of classes; namely how to plan a series of lessons, and how to implement the historical process in the classroom.

From there, we moved on to what might be considered the final topic of the course: assessment. Because seven out of eight participants had never taken a course within the department of education, I felt compelled to first briefly talk about the theoretical underpinnings of assessment. Using Alleman and Brophy (1999) as a point of



reference, I discussed the guiding principles of assessment tools. Additionally, I created a visual with the goal of helping the participants better understand how assessment drives the instructional cycle (See Figure 9.).

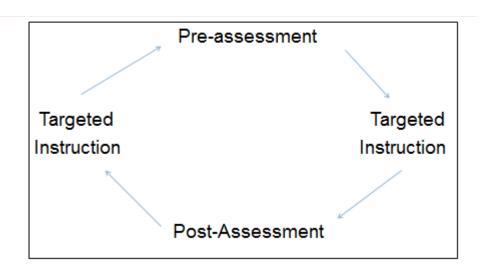


Figure 9. How Assessment Drives the Instructional Cycle

We used the next part of the session to discuss VanSledright's (2011) sixth chapter, which was centered on assessment. To begin, we read, as a class, Becker's sixth class (which was the last class in the series of lessons we had been studying during the last course session). In this instance, Becker was contemplating how to assess his students authentically. We read through his attempts to work through the creation of both multiple-choice items and essay questions. Upon concluding the reading, I posed a question to the class: "When you think about assessment in history, what comes to



mind?" Most returned "multiple-choice questions" as their response. Perhaps this was why the participants were overtly curious about VanSledright's theory of weighted multiple-choice questions. One student responded that it seemed like an "overwhelming amount of work". Another said that she felt like she "needed a whole series of classes to understand just how to do it". I used the following breakdown to help clarify the conceptual framework:

Weighted distractors could be viewed in this way: [written on board: 3-answer is clearly correct; 2- answer refers to the same domain/topic but is incorrect 1- answer refers to a different domain/topic and is incorrect; 0 – is the "lure"; represents common misconceptions about the item or could be the answer provided by someone who guesses based on a general/incorrect understanding]. Think about it in terms of science: If the correct answer regards a specific topic about biology, a 2 point answer would always be about biology, but incorrect. A 1-point answer would be about science (but not biology) and a 0 point answer would be about something that has nothing to do with science.

While all participants acknowledged that they understood the weighting of distractors, I was confident that they would need practice engaging with such an exercise before they even knew what they did and did not understand. However, as was the theme, I did not have enough time in the session to move forward with such an activity.

Next we looked at essay questions as a means for assessment. Our primary focus was on responses to investigative questions. We again turned to Becker's



vignette for a conversation starter. We looked at how he structured his essay rubric and talked about why certain components were included (and perhaps why some were not). Specifically with regards to Becker, I asked the participants to analyze how he assessed his students and what he learned from those assessments. I then asked the participants to engage in a mini-activity. I questioned,

"If you had to come up with a rubric or a way to assess your students' interpretation. What would your rubric look like?" Many participants actually were unsure as to what a rubric was. After I equated it to how Becker set up his essay analysis, they seemed clear. I continued, "What I am most interesting in seeing is ...what are the parts or categories you are going to be looking for in your students' interpretations? These should be representative of sound evidentiary arguments". I gave the participants about 10 minutes to brainstorm categorical headings. The most recurrent category was "argument" with "evidence" following as a close second.

Finally, for the last 25 minutes of class, I asked the participants to engage in their final historical investigation. This time the topic was the Boston Massacre. The questions and associated documents were again borrowed from VanSledright (2002). During this investigation, it was interesting to watch the participants really start to engage with the documents almost getting angry with them. However this also surfaced a troubling roadblock that still seemed to plague many. Instead of using perspective and bias as a tool for understanding the context, some of the participants simply used the sheer existence of bias as a negative factor resulting in the discounting of the evidence. Ben said,



This thing that was written by the town of Boston [is no good] because it is so obviously by the citizens. I didn't think ... I mean I didn't hold this one the same level just because it's so biased and not even trying to be neutral. I read it and I mean I can't even consider it.

Shortly thereafter Brittany responded,

Yeah [agreeing with the last comment above] the same thing for this picture. I mean it looks like some of them were really biased. I mean it's pretty hard to believe that's what really happened because I mean it looks like the Bostonians were just standing there and not doing anything and the soldiers are just lined up shooting. It looks like it was planned that they were going out to shoot this crowd ... I mean clearly there are two sides so you don't discount but ... I don't know.

Class ended with this discussion.

Recall that following class Session Five, I had concluded that participants needed some real practice with the creation of rubrics to assess historical thinking. I had planned to do this during class session seven but ran out of time. Once again, I assigned this task as a "homework assignment" and asked that it be emailed to me prior to our next and last class session. The assignment asked participants to create a grading rubric, which could be used as the tool for assessing an interpretation, essay, or brief-constructed response resulting from a lesson or series of lessons. Participants were specifically asked to consider their own goals for such an assessment and their beliefs about what components were most important when creating their rubric categories.



Session Eight. The last session of the course began with an in-depth discussion of the rubric assignment participants had been asked to create following the last class session. I had received a few emails about the assignment prior to this class. The content was mostly pertaining to "what" should be included. I responded that the categories should be created based on a set of criteria they deemed most important for the successful creation of an authentic historical interpretation. I opened up the discussion for general comments about the rubric assignment and then more specifically about what the participants included and why. Ben responded,

Good ones [historical interpretations] will use evidence from the actual sources and I mean [students] should try not to bring in their own perspective ... well that's impossible so uh ... hmm.

Eric also chimed in commenting,

[Teachers should] assess them on how they use the documents that we provided to them. Like if they just make a statement with no collaboration like just from on top of the head it's no good but if I see that they are ... they have to use the tools like the tone the context and things like that. That would be better.

Katerina then offered her thoughts explaining,

I feel like a "four" is drawing conclusions. I mean your own perspective does have to go into it because it's your own analysis of what you are reading because if you are just using the examples cited in a passage that's just you reciting and that's not creating a history. So yeah a "four" would be drawing



conclusions based on the evidence you've found as opposed to a "one" which would be like reciting the facts that happened.

Interestingly, the participants were quite hesitant to offer up their defined categorizations. My assumption was that this topic was still quite new to them and they were not yet confident in their own understandings. When they did in fact begin to share their categorizations, it was clear that more technical aspects seemed to dominant the rubrics. For example, just about every participant used "grammar or spelling" as a categorization. Some did relate to the assessment of PAIRe. Later I would create three categories, which seemed to umbrella all of the participant responses: General/Technical Criteria, Reasoning Criteria, and History-Specific Criteria.

Following the discussion of assessment and rubrics, the class embarked on a roundtable share of their third and final lesson plans (most of which were not complete). The goal of the roundtable was to share lesson plan objectives, articulate how they intended to meet these objectives, and how they planned to assess for understanding. Each participant took a turn sharing and their peers commented on what they thought was commendable and also offered suggestions and "food for thought". Overall, I felt the experience was very beneficial as a precursor to finalizing their lesson plans. I jotted down in my anecdotal notes that it was "inspiring" to listen to the participants talk, some quite elegantly, about the historical method.

To close the session, and end the formal course meetings, participants were asked to engage in three measures in order to assess end-point beliefs about history and history teaching and learning. Just as was done at the start of Session One,



Questionnaire and the History Teaching and Learning Survey. I also asked the participants to engage with an additional measure, which they had not seen previously. I had come in contact with the History Lab Sequencing Task (HLab) during the course of the experience while I was evaluating a federally funded grant program used by a local school system. The tool was designed as a means for collecting data on participant understanding of the historical method. After discussing its theoretical framework and purpose with its creator, I felt that it would be a valuable tool to use in order to assess the participants 'knowledge of how to teach investigative history. The measure asked participants to select the steps they would use to enact a historical investigation with students from a list of 16 statements and to order them based on how they should occur during a lesson plan sequence.

After participants had completed and submitted the three instruments, they departed. Prior to their departure, all were reminded that they needed to submit their final lesson plan drafts and schedule a final interview with me. Additionally, I encouraged each of the participants to send me their thoughts on the course pertaining to their personal goals, my pedagogical approaches, and the content. They would also have the opportunity to address these questions during our final interview if they were so inclined. I did not consider the course to have come to a close until after the final interview had been completed. I felt that the interview sessions were just as valuable to the surfacing, challenging, and shifting of beliefs as the formal class sessions themselves. The final interview took place in early December just before the university broke for winter break.



Appendix D Overview of Course Goals Per Session

Session Date	General Goal of the Session	Topic/Overview
Session One: September 2, 2010	Surfacing of Beliefs / Initial Measure	 Introduction Goals of the Course BHQ₁ HTLQ₁ Background Knowledge Survey
Session Two: September 16, 2010	Challenging of Beliefs	 Abraham Lincoln Activity What is history? What does it mean to think historically? Lesson Plan 1 Due
Session Three: September 30, 2010	Challenging of Beliefs/ New Ways of Knowing	 Critique of Lesson Plan 1 Understanding and applying PAIRe Atomic Bomb Activity
Session Four: October 14, 2010	Challenging of Beliefs/ New Ways of Knowing	 Jamestown Starving Time Activity Understanding and applying PAIRe (cont'd): Considering historical significance, positionality, and empathy
Session Five: October 28, 2010	Challenging of Beliefs/ New Ways of Knowing	 How do you translate PAIRe into pedagogy? Jamestown Starving Time Activity (continued) Lesson Plan 2 Due
Session Six: November 11, 2010	Challenging of Beliefs/ New Ways of Knowing	 Critique of Lesson Plan 2 Roanoke Island Investigation How do you translate PAIRe into pedagogy (cont'd)?
Session Seven: November 22, 2010 (Tues.)	Challenging of Beliefs/ New Ways of Knowing	 Boston Massacre Investigation Creating Meaningful History Assessments Rubric Assignment
Session Eight: December 9, 2010	Closing / Endpoint Measure	BHQ ₂ HTLQ ₁ Lesson Plan 3 Due



Appendix E Beliefs About History Questionnaire

1. It is funda	mental that st	udents are taught to supp	port their reasoning w	ith eviden	ce.
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
2. History is	aimply a mot	ter of interpretation.			
-		•	C	A	C4
	_	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation.					
3. A historica	al account is t	he product of a disciplin	ed method of inquiry	·.	
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
4. Students v	vho read man	y history books learn tha	at the past is what the	historian n	nakes it to be
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agre
Explanation:					
5. Disagreen	nent about the	same event in the past i	s always due to lack	of evidence	
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
6. Good stud	ents know that	at history is basically a n	natter of opinion.		
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
7. Students n	need to be tau	ght to deal with conflicti	ng evidence.		
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					



8. Historical	claims canno	t be justified, since they	are simply a matter of	of interpreta	ation.
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
xplanation:					
9. Good gen	eral reading a	nd comprehension skills	are enough to learn l	history wel	1.
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
xplanation:					
10. Since ther choose	re is no way to	know what really happ	ened in the past, stud	ents can be	lieve whatever the
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
xplanation:					
11. History is	a critical inqu	uiry about the past.			
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
xplanation:					
12. The past i	s what the his	torian makes it to be.			
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
xplanation:					
	g sources and	understanding author po	erspective are essenti	al compone	ents of the process
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
xplanation:					
14. It is impos	ssible to know	v anything for sure about	t the past, since no on	e of us was	s there.
trongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree



G: 1 D:					
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
16. The facts	speak for ther	nselves.			
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
17. Students r	need to be awa	are that history is essenti	ally a matter of interp	pretation.	
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
18. Reasonabl	le accounts ca	n be constructed even in	n the presence of conf	flicting evic	dence.
Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Explanation:					
19. Even eyev	vitnesses do n	ot always agree with ea	ch other, so there is n	o way to k	now what happene
Strangly Disagras	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Strongly Disagree					
	_				
Explanation:		estion students' historica		ck that they	know the facts.
Explanation: 20. Teachers			al opinions, only chec	ek that they	
Explanation: 20. Teachers s Strongly Disagree	should not que	estion students' historica	al opinions, only chec		
Explanation: 20. Teachers s Strongly Disagree Explanation:	should not que Disagree	estion students' historica	al opinions, only chec Somewhat Agree	Agree	Strongly Agree
Explanation: 20. Teachers s Strongly Disagree Explanation: 21. History is	should not que Disagree	estion students' historica Somewhat Disagree	al opinions, only chec Somewhat Agree	Agree	Strongly Agree
Explanation: 20. Teachers of the strongly Disagree Explanation: 21. History is Strongly Disagree	should not que Disagree the reasonabl Disagree	estion students' historica Somewhat Disagree e reconstruction of past	Somewhat Agree occurrences based or Somewhat Agree	Agree the availa Agree	Strongly Agree ble evidence. Strongly Agree
Explanation: 20. Teachers of the strongly Disagree Explanation: 21. History is Strongly Disagree	should not que Disagree the reasonabl Disagree	estion students' historica Somewhat Disagree e reconstruction of past Somewhat Disagree	Somewhat Agree occurrences based or Somewhat Agree	Agree the availa Agree	Strongly Agree ble evidence. Strongly Agree
Explanation: 20. Teachers of the strongly Disagree Explanation: 21. History is Strongly Disagree Explanation:	should not que Disagree the reasonabl Disagree	estion students' historica Somewhat Disagree e reconstruction of past Somewhat Disagree	Somewhat Agree occurrences based or Somewhat Agree	Agree the availa Agree	Strongly Agree ble evidence. Strongly Agree



Appendix F HLab Sequencing Task

In order to facilitate historical thinking in your classroom, a number of steps are involved. Below is a list of possible steps in the process. Take a minute to study the steps carefully. Then order the steps you would take (first to last) in accomplishing the historical thinking activity with your students. Put ordinal numbers (1,2,3, etc...) in the spaces provided to the left of each step listed to signify your choice of order. Two things to bear in mind (a) the steps listed below are presented randomly, and (b) you may elect to leave certain steps BLANK because you believe these steps are irrelevant or inappropriate.

A.	Provide students with historical sources relevant to the questions they are addressing.
B.	Formally assess students/ understanding of the historical content
C.	Provide students time to pursue addressing their questions via cooperative group settings.
D.	
E.	Initiate the activity by identifying the overall guiding questions the activity exercise will address.
F.	Provide students with the correct information from the textbook in order to help them arrive at the most defensible interpretation of the sources.
G.	Ask students to determine and choose specific historical questions they will address in cooperative groups.
Н.	Provide time for students to present their interpretations of the focus questions they used sources to address.
I.	Provide students with a correct answer to the overall guiding question to solidify their learning of the historical facts.
J.	$\underline{\qquad}_{\text{a focus question.}} \text{Model the investigative process by determining historical context ad subtext and relaxing them to}$
K.	Formally assess students' understandings of the investigative process.
L.	Request that students synthesize the information they gained to address the overall guiding
M.	question. When multiple interpretations emerge from students' readings of the sources, offer them the correct interpretation so as to avoid confusion.
N.	Model the historical investigative process by identifying a focus question and addressing who, what, when, where, and why information gleaned from historical agency.
O.	Discuss and explain organizing concepts such as interpretation, evidence, reliability, progress/decline, causation, historical agency.
P.	Discuss how students' interpretations of the sources are related (or not) o each other to solidify historical facts and clarify reasons for varying interpretations.
Q.	Model the investigative process by showing students a visual of how steps in the process work.



Appendix G Background Knowledge Survey

Name:	Year:
Major(s)/Minor(s):	
Email Address you Check Frequently:	
Area of History, which most interests you	ı:
Grade level(s) you are interested in teachi	ng:
List all the history courses you took in co List the course and number and the gener whether you elected to take the course or elected to take the course, please explain	if it was a program requirement. If you
etc) you took at UMCP or another inst general title of the course. Also please no	ciology, American Studies, women's history itution. List the course and number and the te whether you elected to take the course or ected to take the course, please explain why.
Which of the courses listed above was yo	ur favorite? Why?
Which of the courses you listed above wa	s your least favorite? Why?



Appendix H History Teaching and Learning Questionnaire

1.	What is history?
2.	How would you teach history in school? Why?



Appendix I Lesson Plan Assignment

Lesson Plan Activity:

For this assignment, you will create a history lesson that could be taught to elementary/middle level students based on the principles of learning history we are studying in class. I will be using this draft lesson plan activity to better understand how you think about history and how history can/should be taught to elementary/middle school students. Understanding that most students enrolled in EDCI288f have little or no experience with formalized lesson plans, I will treat these activities as drafts assessing you on your effort and attention to feedback. You will turn in three lesson plan drafts throughout the course of the semester:

Initial Draft Due: September 23 Secondary Draft Due: October 14 Tertiary Draft Due: November 18

Please Use the following general format for crafting your lesson:

Your Name Topic/Idea Grade Level

Central Goal of the Lesson Activity: What do you want your students to know or be able to do?

Key Concept(s): What are the key concepts you want your students to understand?

Resources To Be Used: What materials will you need for this lesson? (text, pictures, film ...)

Assumptions about Students' Prior Knowledge of the Topic/Idea/Concept(s):

What are your assumptions about your students' beginning knowledge surrounding the key concepts you will be addressing?

Activity Script: How will you teach the central goal and key concepts of this lesson? Specifically, what pedagogical moves will you make? Be sure to include as much detail as necessary. Additionally, explain why/what you hope to accomplish with each specified move.

Assessment/Concluding Statement: How will you assess whether or not your students have achieved the goals you initially set?

NOTE: This is to be YOUR OWN UNIQUE LESSON. Do not go online and reproduce a lesson!!



Appendix J Rubric Assignment

As discussed in class today, I would like you to make an attempt at creating a grading rubric for a general historical thinking lesson. Think about what criteria you as a teacher would use to evaluate an interpretation/essay/brief constructed response from your students. For example, if you prompted them with, "What happened on March 5, 1770 in Boston?" ... What would you look for in a response?

Please be sure to create an adequately detailed rubric. To begin, think of the categories you would like to assess ... what "things" or what "stuff" are you looking for in your students' interpretation? What makes it sound? Then under each of those categories, designate a 4,3,2,1 what criteria would earn each of these points.

For Example (hypothetical, simplistic example):

Category 1 = Grammar

- 4 = Proper grammar was used consistently throughout the essay (details of what that looks like ...)
- 3 = Proper grammar was often used throughout the essay (details of what that looks like ...)
- 2 = Many grammar mistakes were made throughout the essay (details of what that looks like ...)
- 1 = Poor grammar was used throughout the essay (details of what that looks like ...)



Appendix K Interview Protocol

Interview One

Introductory Questions

- 1.) Why did you decide to take EDCI288f?
- 2.) What are your personal goals for the course? What would you like to get out of the course?
- 3.) Are you considering a career in teaching? If so, why? What about teaching interests you?

Past Experiences with History

The following questions will be asked specifically with regards to grade-school, then high school, and then college:

- 4.) Describe your experiences with history in elementary, middle, high school.
- 5.) What strategies/moves/techniques did your teachers use to teach history?
- 6.) What materials were used in your history classes? How were these materials used?
- 7.) What kinds of assessments were used to measure your knowledge in history?

Beliefs about History and the Teaching of History

- 8.) What do you feel is the purpose for studying history?
- 9.) What is your understanding of how historians go about studying history?
- 10.) Do you feel as though there are "good" histories versus "bad" histories? If so, why? If not, why not?
- 11.) What do you feel is the goal of teaching history in schools?
- 12.) How do you perceive history to be taught in schools? What strategies do teachers use to teach history? Are these useful strategies? If so, why? If not, why not?
- 13.) What skills do you feel are necessary for students to successfully study history?



14.) What do you think the teaching of history should (ideally) look like in schools? Why?

At this point I will go through each of the statements on the BHQ. Participants have already responded to each statement and during the interview I will ask them to explain why they chose their answers.

Where do you feel you acquired most of your beliefs about history? What do you think has influenced the ways in which you understand the meaning of history? Process of history?

Interview Two and Three

- 1.) How has or hasn't the course addressed your personal educative goals?
- 2.) Have any of your personal goals for the course changed? If so, how and why?
- 3.) What strategies/activities have you found most helpful? How and why?
- 4.) Do you feel as though your understanding of history or the teaching of history has changed since the beginning of the semester? If so, how and what do you think has influenced these changes?
- 5.) What do you feel is the purpose for studying history? What is your understanding of how historians go about studying history?
- 6.) Do you feel as though there are "good" histories versus "bad" histories? If so, why? If not, why not?
- 7.) What do you feel is the goal of teaching history in schools?
- 8.) How do you perceive history to be taught in schools? What strategies do teachers use to teach history? Are these useful strategies? If so, why? If not, why not?
- 9.) What skills do you feel are necessary for students to successfully study history?
- 10.) What do you think the teaching of history should (ideally) look like in schools?

 Why?

At this point I will go through each of the statements on the BHQ just as I did during interview one. I will again ask them to explain their choices to check for any shifts in their understandings. Additionally, I will use the lesson plan activity as a point of conversation. I will ask the student to explain the purpose and goals of the lesson, pedagogical choices they made, and we will discuss any comments made on their lesson plans by myself or their peer evaluator.



Appendix L Coded Data Sample: BHQ Qualitative

23. It is fundamental that students are taught to support their reasoning with evidence. Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Strongly Agree Explanation: students need to support their reasoning with evidence because they need something to base their ideas off of. EBCR-K; EBCR-Kn 24. History is simply a matter of interpretation. Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Strongly Agree Agree Explanation: it is an interpretation but it should be based off of evidence and what the students have learned and read from others EBCR-A to create their own interpretation EBCR-K 25. A historical account is the product of a disciplined method of inquiry. Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree Explanation: one must critically analyze sources or evidence to create their own historical interpretation and account EBCR-A EBCR-K 26. Students who read many history books learn that the past is what the historian makes it to be Strongly Disagree Somewhat Disagree Somewhat Agree Disagree Agree Strongly Agree Explanation: by reading lots of history books, student understand that historians have their own interpretations and historical accounts but each of them should be supported by evidence and not just whatever they think EBCR-Kn; EBCR-A 27. Disagreement about the same event in the past is always due to lack of evidence Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Strongly Agree Agree Explanation: there can a disagreement because there is lack of evidence but sometimes people are bias and just view an event differently based on different experiences and knowledge 28. Good students know that history is basically a matter of opinion. Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Agree Strongly Agree Explanation: while opinion is involved, evidence is key to history 29. Students need to be taught to deal with conflicting evidence. Strongly Disagree Disagree Somewhat Disagree Somewhat Agree Strongly Agree Agree Explanation: students who do not know what to do with conflicting evidence will just give up or go with the



"easy" historical

interpretation without historically thinking about it.

EBCR-K; EBCR-A

Appendix M Lesson Plan Scoring Rubric

Category 1: Goals (role of the student in the lesson)

· · · · · · · · · · · · · · · · ·		,	
3 = There is a clear	2 = A distinction is made	1 = There is a clear	0 = No overall awareness
distinction between the	between the knower and	predominance of the	of the knower. The
knower and what is	what is known. Students	knower as history is biased	student is expected to
known. Students are at the	are asked to engage in	and unjustified. Students	receive and regurgitate
center of historical	some aspect (s) of	may or may not be given	information that is
investigation and use a	historical thinking but a	multiple accounts and are	objectively known.
rigorous method to	clear method of active	expected to choose one to	
actively construct what is	construction is not clear.	showcase.	
known.			

Category 2: Pedagogical Strategies (Approach to teaching how to think historically)

mstoricany)			
3 = The lesson	2 = The lesson challenges	1 = The lesson plan	0 = The lesson plan does
strategically guides	students to engage in	challenges students to	not require students to
students through a	some aspect of historical	interact with one	engage in historical
historical investigation	thinking but one or more	component of historical	thinking. For example,
using the following	key pedagogical strategies	thinking and either does	students may be asked to
strategic moves: a.)Pose	may be missing. Students	not ask students to	read and take notes or
an authentic and reflective	are challenged to create	actively interpret	answer questions,
investigative question(s)	an interpretive response	information or allows	complete worksheets,
b.)distribute sources,	based on evidence.	students to create an	become "experts" on a
which retain a sense of		interpretive response	topic, or create
conflict and tension		which is not based on	simulations.
among perspectives c.)		evidence or asks students	
Have students engage in		to provide the "correct"	
PAIRe d.) Challenge		answer.	
students to create an			
interpretive response			
based on evidence.			

Category 3: Key Procedural Strategies

3 = The lesson challenges	2 = The lesson	1 = The lesson focuses	0 = The lesson plan
students to engage in key	challenges students to	on one historical	does not involve
procedural strategies including: a.) perspective assessment b.)	engage in multiple strategies associated	thinking strategy.	historical thinking.
attribution c.) identification and	with historical thinking.		
d.) evaluating the reliability of			
evidence			

Category 4: Assessment

3 = The task asks students	2 = The task asks	1 = The task asks students	0 = The task asks
to use key procedural ideas	students to use key	to choose a side or	students to summarize or
to address a prompt and	procedural ideas to	perspective but does not	reproduce information
establish a clear	address a prompt.	require any criteria for	using a non-interpretive
interpretation based on		selection or evidentiary	and objective approach.
evidence which argues		backing. A singular	
convincingly and refutes		interpretation is expected.	
other possible			
interpretations.			



Appendix N

Coded Data Sample: Lesson Plan

The Presidents of the USA via The Animaniacs President's song 3rd Grade

Central Goal of the Activity: For students to know all of the Presidents in order
C1-EBCO

Key Concepts: Know the order of the presidents and some basic information about their terms

C1-EBCO

Resources To Be Used:

- 1. Animaniacs video http://www.youtube.com/watch?v=Vvy0wRLD5s8
- 2. The Presidents lyrics http://www.justsomelyrics.com/1032694/Animaniacs-Presidents-Song-Lyrics
- 3. Pictures of all the Presidents

Assumptions about Students' Prior Knowledge of the Topic/Idea/Concept(s): Students should know what a President is and be able to name a few Presidents (George Washington, Abe Lincoln)

Activity: C2-EBCO

- 1. Set up pictures of Presidents all around the room
- 2. Ask students if they know who the people around the room are and if they can name any
- 3. Announce that we are learning all of the Presidents in order and sing the Animaniacs song
- 4. Break down the first 2 verses by line and sing them both together
- 5. Repeat this for the next 2 weeks, reviewing all previous verses before moving on and singing everything learned up until that point at the end
- 6. Once every verse has been broken down, review the entire song and sing it in its entirety

Assessment/Concluding Statement: The assessment for this would be all the students singing the song without looking at the lyrics. They will also be able to pass a quiz where they must list the Presidents in order, with 100% accuracy.

C4-EBCO



Appendix O

Coded Data Sample: Rubric Assignment

Source Analysis: HSe3

- 5: Student analyzed the source well while placing the language and intent in the context of the time.
- 4: Student showed evidence of critical thinking in their analysis of the sources, but not quite enough for a 5.
- 3: Student shows average understanding and application of source analysis techniques.
- 2: Student demonstrated some critical analysis of the documents, but left obvious holes in their argument.
- 1: Student demonstrated little or no actual critical thinking concerning the document(s) in question, or drew their own conclusion based on no evidence.

Thesis Ra2

- 3: Thesis is clearly understood, contestable, and arguable.
- 2: Thesis is average, perhaps somewhat hard to understand.
- 1: Thesis shows no argument, or does not make any sense.

Organization Ts2

- 3: Essay is logically organized with a clear introduction, thesis, body paragraphs and conclusion.
- 2: Essay does not necessarily flow from one paragraph to the next, but overall organization does not take away from understanding.
- 1: Essay is hard to understand because of inappropriate organization.

Grammar Ts1

- 3:Little to no spelling errors or grammatical errors.
- 2:Some grammatical problems and spelling errors.
- 1:Too many grammatical and spelling errors.



Appendix P

Coded Data Sample: Performance Assessment

Interpretation of the Roanoke Colony

Based on what I have read, it is hard for me to come up with a definite conclusion (SNp) on the disappearances of the colonists of Roanoke. It seems as though some historians argue that the people were either integrated with the Natives, moved to another location, or were in fact killed by Natives. However, I think that the colonists may have survived and not been killed. This is based off of several readings. (EO) Samuel Morison writes that the colonists, feeling unsafe and threatened in Roanoke, may have moved to a location called Croatoan where the Natives there were friendlier.(EO)⁵ This would then explain why "Croatoan" was carved into a tree, in hopes that if people were to come back, the carving would explain where the colonists went. Also, other sources say (EO) that the descendants from the colonists and the Natives from Croatoan spoke perfect English and had the physical features of Englishmen⁶. (EO) This may present a fact that the colonists and Natives could have mated and intermingled with one another. Therefore, the sources present the fact that the colonists may not have been killed by Natives, instead relocated to Croatoan to reside with the friendlier Natives. (MR)

⁶ Morison, 677-678.



⁵ Samuel E. Morison, The European Discovery of America: the Northern Voyages (New York: Oxford University Press, 1971), 677-678.

Appendix Q Epistemic Beliefs Rubric

Epistemic Beliefs Rubric⁷

		Beliefs Rubric'
CODE	DESCRIPTION	EXAMPLE
EBCO Copier	Evidence is seen as detached from argument. In other words, there is no overall awareness of the role of the knower.	"There shouldn't be some method of inquiry for history it should just be what it is and method could skew the result." "Historians are just humans, they do not make history, other people make it, he can just go and tell you how it
TR1 Transition 1	Ideally, history should coincide with the past. However, since we cannot know all of it, whenever the evidence is debatable or simply cannot be found, it remains a matter of opinions. (historian as "wanna be" or "should be" chronicler)	goes." "You really don't know history, it's just through books and people writing down stuff and documents from back in the days; there could be something missing that nobody knows about, but as people go, everybody has a different opinion about history and what they think happened." "Everyone should have their own opinion, as long as you know the solid facts."
	Another manifestation is the dichotomy facts vs. opinion. Facts are objective, while opinions cannot be challenged.	you know the some facts.
EBSUB Subjectivist	Clear predominance of the subject; history is unjustified and biased. Focus is mainly on the knower History depends on one's opinions that color how one judges history and how one makes selections (e.g.,	"History is basically what you make of it depending on what you have got to know, what your background is, like democratic, republican, because history, especially like that, people see it differently depending on whether you are republican or democratic."
	political opinions) Historian's opinion are unbounded by evidence, because there is no evidence or it does not really matter.	"The past is what the historian makes it to be, because every historian has a different view on how it's happened."
TR2 Transition 2	History is the interpretive work of the historian based on evidence; the existence of a method is acknowledged, but there is no clarity about how it may look like. In other words, the dynamic subject/object is acknowledged but there is no specific reference to a method.	"There is some evidence on something, so they can't just choose, they have to actually research the evidence, what other theories there are out there, so, and there are ways of knowing, it just takes a while."
EBCR Criterialist	History is the interpretive work of the historian based on evidence; interpretation relies on specific disciplinary criteria. Students are aware of what these criteria are although they may not know how to use them.	"When you read something, like an historical document that was written by some of the historian, you need to understand and read between the lines to understand what he is saying and to understand what he or she is trying to do"

⁷ Created and used to assess interviews with high school students in: Maggioni, L., VanSledright, B., & Reddy, K. (2009, August). Epistemic talk in history. Paper presented at the biennial conference of the European Association for Research on Learning and Instruction: Amsterdam, Netherlands.



Appendix R Pre- to Post Course Categorical Weighted Scores

	History Items			Hist	History Teaching and Learning Items			
	EBCO	EBSUB	EBCR		EBCO	EBSUB	EBCR	
Student	5,16,	2,8,12,	3,11,	Consistency	9,20	4,6,10	1,7,15,17	Consistency
Name	19	14, 22	13,18,21	Score				Score
Oria 1	-1.3	-1.2	1.6	54%	-1.8	-1.0	2.0	56%
Oria 2	-1.7	-1.8	3.0	85%	1.0	-1.3	1.2	56%
Tameka 1	-1.0	-0.8	1.8	69%	0.0	-1.6	1.8	67%
Tameka	0.0	-2.2	2.2	85%	-2.0	-2.3	1.3	89%
2								
Ben 1	-0.7	-2.2	2.4	69%	-2.5	-2.3	1.8	78%
Ben 2	-1.3	-1.4	2.6	62%	0.0	-1.3	2.0	56%
DCII 2	-1.5	-1,7	2.0	02 / 0	0.0	-1.5	2.0	30 70
Katerina 1	0.7	-2.0	1.4	62%	0.0	-0.3	1.2	44%
Katerina 2	-2.0	-1.2	2.8	77%	-0.5	0.0	2.8	67%
Brittany 1	0.0	-0.8	1.8*	50%*	-0.5	-2.3	1.3	56%
Brittany 2	0.0	-0.8	2.2	54%	0.0	0.0	2.3	56%
Sara 1	-0.3	-2.2	1.6	62%	-1.5	-1.6	1.3	56%
Sara 2	-1.6	-2.6	2.8	85%	-3.0	-1.7	1.8	78%
		0.2		162				
Eric 1	-1.3	0.0	2.0	46%	-2.0	-1.0	1.5	67%
Eric 2	-1.3	-0.8	2.0	54%	-2.0	-1.0	1.3	67%
TD 4	0.7	0.1	1.0	1607	1.0	2.0	0.0	
Tom 1	0.7	-0.6	1.8	46%	1.8	-2.0	2.0	56%
Tom 2	-0.3	-1.0	2.0	50%	0.5	-1.3	2.5	67%

Note: Red highlighting indicates scores, which do not align with the course goals. Turquoise highlighting indicates scores, which met or exceeded the high bar set.



References

- Adler, S. (2010). The education of social studies teachers. In W. Parker (Ed.), *Social studies today: Research and practice*. (pp. 329-352) New York, NY: Routledge.
- Afflerbach, P., & VanSledright, B. (2001). Hath! Doth! What! Middle graders reading innovative history text. *Journal of Adolescent and Adult Literacy*, 44(8), 696-707.
- Alexander, P. (2003). The development of expertise: The journey from acclimation to Proficiency. *Educational Researcher*, 32(8), 10-14.
- Andrews, T., & Flannery, B. (2007). What does it mean to think historically?

 *Perspectives on History, 45(1). Retrieved from:

 http://www.historians.org/Perspectives/issues/2007/0701/0701tea2.cfm
- Angell, A. (1998). Learning to teach social studies: A case study of belief restructuring. *Theory and Research in Social Studies Education*, 26(4), 509-529.
- Ashton, P., & Crocker, L. (1987). Does teacher certification make a difference? Florida Journal of Teacher Education, 3, 73-83.
- Bain, R. (2000). Into the breach: Using research and theory to shape history instruction. In P. Sterns, P. Seixas & S. Wineburg (Eds.), *Knowing, teaching, and learning history*. New York, NY: NYU Press.
- Bain, R., & Mirel, J. (2006). Setting up camp at the great instructional divide:

 Educating beginning history teachers. *Journal of Teacher Education*, *57*(3), 212-219.



- Baker, C., Cohn, T., & McLaughlin, M. (2000). Inspecting subject matter knowledge.

 In J. Arthur & R. Phillips (Eds.), *Issues in teaching history*. London:

 Routledge.
- Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners: Towards a practice-based theory of professional education. In G. Sykes & L. Darling-Hammond (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3-32). San Francisco, CA: Jossey-Bass.
- Ball, D. & McDiarmid, G. (1989). The subject matter preparation of teachers. The
 National Center for Research on Teacher Education: Michigan State
 University. Retrieved January 3, 2010 from:
 http://ncrtl.msu.edu/http/ipapers/html/pdf/ip894.pdf
- Ball, D., & McDiarmid, G. (1990). The subject matter preparation of teachers. In R.Houston (Ed.), *Handbook of research on teacher education* (pp. 437-449).New York: Macmillan.
- Barton, K. (2005). Best not to forget them. Secondary students' judgment of historical significance in Northern Ireland. *Theory and Research in Social Education*, 33, 9-44.
- Barton, K. (2008). Research on students' ideas about history. In L. Levstick & C.

 Tyson (Eds.), *Handbook of research in social studies education* (pp. 239-258).

 New York, NY: Routledge.
- Barton, K., & Levstik, L. (1998). "It wasn't a good part of history": National identity and students' explanations of historical significance. *Teachers College Record*, *90*, 478–513.



- Barton, K. & Levstick, L. (2010). Why don't more history teachers engage students in interpretation? In W. Parker (Ed.), *Social studies today: Research and practice*. (p. 35-42) New York, NY: Routledge.
- Beck, I., McKeown, M., & Gromoll, E. (1989). Learning from social studies texts. *Cognition and Instruction*, 6(2), 99-158.
- Beck, J. (2005). A case study of teacher education reform: Issues and challenges. *The New Educator*, 1, 333-343.
- Belton, V., Gould, H., & Scott, J. (2006). Developing the Reflective Practitioner—

 Designing an Undergraduate Class. *Interfaces*, *36*, 150-164.
- Bendixen, L. D. (2002). A process model of epistemic belief change. In Hofer, B. K., and Pintrich, P. R. (Eds.), *Personal epistemology: The Psychology of beliefs about knowledge and knowing* (pp.191-209). Mahwah, NJ: Earlbaum.
- Booth, A. (1993). Learning history in university: Student views on teaching and assessment. *Studies in Higher Education*, *18*(2), 227-235.
- Boyd. D., Goldhaber, D., Lankford, H., & Wycoff, J. (2007). The effect of certification and preparation on teacher quality. *The Future of Children*, 17(1), 45-68.
- Bransford, J., Derry, S., Berliner, D., Hamerness, K., & Beckett, K. (2005). Theories of learning and their roles in teaching. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 40-88). San Francisco, CA: Jossey-Bass.



- Brenner, M. (2006). Interviewing in educational research. In J. L. Green, G. Camilli, & P. B. Moore (Eds.), *Handbook of complementary methods in educational research* (pp. 357-370). Mahwah, NJ: Lawrence Erlbaum Associates.
- Brickhouse, N. W., Dagher, Z. R., Shipman, H. L., & Letts, W. J. (2002). Evidence and warrants for belief in a college astronomy course. *Science & Education*, 11, 573-588.
- Britzman, D. (1991). *Practice makes practice. A critical study of learning to teach.*New York, NY: SUNY Press.
- Bruner, J. (1977). The process of education. Cambridge: Harvard University Press.
- Burroughs, S., Groce, E., & Webeck, M. (2005). Social studies education in the age of testing and accountability. *Educational Measurement: Issues and Practice*, 24(3), 13-20.
- Calder, L. (2006). Uncoverage: Toward a signature pedagogy for the history survey. The Journal of American History, 94(4), 1358-1370.
- Chinn. C. A.. & Brewer, W. F. (1993). The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science instruction.

 *Review of Educational Research, 63. 1-49.
- Cohen, D. (1995). What is the system in systemic reform? *Educational Researcher*, 24(9), 11-17.
- Conant, J. (1963). *The education of American teachers*. New York, NY: McGraw-Hill.
- Cowan, J. (1998). On Becoming an Innovative University Teacher. Open University
- Cuban, L. (1991). History of teaching in social studies. In J.P Shaver (Ed.), Handbook



- Dagher, Z. R., Brickhouse, N. W., Shipman, H., & Letts, W. J. (2004). How some college students represent their understandings of the nature of scientific theories. *International Journal of Science Education*, 26(6), 735-755.
- Darling-Hammond, L. (1996). What matters most: A competent teacher for every child. *The Phi Delta Kappan*, 78(3), 193-200.
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of Teacher Education*, *51*(3), 166-175.
- Darling-Hammond, L. (2006). Powerful teacher education; Lessons from exemplary programs. San Francisco, CA: Jossey Bass.
- Dole, J. A., & Sinatra, G. M. (1998). Reconceptualizing change in the cognitive construction of knowledge. *Educational Psychologist*, *33*, 109–128.
- Donovan, S., & Bransford, J. (2005). *How students learn: History, mathematics, and science in the classroom.* Washington, D.C: National Academies Press.
- Drake, F. (2002). Teaching historical thinking. Bloomington: IL: Eric Clearinghouse for Social Studies/Social Science Education. (ERIC Document Reproduction Service No. ED467383)
- Drake, F., & Brown, S. (2003). A systematic approach to teaching historical thinking. *The History Teacher*, *36*(4), 465-489.
- Dumas, W. (1995). The preparation of middle school social studies teachers in major research universities. *Teacher Education and Practice*, 11(1), 58-64.
- Ericsson, K. & Simon, H. (1993). *Protocol analysis: Verbal reports as data.*Cambridge, MA: MIT Press.



- Epstein, T. (1998). Deconstructing differences in African-American and European-American adolescents' perspectives on U.S history. *Curriculum and Inquiry*, 28(4), 397-423.
- Epstein, T. (2000). Adolescents' perspectives on racial diversity in U.S. history: Case studies from an urban classroom. *American Educational Research Journal*, 37(1), 185.
- Evertson, C., Hawley, W., & Zlotnik, M. (1985). Making a difference in educational quality through teacher education. *Journal of Teacher Education*, *36*(3), 2-12.
- Feiman-Nemser, S., & Buchman, M. (1985). Pitfalls of experience in teacher preparation. *Teachers College Record*, 87(1), 53-65.
- Feiman-Nemser, S., McDiarmid, G. W., Melnick, S., and Parker, M. (1989).

 Changing beginning teachers' conceptions: A study of an introductory teacher education course. East Lansing: National Center for Research on Teacher Education and Department of Teacher Education: Michigan State University.

 Retrieved January 3, 2010 from:

 http://ncrtl.msu.edu/http/rreports/html/pdf/rr891.pdf
- Ferguson, P., &Womack, S. T. (1993). The impact of subject matter and education coursework on teaching performance. *Journal of Teacher Education*, *44*(1), 55-63.
- Finlay, R. (1988). The refashioning of Martin Guerre, *American Historical Review*, 93(3), 553-571.
- Gerstle, G. (1997). Liberty, coercion, and the making of Americans. *The Journal of American History*, 84(2) 524-558.



- Gill, M. G., Ashton, P. T., & Algina, J. (2004). Changing preservice teachers' epistemological beliefs about teaching and learning in mathematics: An intervention study. *Contemporary Educational Psychology*, 29, 164–185.
- Goodland, J. (1990). A place called school: Prospects for the future. New York, NY: McGraw Hill.
- Grant, S.G. (2003). History lessons: Teaching learning and testing in U.S high school classrooms. Mahwah, NJ: Lawrence Earlbaum Associates.
- Grant, S. G. & Salinas, C. (2008). Assessment and accountability in the social studies.

 In L.Levstik & C. Tyson (Eds.), *Handbook of research in social studies*education. New York: NY: Routledge.
- Grossman, P. (1990). The making of a teacher: Teacher knowledge and teacher education. New York, NY: Teachers College Press.
- Grossman, P.L., Wilson, S.M., & Shulman, L.S. (1989). Teachers of substance:

 Subject matter knowledge for teaching, In M.C. Reynolds (Ed.), *Knowledge base for the beginning teacher*. (pp. 23-36). New York: Pergamon.
- Gudmundsdottir, S. (1990). Values in pedagogical content knowledge. *Journal of Teacher Education*, 41(3), 44-52.
- Gurung, R., Chick, N., & Haynie, A. (2008). Exploring signature pedagogies.

 Approaches to teaching disciplinary habits of mind. Sterling, Va: Stylus Publishing.
- Hammer, D. (1995). Epistemological considerations in teaching introductory physics. *Science Education*, 79(4), 393-413.



- Hamerness, K. et.al. (2005). How teachers learn and develop. In L. Darling-*Approaches to teaching disciplinary habits of mind*. Sterling, Va: Stylus Publishing.
- Hamerness, K., Darling-Hammond, L., Grossman, P., Rust, F., & Shulman, L. (2005).

 The design of teacher education programs. In L. Darling-Hammond & J.

 Bransford (Eds.), *Preparing teachers for a changing world: What teachers*should learn and be able to do (pp. 358-390). San Francisco, CA: Jossey-Bass.
- Hess, D. (2002). Discussing controversial public issues in secondary social studies classrooms: Learning from skilled teachers. *Theory and Research in Social Education*, 30(1), 10-41.
- History vs. the past. (2005, spring). In JCB: An Occasional Newsletter of the John Carter Brown Library, 35, 1
- Hofer, B. (2001). Personal epistemology research: Implications for learning and teaching. *Journal of Educational Psychology Review*, *13*(4), 353-383.
- Hofer, B. (2002). Personal epistemology as a psychological and educational construct: An introduction. In B. Hofer & K. Pintrich (Eds.), *Personal epistemology: The psychology of beliefs about knowledge and knowing* (pp. 3-15). Mahwah, NJ: Erlbaum.
- Hofer, B., & Pintrich, P. (1997). The development of epistemological theories:

 Beliefs about knowledge and knowing and their relation to learning. *Review of Educational Research*, 67(1), 88-140.



- Howey, K., & Zimpher, N. (1989). *Profiles of pre-service teacher education: Inquiry into the nature of programs*. Albany: State University of New York Press.
- Huba, M. E. & Freed, J. E. (2000). Learner-centered assessment on college campuses: Shifting the focus from teaching to learning. Boston, MA: Allyn & Bacon.
- Jehng, J. J., Johnson, S. D., Anderson, R. C. (1993). Schooling and students' epistemological beliefs about learning. *Contemporary Educational Psychology*, 18, 23-35
- Kennedy, M. (2005). *Inside teaching: How classroom life undermines reform*.

 Cambridge: Harvard University Press.
- Kienhues, D., Bromme, R., & Stahl, E. (2008). Changing epistemological beliefs: The unexpected impact of a short-term intervention. *British Journal of Educational Psychology*, 78, 545-565.
- King, P., & Kitchener, K. (2002). The reflective judgment model: Twenty years of research on epistemic cognition. In B. Hofer & K. Pintrich (Eds.), *Personal epistemology: The psychology of beliefs about knowledge and knowing* (pp. 37–61). Mahwah, NJ: Erlbaum.
- Kornblith, G., & Lasser, C. (2001). Teaching the American history survey at the opening of the twenty first century: A round table discussion. *Journal of American History*, 87(4), 1409-1441.
- Kuhn, D., Shaw, V., & Felton, M. (1997). Effects of dyadic interaction on argumentative reasoning. *Cognition and Instruction*, 15(3), 287-315.
- Kuhn, D., & Weinstock, M. (2002). What is epistemological thinking and why does it 372

- matter? In B. K. Hofer & K. S. Pintrich (Eds.), *Personal epistemology: The psychology of beliefs about knowledge and knowing* (pp. 121-145). Mahwah, NJ: Erlbaum.
- Kurfman, D. (1991). Testing as context for social studies. In J. Shaver (Ed.),

 Handbook of research on social studies teaching and learning (pp. 310-321).

 New York, NY: Macmilian.
- Lampert, M. (1990). When the problem is not the question and the solution is not the answer: Mathematical knowing and teaching. *American Educational Research Journal*, 27, 29-63.
- Langer, J. (1984). Examining background knowledge and text comprehension.

 *Reading Research Quarterly, 19(4), 468-481.
- Lee, P. (2005). *Putting principles into practice. Understanding history*. Washington D.C: The National Academies Press.
- Lee, P., & Ashby, R. (2000). Progression in historical understanding among students ages 7-14. In P. Sterns, P. Seixas & S. Wineburg (Eds.), *Knowing, teaching, and learning history*. (pp. 199-222). New York, NY: NYU Press.
- Lee, P., & Shemilt, D. (2003). A scaffold, not a cage: Progression and progression models in history. *Teaching History*, 113, 13-24.
- Levesque, S. (2008). *Thinking historically: Educating students for the twenty-first century*. Toronto: University of Toronto Press.
- Levstick, L. & Barton, K. (1997). *Doing history: Investigating with children in middle and school*. Mahwah, NJ: Lawrence Earlbaum Associates.



- Linn, R. (2000). Assessments and accountability. *Educational Researcher*, 29(2), 4-16.
- Lortie, D. (1975). Schoolteacher. Chicago, IL: University of Chicago Press.
- Lowenthal, D. (1985). *The past is a foreign country*. Cambridge, UK: Cambridge University Press.
- Lowenthal, D. (1998). *The heritage crusade and the spoils of history*. Cambridge, UK: Cambridge University Press.
- Maggioni, L. (2010). Studying epistemic cognition in the history classroom: Cases of teaching and learning to think historically (Doctoral dissertation). Retrieved from ProQuest Dissertation and Theses Database (Document ID 2180012291).
- Maggioni, L., Alexander, P., & VanSledright, B. (2004). At a crossroads? The development of epistemological beliefs and historical thinking. *European Journal of School Psychology*, 2 (1-2), 169-197.
- Maggioni, L., VanSledright, B., & Alexander, P. (2009). Walking on the borders: A measure of epistemic cognition in history. *The Journal of Experimental Education*, 77(3), 187-213.
- Maggioni, L., VanSledright, B., & Reddy, K. (2009, August). Epistemic talk in history. Paper presented at the biennial conference of the European Association for Research on Learning and Instruction: Amsterdam, Netherlands.



- Manross, D., Fincher, M., Tan, S., Choi, E., & Schempp, P. (1994). The influence of subject matter expertise on pedagogical content knowledge. Paper presented at the annual meeting of the American Educational Research Association: New Orleans, LA.
- McDiarmid, G. W. (2004). The arts and sciences as preparation for teaching. In K. Howey and N. Zimpher (Eds.), *Informing faculty development for teacher educators* (pp. 99-137). Norwood, NJ: Ablex.
- McDiarmid, G.W., Ball, D., & Anderson, C. (1989). Why staying one chapter ahead doesn't really work: Subject-specific pedagogy. In M.C. Reynolds (Ed.),

 Knowledge base for beginning teachers (pp. 193-205). Oxford: Pergamon Press.
- McDiarmid, G.W. & Vinten-Johansen, P. (2000). A catwalk across the great divide:
 Redesigning the history teaching methods course. In P. Stearns, P. Sexias, &
 S. Wineburg (Eds.), *Knowing, teaching and learning history. National and international perspectives* (pp 156-177). New York, NY: New York
 University Press.
- McNamara, D. (1991). Subject knowledge and its application: Problems and possibilities for teacher educators. *Journal of Education for Teaching*, *17*(2), 113-128.
- McRobbie, C. J., & Thomas, G. P. (2001). Changing the learning environment to enhance explaining and understanding in a year 12 chemistry classroom.

 Learning Environments Research, 3, 209-227.



- Meyer, J.W. & Rowan, B. (1977): Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340-63.
- Newmann, F. M., & Wehlage, G. G. (1993). Standards for authentic instruction. *Educational Leadership*, 50(7), 8–12.
- Owens, W. (1997). The challenges of teaching social studies methods to preservice teachers. *The Social Studies*, 88, 113-120.
- Pace, D. (2004). The amateur in the operating room: History and the scholarship of teaching and learning. *American Historical Review*, *109*, 1171-1192.
- Palmer, D. (2003). Investigating the relationship between refutational text and conceptual change. *Science Education*, 87(5), 663-684.
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.).

 Newbury Park, CA: Sage.
- Paxton, R. (1999). A deafening silence: History textbooks and the students who read them. *Review of Educational Research*, 69(3), 315-339.
- Pearson, P. D., Hansen, J., & Gordon, C. (1979). The effect of background knowledge of young children's comprehension of explicit and implicit information. *Journal of Reading Behavior*, 11(2), 201-209.
- M. Perie, D. Baker, & S. Bobbit. (1997). Time spent teaching core academic subjects in school. National Center for Educational Statistics. Retrieved April 25, 2010 from: http://nces.ed.gov/Pubsearch/pubsinfo.asp?pubid=97293
- Piaget, J. (1985). *The equilibration of cognitive structures*. Chicago, Il. University of Chicago Press.



- Qian, G., & Pan, J. (2002). A comparison of epistemological beliefs and learning from science text between American and Chinese high school students. In B. Hofer & K. Pintrich (Eds.), *Personal epistemology: The psychology of beliefs about knowledge and knowing* (p. 3-15). Mahwah, NJ: Erlbaum.
- Reddy, K. & VanSledright, B. (2010, November). Epistemic Talk in History

 Education. Paper presented at the Annual Conference of the College and

 University Faculty Assembly, Denver.
- Ryder, J., Leach, J., & Driver, R. (1999). Undergraduate science students' images of science. *Journal of Research in Science Teaching*, 36(2), 201-219.
- Schoenfield, A. (1983). Beyond the purely cognitive: Belief systems, social cognitions, and Metacognitions as driving forces in intellectual performance. *Cognitive Science*, *7*, 329-363.
- Schon, D. A. 1987. *Educating the reflective practitioner*. Jossey-Bass. San Francisco, CA.
- Sexias, P. (1996). Conceptualizing the growth of historical understanding. In D.Olson & N. Terrance (Eds.), *The handbook of education and human development* (pp. 765-783). Oxford: Blackwell.
- Sexias, P. (2000). Schweigen die kinder! or, does postmodern history have a place in the schools. In P. Stearns, P. Sexias, & S. Wineburg, (Eds.), *Knowing teaching and learning history* (p. 199-222). New York: New York University Press.

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Shulman, L.S. (1986). Those who understand: Knowledge growth in teaching.

Educational Researcher, 15(2), 4-14.

- Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform.

 Harvard Educational Review, 57(1), 1-22.
- Shulman, L. (2005). Signature pedagogies in the professions. *Daedalus*, *134*(3), 53-59.
- Slekar, T. (2006). Preaching history in a social studies methods course: A portrait of practice. *Theory and Research in Social Education*, *34*(2), 241-258.
- C. Smith, D. Maclin, C. Houghton, & M. Hennessey. (2000). Sixth grade students' epistemologies about science: The impact of school science experiences on epistemological development. *Cognition and Instruction*, *18*(3), 349-422.
- Thornton, S. (2001). Educating the educators: Rethinking subject matter and methods. *Theory into Practice*, 40(1), 72-78.
- Turner-Bisset, R. (1999). The knowledge bases of the expert teacher. *British Educational Research Journal*, 25(1), 39-55.
- VanDriel, J., Beijaard, D., & Verloop, N. (2001). Professional development and reform in science education: The role of teachers' practical knowledge.

 *Research in Science Teaching, 38(2), 137-158.
- VanSledright, B. (1997). And Santayana lives on: Students' views on the purposes for studying American history. *Journal of Curriculum Studies*, *29*, 529-557.
- VanSledright, B. (1998). On the importance of historical positionality to thinking about and teaching history. *International Journal of Social Education*, 12(2), 1-18.



- VanSledright, B. (2001). From empathic regard to self-understanding:

 Im/positionality,Empathy, and historical contextualization. In O.L. Davis, Jr.,

 E. Yeager, S. Foster (Eds.), *Development of historical empathy: Perspective taking in social studies* (pp. 51-68). Lanham, MD: Rowman Littlefield.
- VanSledright, B. (2002). In search of America's past: Learning to read history in schools. New York, NY: Teachers College Press.
- VanSledright, B. (2008a). Narratives of nation state, historical knowledge, and school history. *Review of Research in Education*, 32(1), 109-146.
- VanSledright, B. (2008b). The challenge of assessing American history knowledge development among teachers, National History Education Clearinghouse,

 Retrieved March 22, 2010 from: http://teachinghistory.org/tah-grants/lessons-learned/19432
- VanSledright, B. (2010). What does it mean to think historically and how do you teach it? In W. Parker (Ed.), *Social studies today: Research and practice* (pp. 113-120). New York, NY: Routledge.
- VanSledright, B. (2011). *The challenge of rethinking history education: On practices, theory, and policy*. New York, NY: Routledge Taylor/Francis Group.
- VanSledright, B. & Frankes, L. (2000). Concept and strategic knowledge development in historical study: A comparative exploration in two fourth grade classrooms, *Cognition and Instruction*, *18*(2), 239-283.



- VanSledright, B., & Limon, M. (2006). Learning and teaching social studies: A review of cognitive research in history and geography. In P. Alexander & P. Winne (Eds.), *The Handbook of Educational Psychology* (2nd ed., pp. 545-570). Mahweh, NJ: Lawrence Earlbaum & Associates.
- VanSledright, B., Maggioni, L., & Reddy (2012, April). Promises and Perils in

 Attempting to Change History Teachers' Practices: Results from an 18-Month

 Teaching American History Grant Intervention. Paper presented at the Annual

 Meeting of the American Educational Research Association, Vancouver,

 British Columbia.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, *54*(2), 143-178.
- Verloop, N., Van Driel, J., & Meijer, P. (2001). Teacher knowledge and the knowledge base of teaching. *International Journal of Educational Research*, 35, 441-461.
- VonGlasersfeld, E. (1989). Cognition, construction of knowledge, teaching. *History, Philosophy, and Science Teaching*, 80(1), 121-140.
- White, H. (1978). *Tropics of Discourse: Essays in Cultural Criticism*. Baltimore: The Johns Hopkins University Press.
- Wiersma, W. & Jurs, S. (1991). *Research methods in education: An introduction*. Columbus: Allyn and Bacon.
- Wilson, S. (1991). Parades of facts, stories of the past: What do novice history teachers need to know? In M. Kennedy (Ed.), *Teaching academic subject matter to diverse learners*(pp. 99-116). New York: Teachers College Press.



- Wilson, S., Floden, R., & Ferrini-Mundy, J. (2001). Teacher Preparation Research:
 Current Knowledge, Gaps, and Recommendations, Center for the Study of
 Teaching and Policy: A University of Washington, Stanford University,
 University of Michigan, and University of Pennsylvania consortium.
 Retrieved January 3, 2010 from:
 http://depts.washington.edu/ctpmail/PDFs/TeacherPrep-WFFM-02-2001.pdf
- Wilson, S., Shulman, S., & Richert, E. (1987). 150 different ways of knowing:

 Representations of knowledge in teaching. In J. Calderhead (Ed.), *Exploring teachers' thinking*. Sussex: Holt, Rinehart, & Winston.
- Wilson, S. & Youngs, P. (2005). Research on accountability processes in teacher education. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 591-645). Mahwah, NJ: Lawrence Earlbaum Associates.
- Wineburg, S. (1998). A partial history: An essay review of teaching and learning history in schools. *Teaching and Teacher Education*, 14(2), 233-243.
- Wineburg, S. (1999). Historical thinking and other unnatural acts. *Phi Delta Kappan*, 80(7), 488-499.
- Wineburg, S. (2001). *Historical thinking and other unnatural acts: Charting the future of teaching the past.* Philadelphia, PA: Temple University Press.
- Wineburg, S. (2004). Crazy for history. *The Journal of American History*, 90(4), 1401-1415.



- Yeager, E., & Wilson, E. (1997). Teaching historical thinking in the social studies methods course: A case study. *The Social Studies*, 88(3), 121-126.
- Zeichner, K. (1993). Traditions of practice in U.S. pre-service teacher education programs. *Teaching and Teacher Education*, *9*(1), 1-13.
- Zeichner, K. & Conklin, H. (2005). Teacher education programs. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 645-737). Mahwah, NJ: Lawrence Earlbaum Associates.

