For years I lived like Bruce Wayne or Clark Kent, with separate yet connected dual-identities. By day I was a high school history teacher, and at night I was a graduate student pursuing advanced degrees in history. The difference was greater than merely day and night, greater than simply shifting roles from teacher to student. I switched worlds.

During the evenings, I interacted with others who defined historical study as a way of thinking, a manner of conducting research, and a style of writing. We participated in a professional community to improve the quality of our historical work. History at the university was a discipline, a unique way of knowing the world that professionals shared. In the high school, history was a subject students took and teachers taught, differing from other subjects only in the facts covered. Students claimed that they did in history exactly what they did in other courses—used texts, memorized facts, did homework, and took tests. In the minds of adolescents, there is little unique about history.

Early in my teaching career, it became clear that making these two worlds less dichotomous would be valuable for my students and for me. Actually, my research goals and teaching goals were not so different. As a historian, I tried to develop and use my critical intelligence to build an understanding of the past; as a teacher, I wanted to help others develop their critical faculties and deepen their understanding of the world. The discipline of history, filled with lively debate and thoughtful interactions, held great promise for my high school students. With an analytical stance deeply embedded in the discipline, history did not want for higher level
thinking or need any special, decontextualized add-ons to promote critical thought.

Though this point is not widely acknowledged in schools or schools of education, history is more than a discrete subject matter; it is an epistemic activity. The discipline of history depends upon historians reconstructing the past, for doing history is more than merely uncovering facts. Likewise, learning history is more than memorizing facts. Students of history actively construct the past in their own minds. As the discipline of history has unique problems, practices and habits of mind, so learning history involves distinctive problems and cognitive characteristics. History as a discipline and a course of study demands "meaning over memory." Historians work to give meaning to historical facts, while students must work to give meaning to their historical experiences.

This chapter supports a cognitive approach toward learning history, demanding that teachers understand the nature of historical knowledge, student thinking about history, and the context within which learning history occurs. It urges teachers to consider their classes within disciplinary frames, to design activities consistent with the generalizations, concepts, methods, and cognitive processes of the discipline of history itself.

How to do this? The problem for history teachers begins with trying to understand what defines meaning-making in history. What makes it distinctive? How do historians construct meaning?

History teachers, of course, must have subject-matter knowledge to teach history. I share the concerns of those who point to the alarming numbers of teachers who are teaching out of their areas of academic preparation. However, teachers must go beyond merely knowing the subject. They also must consider how students typically learn history. How do students build meaning as they study the past? How can teachers help students move from surface or scholastic understanding to "deep" understanding? Little in my training prepared me for these pedagogical questions.

As a high school history teacher for more than twenty-five years, I found great value in history-specific research on cognition. A chance reading of an article by Samuel Wineburg introduced me to research by Wineburg, Leinhardt, Voss, Seixas, and Beck, among others. These scholars shared my historian-educator's belief that, as Seixas wrote, "there is something distinctive about the teaching and learning of history, which cannot be known by simply applying general principles of teaching and learning to issues of history education." Unfortunately, little of this work seems to have found its way into national conversations about teaching history.

This essay demonstrates the value of research for practitioners. It argues that emerging research can assist history teachers in designing and implementing instruction. To illustrate these points, I provide examples from my own practice in a ninth-grade world history course.

Research as Teaching Tool

Stimulating students' critical thinking is a cherished goal. It has provided an island of relative agreement in the contentious storm surrounding United States national history standards. Discussions of history's habits of mind or standards for thinking have been central to all the major reform reports. While admirable in the attempt to articulate historical cognition or link thinking skills to content, these reports represented historical thinking as decontextualized lists with discrete sets of objectives. For teachers, these lists flattened out a complex process.

The literature in history-specific cognition offers exciting possibilities because it yields thicker descriptions, showing historians and history students thinking while engaged in disciplinary activities. Too often, history students and history teachers work with the end products of historical thinking—textbooks and monographs. Like all skilled artisans, historians polish these final products, intentionally removing signs of the struggles and strategies along the way. Ironically, such polish complicates the instructional problem for teachers and students. It is very difficult to model or practice forms of historical thinking that are not immediately evident. Therefore, by making visible the "invisible" cognitive work of historians, scholarship in history-specific cognition creates a richer, more nuanced picture of cognition than linear lists of skills or general taxonomies of thought.

For example, Wineburg's study of expert-novice approaches to reading documents demonstrates a "breach between the school and the academy." Wineburg revealed the multiple strategies—corroboration, sourcing, and contextualizing—historians employ as they read documents, strategies that are absent from students' reading. These descriptions of situated historical thinking fill in the cognitive details of such classroom activities as "working with documents" or "analyzing primary sources." They help the
teacher construct a more complex and, ultimately, more satisfying understanding of historical thinking, yielding richer goals for our courses.9

Further, the studies describe ways children understand history, how they approach text, and their underlying epistemological beliefs. The work points out specific ideas that students bring to their study of history, including ideas about the nature of history itself. It reminds us that students are not tabulae rasae, that they pass their classroom experiences through their own presupposed webs of meaning.10 It encourages teachers to consider students’ assumptions and beliefs, for these may undermine the most engaging classroom activity.

This research, then, clarifies the context within which experts and novices reconstruct the past, define historical problems, work with evidence, and build plausible arguments. It enables practitioners to begin instructional design with a deeper, more robust understanding of historical thinking.

However, this only begins the teacher’s task. Unlike the researchers who reveal these hidden elements of historical thought, teachers must design activities that engage students in using such thinking in the classroom. How can we help students move from surface or scholastic understanding to “deep” understanding? How do students learn to contextualize, corroborate, hear voice in text, and assess significance?

To put it bluntly, does any of this research, theory, or scholarship really matter when a teacher teaches history?

To be sure, this complicated picture of the discipline does not fit a transmission model of learning. Though storytelling may help students develop models of historical narratives, lectures and textbooks do not seem to develop in them the historian’s thinking skills. The widely proposed alternative is active learning, engaging students in the “authentic” tasks of the historian. Developing an analogy to on-the-job training—not, the creed is “student as worker”—many researchers urge teachers to require students to do what historians do by working with documents or artifacts to construct arguments.

While I share the spirit, I fear adopting the active stance may beg the instructional question. In embracing the sensible strategy of having students do history to learn history, teachers focus on the trappings of the activities—the behaviors—without considering the thought processes that underlie all disciplinary action. Clearly, history students can mimic behavior. They can read a document set without engaging in the thinking that characterizes the behavior.

Is an authentic disciplinary activity itself transformative? Seixas cautions that activities taken from a community of experts may not automatically be transplanted to a body of novices.11 Disciplinary tasks embedded within the epistemic community draws meaning from the community’s frames, scripts, and schemas. However, students learning history do not yet share the assumptions of historians. They think differently about text, sources, argument, and the structure of historical knowledge.12 The frames of meaning that sustain the disciplinary task within the community of historians may not exist within the classroom. Hence, the students may reject the transplanted activity. Or, the culture of the classroom will assimilate the “authentic” activity, using it to sustain novices’ naive or scholastic views. Engaging students in some legitimate disciplinary activity without restructuring the social interaction or challenging students’ presuppositions may yield only ritualistic understanding. The problem for practitioners is to design activities that engage students in historical cognition without yielding to the tempting assumption that disciplinary tasks mechanically develop students’ higher functions.

Teaching history is more complicated than either transmitting historical facts or engaging students in history projects. Seeing it as an epistemic activity challenges teachers to merge a substantive understanding of the discipline with an equally sophisticated understanding of learning.

To this end, cultural psychology helps us use the history-specific research in the classroom. Cultural psychology—here I refer to the work of Vygotsky, Bruner, Cole, Shweder, Lave, Rogoff, and Wertsch—has deepened my picture of learning, broadening my focus from the individual to locate the learner within the context of both the classroom and the discipline.13 Two useful mediating principles emerged to help me translate history as a form of knowledge to teaching that form of knowledge: (1) externalize all thinking in the classroom, and (2) create cultural supports for disciplinary thinking.

Effective cognitive apprenticeship demands that we make thinking explicit.14 Teachers and students must try to “see” all the thinking in the history classroom. This is particularly complicated in history instruction as four “types” of thinkers hide within the activities of history classes—students, historical actors, expert historian, and the history teacher. Certainly, this idea of the multiple minds present in the history classroom merits further exploration, which this discussion can only suggest. Suffice it to say that, by exteriorizing the thinking of students, past actors, disciplinary experts, and teachers, we create and shape a disciplinary specific
zone of development with beginning points (student thinking), historical content, and process goals (historical actors/event and historians’ habits of mind), while encouraging pedagogical reflection.

The second principle that emerges from cultural psychology helps teachers confront the paradoxical problem of trying to engage novices in expert thinking. Here Vygotsky’s famous rule of cognitive development provides a wonderful guide:

Any function in the child’s cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interspsychological category, and then within the child as an intrapsychological category. Social relations or relations among people genetically underlie all higher functions and their relationships.15

With social assistance, learners can perform many more competencies than they could independently; through social assistance the higher functions emerge and are subsequently internalized. Tharp and Gallimore remind us that “until internalization occurs, performance must be assisted.”16 Therefore, by embedding historians’ disciplinary thinking into classroom artifacts and interactions (demonstrated later), we transform a class of novices into a community with shared disciplinary expertise. Participation in such a community creates opportunities for students to internalize the discipline’s higher functions or expertise.17

These bodies of scholarship place the teacher between the novice and the expert, within the breach between the school and the academy. With an emerging picture of historical cognition and a mediated view of learning, this research and theory refocus teachers’ attention, redefine educational problems, and assist in instructional design and implementation. The examples that follow, taken from my high school world history course, display these ideas in action.

Into the Breach: Constructing a Dynamic Picture of the Discipline

Where to begin with high school students? Since students’ underlying assumptions impact instruction, I began with their beliefs about history itself. My students entered class with a clear conception of history, its purposes and processes. In describing their initial understanding, students mixed homilies about history’s value with almost Gradgrindian images of the subject matter. For my students, history consisted almost entirely of past facts that are “always true” (SS, 8/29/95). World history is “the study of different cultures . . .” [having] to do with the study of maps” (MA, 8/29/95). It is a “written record of events that happened in chronological order” (SK, 8/29/95). For one student, history entailed objects drawn from the past, that is, “if you got a pencil two days ago, you use it today, so now you are using history” (RR, 8/29/95). History’s value rests in its ability to inoculate us against errors; one student wrote, “History repeats itself because we do not learn from our mistakes” (SK, 8/29/95). When giving proof of these repetitive patterns, students give broad examples; one said, “There is always war” (XX, 8/29/95). One student advises, “You cannot change history, but you can make history” (SS, 8/29/95).

These journal entries reveal a static, formulaic vision of history. The past is filled with facts, historians retrieve those facts, students memorize the facts, and all this somehow improves the present. After reading these opening journal entries, I realized that this sea of assumptions about the discipline threatened to engulf our exploration of world history. Therefore, we began with an epistemological introduction to history itself. This was not a “get-them-settled-acustomed-or-acquainted” activity. Rather, we began with a minicourse on the nature of historical knowledge, designed to construct a different, more complex view of the structure of the discipline.

Certainly, I am not alone in beginning this way. University programs require historiography for history majors. It remains one of the most important courses in my own training, revealing the secrets of the craft while challenging me to consider the underpinnings of the discipline. McDiarmid reports that a solid course in historiography altered ways college students thought about history.18 The English Schools Council began their 9–13 history with a historiographic introduction.19 The International Baccalaureate program devotes an entire section of its required “Theory of Knowledge” course to the study of history as a way of knowing the world. The cultural psychologist Michael Cole provides an even more compelling rationale through his discussion of prolepsis, the “cultural mechanism that brings ‘the end into the beginning.’”20 In this sense, Cole suggests that we “presuppose that the children understand what it is that [we are] . . . trying to teach as a precondition for creating that understanding.”21

How to teach something as abstract as the structure of the discipline? Should we try to “deal with the contradictory and complex nature of
history by teaching them to use the strategies and heuristics exhibited by historians? Or do these cognitive processes make sense only when undergirded by a broader set of beliefs about historical inquiry? In this opening unit, I tried to do both by nestling the "strategies and heuristics exhibited by historians" within the "broader set of beliefs about historical inquiry." Through a series of activities, we developed a picture of the discipline that entailed both broad beliefs and the specific cognitive strategies that would inform all our activities for the remainder of the year.

The crucial first step is to problematize the concept "history" and to challenge students' "merely-facts-beamed-through-time" view of the discipline. We began by differentiating between history as a past event and history as an interpretive account. Students wrote a history of the first day of school that they read aloud on the second day. The great variance in their choice of facts, details, stories, and perspectives revealed differences between the event under study (the first day of school) and the accounts of the event. I listened carefully for opportunities in the discussion to point out the two different ways students used the word "history"—(1) as a past occurrence ("that happened in history") or (2) as an account of past occurrences ("I wrote in my history").

After naming the two concepts History-As-Event (H.ev) and History-as-Account (H.ac), students engaged in activities to explore these ideas. For example, they compared their own experience of an event with other accounts of the event. In one exercise involving a baseball game, students not only compared multiple accounts of the game (a typical activity) but also compared these accounts to the event itself. How were the accounts related to the event? Did the accounts capture the full event? Is it possible for accounts to capture events fully? How did the accounts differ? Did they use different facts? Different sources? Different pictures? Different language? Did the accounts identify different turning points or significant events in the game? Were the accounts connected to each other? Are there other possible accounts of the event? Did the accounts serve different purposes? What explains the fact that people studying the same event create differing accounts? Can one account be better than another? How can we assess competing truth claims?

The entire first unit challenges students' fact-based suppositions of history by creating epistemological problems out of their own experiences. For example, after asking students to create an account of an event they did not experience, we ask, "How is it possible to reconstruct a past event that no longer exists in the present?" Students grapple with these problems through journal writing, substantive conversation with others, and evidence from the thinking of expert historians. Throughout, we confront and complicate students' understanding by raising issues of evidence, significance, validity, organization, chronology, spheres of human life, forms of historical accounts, the public's relationship to accounts, and the role historical accounts themselves play in shaping decisions and events. Slowly, students develop a graphic record of their understanding of the discipline. The graphic grows over weeks with students modifying it until we have a complex, dynamic view of the discipline.

The graphic shown in Figure 17.1 hangs prominently in my classroom, guiding disciplinary self-reflection, assessment, analysis, synthesis, and

![Figure 17.1. Concept Map](image-url)
evaluation. Before, during, and after a unit of study, the students use the picture as a concept map to locate classroom activities within the disciplinary frame. Creating, using, and modifying this picture of the discipline demystifies historical accounts for students. It constantly reminds them that historical texts, broadly conceived, are products of a cognitive process involving investigation, selection, evaluation, interpretation, and thought.

On occasion, we use the structure of the discipline to think about instruction, raising questions about my perspective in selecting documents, designing activities, or determining a unit's length. This activity demonstrates that the history classroom itself is a construction of the past that can be understood using disciplinary standards. This opening unit helps students connect the typical artifacts of history instruction, such as the textbook, lecture, movies, maps and facts, to a world beyond the classroom.

Using a map to locate our position, though, does not mean we can travel the territory. The skills needed to traverse a landscape are not the same as those involved in using or even in creating a map. In the classroom, merely creating a more dynamic understanding of history does not mean that students will use the intellectual processes represented. Paradoxically, using those cognitive skills fosters their growth. How can student novices use expert historical thinking? We turn to this question later.

**Crossing the Breach: Assisting Student Performance of Disciplinary Competencies**

During the year, students use historical thinking processes long before they have mastered them. Such performance before individual competence requires assistance. The examples that follow demonstrate three forms of assistance: (1) externalizing thought through informal journals, (2) mediating thought through classroom artifacts, and (3) embedding thought in structured interactions.

**Externalizing Thought Through Informal Journals**

One of the most important tools for teaching and learning history epistemically is informal writing. Informal writing or thinking on paper allows students to explore connections, speculate about historical phenomena, and develop understandings of the past. Informal writing captures thinking in process. Hence, it is tentative; neither the writing nor the thinking is polished or complete. We do not expect it to meet formal standards of grammar, punctuation, spelling, or logic, logical coherence. Nor do we use informal writing to test or evaluate students. Instead, informal writing stimulates students' historical thinking.

To employ informal writing, students keep a journal or learning log exclusively for world history. They do not combine class notes and the informal journals because each serves a different purpose. Whereas class or reading notes captures others' thinking, students use journals to capture their own thinking. Students make their ideas overt, revealing that which is difficult for students to see—the changes in their own thinking. Teachers and classmates also gain access to a student's prior knowledge and emerging conceptions and misconceptions. When public, informal writing lays the foundation for a community of inquiry.

The writing strategies I describe in this section stimulate students' historical imaginations while assisting their thinking. In many ways, the strategies capture the activities of working historians.

- **Externalizing understanding through freewriting.** Students use journals to begin thinking about a historical topic, reading or problem. They capture their initial thoughts through freewriting, responding to questions such as “What do you know about . . . ? What do you think about . . . ? What attitudes do you bring to this subject? What questions do you have? How would you respond in a similar situation? What difficulties do you have with the subject? What do you suspect is most significant about the issue? What is most memorable?”

These questions encourage students to explore a given problem or issue on their own before studying it in class. It requires students to consider their own thinking about the topic. Most important, such writing identifies existing ideas, attitudes, questions, and values. Depositing current thinking on the pages of the journal makes it easier to consider and to avoid presentism later.

- **Creating narratives through story writing.** Story writing invites students to create a narrative from the facts or events in a unit of study. Too often, texts appear to students as a string of disconnected facts, without a coherent beginning, middle, or end. Story writing encourages students to create a narrative structure. It enables teachers and students to explore the voice of the storyteller and to retell a story from multiple perspectives.

Often students create narratives without referring to notes, stressing the coherence of the story line over names and dates. Then, of course,
students return to their notes and the facts to rework the story more accurately. With this activity, teachers can raise important historical questions. What changed in the telling of the story? Did any particular facts alter the story? Did your understanding change? Such procedures allow students to participate in the trials and tribulations of assembling and creating historical narratives.

- **Reading through writing.** Students use the journals to read historical texts. Journal writing urges students to think about what they are reading, to discover what they understand about the material, and to identify its significance. Writing-to-read is different from merely taking reading notes. In the journal, students capture their own thinking about the text, initially guided by teacher-posed questions; the questions engage students in expert thinking as they read. Sample questions include “What were your first thoughts as you read? What questions occurred to you? Does this text remind you of anything else? What passage was most important for you? What passage was important for the author? Is there a difference between what you think is important and what you think the author thinks is important? What questions does the text answer? What is the author’s perspective? How does this connect to other sources?”

Often we use a double-entry method in the journal. Students take quotes or paraphrase the text in one column and then respond to the text on a facing column or page. This establishes a dialogue between the reader and the text, a dialogue similar to what expert readers construct in their minds as they engage text.²⁵

- **Developing dialogues through interactive writing.** Dialectical, interactive writing engages students in an informal, written conversation with others around a historical problem. Working historians participate in a variety of such conversations through conferences, publications, collegial exchanges, and, increasingly, e-mail. Interactive journal writing creates an opportunity for similar exchanges among students. Students read and respond to classmates’ thoughts on a topic or issue under study. To generate conversation, teachers might divide the class into groups of three. Then students exchange journals within the group and write their reactions to their classmates’ entries. Finally, students read and respond to their classmates’ comments. As skills develop in giving and getting comments, we assign roles before students read and respond to classmates, such as “defender of the text,” “doubter,” “believer,” or “friendly critic.”

- **Self-reflection through meta-cognitive writing.** Journal writing also helps students to think about their own thinking. For example, by asking students to consider and reconsider the same question at regular intervals, teachers can help students monitor the changes in their ideas. Informal writing can also help students see how newly acquired information alters their understanding. I ask students, while they are working on term papers, to write weekly descriptions of what they know and think about their topic. Such regular writing prompts students to work out meaning in their sources and note cards as they research, rather than waiting until they have collected all their data. Such writing enables us to raise questions about how to determine the “end” of data collection or the dynamic relationship between evidence and thought.

- **Community building through public readings.** Journal writing actively involves all students in making sense of the material they are studying. An important step in this process requires students to read journal entries aloud in class. Analogous to historians who talk to colleagues or present tentative conclusions at conferences or in their teaching, students publicly share their formative thoughts. In class, students often read short entries consecutively, withholding comment until all students have read. Such quick sharing frees students to listen to their classmates, rather than concentrating upon what they are going to say. It allows timid students to say what is on their minds without the “Oh-I-was-just-going-to-say-that” disappointment of being called upon later in a discussion. All students read what they have written, even if someone else has already read a similar response. This also allows the class to look for patterns in collective responses and points to variations in ideas and perspectives.

Teacher participation in this process is important, though risky. Like the students, teachers should write in a journal, read aloud in class, and participate in journal exchange groups. This models for students that teachers work on historical problems in the same tentative manner—adjusting, modifying, testing, and revising. Joining in the informal writing activities places the teacher within a community of inquiry.

**Mediating Thought through Classroom Artifacts**

Students also rely on tools and artifacts to support their use of expert thinking before they have internalized historical skills. A good example is found in fostering students’ thinking around issues of significance.

Determining significance is a fundamental element of historical thinking. Assumptions about significance shape the way historians select,
organize, and periodize their studies. It is central to the historical enterprise. The failure to determine significance turns history into "one damn thing after another." In our age of abundant information, discriminating between the significant and the insignificant is a vital intellectual skill.

How can we engage students in using strategies for determining significance? Early in the course, my ninth-grade students build a virtual time capsule, with each student deciding items to include and exclude. This is certainly a well-worn activity that does "hook" students. After a very short discussion of their items, though, we go "meta" by turning from the objects they have chosen to a consideration of the thinking they used to make their choices. We externalize students' criteria and construct a set of statements that the class agrees shaped their decisions. We call these our "Tools for Determining Significance" and place these statements on colorful posters around the classroom. One typical poster reads, "Period 3's Tools for Determining Significance: (1) Rare, first-time, or last-time events, (2) Impacts many people in many places, (3) Impacts many areas of human life, (4) Effect lasts across time."

Through the year, students use the posters to make cases for events' importance or to argue for a turning point that signified the end of an event or an era. The posters help students assess historical accounts and decide whether a historian has made a strong case for the importance of an event or interpretation. At times, students discover fundamental interpretive conflicts among historians by applying their charts.

In fact, this classroom artifact often presents intellectual conflict during the year. At first, students used the different criteria in a rigid algorithmic procedure. However, gradually they blurred the lines and overlapped criteria. This raised questions about relative and comparative significance. Students wondered whether and how significance could change over time. We posted these questions as we confronted them, thus visually recording our own epistemological dilemma.

The students created many charts or posters to capture expert thinking in history. Analogous to the way they used the periodic table hanging in the chemistry class, students used these visual tools of history to read, write, take tests, discuss an issue, or make journal entries. They depended upon these aids, regularly referring to them until they internalized the procedures. One student wrote, "I find that I am often using the institutions and rules of significance on a daily basis, without even thinking" (PG, 6/7/96).

Embedding Expert Thought in Classroom Interactions

Another way to assist novices in using expert thinking is to embed that thinking in classroom interactions. A good example is the unusual way my class reads document sets. Here I modify the reciprocal teaching procedure first described by Brown and Palinscar to reflect the strategies historians use when reading primary sources. The procedure uses group interaction to enable students to read together in ways they could not read on their own.

The key is the disciplinary specific division of labor. Each student or pair of students becomes a particular type of question or questioner. Then, within the role, each asks questions of the class about the document we are reading. Thus, discussion ensues.

The beginning questions are common to any classroom reading procedure, as students identify confusing language, define difficult works, and summarize the key points. The remaining roles are specific to the discipline, encouraging students to pose questions expert historians might ask. Using historians' heuristics, students ask their classmates:

- Who made the source, and when it was made?
- Who is the intended audience for the source?
- What is the story line within a source?
- Why they produced a source and the purpose it served?
- Whether other evidence supports the source?
- Whether other evidence contests the source?
- Whether the source is believable?
- What is the story line that connects all the sources?

As they ask questions, classmates return to the documents, make journal entries, and discuss their answers. Thus, in this structured manner, the class raises multiple questions that guide everyone's reading and discussion of text.

This activity is initially awkward and time consuming with its role assignments, complex questioning, and discussion. It is different from cooperative learning where content divides tasks. Here it is the complex thinking that divides the task. This structured activity recognizes that, while individual students cannot perform complete, complex historical analysis of a document or a document set, as a group they can. The activity does not lower disciplinary standards or allow novices merely to mimic experts. As a group, students participated in the complex, authentic activity "where initially the
adults and the artifacts bear a large part of the load, but where children come to be fuller participants (that is competent readers) over time.

Using these roles challenges the students’ habit of treating historical text as they do other text.

**Discussion**

Do any of these techniques improve students’ understanding of history? Though I am excited and enthusiastic about this cognitive approach to history instruction, I cannot yet make definitive statements about its impact on student thinking. However, analysis of student journal entries reveals three areas of change in student thinking. I offer these not as research conclusions but as suggestions of the effect an epistemic approach might have on student cognition.

First, at the end of the year, students reported a noticeable and positive difference between this approach to learning history and other approaches. For example, Sara wrote that she was “surprised” by the “way we learned history in this class.”

I thought it would be like past history classes where you memorize facts, people and dates which have little significance if you don’t understand them. Also, I thought it would be like performing events in history, working in groups, which I hate, and have a “parrot-like” repetition all of the time. We didn’t do anything like that. It was interpreting history. We made it relevant because we interpreted events not memorized them. (SW, 6/7/96)

Another student explained that most of her prior courses “just taught us what happened,” while this course “explored further into things like cause, effect and significance. You cared about how we thought and how we interpreted history” (RG, 6/7/96). Other comments support this,

[H]istory came alive for me by having us develop our own interpretations of the past. (DR, 6/7/96)

It was the first time in my life that I studied history from all viewpoints and interpretations and not just the interpretation of the author of the book. (ET, 6/7/96)

I learned that the history books can be wrong, and that I can even interpret some things myself if I don’t agree. This is the only year history became interesting to me. (WS, 6/7/96)

Second, students gave more complicated definitions of history at the end of the term than they did at the beginning. In initial entries, no student mentioned historical interpretation or the historian’s part in constructing history. However, a more dynamic view of the discipline defined their closing entries, one student wrote, “History is the interpretation and organization of facts. Historians have a unique job in picking dates that split things” (WS, 6/7/96). Students placed thinking as the central element in the study of history; one noted, “I think history is the study of the way people thought, reacted to problems and reacted toward themselves and others” (IT, 6/7/96). Some students reported that history involved an approach to knowledge: “The process went sort of life this—1) decide if the subject/person/event is significant 2) analyze how it effected [sic] each institution 3) give our interpretation insight on the subject” (PG, 6/7/96).

Finally, a preliminary analysis of student work shows that students used their developing skills and understandings to handle text in a more sophisticated manner. For example, after using the “tools” I have discussed to work through multiple primary sources on the fourteenth-century plague epidemic, students offered complicated criticisms of their textbook’s treatment of the same event. Students’ criticism ranged from the textbook’s failure to include evidence of human agency, that is, the book’s account “can lead to the misconception that people did nothing to try and protect themselves” (SW, 2/28/96), to the textbook’s omitting documentation; one student complained that the book “needed to add . . . many more references to outside sources” (KC, 2/28/96). One of the most surprising complaints the ninth-grade students lodged concerned the shortage of facts found in the text; one noted that “one weakness in the way the textbook addresses the Black Death is that it leaves out many details that contribute greatly to the story” (ES, 2/28/96). Students’ observation that a textbook needs more details is indeed an unanticipated benefit of this approach to teaching.

While I am still investigating the impact of this approach to teaching on student thinking, I am more confident about the productive changes it generated in my thinking. For example, the focus on expert, novice, and pedagogical knowledge opened new avenues for reflection and understanding. With this heightened need to locate student thinking in relationship to “expert” thought, I began to read student work and to listen to student talk with a new, almost anthropological intensity. More accurately, I used my historian’s skills of contextualizing, corroborating, and sourcing to read student journals or attend to classroom conversation.
Similar change marked my approach to instructional design, enactment, and "real time" pedagogical modification. Using research as a teaching tool thus opened new opportunities to understand teaching and learning history within the classroom. In turn, this new understanding presents new questions for investigation. Here, again, I find myself poised between worlds—this time, research and practice—with questions aimed in both directions. For example, within the classroom, as we would expect, there was variation in student response to this approach to teaching history. Some students seemed overwhelmed by such active mental processes, even when I used mediating tools; other students quickly stopped using the scaffolds, finding such cognitive tools cumbersome or constraining. Do some students need "scaffolds" to help them use the scaffolds? What other bridges might help them make sense of the complexity that historical thinking demands? Though I have read interesting pieces on how student understanding of time or causation develops, little in my instructional design reflects this literature. It probably should, as I suspect it might help vary and complicate the scaffolding tools. Or, consider the variation in attitude I observed as students deepened their understanding of the constructed nature of historical accounts. Some students embraced a productive skepticism that invigorated their approach to the world around them; others used the ideas to sustain a cynical relativism. We need to explore how these understandings develop.

While I have been arguing that an environment rich in historically grounded scaffolds enables deeper thinking, I have no idea what happens when students move into other settings. Does any of this have staying power, or is it merely contextualized to "that is how we studied history in our freshman year"? How do students negotiate teachers' epistemological differences? Would students benefit from more investigations into the structure of other disciplines, creating images that promote comparison?

Finally, how might other practitioners best use the insights gathered from research probes into how historians, history students, and history teachers think? Conversely, what can researchers learn about practice by the ways teachers adopt, translate, or ignore findings? How might we represent research findings and classroom practice in ways that engage these communities in greater collaboration?

Such questions sit, like the history classroom, at the intersection of several intellectual worlds. As a practitioner, I have found great value in moving from one world to another. The continued interaction among historians, cognitive researchers, and history teachers likewise promises to enrich the work of all, especially the history students in our classrooms.

NOTES


2. Peter N. Stearns, Meaning over Memory: Recasting the Teaching of Culture and History (Chapel Hill, NC, 1993).

3. See also Denis Shemilt, "The Caliph's Coin: The Currency of Narrative Frameworks in History Teaching," this volume; Peter Lee and Rosalynd Ashby, "Progression in Historical Understanding Among Students Ages 7–14," this volume.


19. Shermitt, "The Devil's Locomotive."


21. Ibid.

22. Wineburg, "Historical Problem Solving."


29. The most obvious example of such new instructional design can be seen in the Web site and electronic conferences I created to teach world history during the 1997–1998 school year. See Bain, "Embedding the Structure of the Discipline in the Technology," or visit the World History Project Web site at [http://www.beachwood.k12.oh.us](http://www.beachwood.k12.oh.us)