

Learning to Teach Disciplinary Literacy across Diverse Eighth-Grade History Classrooms within a District-University Partnership

Chauncey Monte-Sano, Susan De La Paz, Mark Felton, Kelly Worland Piantedosi, Laura S. Yee, & Roderick L. Carey

Writing is crucial to success in high school, college, the workplace, and civic life. Yet, little time is spent on writing in schools, and teachers seldom learn how to teach writing in their preservice or in-service experiences (National Commission on Writing, 2003). Perhaps as a consequence, only one-quarter of adolescents demonstrate proficiency on national writing assessments (National Center for Education Statistics, 2003, 2012). In addition, college instructors report that only half of their students are prepared for college-level writing, business leaders say that 65%

Chauncey Monte-Sano is an associate professor in the School of Education at The University of Michigan, Ann Arbor, Michigan. Susan De La Paz is an associate professor in the College of Education at the University of Maryland, College Park, Maryland. Mark Felton is a professor in the College of Education at San Jose State University, San Jose, California. Kelly Worland Piantedosi is a teacher at Ross Elementary School in the District of Columbia Public Schools, Washington, D.C. Laura S. Yee is princpal, Lower School, at the Georgetown Day School, Washington, D.C. Roderick L. Carey is a postdoctoral research fellow with the Center for Urban Education, University of Pittsburgh, Pittsburgh, Pennsylvania. Their e-mail addresses are cmontesa@umich.edu, sdelapaz@umd.edu, mark.felton@sjsu.edu, kelly.worland@dc.gov, lyee@gds.org & rlc93@pitt.edu

of their employees write adequately, and 62%–65% of high school graduates feel they are prepared for either endeavor (Achieve Inc., 2005; National Commission on Writing, 2004).

One recent response to this challenge has been to expand literacy instruction beyond English language arts classrooms into other subject areas. The Common Core State Standards (CCSS) emphasize disciplinary literacy by making literacy instruction every teacher's responsibility (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010). The CCSS require content area teachers to adapt curriculum and pedagogy to support disciplinary literacy development. Therefore, teachers accustomed to stressing only factual knowledge must shift to emphasize the disciplinary learning and thinking that undergirds literacy practices in their subject areas. In addition, they must learn to teach the reading and writing central to their disciplines.

In this article, we share one school-based effort to support teachers' learning of a disciplinary literacy approach to social studies instruction and what their analysis of student work—one pedagogy used to support teachers—tells us about their learning. The curriculum department in one of our partner districts invited us to support their transition from textbook-based instruction focused on information recall to inquiry-oriented teaching focused on disciplinary literacy. We worked with teams of eighth-grade social studies teachers in multiple schools where many students had scored below grade level on statewide assessments. As university partners, we worked in conjunction with the district and across participating schools to provide learning opportunities consistent with the district initiative and school-level instructional goals. We developed an 18-day U.S. history curriculum designed to teach eighth graders to write evidence-based historical arguments and created a 1-year professional development (PD) course for teachers who elected to implement the curriculum.

We grounded decisions about the structure, activities, and context of our efforts to support teacher learning in current ideas about best practices in PD. In terms of structure, the PD focused on specific content (U.S. history), classroom practice (in its emphasis on student work analysis as well as on understanding and using new curriculum materials), and active engagement with ideas and teachers' eighth-grade U.S. history colleagues (e.g., Ball & Cohen, 1999; Desimone, Porter, Garet, Yoon, & Birman, 2010; Hill, 2009; Little, 1993). The work took place over 1 year and included teams from the same school when this was possible or individuals when it was not (e.g., Wilson, 2009). In our PD activities, we used two practices to support teacher learning that show promise: (a) representing, decomposing, and approximating practice (Grossman, Hammerness, & MacDonald, 2009) and (b) attending to students' thinking through analysis of their work (Kazemi & Franke, 2004; van Es & Sherin, 2008). Although we presented the initial curriculum that embodied the disciplinary literacy reform effort, we worked with teachers to implement the curriculum in ways that made sense given their students and school contexts (e.g., McLaughlin &

Mitra, 2001). We thought beyond a sole focus on PD activities or individual practice to considering the different groups and systems teachers participated in (e.g., grade level, subject area, school, district) and the ways in which those aspects of context are both "interdependent and reciprocally influential" when it comes to teacher learning and changing teacher practice (Opfer & Pedder, 2011, p. 379).

In these ways, we hoped our PD would (a) help teachers respond to a district-wide reform initiative based on the best practices from the literature on teacher learning, (b) help teachers make sense of a concept new to many of them (disciplinary literacy), and (c) translate the meaning of the new concept to instructional practices. In this article, we discuss teachers' learning about history and literacy development within the contexts that affected their work by considering their analysis of student writing.

Theoretical Background

Disciplinary Literacy in History

We define disciplinary literacy as the ways of thinking, reading, and writing that are embedded in the production, consumption, and communication of knowledge in a discipline (e.g., Conley, 2012; Moje, 2008). In history, for example, one aspect of disciplinary literacy involves questioning and weighing evidence found in primary sources, constructing interpretations of the past based on analysis of evidence, and conveying interpretations in writing (Monte-Sano, 2008, 2011; Wineburg, 2001). Historical, or disciplinary, thinking is embedded in historians' reading and writing as they develop interpretations (e.g., consider authors' purposes and audiences, situate primary sources in their original context, analyze significance and causation). Interpretations make the case for a particular account of past events or people based on evidentiary support, thus we highlight the goal of writing evidence—based argument within the context of a disciplinary literacy intervention.

Contrary to popular thought, research demonstrates that history learning goals related to disciplinary literacy are attainable for a wide range of students, including students as young as fifth grade (VanSledright, 2002), students with disabilities (De La Paz, 2005), and English learners (Zwiers, 2006). But such goals are not easy to attain: If students are to achieve the promise of disciplinary literacy, they must learn to think in disciplinary ways and learn discipline-specific ways of reading and writing. Why? In his seminal work, Wineburg (2001) argued that students do not naturally tend to think like historians. In reading historical texts, they often focus on the literal meanings and miss the opportunity to use intertextual reading strategies that would promote interpretive work (Afflerbach & VanSledright, 2001). Nor do students tend to write as historians do. In the only study to compare the writing of students and experts, students tended to list and arrange facts rather than analyze information (Greene, 2001). Results from the National Assessment of Educational Progress in the United States highlight additional literacy challenges (Salahu-Din,

Persky, & Miller, 2008). Yet, with instruction that emphasizes disciplinary thinking and argument, students' writing can improve in the context of history classrooms (De La Paz et al., 2014; De La Paz, Monte-Sano, Felton, Croninger, & Jackson, 2016; Monte-Sano, 2008, 2010; Young & Leinhardt, 1998).

Despite the energy focused on disciplinary thinking and writing in the history education research community, many history teachers are not necessarily prepared to teach these aspects of the discipline. Large-scale analysis confirms that when teachers in the United States assign reading and writing in history classrooms, the focus typically involves basic levels of reading comprehension and summary of information (Kiuhara, Graham, & Hawken, 2009; Nokes, 2010). When history teachers in the United States often do not even have a minor in the discipline (Westhoff, 2009), this lack of attention to disciplinary thinking and writing is hardly surprising. Current social studies state standards and assessments as well as the use of authoritative textbooks likewise discourage an emphasis on disciplinary literacy (e.g., Bain, 2006). As a consequence, efforts to influence the teaching and learning of history must give teachers opportunities to develop content knowledge and practice.

Teacher Learning

Teacher education research has helped us think about teacher learning opportunities. In seminal research conducted as part of the Center on English Learning and Achievement, Grossman and her colleagues (Grossman, Smagorinsky, & Valencia 1999; Grossman et al., 2000) considered two kinds of pedagogical tools that support English teachers' learning: conceptual tools and practical tools. *Conceptual tools* are "principles, frameworks, and ideas about teaching, learning, and English/language arts that teachers use as heuristics to guide their instructional decisions" (Grossman et al., 2000, pp. 633–634). *Practical tools* include strategies, practices, or resources used in teaching that "have more local and immediate utility" (Grossman et al., 1999, p. 14). This work has guided our approach to PD as we have emphasized conceptual understandings and practical tools in supporting teacher learning.

To help teachers learn practical strategies for teaching disciplinary literacy in history, we drew on Grossman et al.'s (2009) work on cross-professional perspectives. Grossman and colleagues highlighted representations, decompositions, and approximations as specific concepts underlying pedagogies of practice in professional education. In preparing teachers, representations of practice involve using examples of expert teaching practice and making hidden components that contribute to expert enactment visible. Decompositions of practice involve identifying the components that are integral to particular practices so that novices can see and enact them. Approximations of practice include simulations of different aspects of practice so that novices can rehearse, gather feedback, reflect, and continue to improve. Together, these concepts support the teaching of specific practices by giving learners opportunities to understand and enact them (e.g., Ball & Forzani, 2009).

Research on PD and veteran teachers' learning provided additional ideas for shaping our work. Wilson (2009) led a National Academy of Education committee to investigate what researchers have learned about fostering teacher quality. The committee argued that PD has been effective when it enhances teachers' subject matter knowledge, provides extended learning time, actively engages teachers, involves teams of teachers from the same schools, and links to what teachers are asked to do. Other researchers have highlighted similar structural features (Blank & de las Alas, 2009; Desimone et al., 2010; Hill, 2009; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007) and also framed teacher learning as a complex system situated in the interplay between teachers' multiple contexts (e.g., grade level, subject area, school, district) and PD activities (Opfer & Pedder, 2011).

One promising way of linking PD to teachers' work and actively engaging teachers is to analyze student work with the goal of reflecting on and improving practice (e.g., Ball & Cohen, 1999; Wilson, 2009). Little (2004) looked across PD efforts to highlight the different purposes for student work analysis: deepening teacher knowledge, increasing external control of teacher education, and generating community and commitment to reform among teachers. Our own work focuses on deepening knowledge because teachers are better prepared when they understand student learning and use analysis of student learning as a way to reflect on practice. Little reported some evidence that teaching and learning improve when teachers analyze student work in PD, but this evidence is limited to a handful of studies that do not capture the range of practices used for student work analysis. Windschitl, Thompson, and Braaten (2011) presented one exception, arguing that the promise of analyzing student work in novice teacher inquiry groups can be attained with specific protocols and rubrics to guide the analysis, provide a common language for teachers, and emphasize disciplinary goals. Additional studies have also found that teachers can learn to attend to their students' mathematical thinking in the context of supportive PD (Kazemi & Franke, 2004; van Es & Sherin, 2008).

Learning to teach disciplinary literacy involves many considerations. Here we examine teachers' analysis of students' writing during PD meetings that coincided with a history curriculum intervention focused on developing students' disciplinary use of evidence in writing historical arguments. In prior work, we shared the effects of the curriculum intervention on student learning and found that students whose teachers participated in this PD and intervention grew significantly in their capacity to write historical arguments as compared to students whose teachers did not (De La Paz et al., 2014; De La Paz et al., 2016). These results were even stronger when teachers ensured that students had opportunities to apply what they had learned about disciplinary literacy during instructional time. Gains were significant for students at every reading level as well as for students with disabilities and English learners.

These findings prompted us to consider whether teacher learning during PD might relate to student learning and teacher fidelity. In this article, we explore teachers' analysis of student essays at four points in the year to identify patterns in their

attention to students' disciplinary thinking and writing as one way of gaining insight into teachers' learning in this school-based PD program. In our analyses, we look for evidence of teachers' learning with regard to the conceptual understanding and pedagogical approaches that are the foundation for teaching disciplinary literacy in history. We ask three questions: (a) What do teachers notice in their students' argumentative historical essays? (b) Is there evidence of change in what teachers notice in their students' argumentative historical essays? (c) What do teachers' reflections on students' essays tell us about their knowledge of disciplinary thinking and writing as well as student learning?

Method

The Intervention

Participants and context. We assumed multiple roles in this project as the designers of the curriculum intervention, researchers, and PD facilitators. In these roles, we designed the 18-day curriculum, observed and interviewed teachers, collected students' writing and interviewed them, and designed and taught the PD sessions.

The eighth-grade U.S. history teachers and students in our study work and learn in a large, mid-Atlantic U.S. school district. Each year we worked with a different cohort and refined our intervention based on successes and challenges identified previously. Here we report on the project's second year.

Our 1-year intervention targeted middle schools identified by the district as having significant numbers of struggling readers (about 33% of all participants were significantly below grade level in reading, even though 45% were proficient and just over 20% were advanced readers). Demographic and economic data indicated that 45% of the students received free and reduced-price meals, about 10% received special education services, and 8.5% received English services for speakers of other languages. Students were primarily Black (76%) or Latino/a (15%).

We invited social studies teachers at target schools to join our project, and 20 teachers chose to work with us in some capacity. Fifteen teachers implemented the curriculum with high fidelity (De La Paz et al., 2016), participated full time in PD, and administered pre- and posttests to their students. Five teachers did not implement the curriculum, but administered pre- and posttests to their students to provide data for comparison purposes. Here we focus on 13 teachers who implemented the curriculum because 1 teacher did not have a complete set of data (i.e., she was missing three of four notebook entries focused on her students' work) and 1 was excluded from the final pool of data due to inappropriate administration of students' posttests.

The curriculum. The curriculum we created includes six 3-day investigations focused on a central question and two conflicting primary sources. We selected topics for each investigation (e.g., the Mexican–American War) in coordination with

district leadership. Day 1 of each investigation involved reading and annotating historical sources, Day 2 involved deliberation about the documents and question, and Day 3 involved planning and composing an essay. Students used two disciplinary literacy tools throughout ("IREAD" and "How to Write" or "H2W") to support their reading, thinking, and writing (for more details about the curriculum, see Monte-Sano, De La Paz, & Felton, 2014). Using a cognitive apprenticeship approach, we asked teachers initially to model how to use the disciplinary literacy tools and give students practice using them. In the last three investigations, we asked teachers to promote students' independence with the supports built into the curriculum.

The professional development program. We met with teachers for 66 contact hours across 11 all-day PD sessions. Teachers earned six graduate credits for completing the yearlong course. We grounded PD experiences in literature on effective PD (Wilson, 2009): Our PD was sustained; used extended amounts of time; linked to teachers' work with students in the classroom; actively engaged teachers with curriculum materials, student work, and each other; and gave them opportunities to enhance their knowledge of the discipline and practice. We observed teachers' implementation of the curriculum, discussed challenges and opportunities in their classroom contexts, and talked through how to work effectively with the curriculum in those contexts. The PD targeted three goals: develop teachers' conceptual understanding of disciplinary literacy in history and cognitive apprenticeship, develop teachers' facility with using practical tools to support students' disciplinary literacy learning, and foster teachers' conceptual and practical understanding of teaching disciplinary literacy by analyzing students' work.

In the first four sessions of the course, we aimed to develop teachers' conceptual understanding of history as an evidence-based interpretive discipline, historical thinking, and disciplinary approaches to reading and writing. Such attention was necessary to build a foundational understanding of our approach, which was a major shift from district norms. After these initial sessions, we introduced a cognitive apprenticeship approach to instruction and practical tools (e.g., IREAD, H2W) by sharing the curriculum with teachers, one investigation per meeting. We used Grossman et al.'s (2009) framework of sharing representations, decompositions, and approximations of practice to help teachers learn to use each investigation and the practical disciplinary literacy tools. We modeled the use of the materials for the next investigation, debriefed the key elements of each investigation, talked through how teachers might enact these elements, and gave teachers opportunities to practice teaching key aspects of the investigation to their peers with attention to their classroom contexts (cf. Ball & Forzani, 2009; Grossman et al., 2009). In addition, teachers debriefed their work with the previous investigation and shared ideas with colleagues about how to work with the materials effectively in their classroom contexts. Because we observed teachers, we also attended to teachers' developing understanding of cognitive apprenticeship and disciplinary literacy by publicly sharing examples of when teachers worked with the materials effectively in their classrooms.

Analyzing student work was the third teacher learning opportunity designed to build conceptual understanding and practical facility. Early on, we identified and explained key features of good historical arguments and looked for their presence or absence in student writing samples. Based on this discussion, we generated a list of key features of historical argument that we returned to each session. Subsequent discussions included attention to how we could support particular students and analysis of students' growth trajectories. Once teachers began using the curriculum, they spent 1–2 hours during each PD session considering their students' writing using a student work analysis protocol alongside a list of key features of historical arguments and our written feedback on previous notebook entries (cf. Windschitl et al., 2011). Teachers tracked the progress of three to five purposefully selected students over the course of the year, looking for strengths and areas for improvement and wrote reflections in notebooks. We encouraged teachers to choose students with learning profiles that encompassed the range of performance across their classes by identifying students who were below, at, as well as above average in reading and general literacy skills, as well as choosing students who were learning English or who had identified disabilities. Teachers then shared their findings with colleagues and discussed how they could help their students improve.

By mid-year we found that students' essays included aspects of historical thinking and writing that demonstrated growth; however, teachers did not always notice these qualities. We suspected that teachers did not notice qualities of historical argument in part because of their understanding of these concepts. Therefore, after the fourth investigation, we initiated analysis sessions by sharing two preselected student work samples, generating discussion of the strengths and weaknesses in these essays and exploring what particular aspects of historical argument involved. The preselected samples highlighted key aspects of historical writing that were noteworthy accomplishments or that posed challenges. We modeled and discussed how to identify student needs and work with these students.

Data Sources

The main source of data for this article includes teachers' written reflections on student work from specific investigations in response to four writing assignments given during PD. To support teachers' thinking, we varied the assignments (see Table 1) but maintained a consistent list of key features of historical argument within each assignment. Teachers wrote their responses in a notebook. We collected notebooks after each class, wrote feedback on the reflections in the margins, and altered the PD writing assignments in response to their insights.

Data Analysis

We brought a conception of historical writing to our analysis of teacher note-books and student essays that integrates argumentation and historical thinking (Monte-Sano, 2010). We focused on the disciplinary use of evidence in writing historical arguments, including taking an interpretive position; selecting relevant evidence to support this position; explaining how evidence supports this position; justifying one's use of particular documentary evidence by considering the author's reliability, an author's perspective, the relationship of the evidence to its historical context, or comparison of the value of the available evidence; interpreting evidence appropriately; and recognizing conflicting evidence. This analytic frame guided our interpretation of the data.

Initially, we summarized what teachers wrote about students' work in each reflection, transcribed excerpts of reflections that illustrated teachers' main ideas, and summarized the essays teachers reflected upon. We reviewed these notes and developed a list of recurring themes that were common across teachers' reflections. We then reread a subset of notebooks, organized the data according to theme, debriefed this second pass through the notebooks, and revised the original themes so that they were precise and reflective of the data. Through this process, we created a coding protocol that involved 10 parent codes in teachers' four reflections, tabulating the number of times we observed the code in each reflection, transcribing examples that illustrated teachers' tendencies related to each code, and tracking researcher commentary. Parent codes included the specificity of statements about students or

Table I
Assignments to Elicit Teachers' Thinking About Students' Essays

Reflection assignment Prompt description

Investigation 1

- Consider students' strengths and weaknesses.
- Share examples of each.
- Look for particular aspects of historical writing.
- Share ideas for next steps with students.

Investigation 3

- Compare your focal students to other students in the class.
- Consider students' strengths and weaknesses.
- Share ideas for next steps with students.

Investigation 5

- Select and share excerpts of student writing to illustrate their strengths and weaknesses.
- Identify goals and feedback for students.

Final comparison

- Compare students' work from across the year.
- · Share examples of improvements and difficulties.
- Consider how they could help students improve.

student work; consistency of teacher analysis with student work; specific statements about student growth; focus on aspects of historical writing; focus on completion, goal setting, and ideas for helping students; feedback to give students; adapting the curriculum intervention; and consistency of teachers' goal setting, feedback, and proposed next steps with student work. Each of these parent codes had child codes. For example, the parent code "focus on aspects of historical writing" was broken down into child codes including "focus on aspects of historical writing not related to the intervention" (e.g., grammar, paragraph indentations) and "focus on aspects of historical writing related to the intervention" (e.g., answered the historical question, provided evidence, included rebuttal, evaluated evidence, noted authors/time period). We coded each individual notebook using this coding scheme, which we developed inductively through multiple passes of the data.

We completed our analyses by creating different data displays (Miles & Huberman, 1994) to compare and synthesize findings across all notebooks. One series of charts tabulated teachers' tendencies for each code and highlighted where teacher tendencies were more (green) or less (red) consistent with the intervention. This view highlighted the number of teachers who demonstrated each pattern and how those numbers changed according to journal entry. Within the code "focus on aspects of historical writing related to the intervention," researchers noted which particular aspects of historical writing teachers attended to in each reflection. Another chart specified how many teachers noticed each aspect of historical writing (e.g., provided evidence, historical thinking) and in which reflection. We also transcribed all of the examples of teachers' attention to evaluation of evidence (e.g., "[The student] continues to work hard citing quotes, explaining and writing out her evaluation, but still cannot explain why people disagree") and historical thinking (e.g., "In most cases they recognize the author and the situation in which the investigation is taking place") so that we could identify patterns within this code, compare what teachers noticed when writing about evaluation or historical thinking, and tabulate the number of teachers who attended to either.

Findings

Overall, we found that teachers learned to notice and comment on their students' historical thinking in writing, but several had great difficulty specifying next steps for working with their students on historical thinking and writing, and our language in PD sessions in some cases complicated teacher learning.

What Teachers Noticed

Attention to key aspects of disciplinary writing. As the year progressed, teachers increasingly focused on aspects of historical writing when analyzing student work and noticed more sophisticated aspects of it. Initially, teachers' attention

was diffuse, spread across a range of considerations without any overarching frame for thinking about student writing. After Investigation 1, only 54% of the teachers noticed aspects of historical writing that related to the curricular goals even though they had already participated in almost one-third of the PD meetings. And those teachers paid attention to different aspects of historical writing without a common focus—some noticed whether students annotated documents, answered the question, or used evidence (e.g., see the appendix, Ms. Blue); others focused on students' historical thinking and evaluation, or critique, of evidence (e.g., see the appendix, Mr. Addison). At the same time, teachers paid attention to students' engagement, lack of paragraph indentations, word choices, style, and length of responses (e.g., see the appendix, Ms. Tilney). Three teachers (23%) did not focus on students' writing when prompted and instead scrutinized their teaching of the first investigation.

In reflecting on Investigation 3, and for every reflection thereafter, teachers' attention showed greater consistency of focus and emphasis on historical writing. In these reflections, every teacher noted some aspect of historical writing in students' work. Forty-six percent of teachers concentrated on whether students answered the historical question, and 69% focused on students' inclusion of evidence in their essays. Mr. Jacobs (all names are pseudonyms) emphasized strengths and weaknesses in a student's response to the historical question when he wrote, "[The student] failed to use the introduction to inform the reader of his conclusion . . . [his] strength is that he did 'early' in the essay, though in the second paragraph, answer the historical question." Mr. Addison attended to students' inclusion of evidence in their essays when he wrote that the student "included support for his conclusion, using two quotes."

By Investigation 5, 77% of teachers continued to focus on whether students answered the question, and 85% focused on students' use of evidence. In addition, 69% concentrated on students' explanation and evaluation of evidence, and 77% focused on students' historical thinking. When teachers compared students' work across investigations on the final assignment, 69% concentrated on students' use of evidence and evaluation of evidence, 62% attended to students' rebuttals and explanations of their evidence, and 31% noticed students' thinking about the historical content and historical thinking in their essays. Teachers increasingly attended to students' historical writing. Although only 31% noticed students' historical thinking and evaluation of evidence by Investigation 5.

Attention to disciplinary thinking. In our curriculum, we used two terms to refer to disciplinary thinking: evaluation of evidence and historical thinking. We see these as related concepts: Historical thinking includes evaluation of evidence using disciplinary norms such as consideration of an author's purpose (Wineburg, 2001). At the same time, evaluation of evidence can include attention to logic and argument structure in a way that's not specific to a single discipline (e.g., Toulmin, 1958).

We introduced the phrase "evaluation of evidence" in our text structure (H2W), which included supporting paragraphs with a quotation or example to support a claim, an explanation of that evidence, and an evaluation that indicates the value of the evidence for the argument. It occupied a specific place in H2W (the last sentence of a supporting or rebuttal paragraph) as a reminder for students to integrate judgments of evidence in their essays. Evaluative statements incorporate historical thinking and can also emphasize the logic of an excerpt or how an excerpt supports an argument. We initially built historical thinking into the curriculum via reading and annotating primary sources through the IREAD tool and often referred to this as "historical thinking." We hoped the text structure specification to evaluate evidence (in H2W) would encourage students to integrate historical thinking into their essays. Over the year, the curriculum exposed students to sourcing and contextualization, recognizing multiple perspectives, and evidence-based writing. In PD meetings, we explored these aspects of historical thinking with teachers.

When we asked teachers to assess their students' writing, we asked them to consider students' "evaluation of the evidence" in their essays. In response, teachers wrote about the substance of students' evaluations (beyond just noting that students did or did not evaluate evidence), and they framed evaluation as a consideration of author reliability (63% of the time), historical context (16%), or the significance of evidence (21%)—all of these represent disciplinary ways of thinking and show that evaluation of evidence in writing overlapped with historical thinking while reading as we had intended. For example, after Investigation 1, Ms. James found that students were "able to evaluate the sources independently to determine if they trusted them." She shared a specific example: "In his evaluation, [he] weighed if someone would be more likely to lie in a diary or sworn statement." Ms. James highlighted author reliability issues in evaluations by noticing students' thinking about the genre of sources and author credibility. Mr. Addison was among a minority of teachers whose attention to evaluation emphasized historical context. A student struggled to explain why the evidence she presented in her Investigation 5 essay about nonviolent approaches to abolitionism was convincing. Addison wrote, "I would have [her] evaluate why fighting doesn't work with a concrete example of a slave uprising that did not work." He recognized what failed in her evaluation and suggested using the historical context—examples of failed slave revolts—to bolster the student's evidence about the ineffectiveness of violent action. Mr. Bismark attended to evaluation by looking for why students selected evidence and the relevance of evidence to their arguments. After Investigation 1, Bismark wrote, "Some of the students struggle with explaining why that evidence is important and how it relates to their side or why they chose some evidence over other evidence." He continued this focus after Investigation 3, noting, "Most [students] struggle to evaluate why they chose the evidence they did." Asking students to justify their selection of evidence can highlight how a piece of evidence relates to the argument or the value of the evidence selected as compared to other evidence.

In contrast, one-third of teachers' comments about students' evaluations only stated whether students had evaluated their evidence and did not consider the substance of students' essays. After Investigation 5, Ms. Chester wrote, "Overall, the majority of students have improved and are getting the 3 steps of the support (eval can still be weak)." The three steps of supporting paragraphs in H2W included evidence, explanation of the evidence, and evaluation of the evidence. It's not clear from her reflection why Chester said that students' evaluations were weak. Her reference to the three steps makes us wonder whether she checked sentences off for completion rather than focusing on their quality. Other teachers made vague comments about students' evaluations. In reflecting on student work from Investigation 5, Ms. Blue wrote, "Most of her evaluation needs some more work." Although the majority noted students' evaluations, teachers' attention did not always indicate an understanding of evaluating evidence.

We did not directly use the term "historical thinking" in teacher reflection prompts, but the prompts refer to many aspects of historical thinking in their attention to students' claims, evidence, evaluations of evidence, multiple perspectives, and rebuttal. Regardless, teachers increasingly described students' historical thinking in ways that demonstrated disciplinary understanding. Overall, teachers made 26 comments about students' historical thinking in reflections we analyzed, and each of these comments demonstrated understanding of such thinking. Whereas 31% of teachers attended to students' disciplinary thinking in Investigation 1, 69% of teachers commented on their students' disciplinary thinking by Investigation 5. Teachers highlighted students' comments about author reliability most often (54% of the time). When noticing her students' lack of consideration for author reliability, Ms. James shared, "Goals I would set for these students would be to work on explaining why they believe or disbelieve an author."

Teachers also attended to students' contextualization (15%), recognition of historical perspectives (11.5%), use of authors' names or locations (11.5%), and full consideration of evidence (8%). Mr. Addison noticed that one student shared details about the treatment of slaves in the 1800s as a way to bolster his argument that abolitionists would need to fight to free slaves. He wrote, "This shows [he] thought about the conflict and he contextualized the documents." With regard to historical perspectives and citing authors' names, teachers noticed when students recognized that an author or person in the past had a particular worldview. For example, Ms. Kady wrote, "[The student] referred to both authors by name rather than saying doc A/B. This is good because it shows that she understood that the documents were written by someone and they are expressing the views of certain groups/individuals." Other times when teachers noted a student's use of an author's name or location, their commentary was more surface level, as when Ms. Chester wrote, "Many are not doing well with opening/closing paragraphs and detail things like naming author, background, being specific." We also saw teachers think about the importance of considering counterevidence, such as when Mr. Bismark set a

goal for students to "focus more on using the evidence presented and trying to rid themselves of previous bias/judgment." In this example, the teacher attended to students' full consideration of the evidence, a part of historical thinking that Wineburg (2001) referred to as "suspending judgment."

Attention to quality and completion. In addition to their growing attention to aspects of disciplinary writing and thinking, teachers increasingly noticed the quality of students' work and students' ideas. After Investigations 1 and 3, most teachers focused on whether students had completed particular aspects of writing. After Investigation 3, Ms. Blue wrote, "The Proficient and Advanced students were able to answer the historical question, identify where the events took place and also take a position . . both have supporting details and quotes." Blue catalogued students' achievements without attending to examples or visibly engaging with students' thinking. Most teachers (77%) took a similar approach in Investigation 3, and only 15% commented on the quality of students' writing or thinking. Although 69% of teachers focused on completion in the last reflection, 54% focused on the quality of students' work (46% focused on both). Mr. Lagard demonstrated attention to students' ideas. A student argued that nonviolence would "solve the problem [of slavery] . . . the problem is gone and it won't come back." Lagard wrote in his reflection,

He shows that he has thought and evaluated the quote before. However I would speak to him about the loopholes that he did not account for. Ex: Civil Rights Movement and who went to jail and how problems took a while to resolve.

Although Lagard jumps time periods—from abolitionism in the mid-1800s to the civil rights movement of the 1950s and 1960s—he does recognize what his student says and responds with ideas to push the student further. Teachers increasingly focused on the quality of students' work and completion as opposed to only noticing completion of different pieces of an essay. As they did so, teachers showed greater engagement with students' thinking.

How Teachers Thought About Next Steps in Response to What They Noticed

Over the year, teachers made progress in identifying student needs and specifying how to help students. Part of what teachers noticed were students' strengths, but they also increasingly identified areas for improvement that were directly aligned with the intervention.

After Investigation 1, fewer than half of the teachers identified student needs related to the intervention; instead, many focused on things like whether students indented paragraphs or the length of essays. By Investigation 3, however, 77% of teachers began to focus on needs directly related to historical writing. These included statements such as those by Ms. Kady, who noted her students' struggle "with the rebuttal paragraph and evaluation of the evidence." We considered identifying students' needs as a first step in thinking about how to help students meet

disciplinary literacy goals. But teachers' ideas for how to help students lagged behind their identification of student needs.

Even by Investigation 3, 31% ofteachers did not suggest next steps for students. Of those who did offer next steps, only 31% offered specific, concrete next steps that teachers could enact. Teachers offered more specific details for next steps as the intervention progressed, but there were some lapses in this trend toward the end of the school year. After Investigation 5, 62% of the teachers provided specific next steps, whereas only 46% did so on the final reflection. This trajectory is interesting particularly given the teacher reflection prompts. In Investigations 1 and 3 and the final reflection, we asked teachers to state what they could do to help their students improve. In contrast, in Investigation 5, we asked teachers to identify goals for students and feedback they might give. In Investigations 1 and 3 and the final reflection, the language of the assignment was more consistent with coding for identifying next steps, yet the percentage of teachers who specified ways to help was lower across these time points than in Investigation 5.

Instead, the majority of teachers focused more on student initiative rather than steps they could take to drive student improvement. Ms. Reston noted that a student needed to "evaluate with better support" and suggested that she would support her by telling her to "carefully read and evaluate the source." General ideas about what to do, rather than specific details for how the student or teacher would execute next steps, were common.

In contrast to Ms. Reston, when Ms. Tilney identified students' needs, she frequently proposed specific and well-developed next steps to address them. In proposing next steps for one student who rarely considered the value of her evidence, Ms. Tilney wrote,

To assist [this student], I would have her refer back to the [graphic organizer] to help her not to omit the evaluations. Then, I would tell her to explain why she chose certain quotes (forcing her to evaluate when she doesn't realize it).

Nevertheless, Ms. Tilney was in the minority. Although teachers improved in their ability to identify student needs as the year progressed, their ideas for how to support those needs remained less developed.

Discussion and Conclusion

Analyses of teachers' reflections on student work give us insight into their thinking and the efficacy of our PD efforts. We see several promising signs in teachers' analysis, including an increasing focus on key aspects of disciplinary writing, attention to evaluative and historical thinking, consideration of the quality of students' work (not just completion), and skill in identifying students' needs. In important ways, participating in a 1-year PD course focused on disciplinary reading, thinking, and writing with opportunities to develop conceptual understanding, practice with

feedback, and analyze student work appeared to expand teachers' understanding of historical writing (alongside teachers' work in implementing the curriculum). With minor exceptions, the results from this study and our broader analysis of student outcomes (De La Paz et al., 2014; De La Paz et al., 2016) indicate that teachers who consistently focused on disciplinary thinking in their analysis of student work were the most effective, in terms of their students' writing outcomes, as long as they also provided time for students to write independently. A yearlong school-based PD focused on new concepts (disciplinary literacy, cognitive apprenticeship) and a new curriculum supported teacher learning. This study has implications for those who work with teachers in today's high-stakes standards environment, for those who integrate literacy into subject area classrooms, and for those committed to supporting teacher learning in the context of their school-based work.

Why do we think teachers increasingly focused on aspects of historical writing, disciplinary thinking, the quality of student work, and students' needs? We look to the structure, activities, and context of the PD to understand this question and compare our work with the literature as we consider teachers' learning. First, structural features of the school-based PD provided learning opportunities highlighted in the literature: The PD was content-focused, based on classroom practice, and involved collective participation of teachers from the same grade level (and in several cases from the same school) in active learning opportunities (e.g., Desimone et al., 2010; Hill, 2009; Wilson, 2009).

Second, several activities provided learning opportunities for teachers, all of which were focused on the goal of improving students' historical argument writing and their disciplinary use of evidence in developing and supporting arguments. A common goal gave the following activities coherence: implementing new curriculum materials and teaching practices and reflecting on them (e.g., Desimone et al., 2010; Hill, 2009); offering and receiving feedback from colleagues and PD instructors about using the new materials in their classroom contexts (Blank & de las Alas, 2009; Little, 1993; Opfer & Pedder, 2011); developing conceptual understandings of disciplinary literacy and cognitive apprenticeship (in addition to practical tools offered in the curriculum; Grossman et al., 2000); representing, decomposing, and approximating new teaching practices that support key aspects of disciplinary literacy (Grossman et al., 2009); and analyzing student work (Windschitl et al., 2011). Over the course of the year, these activities collectively focused classroom practice on student learning.

The PD activities helped teachers become more sophisticated instructors of history and writing. They grew in their knowledge about specific topics, conceptual understanding of history as evidence-based interpretation, and historical thinking with primary sources. We asked teachers to "do" the investigations themselves and, in doing the intellectual work of the investigation, to develop an understanding of the specific topic and ways of thinking that were especially important to attend to with the particular primary sources from that investigation. In this way, teachers deepened their

understanding of historical thinking with regard to the specifics of each investigation. Regarding writing, we highlighted argument writing as centrally focused on claims and evidence and as a process rather than a single product at the end of a unit. We asked teachers to execute the writing process for each investigation by annotating texts, discussing them, completing a plan for writing, and drafting a written response to the central question; these elements of the writing process in particular have been found especially effective in prior research (Graham & Perin, 2007). Through these activities, teachers developed their background knowledge of complex concepts that they hadn't necessarily engaged with before (e.g., Westhoff, 2009).

Third, several aspects of the learning environment aligned with the focus of the PD, whereas other contextual factors were constraints. The district initiative to embrace disciplinary literacy across subject areas meant that the PD helped teachers meet this goal rather than adding a different goal to their plate. The district allowed teachers to take 1 day off per month to attend PD. And the grant supporting this work paid for substitute teachers, graduate course credit, and a teacher honorarium, reinforcing accountability to the work and allowing teachers to spend time on it. At the same time, the larger context presented them with multiple and varied challenges and constraints, something they mentioned repeatedly. The devaluing of social studies in the district schools meant less time for U.S. history, bigger class sizes, more classes per teacher, fewer U.S. history teachers in any one building, and repeated interruptions during the school day. Although the district was shifting toward a history curriculum that emphasized disciplinary literacy, the curriculum standards for U.S. history in the district at the time of our study emphasized breadth over depth and a pacing guide. Teachers felt they had to cover what was in the district curriculum and did not have much time to devote to our lessons. Finally, teachers repeatedly shared that our approach to teaching history was quite different than how they were prepared. Although they welcomed the shift, it was indeed a shift for many. Competing influences meant that teachers had to find ways to integrate our curriculum and ideas from PD into their existing, complex work lives. Given the nature of the project, however, we were able to directly observe and discuss how teachers could manage these constraints and teach disciplinary literacy to their students in their particular school settings. In this way, the school-based PD was grounded in the complex system that influenced teachers (Opfer & Pedder, 2011) and perhaps was more likely to have an impact on teachers' practice and knowledge as well as student outcomes.

Turning to examine the school-based learning opportunities in more depth, we believe that student work analysis served as a concrete way of inquiring into practice by regularly asking what students were learning and as a means of helping teachers to differentiate instruction because they explored ways to support all students' growth in historical writing (including those who read above and below grade level). The use of protocols, tools, and feedback to structure student work analysis may have contributed to the improvements noted in teachers' reflections as well as some of the

areas for growth we observed. At the beginning of the year, we presented teachers with a list of important qualities of historical writing (e.g., supports the argument with evidence, evaluates evidence, rebuts opposing evidence) and explored these different aspects of writing by examining student work examples from the previous year. We included this list with the student work analysis protocols during the year as a way to prompt teachers to focus on qualities of historical writing in students' essays. Throughout the year, we gave written feedback to teachers by responding to their reflections in their notebooks and emphasized aspects of historical writing in our comments.

However, including a list of historical writing qualities without greater written elaboration may have encouraged some teachers to look for completion of essay segments rather than notice the quality of students' ideas, misinterpret or overlook disciplinary aspects of their students' writing, or make only vague references to disciplinary writing. One way to develop this tool further would be to create an elaborated rubric that describes different levels of historical writing (e.g., Windschitl et al., 2011). During the year, we addressed this issue by sharing preselected samples of student work to explore particular aspects of historical writing that we noticed during our observations and launch more in-depth discussion of them.

To encourage more specific, in-depth reflection on students' historical writing, we also varied our student work analysis protocols by prompting teachers to attend to specific excerpts of student essays and compare students' essays across time. Of those we analyzed, the Investigation 5 assignment generated the strongest reflections (e.g., specific statements about student work, analyses grounded in examples, articulation of next steps for helping students, consistency between reflection and student work). Although previous prompts asked for examples, this prompt asked teachers to include excerpts from students' work. For the final assignment, teachers compared the same students across time. Here teachers' reflections showed greater depth by focusing on the quality of students' work more than completion and identifying student needs that emphasized aspects of disciplinary writing. Prompting teachers to look at student work over the year may have helped them notice incremental student progress. Comparing individual student's work across time may be another strategy to generate stronger reflections, although it's possible that teachers improved in these areas as a function of time. Consistency across assignments would allow us to make more claims about growth. And some balance of open-ended responses and specific prompts would give us an opportunity to see what teachers attend to on their own and how well they attend to what we've identified as important. As is, we believe that additional opportunities for explicit attention to growth in the quality of students' essays may have helped a larger proportion of teachers make progress toward a more learner-centered focus on next steps.

The language in our list of historical writing qualities tool and some of our curriculum materials may have made it difficult for teachers to understand that historical thinking and evaluation of evidence were related concepts. The discrepancies between

teachers' comments about historical thinking and evaluation were notable. Similarly, in our observation data, teachers struggled most consistently with explaining evaluations and the role of evaluation in an essay to students, yet they did not have the same struggle in explaining historical thinking during reading. Since we used the term "evaluation of evidence" to signal students (and teachers) to bring the historical thinking they engaged in with reading into their essays as they moved through the process of writing, we were pleased to see overlap between evaluation and historical thinking in teachers' reflections. That is, teachers attended to author reliability, contextualization, and evidence selection when noting evaluation. However, the pattern of vague references to students' evaluations and greater attention to whether (rather than how) students completed the evaluation step calls into question the utility of using "evaluation" as a signal for integrating disciplinary thinking in writing. Furthermore, teachers' comments about students' completion of the evaluation step were vague enough that we were not certain that teachers understood the concept of evaluation and that it was another way of considering historical thinking. Having a common language in this kind of work is important, but so too is maintaining simplicity. In our third year we substituted the word "judge" or "judge your evidence" to stand in for historical thinking while reading and writing rather than using different terms. Using the same term signals to students and teachers more clearly that this kind of analytical thinking is something you do when reading and when composing—using the same term in IREAD and H2W (as well as the analysis of student work tool) indicates the connection between the reading and writing processes.

Student work analysis helps teachers focus on how students respond to instruction and diagnose students' writing but doesn't necessarily generate a clear set of next steps for teachers, particularly if the concepts and strategies are new to them. Teachers increasingly attended to students' historical writing but didn't always know what to do to develop that writing further, especially without the curriculum supports (e.g., once a lesson from the curriculum is taught or when students' needs fall outside one of the lesson plans from the curriculum). We thought about how to develop teachers' capacity to support students' development as thinkers and writers and incorporated these ideas into PD efforts for the third year. We continued to look at student work but added discussions of how to respond to a class and practiced figuring out feedback that might support students. As we reviewed each investigation in the third year's PD, we prompted teachers to make notes in the margins of the lesson plans about how to help particular students or classes based on our discussions of the challenges students faced. We also suspect that sustained attention—through additional PD or tools and activities that teacher collectives can continue to organize around on their own—to developing teachers' conceptions of historical writing and cognitive apprenticeship would support their decision making beyond any one set of lessons (e.g., Whitney & Friedrich, 2013).

Through careful design and coordination, PD experiences can advance teachers' learning in meaningful ways and build teachers' capacity to support middle

school students' disciplinary literacy practices. Such work is complex but critically important to preparing teachers and their students for the demands they face. Our 66-hour PD experience and curriculum supported teachers' learning through systematic attention to student outcomes and relevant supports for teachers. Real benefits for students came when teachers were able to apply what they had learned in their instruction.

The agenda to develop students' disciplinary literacy is both robust and, we believe, worthwhile. Without teachers who are prepared to support this agenda in all content areas at the middle school level, we will not be able to move forward. How, then, are we to prepare content area teachers to integrate disciplinary thinking and literacy instruction? Helping teachers frame school subjects around disciplinary thinking and embrace the primacy of literacy can equip them to teach disciplinary literacy effectively. We share our school-based effort to explore these issues and spark conversation so that researchers and practitioners can think together and address one of the biggest challenges facing education in the CCSS era: teacher learning.

References

- Afflerbach, P., & VanSledright, B. (2001). Hath? Doth? What? Middle graders reading innovative history text. *Journal of Adolescent and Adult Literacy*, 44(8), 696–707.
- Bain, R. (2006). Rounding up unusual suspects: Facing the authority hidden in the history classroom. Teachers College Record, 108(10), 2080–2114.
- Achieve Inc. (2005). Rising to the challenge: Are high school graduates prepared for college and work? Washington, DC: Peter D. Hart Research Associates.
- Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 3–31). San Francisco, CA: Jossey-Bass.
- Ball, D. L., & Forzani, F. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60(5), 497–511.
- Blank, R. K., & de las Alas, N. (2009). Effects of teacher professional development on gains in student achievement: How meta-analysis provides evidence useful to education leaders. Washington, DC: Council of Chief State School Officers.
- Conley, M. W. (2012). Foregrounding the disciplines for teacher preparation in secondary literacy. *Journal of Adolescent and Adult Literacy*, 56(2), 141–150.
- De La Paz, S. (2005). Effects of historical reasoning instruction and writing strategy mastery in culturally and academically diverse middle school classrooms. *Journal of Educational Psychology*, 97, 139–156.
- De La Paz, S., Felton, M., Monte-Sano, C., Croninger, R., Jackson, C., Deogracias, J. S., & Hoffman, B. P. (2014). Developing historical reading and writing with adolescent readers: Effects on student learning. *Theory and Research in Social Education*, 42(2), 228–274.
- De La Paz, S., Monte-Sano, C., Felton, M., Croninger, R., & Jackson, C. (2016). A historical writing apprenticeship for adolescents: Integrating disciplinary learning with cognitive strategies [Online first]. *Reading Research Quarterly*. doi:10.1002/rrq.147

- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2010). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24(2), 81–112.
- Graham, S., & Perin, D. (2007). Writing next: Effective strategies to improve writing of adolescents in middle and high schools—a report to the Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education. Retrieved from https:// www.carnegie.org/media/filer_public/3c/f5/3cf58727-34f4-4140-a014-723a00ac56f7/ ccny_report_2007_writing.pdf
- Greene, S. (2001). The question of authenticity: Teaching writing in a first-year college history of science class. *Research in the Teaching of English*, 35(5), 525–569.
- Grossman, P., Hammerness, K., & MacDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching: Theory and Practice*, 15(2), 273–289.
- Grossman, P. L., Smagorinsky, P., & Valencia, S. (1999). Appropriating tools for teaching English: A theoretical framework for research on learning to teach. *American Journal* of Education, 108(1), 1–29.
- Grossman, P. L., Valencia, S. W., Evans, K., Thompson, C., Martin, S., & Place, N. (2000). Transitions into teaching: Learning to teach writing in teacher education and beyond. *Journal of Literacy Research*, 32(4), 631–662.
- Hill, H. (2009). Fixing teacher professional development. *Phi Delta Kappan*, 90(7), 470–476.
 Kazemi, E., & Franke, M. L. (2004). Teacher learning in mathematics: Using student work to promote collective inquiry. *Journal of Mathematics Teacher Education*, 7, 203–235.
- Kiuhara, S., Graham, S., & Hawken, L. (2009). Teaching writing to high school students: A national survey. *Journal of Educational Psychology*, 101(1), 136–160.
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15(2), 129–151.
- Little, J. W. (2004). "Looking at student work" in the United States: Countervailing impulses in professional development. In C. Day & J. Sachs (Eds.), *International handbook on the continuing professional development of teachers* (pp. 94–118). Columbus, OH: Open University Press.
- McLaughlin, M., & Mitra, D. (2001). Theory-based change and change-based theory: Going deeper, going broader. *Journal of Educational Change*, 2, 301–323.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). London, UK: Sage.
- Moje, E. (2008). Foregrounding the disciplines in secondary literacy teaching and learning: A call for change. *Journal of Adolescent and Adult Literacy*, *52*(2), 96–107.
- Monte-Sano, C. (2008). Qualities of historical writing instruction: A comparative case study of two teachers' practices. *American Education Research Journal*, 45, 1045–1079.
- Monte-Sano, C. (2010). Disciplinary literacy in history: An exploration of the historical nature of adolescents' writing. *Journal of Learning Sciences*, 19, 539–568.
- Monte-Sano, C. (2011). Beyond reading comprehension and summary: Learning to read and write by focusing on evidence, perspective, and interpretation. *Curriculum Inquiry*, 41, 212–249.
- Monte-Sano, C., De La Paz, S., & Felton, M. (2014). *Reading, thinking, and writing about history: Teaching argument writing to diverse learners in the age of the Common Core, 6–12*. New York, NY: Teachers College Press.
- National Center for Educational Statistics. (2003). *The nation's report card: Writing 2002*. Retrieved from http://nces.ed.gov/nationsreportcard/pubs/main2002/2003529.asp

- National Center for Educational Statistics. (2012). *The nation's report card: Writing 2011*. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2012470
- National Commission on Writing in America's Schools and Colleges. (2003). *The neglected* "R": *The need for a writing revolution*. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/neglectedr.pdf
- National Commission on Writing in America's Schools and Colleges. (2004). Writing: A ticket to work . . . or a ticket out: A survey of business leaders. Retrieved from http://www.collegeboard.com/prod_downloads/writingcom/writing-ticket-to-work.pdf
- National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects. Washington, DC: Authors.
- Nokes, J. (2010). Observing literacy practices in history classrooms. *Theory and Research in Social Education*, 38(4), 515–544.
- Opfer, D., & Pedder, D. (2011). Conceptualizing teacher professional learning. Review of Educational Research, 81(3), 376–407.
- Salahu-Din, D., Persky, H., & Miller, J. (2008). *The nation's report card: Writing 2007*. Retrieved from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008468
- Toulmin, S. (1958). *The uses of argument*. Cambridge, UK: Cambridge University Press.
- van Es, E. A., & Sherin, M. G. (2008). Mathematics teachers' "learning to notice" in the context of a video club. *Teaching and Teacher Education*, 24, 244–276.
- VanSledright, B. (2002). Confronting history's interpretive paradox while teaching fifth graders to investigate the past. American Educational Research Journal, 39(4), 1089–1115.
- Westhoff, L. (2009). Lost in translation: The use of primary sources in teaching history. In R. Ragland & K. Woestman (Eds.), *The Teaching American History project: Lessons for history educators and historians* (pp. 62–78). New York, NY: Routledge.
- Whitney, A., & Friedrich, L. (2013). Orientations for the teaching of writing: Legacy of the National Writing Project. *Teachers College Record*, 115, 1–37.
- Wilson, S. (2009). *Teacher quality: Education policy white paper*. Washington, DC: National Academy of Education. Retrieved from http://www.naeducation.org/Teacher_Quality_White_Paper.pdf
- Windschitl, M., Thompson, J., & Braaten, M. (2011). Ambitious pedagogy by novice teachers: Who benefits from tool-supported collaborative inquiry into practice and why? Teachers College Record, 113(7), 1311–1360.
- Wineburg, S. (2001). Historical thinking and other unnatural acts: Charting the future of teaching the past. Philadelphia, PA: Temple University Press.
- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report No. REL 2007, 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from http://ies.ed.gov/ncee/edlabs
- Young, K. M., & Leinhardt, G. (1998). Writing from primary documents: A way of knowing in history. *Written Communication*, 15(1), 25–68.
- Zwiers, J. (2006). Integrating academic language, thinking, and content: Learning scaffolds for non-native speakers in the middle grades. *Journal of English for Academic Purposes*, *5*, 317–332.

Appendix

Student Writing Samples and the Aspects of Disciplinary Writing That Teachers Noticed in Reflections

Investigation 1

Mr. Addison (example of a teacher who attends to disciplinary writing from the start)

Example of student writing

"I think the british fired first because America has more evidence saying the british started the war if you think why would the british be crossing a river in 2 in the morning I would think they are try to attack me. More reason I belive the british fired first lieutenant john barker said he could not regroup with the army because men were so wild they could here no orders that makes me belive they shot first because they did not follow orders. Im saying no one told the british to do anything to fired first because they did not follow orders."

What the teacher wrote in his notebook about this student's writing

"Strengths—uses evidence from the documents + explains why it answers the question. Ex—He uses the evidence that the British crossed at 2 am and then explains how this seems like an aggressive move . . ."

"Weaknesses—He does not directly address the types of sources. Ex—He doesn't say why the minutemen should be believed . . ."

"He answers the question well and gives evidence with explanations. He mostly uses one document however and does not give credit to the minutemen, who support his perspective."

Aspect of historical writing

Teacher noticed:

- Claim
- Evidence
- Reliability of one source
- Inattention to reliability of second source
- Student's historical thinking about context

Investigation 5

Mr. Addison (example of a teacher who attends to disciplinary writing from the start)

Example of student writing

"The argument is about if slaves should be violent or nonviolent. I choose they should be violent because the master is always being violent to them and talking to them about letting the slaves be free they would laugh so in order to free them they should fight for freedom. Another quote is 'Remember the whippings your father's suffered. Think how many tears you have cried upon the soil that you have fanned.' It is a deadly mistake to belive that the only way to maintain peace is always to be ready for war. The Bible greatest enemy is of war. I picked [side] A because back then in those times people did not listen to slaves so the only way I can see slaves being free by fighting for their rights. The other side B I did not pick because not everybody is peaceful some dont care what people have to say thats why I picked side A."

What the teacher wrote in his notebook about this student's writing

"Improvements/strengths—He has evidence of a rebuttal, he said why he chose his side."

"Areas for improvement—Writing in 5 paragraphs, explaining why the evidence is trustworthy."

"Strength excerpts: 'I picked A because back then in those times people did not listen to slave so the only way I can see slaves being free by fighting for their rights.'—This shows he thought about the conflict and contextualized the documents.—I would have [the student] explain why this is his thought by supporting it with information from the documents."

"Weak excerpts: He just randomly listed quotes, not tying them to anything. I would suggest he follow the format and use the graphic organizers."

Aspect of historical writing

Teacher noticed:

- Counterargument
- Claim
- Use of quotations but need to use quotations purposefully to support the claim
- Inattention to reliability of evidence
- Student's historical thinking about context

Investigation 1

Ms. Tilney (example of a teacher who shows strong improvement in attending to key aspects of students' disciplinary writing)

Example of student writing

"I believe the Patriots fired the first shot at Lexington green because there statement seems false. I think they were angry at the British and some of them could not control there selfs. The false points in there story are we turned out backs to leave if you all knew that you are going to defend against british and were ordered to why wen the drum beat sounded and the british was there why would you go back what was the point of you all coming visit to see if they were coming I believe some had the intention of shooting or killing British soldiers or the shot could have been on acident"

What the teacher wrote in her notebook about this student's writing

"His reading level is extremely high, but he has not been very productive in any of his classes. He wrote the beginnings of a good essay, however, did not follow through to the end. . . . I am a little frustrated with [this student] because he is capable of so much more. However, I do know that reading and writing are two separate entities."

Aspect of historical writing

Teacher did not comment on:

- Student's claim
- Student provides evidence and reasoning in support of claim
- Student considers reliability of one source

Investigation 5

Ms. Tilney (example of a teacher who shows strong improvement in attending to key aspects of students' disciplinary writing)

Example of student writing

"The Articles are about Slaves trying to find ways to escape slavery during the Civil War. In some states it was finally illegal to hold slaves and they were demanded to be let free. The Problem is slaves cant decide wether to use Peace or Power to get there freedom. I think a more aggressive approach will work out because after reading information from both sides Henry Highland Garnet wrote that 'as a result of Veseys threatening plan, the slave states seriously considered freeing the slaves. But once the threat of a slave revolt went away the slave holders stopped talking about freeing slaves." His quote shares that they have tried to use aggression and it worked but they decided to give the slave holders a break and that's when slave holders tried to hold slaves longer. After reading this quote I think it's very—"

What the teacher wrote in her notebook about this student's writing

"He continues to provide the bear minimum when it comes to supporting and incorporating direct quotes from the documents. [He] does answer the question but does not persuade the reader at all. I have realized that he has not been completing his graphic organizers, which probably contributes to him not finishing or writing effectively."

"Strengths – answered the question (stated a position) – used some sentence starters – gave credit to one author."

"Improvements – use 'How to Write' and graphic organizer to plan writing – use sentence starters to guide his ideas."

"The problem is slaves can't decide whether to use Peace or Power to get their freedom.' This excerpt shows me that [the student] has a clear understanding of the issues the slaves are facing. I will encourage him to make sure to expound upon his statements as if he is explaining everything to someone who has not read the documents."

"His quotes shows that they have tried to use aggression and it worked until they decided to give the slave owners a break and hold the slaves longer.' His explanation is all over the place and says 'give the slave owners a break' which was not eluded to in the documents. I will tell [the student] to be sure to use his graphic organizer to increase the readability of his writing and force him to read confusing excerpts aloud to see if he thinks they make sense. PROOFREAD!"

Aspect of historical writing

Teacher noticed:

- Student's use of quotations to support his claim
- Student responds to the question and makes a claim
- Student notes author of source cited
- Student provides little rationale, reasoning or justification

Teacher did not comment on:

• Historical inaccuracies and misunderstanding of the topic (e.g., the sources did not focus on escaping slavery during the Civil War but on abolitionism before the Civil War)

Investigation 1

Ms. Blue (example of a teacher who shows modest improvement in attending to key aspects of students' disciplinary writing)

Example of student writing

"I belive the nither one of them fired first, they both fired at the same time. Because the aritcal B says Both minuteman and British fired at the same time."

What the teacher wrote in her notebook about this student's writing

"[The student] claimed that each fired first which shows [the student] cannot come up with a clear idea of who did the shooting. She claimed both did and it is found in the article, I believe she misread the information or paid little attention to the discussion that was held with her partner."

"[The student] generally puts little or no effort into her work. She believes she will advance to the next grade level no matter what because this is all she has been doing and every year she moves on, she told me."

Aspect of historical writing

Teacher noticed:

• Faulty claim in response to question

Teacher did not comment on:

- Even though the teacher disagrees with the claim, the student has a claim
- The student supported her claim with evidence from one source and names that source (but doesn't use the source accurately—needs to use both sources to make this point)

Investigation 5

Ms. Blue (example of a teacher who shows modest improvement in attending to key aspects of students' disciplinary writing)

Example of student writing

"I say more aggressive because by being aggressive you get to fight and the others may give up and they'll get what they want. In document A Henry Highland Garnet's he tried to end slavery by being aggressive. The slavery begain near the Civil War. This happen in the United State.

'It is better to die as a free man then to live as slaves.' I choose this quote because in the time of slavery the days were terrible. Also they make them work and get treated like animals. On the other hand as a free man you don't have to do any of those stuff working for other like slaves or be treated like animal. My evaluation is the men who said this was a slave once, so he knows how the slaves were treated. He also know that as a free man you don't have to be anything of those things.

'Brother, your oppressors try to make you as much like animals as possible.' This means that their masters punish the slaves when they do something wrong. They hit them like animals. My evaluation is that they wanted to make the slaves soft, so that they can be controll easily.

In document B their answer goes against mine because 'they must place their faith in god to protect them from danger.' This means that they want to make the slaves to put their mind to god so that they'll be protected. Also because they don't want the slaves against them so that's why they tell them a lie to believe in god.

My answer is aggressive because they get to fight win the battle and get what they want freedom. They want to die as a free man because slavery was terrible. They were treat bad by being punish and treated like animal."

Learning to Teach Disciplinary Literacy

What the teacher wrote in her notebook about this student's writing

"[The student] has made great strides. He is an ESOL student who at first cannot write a paragraph but who was able to write five after several lessons. He spends more days than an average student but gets his facts together. [The student] has grown tremendously but needs to work on why people disagree and how to explain a conflict. Also, he needs to work on how to convince his audience why his side must be the right fact to accept."

"Several goals to work on will be – emphasizing paragraphs (visually) – getting them to explain why people have a problem with/disagree about the investigation question, listing them – encouraging them to use more strong conviction at the end for their audience to support their claims – on the whole working on their evaluation and conclusions"

Aspect of historical writing

Teacher noticed:

- Need to explain the conflict and different interpretations—this would provide more context for the argument and clarify the claim.
- Need to support his "side" or claim

Teacher did not comment on:

- Historical inaccuracy (e.g., slavery began near the Civil War)
- Student uses quotations to support his claim (but does not explicitly link them to the claim or introduce them)
- Attempt at rebuttal or recognition of alternate perspective (when referring to Document B)

Note. All quotations are given exactly as originally written.