RESEARCH ARTICLE

Teacher candidates as student partners in decoding the disciplines research: Decoding how university students contextualize historical documents

Ryan DiCostanzo, Anthony Discenza, *and* ***Jenna Langone,*** *Adolescence Education Social Studies and History, SUNY Cortland, United States.* ****Jared McBrady,*** *History Department, SUNY Cortland, United States.*

Contact: jared.mcbrady@cortland.edu

ABSTRACT

This study examines the role of secondary teacher candidates as student partners in research into undergraduate students' historical cognition while contextualizing documents. It highlights the unique role of teacher candidates as near-peer interviewers and change agents within higher education and secondary curricula. Through using decoding the disciplines methodology to solicit student voice in near-peer interviews, teacher candidates identified areas for curricular change in teaching contextualization in university history courses. The involvement of teacher candidates extended beyond the university classroom and informed their future work in secondary education. Decoding experiences in university courses provided teacher candidates with insights into supporting secondary pupils' abilities to contextualize historical sources. This research demonstrates the potential of teacher candidates as near-peer interviewers and curricular change agents in secondary and higher education. Collaborative partnerships between teacher candidates and faculty can lead to meaningful curricular changes and effective teaching practices in higher education and secondary education contexts.

KEYWORDS

student voice, near-peers, decoding the disciplines, history, contextualization

Since the introduction of the paradigm, the decoding the disciplines methodology has aided instructors in unpacking experts' disciplinary cognition across numerous disciplines (Middendorf & Shopkow, 2018; Miller-Young & Boman, 2017; Pace, 2017; Pace & Middendorf, 2004). For many experts, years of study and work in their respective fields have led to the development of tacit expertise—ingrained heuristics and seemingly intuitive conclusions developed through years of practice. Learners, however, often lack such tacit intuitiveness. While historians, for example, may find their ways of thinking quite natural, learners encountering such modes of thought for the first time may find historical thinking a distinctly "unnatural act" (Shopkow, 2017;

Wineburg, 2001). Hence, the need to decode this tacit thinking—to critically deconstruct expert metacognition into explicit, teachable steps. Decoding interviews, metacognitive interviews designed to surface and make explicit expert interviewees' tacit thinking, form a key part of this process.

When initially developed, the decoding methodology largely focused on the context of higher education and decoding the metacognition of experts. In the decades since its introduction, researchers have expanded the paradigm in new directions. In decoding 2.0 (Pace, 2021), students have become more involved in the process as both informants and researchers. Students have participated as the subjects of decoding interviews that unpack their developing tacit disciplinary knowledge, revealing key misconceptions and other bottlenecks that require instructional intervention (Cameron, 2019; Khomokhoana & Nel, 2019; McBrady, 2022; Rouse et al., 2017). Students have also conducted and analyzed the results of decoding interviews (McBrady, 2022; Pelnar et al., 2020; Rouse et al., 2017). Additionally, decoding 2.0 has involved pressing on the barriers between higher education and secondary schooling by involving university students preparing to become secondary teachers (Brown, 2018; Bruno & Petrucci, 2019; Díaz & Shopkow, 2017; McBrady, 2022; Schultz & Lovin, 2012).

Scholarship of teaching and learning (SoTL) scholars have also worked to involve students as partners in the research process (Cook-Sather et al., 2014; Healey et al., 2014; Matthews et al., 2018) and as change agents in the higher education learning experience (Dunne & Zandstra, 2011; Fung, 2017; Neary & Winn, 2009). Incorporating student voice—the unique perspectives learners hold on teaching and learning that warrant instructors' consideration—into the scholarship of teaching and learning has the potential to reveal unique and important perspectives on teaching and learning, including ways to change the learning experience in positive ways (Bovill et al., 2011; Fielding, 2001; Rudduck, 2007). This study builds on past work that incorporates students as partners into the decoding methodology, but does so in a unique way: by involving both undergraduate students enrolled in history courses and undergraduate teacher candidates preparing to teach secondary history classes.

This article begins by building context. We describe how we adapted the decoding methodology to incorporate teacher candidates as student partners and summarize the findings from an analysis conducted in a recent student partnership. This recent student partnership investigated one aspect of historical cognition – the cognition readers use when they attempt to place documents into historical context. We follow this with discussion and analysis of the important role teacher candidates play as student partners. We argue that involving undergraduate teacher candidates in decoding research uniquely positions them as elicitors of student voice and as curricular change agents for both higher education curricula and secondary curricula. Engaging teacher candidates in student partnerships also affords those teacher candidates valuable, relevant experience that directly impacts their professional work after graduation. Through publishing this article in the *International Journal for Students as Partners*, we seek to engage with the community of scholars engaged in student partnerships in order to raise awareness of the potential that secondary teacher candidates hold for student partnerships in university settings.

Given the many layers of teaching and learning present in this work, we employ deliberate terminology in an effort to distinguish the many interlinking roles. We use learners and instructors to refer generally to those roles in any classroom (although we acknowledge that

instructors can and should learn a good deal from the learners in their classroom). The term faculty refers to instructors who teach in the context of higher education. Teachers refer to instructors at the secondary-school level. In the state of New York, secondary-school levels include seventh grade through twelfth grade. We use students when referring to learners in the context of higher education, and pupils to refer to learners in the context of secondary education. Finally, teacher candidates refer to those undergraduate students studying in a professional program that prepares them to become secondary teachers. Teacher candidates take university coursework. They also act as student teachers, spending time teaching secondary pupils under the mentorship of a secondary teacher.

METHODOLOGY

One of the most essential historical thinking skills for reading like a historian is contextualization, which involves weaving together an interpretation of a document that situates it within its historical context. As such, it involves more than just basic reading comprehension; contextualization requires asking questions and applying relevant external background information to a document to create an interpretation of the document within the context of a historical time and place. Yet teaching this crucial historical thinking skill remains a persistent problem in history education, as learners encounter bottlenecks to developing contextualized thinking (Baron, 2016; Britt & Aglinskas, 2002; Mosborg, 2002; Nokes et al., 2007; Reisman, 2012; Shemilt, 2000; Wooden, 2008). With few recent studies published on how learners develop the skills of contextualization (Reisman & McGrew, 2018), the cognition learners display while attempting to contextualize historical documents warrants further decoding. Our research with student partners aimed to enhance our understanding of how undergraduate students contextualize historical documents, including the challenges they encounter in their efforts, and potential instructional interventions to help address this ongoing problem in history education.

This work involved multiple types of student-staff partnerships designed to delve into learner cognition, suggest curricular reform, and provide teacher candidates with authentic applied learning experiences. Instructors included faculty partners teaching general education history coursework and a faculty member teaching a course preparing secondary history teachers. Learners included undergraduate students enrolled in the faculty partners' courses who acted as informants and key contributors of student voice and undergraduate teacher candidates who worked as interviewers, research co-analysts, and curricular change agents. Research took place at SUNY Cortland, a public university within the State University of New York (SUNY) system, and data came from three undergraduate courses offered at SUNY Cortland: (a) HIS 399: Teaching and Learning of History, a course on SoTL for the discipline of history offered to upper-level undergraduate teacher candidates preparing to teach secondary history; (b) HIS 100: The World to 1500, an introductory world history course; and (c) HIS 200: United States to 1877, an introductory United States history course. Students took HIS 100 and HIS 200 as either part of the requirements for a history major or to satisfy parts of a general liberal arts education for students of any major.

While enrolled in HIS 399: Teaching and Learning of History, teacher candidates learned how to conduct decoding interviews (Pace, 2017; Middendorf & Shopkow, 2018). In a decoding interview, interviewers solicit from interviewees explicit metacognition regarding the steps they

take to work through a cognitive task, such as contextualizing a historical document. Although originally designed for faculty, Rouse et al. (2017) have adapted the decoding interview for undergraduate students, who can act as interviewers and interviewees. Teacher candidates interviewed each other to decode how they created contextual interpretations of documents. Additionally, they read SoTL literature describing the historical thinking heuristic of contextualization (Reisman & Wineburg, 2008; Wineburg, 2001). In the latter part of the semester, teacher candidates conducted decoding interviews with students enrolled in HIS 100 or HIS 200 to gain insight into how students generated interpretations of a document's historical context. Teacher candidates worked with historical documents appropriate to either the content of HIS 100 or HIS 200. In HIS 100, teacher candidates interviewed students based on the primary source students had selected (from a list the instructor provided) as the subject of a required essay. In HIS 200, teacher candidates used an 1870 illustration titled *Montcalm Trying to Stop the Massacre* during the interview. This illustration depicts French General Louis-Joseph de Montcalm's attempt to prevent his Native American allies from killing British soldiers and civilians captured at Fort William Henry during the Seven Years' War in 1757. For this illustration, we adapted a historical thinking assessment available at the Digital Inquiry Group's "Beyond the Bubble" (Digital Inquiry Group, n.d.). In interviews with students, teacher candidates started by asking students to describe how they analyzed the historical context of their document. From there, teacher candidates followed decoding the disciplines interview protocols to elicit more metacognition from students on how they contextualized. Forty-three teacher candidates conducted interviews with 50 students; each teacher candidate interviewed one to two students. During these interviews, teacher candidates took field notes. After each interview, teacher candidates wrote reflective memoranda that captured their initial interpretations. If the student consented, teacher candidates also recorded the interview for transcription.

After concluding their decoding interviews, teacher candidates worked in small groups to consider subsets of the larger body of interview data. Each small group considered roughly seven student interviews. Teacher candidates analyzed those data to identify both areas of student strengths and student bottlenecks. Decoding uses the metaphor of a bottleneck to describe areas where learners seem to struggle to develop disciplinary thinking and progress in their understanding. Decoding does not seek to identify and explicate learner bottlenecks for the purpose of denigrating or criticizing learners. Rather, explicating bottlenecks both empowers and implicates the instructor in making changes to address bottlenecks and improve the learning experience.

In this spirit, teacher candidates followed identifying student bottlenecks with suggestions for possible teaching strategies (rooted in the pedagogical scholarship they studied in their professional preparation program) that faculty partners could implement to address those bottlenecks. Each teacher candidate then prepared their own individual report based on their work in small groups. In those individual reports, teacher candidates described patterns of student cognition, provided suggestions for faculty partners to adjust their instruction in HIS 100 or HIS 200, and reflected on how they might use decoding in their own practice as secondary teachers.

Following this collection of interviews, the authors of this article (three teacher candidates and the faculty instructor of HIS 399) formed a research lab to further analyze the decoding interviews. We compiled a comprehensive data set from teacher candidates and

students who consented to include their data in the analysis for publication purposes. Twenty-nine out of 50 undergraduate students consented to include their interview data, and 42 out of 43 teacher candidates consented to include their individual reports in this comprehensive data set. We conducted a systematic analysis of the data using grounded theory, starting with independent open coding (Emerson et al., 2011), to identify emergent themes. The following research questions guided our open coding examination of students' cognition while contextualizing documents:

- How do students in history courses approach contextualizing a document?
- What cognitive bottlenecks inhibit students from more expert contextualized thinking?
- How might faculty address these cognitive bottlenecks?

Following open coding, we developed categories for focused coding (Charmaz, 2006). These focused codes included codes that addressed sourcing (the historical thinking heuristic of identifying the origin of a document), building and using background knowledge, reading strategies, types of contextualizing interpretations, and approaches to bias. We independently coded the data, with at least two members of the lab reading each piece of data. To establish inter-rater reliability, these two lab members conferred over their independent coding of the data and reached a consensus through deliberation in any area where assigned codes disagreed. After reaching consensus, we collated these focal codes to analyze how students enrolled in undergraduate history courses approached contextualizing historical documents, which generated both quantitative and qualitative findings.

One main limitation of this study involves the self-reported nature inherent in decoding interviews. Despite the use of probing questions to elicit tacit thinking, interviewed students may have hesitated to report shortcomings or points of confusion, leaving their unexamined disciplinary thinking unsaid. The use of near-peers as interviewers, however, partially addressed this limitation. Keeping the interviewed students anonymous from the faculty partners also partially addressed this limitation; participation and comments made during interviews could have no impact on students' course grades. The small sample size of this study limits us to providing descriptive and suggestive, rather than definitive, findings. These findings reach the level of internal generalization only. Despite these limitations, readers may recognize similar bottlenecks in contextualized thinking among learners in their own institutional contexts. We first present our findings on how undergraduate students contextualize historical documents, which emerged from analysis of data, and follow with a discussion of our experience engaging in decoding research and collaborations for instructional reform that involved undergraduate students, teacher candidates, and faculty. Given the focus of the project and this manuscript on using teacher candidate student partners to drive curricular improvement, we focus on the student bottlenecks identified, even though our work identified many strengths that students demonstrated when approaching the task of contextualizing historical documents.

Decoding student approaches and bottlenecks while reading documents

Interviews with students revealed that most students demonstrated some level of the sourcing heuristic as they read historical documents. Wineburg (1991) named and described historians' sourcing heuristic as their inclination to preface reading a document by first identifying attributes

of that document's creation, such as the author, intended audience, date and location of the document's creation, and its genre. Over 86% of all interviewed students spoke about identifying at least one sourcing attribute in their interview. Students most commonly identified the date of the document's creation (76%); identifying the document's author followed (59%). Students gave the least attention to the location of a document's creation (41%), and only six students identified sourcing attributes beyond date, author, or location. Further, while most students vocalized the need to pay attention to either the date, author, or location of a document, many struggled to answer those questions correctly or did not make interpretations of historical context using those attributes.

In the decoding interview, students used documents adapted and edited for student use (Wineburg & Martin, 2009). This included editorial headnotes providing background information and context for the document and an attribution footnote providing sourcing information. A significant number of students did not utilize these aids despite having access to them; we coded that only about 38% of students mentioned using the contextualizing headnote or the sourcing footnote in their interviews. A gap existed between the percentage of students who demonstrated awareness that they should identify the author of a document (mentioned in about 59% of student interviews) and students who knew to use the sourcing attribution to do so. For example, in the sourcing footnote for the illustration *Montcalm Trying to Stop the Massacre* used in interviews with HIS 200 students, the sourcing footnote clearly identified Felix Octavius Darley, an American illustrator from the mid-1800s, as the creator of the source. However, several students speculated that the author of the document came from France or Britain, without naming anyone specifically.

Even students who did use editorial interventions lacked awareness of their origins. One student hypothesized that the contextualizing headnote, which the faculty partner from HIS 200 had adapted from a document available at the Digital Inquiry Group website, actually came from a British person involved in the French and Indian War, "because it's explaining what happened and it doesn't really seem like it's from either [French general] Montcalm's point of view and it doesn't seem like it's from the Native American point of view either." This raises at least two important considerations in the use of edited primary sources in the history classroom: the authors of editorial annotations often remain invisible (Paxton, 1997) to students, and learners often do not use these editorial annotations or do not know how to use them to aid historical reading of documents.

Students in the study described reading approaches that tended to fall into two distinct categories: gist reading to seek a general overview of the document (discussed in approximately 80% of student interviews) and fact-mining to scour the document for specific details in support of an argument (discussed in approximately 60% of student interviews). While seemingly diametric approaches, both of these reading approaches converged on the same outcome: *a priori* interpretations of documents. One student described employing gist reading to determine if a document "fit" the argument of her essay. Another student described looking across multiple documents to find "specific facts" that could provide "information to help support" her argument. In both approaches, rather than assessing available evidence and developing *a posteriori* claims based on that evidence, students described reading sources in a way that allowed them to sift through documents to identify information that aligned with their preconceived notions. This runs contrary to developing expert contextualized interpretations of

documents, as it entails approaching a document first on its own terms rather than selectively reading the document to fit it into an existing claim.

Decoding bottlenecks in making interpretations of historical context
While many students knew to describe some sourcing information, such as the author, date, or location of a document's creation, fewer students actually used that information to make interpretations of historical documents' temporal or spatial context. While 86% of students mentioned some aspect of the sourcing heuristic in their interviews, we only coded roughly 75% of students as making some form of contextualizing interpretation. Of the 29 interviewed students, only 15 (51.72%) spoke about interpreting the author of a document, compared to 16 students (55.17%) who discussed interpreting the date of a document. Additionally, only seven students (24.14%) based their interpretations on a document's location, compared to 41.38% of students who identified a document's location. As an example of such interpretations, one student used information about the author and the author's likely worldview to make a conjecture about the document: "The author may have made this source for a purpose that doesn't represent the full perspective. So I need to know who the author of this source is, and since the author's names are European-sounding (Felix and Albert), they are probably pro-European." The student used information about the author to place the document in context.

In coding for contextualizing interpretations, we did not discriminate against the quality or accuracy of an offered contextualizing interpretation. We merely noted if a student had attempted such an interpretation. For example, one student inaccurately placed the 1870 illustration *Montcalm Trying to Stop the Massacre* in the context of the Seven Years' War, which took place over a hundred years prior. Still, this student used his knowledge of that time period to attempt to better interpret the document:

> The French-Indian War, they're allies at the time, and the Native Americans at the time were fed up with land being taken, with children being stolen, being raped, crops being burned by the British. And so when the British were captured, [the Native Americans had no] reason to stop themselves, they had been already tormented for so long.

Although not a wholly accurate interpretation, we still coded this student as attempting to interpret the historical context of the document.

Despite the interviews' focus on how students contextualized documents, only around three-quarters of the students actually discussed interpreting documents. This gap reveals that a subset of students did not recognize contextualizing as an interpretative act but rather incorrectly conceptualized contextualization as a mere factual identification of a document's date and location. This further suggests that some students approach documents in the history classroom as sources of information to memorize and comprehend rather than as sources of evidence used for crafting interpretations. This finding suggests that instructors may need to explicitly define contextualization as creating an interpretation based on the historical context of a document, not just factual identification of the date and location of a historical document.

Decoding bottlenecks in using background knowledge to contextualize documents
To contextualize a document, historians must first source the document, then apply relevant background knowledge to the document in order to generate an interpretation of its meaning. We coded the sources of background knowledge students mentioned in their interviews. Students most commonly mentioned the internet as a source of background knowledge (mentioned in about 45% of student interviews). A crucial bottleneck emerged in students' use of the internet. Although many students mentioned their awareness of using library databases and internet domain endings as indicators of credibility, their comments often revealed an over-reliance on these as guarantors of credibility. For instance, one student incorrectly assumed that "anything that comes from a history website, anything from a .org or a .edu is always a safe source to use." Such an overreliance on domain endings echoes an earlier decoding study on how students select sources for history papers (McBrady, 2022). Around 30% of the interviews mentioned the faculty member teaching the course, the second most common source of background knowledge for students. Students mentioned the course textbook as a source of background information the least of all (in only about 7% of interviews). Such findings reveal that, although faculty may intend their course lectures and textbooks as sources of background information to help prepare students to contextualize primary sources, students rely more often on the internet than these sources.

In coding how students used their prior knowledge to make interpretations of contextualization, we found that many students (nearly 70%) made contextualizing comments that used prior knowledge accurately and positively to interpret historical events. However, a significant number (nearly 50%) also made presentist (Wineburg, 1999) comments, which we considered inaccurately attributing present-day values, ideas, and frames of reference to historical actors. For instance, one student interpreting an illustration of French general Montcalm in the French and Indian War commented, "So it feels like the Native Americans are just trying to protect their land and their people, whereas [Montcalm], whatever his name is, just kind of invaded it for his own personal gain." The student used her present-day frameworks to understand interactions between indigenous peoples and European settlers in North America, incorrectly attributing those motivations to the historical actor Montcalm. Although certainly European settlers and indigenous peoples did conflict over land use, this did not accurately reflect Montcalm's interactions with his Native American allies at the Battle of Fort William Henry (Anderson, 2000; Nester, 2000; Starbuck, 2002). We came to identify an additional bottleneck in students' contextualizing interpretations, which we came to call tunnel vision. In this bottleneck, students continued to concentrate on aspects of their own background knowledge even after identifying sourcing information indicating a different time period. Although the illustration of Montcalm depicts an event that took place in 1757 during the French and Indian War, the illustration actually dates to the 1870s or 1880s, during a period of post-Civil War western expansion and conflicts between the United States military and Indigenous peoples. Even when identifying that sourcing information, students' interpretive gaze often remained fixed on the French and Indian War rather than considering the context of Western Expansion and ongoing American Frontier Wars between indigenous peoples and the United States Federal Government. This tunnel vision prevented students from interpreting the illustration in its correct historical context. Nearly 80% of students made tunnel-vision comments in their interviews.

Decoding student thinking using near-peer interviews

This project involved undergraduate students in two different but interconnected roles. One group of undergraduate students, those enrolled in HIS 100 or HIS 200 courses, took on the important role of informants. Where much of decoding focuses on expert thinking, in this project, student cognition became central to the work, embracing the innovation Rouse et al. (2017) introduced. However, rather than having faculty researchers conduct interviews, a second group of students—undergraduate teacher candidates—interviewed these informants. These teacher candidates took on the role of near-peers during these interviews.

With its roots in Vygotskyan learning theory (Vygotsky, 1987), much of the work on near-peers has focused on using more experienced peers as instructors, tutors, or mentors, particularly in a medical school setting (Akinla et al., 2018; Bulte et al., 2007; de Menezes & Premnath, 2016) but also in the context of secondary teacher training (Hatch & Grossman, 2009). Recent studies in decoding research (Cameron, 2019; Rouse et al., 2017) and other research on teaching and learning (Baggett et al., 2022; Cook-Sather, 2014) have demonstrated an emerging trend of using near-peers as interviewers. A near-peer interviewer offers the benefit of a reduced power imbalance. Power dynamics constitute a persistent consideration within faculty-student partnerships, particularly if the faculty member also occupies the role of evaluator and determiner of course grades (Cook-Sather et al., 2014; Delpish et al., 2010). However, in our near peer interviews, interviewees have the benefit of anonymity, as the faculty partner never learned their identities. Further, interviewees often perceive and identify with their interviewers as fellow students closer to their own lived experiences and status in the university. As one teacher candidate noted in his memorandum after completing an interview:

> Heading into the interview, I was a little concerned that the interview would consist of awkward dialogue, both due to potentially my inabilities as an interviewer and S116's potential awkwardness in answering questions. I was surprised to find out that I actually share an upper-level history class with S116, so the awkwardness was instantly squashed with some discussion and jokes about our shared class.

Such camaraderie and a reduction in the power imbalance also led to perhaps more honest metacognition than a faculty partner would have achieved in an interview. Another teacher candidate reflected that her interviewed student "has no filter whatsoever. They were incredibly casual during this interviewing and always seemed to say immediately what came to mind." The transcript of the interview made this evident, as the student freely made comments like "I don't know how to write a thesis statement for a bullshit essay. . . . I'm going to go have my ass handed to me." Perhaps the student would use such uninhibited language in a conversation with a faculty member, but we suspect not. The anonymity and reduced power imbalance afforded through near-peer interviewing facilitated a more comfortable sharing of metacognition on the part of the interviewed students.

Indeed, one of our faculty partners mentioned that participating in this process benefitted her because she gained access to student thinking that they had not previously shared with her. "It was very helpful," she said of the project. She continued:

I had no idea that my students didn't know what historical context was because they don't tell me and they don't ask . . . and that's just like so basic to history. It didn't even occur to me that they wouldn't know what it was.

Near-peer interviews provided a crucial perspective on the metacognition of this faculty partner's students, one she had not otherwise accessed. The use of near-peers in decoding interviews provided another avenue to elicit and engage with student voice.

Teacher candidates as change agents for the university curriculum
Undergraduate students have acted as curricular change agents within several institutional contexts (Bovill et al., 2014; Cook-Sather, 2014; Freeman et al., 2014). However, the use of secondary social studies teacher candidates as change agents within this system provides a unique advantage. As undergraduate students, teacher candidates begin the process of developing expertise for teaching the discipline of history. As such, they occupy a distinctive liminal space between history faculty and undergraduate students. This third space (Bhabha, 1988; Moje et al., 2004; Rutherford, 1990; Zeichner, 2010) empowered teacher candidates to act as both translators and transformers of disciplinary and pedagogical knowledge.

In order to do so, teacher candidates first analyzed the findings from their near-peer decoding interviews. They collaborated with each other to identify bottlenecks the interviewed students experienced as they contextualized historical documents. Following that analysis, teacher candidates then turned to their next task: providing suggestions for how faculty partners could improve teaching contextualized thinking. Each teacher candidate wrote their own individual report that provided suggestions for the faculty partner. As an example of this work, the suggestions teacher candidates provided to our faculty partner in HIS 100 coalesced around six themes:

1. Students lacked a clear definition of contextualization and its relevance. The faculty partner should explicitly define contextualization as an interpretive act and not just the identification of the appropriate date and location of a document's creation.
2. Students would benefit from having contextualized thinking explicitly modeled to them, breaking it down into steps, and having the faculty partner verbalize thoughts through the think-aloud technique.
3. Students needed more explicit guidance in connecting the background knowledge and themes provided in class lectures to the historical documents they read.
4. Guided questions or annotation guides could better support students' contextualized thinking while reading documents.
5. Students needed more opportunities to practice contextualized thinking in class before working on their papers.
6. The prompt for writing assignments could more clearly emphasize expectations for putting documents into historical context.

Furthermore, as teacher candidates preparing to teach secondary history courses, they had spent the last two semesters studying scholarship on the teaching and learning of history. Their suggestions came not just from the position of an undergraduate student but from a novice

professional in the field of teaching history. Teacher candidates based their recommendations on this scholarship and frequently pointed faculty partners to helpful articles that might help them better teach contextualization to their students. For example, one teacher candidate suggested that the instructor for HIS 100 read Chapter 4 of Sam Wineburg's (2001) book *Historical Thinking and Other Unnatural Acts*. "I think she will find an easier time modeling contextualized thinking for her students following this reading," he wrote. This partnership with teacher candidates helped disseminate pedagogical scholarship to faculty partners. Indeed, given the somewhat uneven pedagogical preparation afforded to doctoral students of history (Bender et al., 2004; Pace, 2004), in some cases, teacher candidates might have more exposure to recent scholarship in the field of teaching and learning history than the faculty partners they advise.

Equipped with an in-depth understanding of the student experience from near-peer decoding interviews and a burgeoning understanding of the scholarship of teaching and learning history, teacher candidates held a unique position as change agents for undergraduate history courses. Their suggestions led to meaningful changes in course design. After partnering with the teacher candidates in HIS 399, one faculty partner discussed the changes she made to HIS 100 in response to the feedback of the teacher candidates. "I decided to, I believe, I think I changed the wording on the assignment to explain context more," she said. "But what I did was redesign the class [laughter]." Part of that course redesign included far more explicit modeling and scaffolding in primary source work to prepare students to better contextualize primary sources and connect them to course themes. The faculty partner incorporated more explicit primary source work through frequent in-class learning experiences for her students. Students prepare for this source work by reading the source ahead of time and taking a comprehension quiz. Then, in class, they worked in small groups to answer the faculty partner's guiding questions that helped them not only understand the factual information contained in the document but also prepared them to contextualize the document by linking the document to broader course themes. Our faculty partner sequenced these primary sources and the guiding questions of in-class document work so they became more complex as the semester continued; the complexity of the final document considered in class exceeded that of the independent contextualizing analysis she expected students to complete in the written paper for HIS 100. Using feedback from teacher candidates based on decoding interviews with her students, our faculty partner radically redesigned her course.

As the case of HIS 100 demonstrates, teacher candidates acted as real curricular change agents. Teacher candidates gained access to the metacognition of their near-peers through a decoding interview. Pairing that with their own burgeoning expertise in SoTL scholarship for the discipline of history allowed them to meaningfully identify student bottlenecks and suggest pedagogical interventions for addressing these bottlenecks that were rooted in SoTL literature. Faculty partners then changed their university curriculum in response to these suggestions.

Teacher candidates as change agents in the secondary curriculum
The experiences that teacher candidates gained through their student partnership did not just remain in the university classroom. Decoding how undergraduate students contextualized documents and developing curricular interventions for helping students overcome those bottlenecks also informed teacher candidates' future work in secondary classrooms.

One teacher candidate, for example, already began to notice how his host teacher decoded contextualizing thinking for her pupils while observing in a secondary classroom following the decoding project. In his field journal, he described the activity, which involved charting out historical events and connecting them to course themes, as a potential support that "may alleviate bottlenecks that students may have when contextualizing sources." The teacher candidate's work with undergraduates and suggestions for improving teaching contextualization in an undergraduate course prepared him to analyze the secondary classroom.

During student teaching, some teacher candidates began to uncover similar bottlenecks with secondary pupils as those they had observed with undergraduate students. For example, one teacher candidate noticed secondary pupils falling into a bottleneck of tunnel vision as he witnessed students focus only on "one part of history or one narrative. . . . That's all they've known." Secondary pupils also faced a similar bottleneck as undergraduate students in failing to recognize contextualization as an act of interpretation; rather than "making claims" and interpretations, students "just regurgitated information that they were given." As this teacher candidate found, many of the bottlenecks we had enumerated with undergraduate students also applied to secondary pupils.

Given that secondary pupils displayed parallel bottlenecks to those displayed in undergraduate students, teacher candidates could then begin to adapt suggestions made to improve university curriculum into their own secondary classrooms. For example, knowing that many students failed to attend to contextualizing headnotes or sourcing footnotes, a student teacher implemented the metaphor of buying a book to prepare secondary pupils to read historical documents in his classroom:

> The first thing you read in a book is the cover. Then you see the table of contents, and then you actually get into the chapters. So I think what I told students was just read this article as if you're reading a book for the first time, try to learn more about it. You know, before you buy the book in a bookstore, you always look at the back of the book. You read the summary of [the book] similar to [the header of a document].

Having already discussed undergraduate students' penchant for skipping over editorial scaffolds when reading historical documents, this student teacher had a teaching metaphor already prepared for his secondary pupils.

Teacher candidates also left with an understanding of the importance of incorporating student voice into teaching, whether undergraduate instruction or secondary instruction. Following his experience with the decoding project with undergraduates, one teacher candidate started the first day of his new job teaching secondary pupils by eliciting their voice. He had them share what they did not like about studying history or what they liked about studying history:

> So I think being able to just at least talk to the kids before actually starting the content and seeing where they are. . . . I can say that I talked to every single one of the students, and I got their own opinion and their own perspective on it.

Eliciting that student voice charged this student teacher with a goal: at the end of the semester, could he shift their perspective on history so the study of that subject becomes more tolerable

and more enjoyable for pupils? Shifting perspectives and deepening learner engagement and understanding within the discipline is, of course, an important goal for any work of curricular change.

CONCLUSION

Our small study examines the unique position secondary teacher candidates can hold as interviewers and researchers in decoding the disciplines research. Situated within a liminal space between historians and undergraduate students, teacher candidates can uniquely work as intermediaries between these two. Teacher candidates' status as undergraduate students allows them to elicit authentic student voice from near-peer informants. Further, their own developing expertise in the scholarship of teaching and learning enables teacher candidates to channel this student voice into curricular change at the university level. Faculty partners changed their university courses in response to teacher candidates' suggestions—suggestions that paired student voice with pedagogical scholarship. All these enabled faculty partners to better attend to students' developing abilities to contextualize historical documents.

Teacher candidates' roles as curricular change agents extended across the divide between secondary and higher education. Teacher candidates also adapted their own secondary instruction to enhance the teaching of contextualization to their pupils. To do so, they drew on decoding methodologies, the student voices they had elicited from student interviews, and the suggestions they had provided to faculty partners for improving the teaching of contextualization.

This study also suggests the need for further examination of the role secondary schools play in student partnership and SoTL research. Pace (2017) has suggested decoding might develop "a new language of teaching and learning that would lessen the negative impact of the current dysfunctional chasm between secondary and higher education" (134). Teacher candidates, as current students in higher education and future teachers in secondary education, form an important linkage between secondary and higher education. More research into their role may bring additional perspectives on the effects teacher candidate partnerships have on the secondary realm and on the preparation of secondary pupils for higher education.

This study had the prior approval of SUNY Cortland's Institutional Review Board (human subjects research ethics board).

NOTE ON CONTRIBUTORS

Ryan DiCostanzo *earned a B.A. at SUNY Cortland with a dual major in History and Adolescence Education Social Studies and a Teaching English as a Second Language minor. A full-time*

substitute teacher at Warwick Valley Central School District, he plans to pursue an M.A. in History at SUNY Cortland.

Anthony Discenza i*s currently pursuing an M.A. in Adolescent Special Education at Touro University. He earned a B.A. at SUNY Cortland with a dual major in History and Adolescence Education Social Studies. Discenza has an interest in connecting historical concepts to current events using historical thinking methods.*

Jenna Langone *is a current graduate student in SUNY Cortland's M.A. in History program. She received her Dual B.A. in History and Adolescence Education Social Studies with a minor in Women, Gender, and Sexuality Studies. She conducted an independent research study relating women in history to their place in current curricula.*

Jared McBrady *is an assistant professor of history and coordinator of the Adolescence Education Social Studies program at SUNY Cortland. His teaching and research focus on the preparation of elementary, secondary, and university history teachers and the scholarship of teaching and learning in the discipline of history.*

REFERENCES

Akinla, O., Hagan, P., & Atiomo, W. (2018). A systematic review of the literature describing the outcomes of near-peer mentoring programs for first year medical students. *BMC Medical Education*, *18*(98), 1–10. https://doi.org/10.1186/s12909–018–1195–1

Anderson, F. (2000). *Crucible of war: The seven years' war and the fate of empire in British North America, 1754–1766*. Vintage.

Baggett, H. C., Anderson, A. J., & Andrzejewski, C. E. (2022). Photo collages and near-peer interviewing: Scaffolding data collection in youth participatory action research projects with children. *Journal of Participatory Research Methods*, *3*(3), 1–9. https://doi.org/10.35844/001c.38339

Baron, C. (2016). Using embedded visual coding to support contextualization of historical texts. *American Educational Research Journal*, *53*(3), 516–40. https://doi.org/10.3102/0002831216637347

Bender, T., Katz. P. M., Palmer, C., & the AHA Committee on Graduate Education (2004). *The education of historians for the twenty-first century*. University of Illinois Press.

Bhabha, H. K. (1988). The commitment to theory. *New Formations*, *5*, 5–23.

Bovill, C., Cook-Sather, A., & Felten, P. (2011). Students as co-creators of teaching approaches, course design and curricula: Implications for academic developers. *International Journal for Academic Development*, *16*(2), 133–145. https://doi.org/10.1080/1360144X.2011.568690

Britt, M. A., & Aglinskas, C. (2002). Improving students' ability to identify and use source information. *Cognition and Instruction*, *20*(4), 485–522. https://doi.org/10.1207/S1532690XCI2004_2

Brown, S. D. (2018). Assessing while learning: Teacher candidates in the history classroom. *Social Studies Education Review*, *7*(3), 22–41. https://coe.uga.edu/academics/concentrations/social-studies-education/

Bruno, P., & Petrucci, P. (2019). Decoding the disciplines. Applying the methodology to high school. In S. Chistolini (Ed.), *Decoding the disciplines in European institutions of higher education: Intercultural and interdisciplinary approach to teaching and learning* (pp. 44–45). FrancoAngeli.

Bulte, C., Betts, A., Garner, K., & Durning, S. (2007). Student teaching: Views of student near-peer teachers and learners. *Medical Teacher*, *29*(6), 583–590. https://doi.org/10.1080/01421590701583824

Cameron, E. L. (2019). Using methods from cognitive psychology to elucidate mental processes. In *Third EuroSoTL congress: Exploring new fields through an academic approach to teaching* (pp. 675–684). Universidad del País Vasco.

Charmaz, K. (2006*). Constructing grounded theory: A practical guide through qualitative analysis*. Sage.

Cook-Sather, A. (2014). Multiplying perspectives and improving practice: What can happen when undergraduate college students collaborate with college faculty to explore teaching and learning. *Instructional Science*, *42*, 31–46. https://doi.org/10.1007/s11251–013–9292–3

Cook-Sather, A., Bovill, C., & Felten P. (2014). *Engaging students as partners in learning and teaching: A guide for faculty*. Jossey-Bass.

de Menezes, S., & Premnath, D. (2016). Near-peer education: A novel teaching program. *International Journal of Medical Education*, *7*, 160–167. https://doi.org/10.5116/ijme.5738.3c28

Delpish, A., Holmes, A., Knight-McKenna, M., Mihans, R., Darby, A., King, K., & Felten, P. (2010). Equalizing voices: Student-faculty partnership in course design. In C. Werder & M. M. Otis, (Eds.), *Engaging student voices in the study of teaching and learning* (pp. 96–114). Stylus.

Díaz, A. J., & Shopkow, L. (2017). A tale of two thresholds. *Practice and evidence of the scholarship of teaching and learning in higher education*, *12*(2), 229–248. https://www.pestlhe.org/index.php/pestlhe/issue/view/31

Digital Inquiry Group (n.d.). *Beyond the bubble: History assessments, seven years' war*. https://inquirygroup.org/history-assessments/seven-years-war

Dunne, E., & Zandstra, R. (2011). *Students as change agents: New ways of engaging with learning and teaching in higher education*. ESCalate.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes* (2nd ed.). University of Chicago Press.

Fielding, M. (2001). Students as radical agents of change. *Journal of Educational Change*, *2*(3), 123–141. https://doi.org/10.1023/A:1017949213447

Freeman, R., Millard, L., Brand, S., & Chapman, P. (2014). Student academic partners: Student employment for collaborative learning and teaching development. *Innovations in Education and Teaching International*, *51*(3), 233–243. https://doi.org/10.1080/14703297.2013.778064

Fung, D. (2017). *A connected curriculum for higher education*. UCL Press.

Hatch, T. & Grossman, P. (2009). Learning to look beyond the boundaries of representation. *Journal of Teacher Education*, *60*(1), 70–85. https://doi.org/10.1177/0022487108328533

Healey, M., Flint, A., & Harrington, K. (2014). *Students as partners in learning and teaching in higher education*. Higher Education Academy. https://www.advance-he.ac.uk/knowledge-hub/engagement-through-partnership-students-partners-learning-and-teaching-higher

Khomokhoana, P. J., & Nel, L. (2019). Decoding source code comprehension: Bottlenecks experienced by senior computer science students. In B. Tait, J. Kroeze, & S. Gruner (Eds.), *Communications in computer and information science* (pp. 17–32). Springer. https://doi.org/10.1007/978–3-030–35629–3_2

Matthews, K. E., Cook-Sather, A., & Healey, M. (2018). Connecting learning, teaching, and research through student-staff partnerships: Toward universities as egalitarian learning communities. In V. C. H. Tong, A. Standen, & M. Sotiriou (Eds.), *Shaping higher education with students: Ways to connect research and teaching* (pp. 23–29). UCL Press. https://doi.org/10.2307/j.ctt21c4tcm.7

McBrady, J. (2022). Decoding the disciplines as a pedagogy of teacher education. *Teaching and Learning Inquiry*, *10*, 1–28. https://doi.org/10.20343/teachlearninqu.10.11

Middendorf, J., & Shopkow, L. (2018). *Overcoming student learning bottlenecks: Decode the critical thinking of your discipline*. Stylus.

Miller-Young, J., & Boman, J. (2017) *Using the decoding the disciplines framework for learning across disciplines*. Jossey-Bass. https://doi.org/10.1002/tl.20216

Moje, E. B, Ciechanowski, K. M., Kramer, K., Ellis, L., Carrillo, R., & Collazo, T. (2004). Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly*, *39*(1), 38–70. https://doi.org/10.1598/RRQ.39.1.4

Mosborg, S. (2002). Speaking of history: How adolescents use their knowledge of history in reading the daily news. *Cognition and Instruction*, *20*(3), 323–358. https://doi.org/10.1207/S1532690XCI2003_2

Neary, M., & Winn, J. (2009). The student as producer: Reinventing the student experience in higher education. In L. Bell, M. Neary, & H. Stevenson (Eds.), *The future of higher education: Policy, pedagogy, and the student experience* (pp. 192–210). Continuum.

Nester, W. R. (2000). *The first global war: Britain, France, and the fate of North America, 1756–1775*. Greenwood Publishing Group.

Nokes, J. D., Dole, J. A., & Hacker, D. J. (2007). Teaching high school students to use heuristics while reading historical texts. *Journal of Educational Psychology*, *99*(3), 492–504. https://doi.org/10.1037/0022–0663.99.3.492

Pace, D. (2004). The amateur in the operating room: History and the scholarship of teaching and learning. *The American Historical Review*, *109*(4), 1171–1192. https://doi.org/10.1086/ahr/109.4.1171

Pace, D. (2017). *The decoding the disciplines paradigm: Seven steps to increase student learning*. Indiana University Press.

Pace, D. (2021). Beyond decoding the disciplines 1.0: New directions for the paradigm. *Teaching and Learning Inquiry*, *9*(2): 1–27. https://doi.org/10.20343/teachlearninqu.9.2.3

Pace, D., & Middendorf, J. (2004). *Decoding the disciplines: Helping students learn disciplinary ways of thinking*. Jossey-Bass. https://doi.org/10.1002/tl.142

Paxton, R. J. (1997). "Someone with like a life wrote it": The effects of a visible author on high school history students. *Journal of Educational Psychology*, *89*(2), 235–250. https://doi.org/10.1037/0022–0663.89.2.235

Pelnar, H., Reyes, G., Sehgal, K., & Cameron, L. (2020). Partners, not peers: Defining boundaries and expectations in student partnerships. *International Journal for Students as Partners*, *4*(2), 138–144. https://doi.org/10.15173/ijsap.v4i2.4289

Reisman, A. (2012). Reading like a historian: A document-based history curriculum intervention in urban high schools. *Cognition and Instruction*, *30*(1), 86–112. https://doi.org/10.1080/07370008.2011.634081

Reisman, A., & McGrew, S. (2018). Reading in history education: Text, sources, and evidence. In S. A. Metzger & L. M. Harris (Eds.), *The Wiley international handbook of history teaching and learning*, 527–550. John Wiley & Sons. https://doi.org/10.1002/9781119100812.ch20

Reisman, A., & Wineburg, S. (2008). Teaching the skill of contextualizing in history. *The Social Studies*, *99*(5), 202–207. https://doi.org/10.3200/TSSS.99.5.202–207

Rouse, M., Phillips, J., Mehaffey, R., McGowan, S., & Felten, P. (2017). Decoding and disclosure in students-as-partners research: A case study of the political science literature review. *International Journal for Students as Partners*, *1*(1), 1–14. https://doi.org/10.15173/ijsap.v1i1.3061

Rudduck, J. (2007). Student voice, student engagement and school reform. In D. Thiessen & A. Cook-Sather (Eds.), *International handbook of student experience in elementary and secondary school* (pp. 587–610). Springer. https://doi.org/10.1007/1-4020-3367-2_23

Rutherford, J. (1990). The third space: Interview with Homi Bhabha. In. J. Rutherford (Ed.), *Identity: Community, culture, difference* (pp. 207–221). Lawrence and Wishart.

Shemilt, D. (2000). The caliph's coin: The currency of narrative frameworks in history teaching. In P. N. Stearns, P. Sexias, & S. Wineburg (Eds.), *Knowing, teaching, and learning history: National and international perspectives* (pp. 83–101). New York University Press.

Shopkow, L. (2017). How many sources do I need? *The History Teacher*, *50*(2), 169–200. https://www.jstor.org/stable/44504478

Schultz, K. T., & Lovin, L. (2012). Examining mathematics teachers' disciplinary thinking. *The Mathematics Educator*, *21*(2), 2–10. https://openjournals.libs.uga.edu/tme/article/view/1965

Starbuck, D. R. (2002). *Massacre at Fort William Henry*. University Press of New England.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. C. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.

Wineburg, S. (2001). *Historical thinking and other unnatural acts: Charting the future of teaching the past*. Temple University Press.

Wineburg, S. S. (1991). Historical problem solving: A study of the cognitive processes used in the evaluation of documentary and pictorial evidence. *Journal of Educational Psychology*, *83*(1), 73–87. https://doi.org/10.1037/0022–0663.83.1.73

Wineburg, S. S. (1999). Historical thinking and other unnatural acts. *Phi Delta Kappan*, *80*(7), 488–499. https://doi.org/10.1177/003172171009200420

Wineburg, S., & Martin, D. (2009). Tampering with history: Adapting primary sources for struggling readers. *Social Education*, *73*(5), 212–216.

Wooden, J. (2008). "I had always heard Lincoln was a good person, but…": A study of sixth graders' reading of Lincoln's views on black-white relations. *The Social Studies*, *99*(1), 23–30. https://doi.org/10.3200/TSSS.99.1.23–32

Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, *61*(1–2), 89–99. https://doi.org/10.1177/0022487109347671