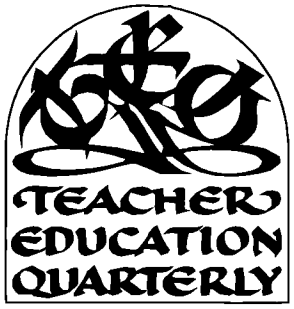

Scaffolding Coach Feedback for History Teachers on an Online Video Analysis Platform

Abby Reisman & Sia Elle Beckwith

Abstract

This study examined how the introduction of a feedback scaffold to a video analysis platform improved the quality and focus of history teachers' and novice coaches' comments. We found that coaches' feedback to teachers became more timely, focused, specific, actionable, and direct and that teachers increased their attention to the features of historical inquiry. We draw implications for the design of resources and professional development to support novice instructional coaches in history.

Introduction

Research on teacher learning has emphasized the importance of ongoing professional development experiences that support instructional change (Desimone et al., 2002; Hill & Papay, 2022). Increasingly, coaching is viewed as a critical feature of effective professional development and has been tied to changes in teacher practice and gains in student learning (Allen et al., 2015; Kraft & Blazar,

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2017; Kraft et al., 2018). Logistical and financial barriers, however, discourage widespread, sustainable, in-person coaching because such models are resource- and time-intensive (Borman & Feger, 2006; Carter et al., 2017; Morgan & Bates, 2018). School-embedded coaches are often tasked with multiple roles and have limited time for focused, instructional feedback (Bean et al., 2010). One potential solution to these logistical hurdles is the emergence of online platforms that support asynchronous video analysis (e.g., ClassForward, Edthena, TORSH). Such platforms offer opportunities to reenvision instructional coaching by reducing the logistical hurdles involved in traveling between schools, classrooms, and teachers. Furthermore, online coaching models can expand opportunities for teachers to be matched with content experts, as they no longer depend on local personnel.

History teachers are especially in need of subject-specific instructional coaching. Social studies instruction has been historically deprioritized in favor of tested subjects, such as language arts and mathematics, especially since No Child Left Behind (Fitchett et al., 2014). In the absence of district-provided resources and personnel, online video analysis platforms seem promising because teacher leaders can be leveraged to provide instructional guidance to their peers. Of course, the effectiveness of such a model would rest on these teacher-leaders-turned-coaches learning to support teachers' asynchronous video analysis in ways that lead to instructional change (Kraft & Hill, 2020). To date, the research on effective professional development for history teachers does not offer much guidance, and the field has yet to articulate domain-specific principles to guide the design of professional learning for history teachers (van Hover & Hicks, 2018).

In this study, we examine how interactions between instructional coaches and history teachers on a video analysis platform changed after the introduction of a scaffold that helped structure coaches' feedback. The study draws on data from a 2-year design-based study in which history teacher leaders served as novice coaches for their colleagues. We grounded our inquiries in the following questions: (a) To what extent did the introduction of the feedback scaffold correspond with changes in the focus and quality of coaches' feedback? (b) To what extent did the introduction of the feedback scaffold correspond with changes in the focus and quality of teachers' reflections on their videos?

Research on Teachers' Noticing in Video

Video analysis has been used to support learning for both preservice and in-service teachers. Central to these findings is an effort to shift teachers' perception of instruction and focus their attention on the salient features of classroom activity. Research has documented effects of video analysis on teacher motivation, classroom practices, reflection, and attention to student learning (for a review, see Gaudin & Chaliès, 2015). A smaller body of research has documented the significant impact of video analysis on student achievement scores (Allen et al., 2011; Roth et al., 2011).

This broader body of research on teacher "noticing" draws on the construct of *professional vision*, or the discursive ways that professional groups mark or highlight those features of a practice most salient to their work (Goodwin, 1994). Notably, the bulk of this research on noticing has been conducted in face-to-face contexts, in extended professional development or teacher education settings. Researchers have identified effective facilitation moves to support teacher noticing in in-person contexts. For example one framework highlights key facilitation moves, such as presenting initial prompts that focus the discussion of the video, highlighting important moments in the video, carefully selecting ideas to promote or challenge in discussion, and keeping the discussion focused on the video and on the disciplinary content (van Es et al., 2014). These facilitation moves serve the function of "channeling and focusing" (Pea, 2004, p. 432), or framing and highlighting critical features of the video as a means of scaffolding teachers' analysis. Only two projects (Allen et al., 2011; Matsumura et al., 2019)—both focused on instructional coaching—have incorporated asynchronous video analysis into their models, and these models rely on expert coaches who select short segments for teacher analysis. One challenge left unanswered by this literature is how to support novice coaches in focusing teachers' analysis of classroom video.

Inquiry Instruction in History Classrooms

To determine how to support novice coaches, we must first clarify the end goal of domain-specific instructional coaching in history. We hold that instructional change should reflect a shift from traditional methods that position students as passive recipients of prepackaged knowledge to inquiry-based approaches that invite students into the processes of knowledge construction. But inquiry instruction in any subject area is a heavy lift (Cohen, 2011). Such instruction demands that teachers have deep familiarity with the subject matter, facility with ways of organizing classroom discourse that invite students into the processes of interpretation and knowledge construction, and sensitivity to the knowledge that students bring to the endeavor. Although policy documents reflect a broad consensus that such instruction is desirable (e.g., National Council for Social Studies, 2013), a long history of foundered reform efforts underscores the challenges inherent in moving the instructional needle toward inquiry. The track record in history classrooms is particularly bleak (Cuban, 2016; Evans, 2004).

Inquiry instruction in history, like in other subject areas, invites students into the processes of knowledge construction. To know in history is to use the evidentiary record to make sense of the past, with the understanding that such knowledge must, by necessity, remain partial and incomplete. Such a presentation of the subject matter inverts typical classroom instruction, where historical knowledge is generally presented in a fixed, authoritative narrative and where textbooks rarely reveal the evidentiary basis for their claims. Several intervention studies have found effects

for inquiry-based curricula on student historical reading and writing (e.g., de la Paz et al., 2014; Reisman, 2012b). These curricular interventions all comprised lessons or units centered around historical questions, with accompanying document sets reflecting conflicting perspectives or accounts that students were expected to reconcile. Importantly, in all cases, PD for participating teachers was offered by the researchers, with minimal theorizing about how the PD activities were intended to affect teacher learning. The one exception to this pattern was de la Paz et al. (2011), in which hierarchical linear modeling allowed researchers to identify a stronger effect on both teacher instruction and student learning for teachers who participated in extended, follow-up support that included additional workshops on history and pedagogy and support for common planning time with same grade–level teachers around designing and integrating inquiry instruction. Even in this case, however, we do not gain insight into how the researchers theorized these additional interventions as mechanisms for teacher learning.

We hypothesize that any professional development that wishes to shift teachers' instructional practice toward inquiry must first help them see how and where inquiry appears in enacted instruction. We maintain that inquiry instruction appears in three types of classroom interactions: (a) interactions that open the subject matter to interpretation and invite student knowledge construction; (b) interactions in which student discourse (e.g., student questions, disagreements), rather that the teacher, propels the lesson forward; and (c) interactions that engage students as sense makers, capable of high-level intellectual endeavors. Once teachers can identify moments during instruction that might be ripe for such interactions, they can begin to consider action possibilities that will allow them to create such opportunities in future instruction.

Research on Coaching Feedback

Most content-based models of instructional coaching embrace a directive approach; coaches are considered instructional experts, and the goal of coaching is to reform teacher practice to align with a particular instructional approach (e.g., Blazar et al., 2018; Gibbons & Cobb, 2016; Matsumura et al., 2010). Directive approaches stand in contrast to responsive approaches that focus on developing teachers' self-efficacy and capacity for reflection (see Costa & Garmston, 1994). In directive models, the coach guides the teacher toward a particular instructional vision under the assumption that a teacher's practice will change if they observe changes in student outcomes or achievement (Neufeld & Roper, 2003). Recent research has indicated that effective coaches toggle between the two approaches (Borman & Feger, 2006; Gibbons & Cobb, 2017), prompting teachers to reflect on their assumptions or interpretive frames and, in doing so, supporting them in considering alternative approaches to recurring instructional problems. Across responsive and directive coaching approaches, a general portrait has emerged of

effective feedback, namely, that it be "timely, sufficient, concrete, specific and limited to a small number of performance problems" (Veenman & Denessen, 2001, p. 410; see also Aikens & Akers, 2011). Furthermore, the literature on content-based coaching suggests that feedback be deeply rooted in content and relevant curricular structures (Borman & Feger, 2006; Gibbons & Cobb, 2016).

Ultimately, for coaching feedback to be effective, it must be actionable to the extent that teachers perceive next steps they can take to improve instruction. In certain interventions, the focus on "next steps" is structured as part of a routine (Blazar et al., 2018; Kraft & Hill, 2020). But the notion that feedback must be actionable appears widely across the broader span of literature (e.g., Hattie & Timperley, 2007). By a similar logic, praise that is unaccompanied by a rationale or specific example has been deemed ineffective in the feedback literature because it fails to offer the recipient a road map or vision for how to proceed (Hattie & Timperley, 2007).

As a consensus emerges around the qualities of effective feedback, so, too, does the evidence that instructional coaches need professional development and support in offering it (Gallucci et al., 2010; Woulfin, 2017). Unfortunately, existing research on coaching does not offer much guidance on how to support coaches' development (see Gallucci et al., 2010; Gotwalt & Hausburg, 2020). Offering direct feedback is especially challenging for teacher leaders, who are frequently tapped to serve as instructional coaches without prior experience providing or receiving coaching, as they often struggle to break out of the "culture of nice" that dominates teacher peer interactions (MacDonald, 2011; Mangin & Stoelinga, 2011). In light of recent research indicating the value of providing coaches with a clear routine to structure their feedback (Allen et al., 2011; Kraft & Hill, 2020), we designed a feedback scaffold that coaches could use to structure video-based feedback and guide history teachers' noticing and analysis of classroom videos.

Method

Project Context

The current project grew out of an effort to design a sustainable model of coaching that leverages the instructional expertise of teacher leaders and overcomes the logistical hurdles that limit the scalability of face-to-face coaching models. Data from the project come from the first 2 years of a design-based implementation study with a cohort of instructional coaches (10 in Year 1, 8 in Year 2) in a well-resourced Mid-Atlantic district that has been committed to document-based history instruction and was interested in developing a sustainable model of instructional coaching. The coaches were full-time classroom teachers selected for their proficiency in document-based history instruction and their experience and familiarity with the *Reading Like a Historian* curriculum.

The *Reading Like a Historian* curriculum comprises stand-alone document-based lessons that engage students in historical inquiry through a sequence of core

instructional activities: (a) establish background knowledge, (b) engage students in disciplinary reading of multiple historical texts, and (c) facilitate whole-class discussion around a central historical question (CHQ; Reisman, 2012a). This sequence of activities draws on constructivist and sociocultural theories of learning (Brown et al., 1989; Piaget, 1929; Vygotsky, 1978) to maximize the probability that students gain richer and more complex understandings of the past. By establishing background knowledge, the teacher assists students in constructing a general schema about a particular historical event. When this approach is done effectively, the teacher elicits, attends to, and builds on students' incoming knowledge about the historical event or period. The purpose of engaging students with historical documents is to then offer conflicting interpretations that are sequenced to prompt students to change their minds and revise their interpretations. The third and final activity, the whole class discussion, allows students to reconcile their newly acquired information about the past with their initial schemas.

Influenced by arguments for designing and organizing teacher education around bounded, discrete instructional practices (Ball & Forzani, 2009; Grossman et al., 2009), the first author invited the teacher leaders to design the existing coaching model around the practices that compose the document-based lesson. Together, the teachers and first author worked to specify and design instructional tools around three core practices: establishing background knowledge (EBK), supporting historical reading (SHR), and facilitating historical discussion (FHD). Each coach was paired with one to two early-career teachers to pilot a coaching model in which teachers coplanned with coaches and then videotaped themselves enacting each practice in their classroom. Coaches gave teachers asynchronous feedback via an online video analysis platform.

Video Analysis Data

Teachers and coaches used the online video analysis platform TORSH Talent to upload, view, and comment on videos of their classroom instruction (see Figure 1). In Year 1 of the project, teachers uploaded one video per practice; that is, they uploaded one EBK video for the first coaching cycle, one SHR video for the second coaching cycle, and one FHD video for the third coaching cycle. In Year 2 of the project, teachers uploaded two videos per practice.

Prior to the introduction of the feedback scaffold, teachers were instructed to tag their videos for the core features of each practice (see Table 1 for key components of EBK and SHR). This was done so that teachers could better identify the components of each practice and assess the impact on the lesson when they skipped those components. Coaches then responded to these comments, offering feedback or praise and occasionally posing questions, but teachers were not required to respond to coaches' comments. The introduction of a feedback scaffold in Year 2 was an effort, then, to address both the lack of asynchronous interaction between coaches

and teachers and the low quality of video analysis present in the TORSH comments in Year 1. Coaches and researchers designed and introduced the feedback scaffold in Year 2 after teachers uploaded their first EBK videos but before they uploaded their second EBK videos (see the intervention timeline in Table 2).

Feedback Scaffold

The feedback scaffold was a template to help coaches initiate their asynchronous interactions with teachers about the videos. Aligned with the research on facilitating teacher noticing with video outlined earlier, the template included three parts: (a) a focused observation about the teacher's instruction, (b) a claim about desirable instructional practice, and (c) a targeted prompt for teachers to identify

Figure 1
TORSH Talent Online Analysis Video Platform

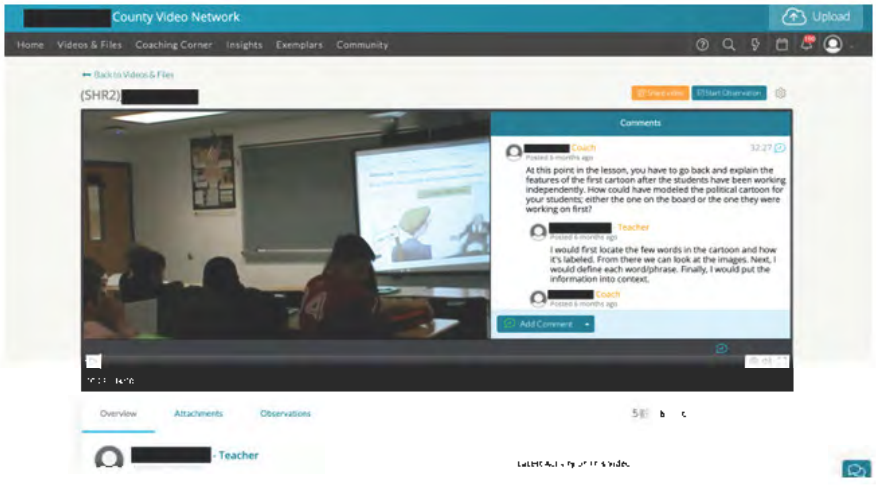

Table 1
Key Components of Core Practices Establishing Background Knowledge and Supporting Historical Reading

	Components
Establishing background knowledge	• Hook students into problem space • Review prior knowledge • Introduce new knowledge • Motivate central historical question
Supporting historical reading	• Model historical reading • Transition to independent active reading • Monitor comprehension • Debrief comprehension

three moments in the video when they could have engaged in the desirable practice. For example, the task might have the following structure:

> In watching your video, I noticed _____. One goal of this lesson [or type of instruction] is _____. Can you identify three moments in the video where you could have _____?

After watching teachers' videos, instructional coaches used the template to design prompts that guided teachers' noticing and analysis of video. Teachers responded to the prompts, then coaches typically followed up with additional feedback. In that sense, we conceived of the prompt as a scaffold both for coaches' feedback and for teachers' video analysis.

Although coaches designed prompts to focus on the features of each practice (e.g., EBK, SHR) and often inserted additional commentary and/or praise, the structure of the prompt remained the same across cycles: (a) observation, (b) claim about good practice, (c) prompt for alternative action. For example, one coach designed the following prompt in response to one teacher's EBK:

> Great work with the EBK. Setting up information starting with accessible background knowledge with urbanization and growth of cities worked really well. One of the tough things with doing document-based lessons with middle school students is getting buy-in. Moving forward, getting as many students involved as possible in the lesson will create a more effective EBK and overall learning experience for the students. I want you to re-watch your video and identify three moments where you could have given a question or task to engage all students. What could have been the benefit of those changes?

Table 2
Intervention Timeline

Teacher video uploads	*Feedback scaffold*	*Included in study*
Year 1		
Establishing background knowledge	no	–
Supporting historical reading	no	PRE-SHR
Facilitating historical discussions	no	–
Year 2		
Establishing background knowledge 1	no	PRE-EBK
Establishing background knowledge 2	yes	POST-EBK
Supporting historical reading 1	yes	POST-SHR
Supporting historical reading 2	(group task)	–
Facilitating historical discussions 1	(group task)	–
Facilitating historical discussions 2	(group task)	–

Note. In PRE cycles, teachers were instructed to tag their videos for the core features of each practice, and coaches would provide feedback on these comments; in POST cycles, the coach provided feedback and invited teachers' comments by posting a "task" using the feedback scaffold. EBK = establishing background knowledge. SHR = supporting historical reading.

The prompt highlighted the dual purpose of the EBK: to provide relevant background and to motivate student inquiry. In this case, the coach praised the former and then designed a task around the latter. The same coach designed the following prompt on the same teacher's SHR video:

> You set your students up to be very successful by modifying documents in a way that makes them accessible but leaves enough to sift through. My feedback focuses on the debrief. The point of the debrief is to ensure that students understand each document so they can answer the CHQ. You want to leave enough mystery/tension so eventually that can be brought up in a discussion. Could you find two moments where doing less (revealing less info, asking one less question, etc.) could have set up for more tension in the discussion?

Here the coach focused on a different aspect of document-based historical inquiry: the *withholding* of information and/or interpretation so that students have an opportunity to discover it as they engage in whole-class discussion. Although the substance differed from the focus on the EBK prompt, the structure remained essentially the same.

Data Sources

The introduction of the feedback scaffold in the middle of the Year 2 EBK cycle allowed us to compare teachers' and coaches' comments between the first and second EBK video uploads in Year 2 of the project (referred to in our results as pre-EBK and post-EBK). The introduction of the scaffold also allowed us to observe differences between teachers' sole SHR video upload in Year 1 and their SHR 1 videos in Year 2 (referred to in our results as pre-SHR and post-SHR; see Table 2).[1]

Each of the comparisons presented affordances and constraints. By combining our analysis from both comparisons, we hope to shed light on the contributions of the feedback scaffold to coaches' feedback and teachers' video reflections. To facilitate the possibility of aggregating our analyses across these two comparisons, we focused only on seven coaches who (a) participated in both Year 1 and Year 2 of the study and (b) designed feedback scaffolds for teachers in Year 2. These seven coaches worked with different numbers of teachers each year (see Table 3). We use responses from eight interviews that we conducted with each coach across the first 2 years of the project to triangulate our findings.

Data Analysis

We analyzed coach and teacher comments on several dimensions, each aligned with existing research on feedback and noticing with video. Our intent was to capture whether and how the focus and quality of teacher and coach comments changed after the introduction of the feedback scaffold.

We considered coach comments to improve if they became more timely, focused,

specific, actionable, and direct. Table 4 presents our coding scheme for coaches' comments and how we operationalized each construct. Each coach comment was coded with as many codes as applied.

Table 3
Coach and Teacher Participation

Coach	*Years teaching*	*Subjects taught*	*Grade levels aught*	*Prior experience coaching teachers*	*Prior coaching by lead author*	*Year 1 teachers (years teaching)*	*Year 2 teachers (years teaching)*
Adam	4	U.S. History, Civics, & Economics	7-8	no	no	AJ (4); Alex (2)	Andy (5); Allison (13)
Becky	12	World History	9–10	mentored student teacher	yes	Barb (13)	Barb (14)
Carol	10	U.S. History	7; 10–12	no[a]	no	Chris (3)	Chris (4); Charles (13)
Dani	4	U.S. History AP Economics	6; 11	no	yes	Dara (2)	Diane (3)
Eric	8	U.S. History; Civics	6–8; 11-12	no[a]	no	Evan (2); Emily (2)	Erin (2)
Frank	5	U.S. History	7	no	yes	Farrah (8)	Fred (7)
Gina	4	U.S. History	6	no[a]	yes	Greg (3)	Gail (7); Grace (9); Gabi (4)

Note. AP = Advanced Placement.
[a]Participated in the district's induction program, where coaches mentored first-year teachers but did not provide instructional coaching.

Table 4
Codes for Coach and Teacher Comments

Quality of feedback	*Codes (subcodes)*
Focused	• Classroom management • Student engagement • Cognitive demand • Pedagogy (instructional moves, classroom routines, instructional practices/specifications) • Content (learning goal, curricular materials, comprehension, prior knowledge) • Miscellaneous (clarifications, jokes)
Specific/actionable	• Suggestion related to instruction (presence/absence of rationale, lesson-specific vs. transferable to future lessons)
Direct	• Praise (presence/absence of rationale) • Challenge (presence/absence of rationale)

We coded teacher comments pre- and post- introduction of the feedback scaffold with one or more of the following "inquiry" codes that map on to the conceptual work of supporting inquiry instruction: (a) *subject matter* as open to interpretation; (b) role of *student discourse* as the mechanism for learning through inquiry; and (c) attention to *students' capacity for sense making.* All other teacher comments were coded as "noninquiry." These included any instance when a teacher noted part of a practice without tying it to the purpose of the lesson (e.g., "here I'm modeling"), any comment about content coverage (e.g., "I'm talking about the Scientific Revolution"), or comments related to student engagement (e.g., "students seem to be following").

To compare patterns between cycles, we calculated the percentage labeled with each code out of the total number of coach or teacher comments in each pre- or post-cycle. This allowed us to characterize the proportion of comments assigned each code and how that shifted pre- and post- the introduction of the feedback scaffold. All comments were double coded, and disagreements were resolved through discussion.

Results

Coach Feedback

Timeliness. We defined the feedback cycle as starting with teacher comments and ending with the coach responding to these comments. By comparing time stamps on pre- and post- comments, we found that the average length of the feedback cycle dropped from 6.2 days in the pre- comments to 3.5 days in the post- comments. Moreover, teachers were more likely to respond to coaches' comments in the post-comments than in the pre- comments.

Focus. In comparing coaches' comments on teachers' videos before and after the introduction of the feedback scaffold, we observed a drastic reduction in the sheer number of comments posted (n = 234 pre; n = 92 post). In the pre- cycles, coaches made approximately 12 comments per video; after the introduction of the scaffold, coaches posted approximately 4 comments per video.

We did not observe a concomitant decrease in the number of topics covered by the coaches. Not only did coaches cover the same range of topics before and after the introduction of the feedback scaffold but they also did so in precisely the same relative order of emphasis. Across pre- and post- comments, coaches spent the greatest share of their comments addressing teachers' pedagogy (56% pre; 62% post), followed by content-related comments (35% pre; 32% post). Coaches commented on student engagement far less frequently (12% pre; 17% post), and coach comments on classroom management, cognitive demand of instruction, and miscellaneous each represented less than 10% of coach comments across both pre- and post- videos.

Although the range of topics covered on pre- and post- comments remained

the same, a closer look revealed that they were more integrated and focused in the post- comments. For example, Adam's comments on his teacher's pre-EBK video represented the sort of range and variation that typified coaches' pre-EBK commentary (see Table 5). Allison posted a video in which she established background

Table 5
Adam's Comments on Allison's EBK 1 Video in Year 2

	Comment	*Focus of comment*
1	What was the warm-up question/activity again?	miscellaneous
2	Ignore—got it now!	miscellaneous
3	The Chicago Fire is brought up again in Document D—this could make a really interesting connection to how huge of an event that was in history, and how the Chinese reflect on it too.	content: curricular materials
4	Great activity—how do you feel that it added to the overall outcomes of the lesson?	content: learning goal
5	Here you could use some basic examples to get students to understand complex economic terms (ex: "if someone is depressed how do they feel?" "what about jobs and money could make someone depressed?" "if I am panicking what am I doing?"). While it is super basic, it gets students' involvement high.	content: comprehension; student engagement
6	These questions aren't as low level as you think. Students are making connections to economic principles that they have never learned. You could quickly move these questions higher with having them make some predictions and generalizations if you wished.	cognitive demand
7	Students seem to grasp the idea of a depression—well done!	content: comprehension
8	What could be some higher-level questions you could pose here about a depression?	cognitive demand
9	Is there a series of questions you could pose here to get to higher-level thoughts about the economic benefits and perhaps downfalls of immigrants that relate to the documents that will be explored?	cognitive demand; content: comprehension
10	This is a great point by this student that will connect later to the documents—feel free to emphasize this because students will remember it later.	content: comprehension
11	In this transition, you can delve deeper for higher knowledge too. For example, "why would too many immigrants be a problem?"	cognitive demand
12	Good analysis portion! You can always move from super low level (what do you see) to higher (what does that mean) to get more and more involved.	cognitive demand; student engagement
13	Here is a good spot to tie back in prior knowledge—"what reasons for immigration is this sign promoting?"	content: prior knowledge
14	Never mind the last comment!	miscellaneous
15	This idea of ideals and values went really well here—do you think this added to the context of the documents later?	content: learning goal; curricular materials
16	The response of the movie with Will Smith was stellar!	pedagogy: instructional move
17	That is a really high-level question/answer that uses prior knowledge!	cognitive demand
18	Solid transition here—could you have possibly used the prior cartoon as a jump-off to predicting what may happen with immigrants to lead even more into this?	content: curricular materials; pedagogy: instructional move
19	At this point, the EBK has taken about 20 minutes. Did you feel that students were prepared enough to tackle the documents and that they were motivated in answering the CHQ?	pedagogy: practice/specification

knowledge for a document-based lesson about Chinese immigration. On that video, Adam posted 19 comments, and Allison did not respond to any of them.

After the introduction of the feedback scaffold, Adam's comments on the same teacher's EBK 2 video targeted a clear objective—increasing student engagement in the lesson. What emerged was a focused exchange in which Adam used his four comments to both reinforce what the teacher was saying and offer suggestions for how to better accomplish a specific instructional goal. This time, Allison responded (see Table 6). Most importantly, in his final comment, Adam tied the focus on student engagement in the prompt to the larger arc of historical inquiry, explaining to Allison that when students are "successful in the EBK . . . they will be more willing to engage later during the reading of documents and discussion."

While Adam still covered five topics (student engagement, cognitive demand, pedagogy, and content), each additional topic was discussed in relation to the central topic of student engagement. In short, in the post- comments, even seemingly disparate topics were arrayed around the focal issue raised in the task.

Specificity. We found not only that the proportion of suggestions increased from pre- to post- comments (33% pre; 45% post) but also that approximately 90% of the post- suggestions included rationales, a nearly 30% increase from pre- suggestions. Frank, for example, suggested on Farrah's pre-SHR that she "explain why we predict when looking at documents and the importance for sourcing/determining reliability," but this suggestion did not include a rationale for why this would be a valuable instructional decision. By contrast, Frank suggested on Fred's post-SHR video, "Consider modifying the guided questions [in the original lesson] for the students. Seven questions are a lot and the goal for these questions is to ensure that students understand the document/source to be able to discuss later." It is important to note here that Frank grounded his rationale in the logic of historical inquiry, whereby the goal of the lesson is to equip students to engage in meaningful discussion.

At the same time, the proportion of suggestions that were transferable across lessons also increased among coaches (41% pre; 66% post), while the percentage of suggestions that only applied to one specific lesson plan declined sharply (66% pre; 39% post). Gina, for example, made the greatest number of suggestions of all the coaches, and many of these had rationales even in the pre- cycles. However, whereas her suggestions were evenly split between transferable and lesson-specific in the pre- cycles, they became predominantly transferable to future lessons in the post- cycles. For example, she suggested on Grace's pre-EBK,

> One of the major goals of the EBK is to get the kids super excited and into the topic so that they are motivated to read and discuss. I wonder if you could have emphasized the "drama" a little here. For example, "So all of these people have one thing in common. They are still alive! Would you guys believe me if I told you that Google says the richest person ever is actually dead?"

Although this comment had a broader rationale that highlighted the purpose of

Table 6
Adam's Comments on Allison's EBK 2 in Year 2

	Comment	*Focus of comment*
Coach	[TASK] You bring a lot of background information and tie in previous learning with some self-discovery through photos prior to engaging in the lesson. One of the hardest parts of document-based lessons is getting student involvement. Through your video, I only heard a few voices or names mentioned when you were addressing students. Could you identify three moments in your EBK where you could give the students a question or task that could develop more student engagement or voice?	student engagement
Teacher	This is a spot where the kids could have been leading the EBK. They did a really good job on the political machines lesson, and rather than have me reexplain that knowledge to them, they could have been leading this and showing their prior knowledge (giving more students opportunity to speak).	
Coach	Perfect—this will also allow you to extend their understanding with high-level questions too!	student engagement (through cognitive demand)
Teacher	Kids recognize that photographs are powerful. Here, I could have engaged more students by asking questions about why a Muckraker would tell the story of a problem using photos.	
Coach	That's a great high-level question. This is even a spot where a quick 30-second shoulder share with a table mate could help. While your lesson focused more on the life in cities, this could bring up issues with literacy at this time (it's easier to understand a photo than to read a story) as well as looking at who are the people viewing these photos.	student engagement (through pedagogy and content)
Teacher	I think it may have been meaningful to give examples of words with negative connotations in this spot. Kids would be excited to identify words that have negative emotions tied to them, and a more language arts–oriented question may engage a different group of kids.	
Teacher	As I rewatch, I think there are some places where I could have had other students expand on prior knowledge and have them take the lead on the EBK in some ways. I have been struggling with this. During other activities, I often have kids stand up and tell them that they can sit when they answer a question, but that method does not lend itself well to document work. I think finding a more systematic way of going about answering questions (popsicle sticks; a method such as two people from this table, two people from the middle table, two from the last table; etc.) may work.	
Coach	Don't shy away from the student interaction with movement even in an EBK. One of the big things especially with middle schoolers is finding ways to engage as many as possible prior to the lesson and giving them a chance to be successful in the EBK, because then they will be more willing to engage later during the reading of documents and discussion. Even small, simple victories can grow big.	student engagement (through pedagogy: classroom routine and content: learning goal)

the EBK, the actual suggestion could not be replicated in any lesson other than the one on Mansa Musa presented in the video. By contrast, on Gabi's post-SHR video, Gina commented,

> We want these lessons to be practical and sustainable and it seems like [the debrief] ended up taking a lot of class time. Moving forward, I think if you are only going to get through one document, you could have students complete the written response as a way to assess their learning before they leave (so you can make adjustments the next day).

Directness. The final characteristic of effective feedback is that it be direct, though not didactic or excessively critical. Across both pre- and post- cycles, coaches were unlikely to challenge teachers (2% pre; 8% post). In fact, only two of the seven coaches ever challenged teachers. Their challenges were more likely to include rationales in the post- cycles than in the pre- cycles. Praise, by contrast, constituted a significant proportion of coach comments (45% pre; 37% post). We found that after the introduction of the feedback scaffold, more than half of coaches' praise comments (57%) included a rationale, whereas only 31% of the pre- praise comments included a rationale. For example, in contrast with stand-alone affirmations like "I like this activity" or "awesome question here," coaches were more likely to elaborate on their praise after the introduction of the scaffold. Becky, for instance, praised Barb in her post-SHR video, highlighting the relationship between her questions and the larger purpose of the lesson, which was to tie student document analysis to the central historical question: "These are really good questions to ask students to orient them to the text and start to make connections with the CHQ." Carol commented on Charles's post-EBK: "Great start with having your CHQ written on the front board, so students can keep referring back to it." And on Chris's post-SHR, she commented,

> I'm glad you are stressing this idea that children and women are unskilled workers during this time period. Very important for students to understand this before moving forward with the documents. Because it's not just the factories that are dangerous—it's the lack of training for the people who worked in them!

By providing a rationale for their praise, coaches more effectively highlighted why certain instructional decisions aligned with the arc of historical inquiry, whereby students continually return to the CHQ, bringing to bear new evidence and perspectives.

We also found that teachers were nearly twice as likely to pose authentic questions after the introduction of the scaffold (14% pre; 27% post) and less likely to pose rhetorical questions (17% pre; 5% post). A close look at one coach's feedback illustrates how the questions became more direct. In the pre- comments, Eric struggled to offer his teachers direct and constructive feedback. In his interviews, he explained that he "didn't want to seem like a know-it-all" or like he was "telling teachers what to do," and as a consequence, he often posed inauthentic, rhetorical

questions with assumed "right" answers. His comments on Emily's pre-SHR video included several rhetorical questions that masked more direct feedback: "Do you think students are starting to lose interest at this point?" and "Do you think [this] is engaging enough? I only ask because you kind of hit on this already." In a similar example, Eric asked Evan on his pre-SHR video,

> Do you think you covered why [sourcing a document] is important to understanding the document as it relates to the CHQ? Did you consider going further with the model and asking more questions about the author? Date? Purpose of source? Type of source?

Such questions hinted that something was wrong but provided little guidance.

While working with Erin in Year 2, Eric brought up similar issues more directly. He designed the following task for her post-SHR video, in which he highlighted how the work of historical reading should always be geared toward answering the lesson's CHQ:

> You spend a lot of time modeling how to source by breaking down each component for the students, but you don't really take much time to explain to students why sourcing is such an important skill for historians to use when analyzing a document and answering a CHQ. What could you have said to improve in this regard?

Here the structure of the prompt forced Eric to articulate explicitly what was wanting in the teacher's enactment and to invite the teacher to propose alternative instructional actions. See Table 7 for a summary of changes in coach comments.

Table 7

Summary of Percentage Changes in Coach Comments

	PRE-cycles (EBK and SHR)	*POST-cycles (EBK and SHR)*
Total comments	234	92
Content of comments (%)		
Pedagogy	56	62
Content	35	32
Student engagement	12	17
Suggestions (%)		
Total suggestions	33	45
Proportion of suggestions with rationales	61	87
Proportion of transferable suggestions	41	66
Praise (%)		
Proportion of praise comments with rationales	31	57
Questions (%)		
Authentic questions	14	27
Rhetorical questions	17	5

Note. EBK = establishing background knowledge. SHR = supporting historical reading.

Teacher Comments

Our analysis of teacher comments sought to determine whether the increased focus, specificity, and directness in coaches' feedback correlated with an increase in teachers' comments focused on the key features of historical inquiry, namely, (a) opening history to interpretation, (b) viewing student discourse as the mechanism for inquiry, and (c) positioning students as sense makers. Like coaches, teachers also posted considerably fewer comments on the post- videos (n = 219 pre; n = 95 post), so we report percentages as proportions of total comments from each cycle.

Historical Inquiry Versus Noninquiry Comments. Across pre- and post-EBK cycles and pre- and post-SHR cycles, teachers' comments related to historical inquiry increased (38% pre; 60% post), and their noninquiry comments decreased (62% pre; 40% post). Disaggregating these general trends, we found that teachers' increased attention to the features of historical inquiry, specifically to history as interpretation and student discourse as the mechanism for driving the lesson, were more evident in the post-EBK comments than in the post-SHR comments but that there was a marked increase in teachers' attention to students' sense making in teachers' post- comments across both practices. These findings track when we consider how the two instructional practices challenge teachers in different ways: when establishing background knowledge, teachers need to resist the urge to tell the whole story; the goal is to motivate inquiry (open history to interpretation) by getting students to ask questions about the topic at hand (student discourse as a mechanism for learning); when supporting historical reading, teachers need to resist telling students how to interpret the lessons' documents and trust students' capacity as sense makers.

We share two examples of how coaches' prompts may have helped teachers attend to the features of historical inquiry when commenting on videos of their EBK.

Example 1. Gina posed the following prompt on Gail's post-EBK video:

> One of the learning goals from the Salem Witch Trials lesson is that students understand the historical context surrounding witch trials. The goal of the EBK is to provide students with the background knowledge to grapple with the CHQ, which in this lesson is: What caused the Salem Witch Crisis of 1692? Watch your EBK 2 video and identify three moments where you might have restructured your EBK to include a focus on historical context. What do you think the benefit of these changes might be?

Gail responded by noting a moment when she might have taken more time to elicit student understanding about the historical context:

> Here is where I remind the students of the video we watched [previously about the Salem Witch Trials]. But I jumped immediately to asking them about the different hypotheses [as to what caused the trials], and I could've begun by asking them

> about what we know about this place and time and what evidence we saw in the video, and *then* moved on to reminding [students] of the hypotheses.

In other words, Gail reflected on how she might have used students' prior knowledge to generate a portrait of the historical context before jumping into the inquiry. Her rich insight about how to use students' knowledge to contextualize the historical inquiry stands in contrast to an unspecified observation Gail made on her pre-EBK video: "I would have asked a different question here so I wish I had paused here."

Example 2. Diane's comments also became more specified and grounded in historical inquiry in her post-EBK video. The majority of her comments on her pre-EBK either described components of the specification or focused on alternative instructional choices that would have sped up the EBK. For example, she noted, "I think next time it will be quicker to just have a quick discussion, maybe a think-pair-share type of activity," instead of the post-it activity that she chose to facilitate in the video. By contrast, her post-EBK comments responded directly to Dani's substantial feedback prompt:

> This CHQ is a pretty difficult one because it is a little abstract. On one side, you have the idea that Lincoln freed the slaves—he issued the Emancipation Proclamation despite possible political consequences.
>
> On the other side you have this idea that the slaves freed themselves. Although legally Lincoln freed the slaves, very few slaves actually saw freedom immediately after the Emancipation Proclamation was issued. For many slaves to be free from slavery, they had put themselves at great personal risk. There is also this idea that because slaves were escaping North, they made the situation of runaway slaves an issue that Lincoln had to deal with.
>
> This is the basic problem space you want your students to have grappled with by the time you give them the documents and restate the CHQ. I think you started to build this problem space, but you could have pushed it more throughout your EBK.
>
> So, with that in mind I want you to look through your EBK and identify at least three places where you either set up the problem space or where you think you could have built it up more.

In response to this prompt, Diane again suggested using a think-pair-share structure, but this time her rationale was tied to the flow of the inquiry and the arc of the lesson:

> I think the beginning when I first introduce the CHQ would have been a good time for students to think-pair-share and analyze the CHQ just based off their background knowledge to see which side they're on before they read the documents.

This shift suggests that Diane had begun to conceptualize the lesson as an arc of activities in which she engages students' sense making and discourse in the service of interpreting the past.

Discussion

This study examined the impact of a scaffold designed to improve the quality and focus of asynchronous coach feedback and history teacher noticing comments on a video analysis platform. Our analysis suggests that the scaffold achieved both goals. Coaches' feedback to teachers became more timely, focused, specific, actionable, and direct. Teachers increased their attention to the key features of historical inquiry. These findings underscore the power of scaffolds to channel and focus attention (Pea, 2004). In this case, the feedback scaffold not only narrowed *teachers'* fields of vision but also effectively gave *coaches* permission to circumscribe a problem space for teacher exploration. In doing so, the task also permitted coaches to cut through the "culture of nice" that characterizes peer interactions among teachers (MacDonald, 2011), allowing them to offer direct and specific feedback.

These shifts are especially striking given the documented challenge of prompting teacher learning around inquiry instruction. One could argue that the coaches in this project had an especially challenging job because they had to *both* communicate the epistemological nature of document-based historical inquiry *and* highlight how it might manifest in practice. We can observe coaches' efforts to integrate comments about the subject matter into their tasks, before suggesting concrete ways for teachers to manifest these abstract understandings about the past *in enacted practice*. Dani's extended task about the Emancipation Proclamation lesson underscores just how much the pedagogical suggestion rested on a firm understanding of the subject matter. We wonder if the template for the feedback scaffold—the *observation-claim about good practice-prompt for alternative action* structure—was so readily embraced by coaches because it gave them a framework with which to integrate all the components required to support an instructional shift toward historical inquiry.

While we are enthusiastic about the potential for feedback scaffolds to support asynchronous instructional coaching around videos, we recognize that certain features of this particular coaching program may have contributed to how coaches not only embraced the intervention but also tailored the tasks to their particular teachers. For example, coaches in this program were paired with teachers who taught the same subject and had deep familiarity with the scope, sequence, and general pacing of the year. Coaches also had extensive experience with document-based history instruction and knew which *Reading Like a Historian* lessons aligned with state standards for a given course. As we saw earlier, this extensive subject matter and curricular knowledge no doubt informed the quality and depth of the tasks that the coaches designed. In other words, the coaches knew from experience how the lessons worked and were able to focus teachers' attention on key junctures in the lesson deemed essential to support student learning.

Second, the program itself was designed around a practice-based approach that sought to delineate, specify, and bound core instructional activities related

to document-based history instruction. Teachers were introduced to each practice through exemplar videos, specifications, and planning guides. On any given video, coaches only commented on whichever practice was the focus of that particular cycle. That is, in designing feedback tasks that narrowed the problem space for teachers, coaches were *already* operating within the bounds of a discrete instructional practice intended to narrow the problem space for teachers. One would imagine that designing a meaningful feedback prompt would be far more challenging if coaches could comment on any aspect of classroom instruction. That is not to say that the design of feedback scaffolds should always be nested in a practice-based approach to video analysis but rather that a practice-based approach may have contributed to the success with which the coaches in this study were able to adopt and implement the intervention.

These findings, then, represent an early exploration of the potential value of such scaffolds to support asynchronous video analysis, and they require further investigation. Our design prevents us from making any causal claims about the impact of the feedback scaffolds on teachers' noticing or coaches' feedback. Any number of other factors could have contributed to the changes we observed, not least of which includes the development of coaches' experience by virtue of their participation in the program. A more robust design would not only control for such factors but also investigate effects on teachers' practice and, ultimately, student learning. Nevertheless, in their critiques of existing research on professional development that focuses primarily on program structures, scholars such as Hill et al. (2013) and Borko (2004) call for targeted research to test the impact of instructional interventions on teacher learning. We view this article as responding to their call. The need for targeted research on programmatic design features is especially urgent in the context of instructional coaching, where little research exists on best practices or how to support coaches' learning.

Implications

Although the feedback scaffold itself represents a rather minor intervention in a larger coaching program, its impact speaks to the urgent need for tools and resources to support coaching and professional development more broadly. We know that instructional coaching constitutes an essential component of effective professional development around ambitious instructional reform. A flurry of recent publications have suggested that online video platforms offer promising, if largely untested, mechanisms for scaling coaching efforts and overcoming common logistical and financial hurdles that limit current efforts. But all instructional coaches, whether online or in person, need professional development, tools, and resources to support their learning. As this study suggests, these tools need not be elaborate or complex to facilitate substantive shifts in coaching or teacher learning.

Note

[1] Teachers engaged in collective analysis with peers on TORSH in Year 2 for SHR 2, FHD 1, and FHD 2. We therefore excluded those comments from our current analysis.

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