

FACILITATING VIDEO COACHING CLUBS

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We explored the facilitation of video coaching clubs to provide professional learning opportunities for coaches taking part in video clubs as part of a three-part professional development project. We lifted a facilitation framework (van Es et al., 2014) from a video-based teaching context to a video-based coaching context to better understand how the facilitators of video coaching clubs drew out contributions from coach participants while simultaneously leveraging their own insights as productive tools to advance the conversation. We further explored how facilitation practices changed over the course of two years. We found that facilitators increased their contributions when the videos came from the participants. The facilitators used the videos to reinforce the principles of content-focused-coaching, to model how to reflect on videos of coaching, and to conjecture about broader issues in coaching.

Keywords: rural, middle grades, professional learning, ambitious teaching, video clubs.

We studied discourse moves of facilitators of video clubs that were designed to support the professional learning of mathematics coaches. Our video coaching clubs consisted of groups of four to five coaches who met regularly to collectively view and analyze videos of coaching practice, similar in structure to video clubs that have been used with teachers (Gaudin & Chalies, 2015; van Es & Sherin, 2008). While there has been considerable literature on the facilitation of video clubs for teachers (cf. van Es et al, 2014; Coles, 2019), there has not been a parallel focus on video clubs for mathematics coaches. Karsenty et al. (2023) define a facilitator as “a professional who manages the PD activities, sets norms for interactions, supports teachers’ exchange of experiences and insights, monitors the discussion, and works with teachers toward the goals set for the PD” (p. 28).

We note the complexities of extracting practices from nested activities to new layers of practices (e.g., nesting and lifting [Prediger et al., 2019]) to analyze the practices of facilitators of teacher educators). We studied the practices of the video club facilitators by adapting the Framework for Facilitation of Video-Based discussions, developed by van Es et al. (2014). This framework includes broad categories such as *orienting group to the video analysis task*, *sustaining an inquiry stance*, *maintaining a focus on the video and the mathematics*, and *supporting group collaboration*, that include specific facilitation moves (e.g., launching, countering, etc.) The literature on video clubs for teachers shows that these clubs provide opportunities for teachers to develop their capacities to attend to how their actions supported student thinking. In turn, we hoped to show how the Video Coaching Clubs—given the name because mathematics coaches are the participants, not teachers—would support coaches to attend to how their actions impacted teacher’s learning. The premise of a mathematics education video club is to create an environment for a group of educators to develop evidence-based reasoning as the basis of teacher growth (van Es & Sherin, 2008); our intent was that video coaching clubs would foster a context for coaches to develop evidence-based reasoning as the basis for coach growth. We answered the following research question: How did the facilitator draw out contributions from the coach participants while simultaneously leveraging their own insights as Kosko, K. W., Caniglia, J., Courtney, S., Zolfaghari, M., & Morris, G. A., (2024). *Proceedings of the forty-sixth annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Kent State University.

productive tools to advance the conversation? How did facilitation practices change over the course of four video coaching clubs?

Design Principles for our Video Coaching Clubs

We based our video club design on several principles. First, we wanted our coach participants to draw on videos of coaching to support their evidence-based noticing of relevant coaching incidents; this follows the principle of lifting (Prediger et al., 2019) principles from teacher video clubs to that of coach video clubs.

We also drew from the notion of unpacking content related to teachers' planning practices to serve as a basis for the coaching episodes around which we wanted the coach participants to reflect. In other parts of our project we utilized content-focused-coaching [CFC] (West & Staub, 2013) as the model of coaching we emphasized; CFC is intended to develop teachers' content knowledge and pedagogical content knowledge. Content-focused coaches typically engage teachers in a three-part coaching cycle in which a coach and teacher collaboratively plan, teach, and reflect upon a mathematics lesson (West & Cameron, 2013). The planning phase of the coaching cycle is an opportunity to support teachers to develop new planning practices, while the debriefing phase is an opportunity to help teachers reflect on the ways students engage with mathematics (e.g., Witherspoon et al., 2021). Thus CFC-based planning and debriefing practices were the focus of the coaching episodes coach participants viewed..

Third, we followed the lead of van Es et al. (2014) and Coles (2019) in designing for high quality or productive discussions, which are characterized by four primary purposes for facilitation: orienting the group to the video analysis task, sustaining an inquiry stance, maintaining a focus on the video and the mathematics, and supporting group collaboration (the same key components of the van Es et al. (2014) facilitation model). Our model was intended to manage the tension between providing adequate scaffolding without being too prescriptive (Coles, 2019; Elliot et al., 2009).

Study Context

The Video Coaching Clubs are one of three components of fully online professional learning intervention designed to support mathematics coaches to engage in CFC. Coach participants from rural districts participated in an online course, online video coaching clubs, and one-on-one video-based coaching cycles with a Mentor Coach. Each video club met eight times over two years for approximately two hours each time; in the first year (first four clubs) the facilitator presented a video clip of their own coaching; these clips were chosen as examples, not exemplars of coaching moments, intended to initiate an inquiry into coaching, not an evaluation of the coach or the teacher (Borko et al., 2011). In the second year, each coach participant, rather than the facilitator, presented a video as the basis of group reflection. To facilitate evidence-based reasoning, the coach participants were asked to follow a see-think-wonder sequence for each relevant moment they noticed in the video, meaning they responded to prompts asking: What did you see? What did you think? What did you wonder?. These responses were written independently; these reflections became the basis of the public reflection that followed via dialogue as part of the video coaching club.

Methods

Data Collection

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We analyzed transcripts from three groups of coaches who each met eight times, for a total of 24 Video Coaching Clubs. The clubs were all part of the first cohort of our project; consequently, all of the facilitators were new to the roles and to video coaching clubs. The Video Coaching Clubs were conducted via zoom and recorded; these sessions were then professionally transcribed and entered into spreadsheets for analysis.

Data Analysis

We adapted the coding framework from van Es et al. (2014) that was focused on teachers reflecting videos of mathematics lessons. The categories from that framework described the facilitator role of the Video Coaching Clubs in regard to high quality discussions and thus largely aligned with our purposes. However, we made a couple of adaptations to the framework to capture the extent to which the intellectual contributions drew from the facilitator or the participants. We were interested in capturing the ways in which the facilitator drew out contributions from the coach participants while simultaneously leveraging their own insights as productive tools to advance the conversation.

The practices from the Van Es et al. (2014) were: *orienting the group to the video analysis task*, *sustaining an inquiry stance*, *maintaining a focus on the video and the mathematics*, and *supporting group collaboration*. We largely kept the first and fourth roles, but incorporated the second and third into two newly defined practices. Both new categories, *focusing on contributions of participants* and *facilitator interjecting their thinking*, incorporated aspects of an inquiry stance and evidence-based reasoning while allowing us to explore how intellectual authority played out in the clubs. For example, in the category of *focusing on contributions of participants*, the codes *probing participant reasoning*, *paraphrasing*, *lifting up*, and *summarizing and connecting* function to make explicit the reasoning of the participants' reflections on the videos; these promote an inquiry stance. In the *facilitator interjecting their thinking* category, the codes offering an explanation and questioning/wondering focus on the reasoning of the coach, while the code *highlighting / providing evidence* mark moves where the coach focused on the video and the mathematics. See Table 1 for a list of categories, codes, and definitions.

Category	Code	Definition
Orienting to the video club norms and activities	Setting norms / expectations	Setting cultural norms for participating, such as how to formulate disagreements
	Explaining Video Coaching Club activity and directions	Providing details of the activity and how it will be structured
	Contextualizing clip	Provide additional information about the coaching context and mathematics lesson
Focusing on contributions of participants	Prompting participant ideas	Pose general prompts to elicit participant ideas
	Probing participant reasoning	Prompt participants to explain their reasoning and/or elaborate on their ideas
	Paraphrasing	Restate and revoice to ensure common understanding of an idea

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	Lifting Up	Identify an important idea that a participant raised in the discussion for further discussion
	Summarizing and Connecting	Make connections between ideas raised in the discussion
	Offering an explanation	Provide an interpretation of an event, interaction, or mathematical idea, from a stance of inquiry
Facilitator interjecting their thinking	Highlighting / providing evidence	Direct attention to noteworthy coaching or teaching moves in the videos
	Questioning/wondering	Coach poses a hypothetical question or wonders about possible alternative actions.
Orchestrating discussion		Invite participants to share different ideas who have not already participated in a discussion thread. Use in cases where the instructor calls out names to ensure everyone has participated.
	Distributing participation	
	Validating participant ideas	Confirm and support participant contribution

Table 1: Categories, Codes, and Definitions in the Framework

Results

The summaries for each category yielded some consistencies across the facilitators. The facilitators spent roughly one third of their turns orienting the coach participants to the VCCs, with percentages decreasing from the first year to the second for each facilitator. The following quote from Reiss in VCC1 is an orienting move that illustrates how the coaches framed the clubs:

We've come up with three goals that we're really working towards in these video coaching clubs. The first one is to grow in our ability to make sense of coaching moves and teacher thinking by noticing and naming interesting moments in a planning conversation. Then we also want to work on growing our personal capacity to facilitate content focused coaching planning conversations with teachers. We're going to continue to grow our collaborative community of coaches through rich conversations about authentic coaching moments. (Reiss, VCC1)

Roughly a fifth of the facilitator turns *focused attention on the contributions of the coach participants*; about half of those were *prompting participant ideas* and the other half a combination of the other four codes in that category. Roughly one in six facilitator moves involved *facilitator interjecting their thinking*, though the percentages in this category increased from the first year to the second year, which we explore below. Table 2 displays the overall percentages across both years of the VCCs.

Code Category	Lowrey	Reiss	Whilton
Orienting	32.2	43.5	32.7
Focusing on contributions of participants	20.4	23.0	18.9
Facilitator interjecting their thinking	15.5	13.9	16.1
Orchestrating	20.2	9.7	14.7

Table 2: Results across Categories for Both Years

We noted a number of trends when comparing the first year (the four VCCs where the facilitator presented a video of their own coaching) with the second year (the last four VCCs where the video was from one of the coach participants). These trends offer insights into the nature of VCC facilitation and into the impact of the selection of videos in terms of the conduct of the VCCs. We focus on four codes where we noted differences across the two years of the VCCs, three of which are in the *facilitator interjecting their thinking* category. Three of these codes showed increases across the two years while one did not. We will provide examples of facilitation moves for each of these codes to provide insights into facilitation and why facilitation changed when the source of the videos changed. We first note that the code *setting norms and expectations* decreased for Lowrey and Reiss across the two sets of VCCs from around 7% of facilitator turns to around 1.5%; this can be explained in part because by the second year of VCCs the norms and expectations would already be established. We note this to illustrate that there were some expected changes across the two years, first because the norms of the community had already been established and because the facilitator was no longer presenting their own video. See Table 3 to see the codes and the percentages across the two years.

Code Category	Lowrey VCC1- VCC4	Lowrey VCC5- VCC8	Reiss VCC1- VCC4	Reiss VCC5- VCC8	Whilton VCC1- VCC4	Whilton VCC5- VCC8
Paraphrasing	5.5	1.5	3.3	2.9	4.4	1.8
Offering an explanation	7.6	10.1	3.0	10.3	6.1	11.1
Highlighting / providing evidence	0.5	4.6	0.3	4.9	1.7	3.6
Questioning/wondering	2.2	6.1	0.00	13.2	2.2	9.3

Table 3: Percentage of Facilitator Moves for Selected Codes

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The four codes we focus on below showed notable changes across the two years, with *paraphrasing* being the only one of the four that decreased. Here is an example from Lowrey:

I guess what I'm hearing is that there were—you bumped into some kids that just having that understanding of fractions that we can cut things up and we can still share them and be able to use all of them and share them equally and what that might mean. Then this idea of cutting 'em all into fourths and is that going to give me the same amount as if I had a whole brownie? If I had four of those fourths, would that give me a whole brownie? (Lowey, VCC1)

Here, Lowrey emphasizes the mathematical explanation provided by a participant in a detailed way. This example and others of paraphrasing largely served the purpose of “facilitator modelling the kinds of discourse or social and discussion norms desired in a group” (Coles, 2019, p. 11). Similar to the decline in the norms and expectations code, the incidences of this code likely declined because the norms and expectations were more established in Year 2.

The *highlighting / providing* code increased in part because the facilitator in year two followed the same see-think-wonder sequence to reflect on the video as the other non-presenting participants. For example, Whilton referenced a moment in participant Rice's coaching video:

One thing, too, from a coaching move that I noticed, I felt like the—I felt like the teacher's explanation in response to the coach's question was ... just a broad statement. Then Rice followed up with a very specific, though. “Well, I heard a student say”—she named a very specific moment. (Whilton, VCC7)

This differed a bit from the first year, where the highlighting revealed new insights into a coaching session the facilitator had conducted:

Just like Stevens said, I didn't even catch the why. The part I caught from the teacher in that same moment though was she said, “I would have asked them this because that would have aimed at our third goal,” right? Same moment, but then she named the question and then said, “I would have asked that because that would have gotten us towards the third goal.” (Whilton, VCC4)

The two codes that had the highest frequency of these four were *offering an explanation* and *questioning/wondering*. These codes represented the most substantial and detailed insights from the facilitator. As represented in the Reiss quote that expressed the goals of the VCCs, the facilitators' goals included supporting the participants to understand the principles of content focused coaching and to make sense of specific instances of coaching with respect to those principles. Below, we include instances of these codes to show how the coaches accomplished these goals and why they were more prevalent in year two.

The first example of *offering an explanation* is from Reiss connecting her interpretation of the video to the process of supporting teachers to identify a mathematical goal:

I think what was happening was that the coach didn't want to give away too much about what she—I think she may have been trying really hard not to make the goal for her, so she was trying not to give too specific of examples because she wanted the teacher to self-select her goals. (Reiss, VCC 5)

A second example comes from Whilton, who described how the coach was trying to get the teacher to notice what students were doing:

[was] the coach picking up maybe on this general nature of, “We talked about, and we did this,” and the coach was like, “Wait a second. “We” were doing this stuff. What were the

kids actually saying?" And pushing for that specificity from what were the kids actually saying versus living in this (Whilton, VCC 6)

These examples illustrate how facilitators used moments in the video to raise essential tensions in content focused coaching; in one case it was about providing opportunities for teachers to contribute to lesson planning and in the second it was about supporting teachers to notice students' mathematical thinking. In both cases, the facilitators' explanations animated the coaches' intentions and actions in ways that foregrounded principles of content focused coaching; they were able to leverage a participant's video to make a point that may not have been as poignant had it been their own video.

The first example of *questioning/wondering* is from Reiss in which she wonders about the outcome of the coaching conversation:

Then I had a lot of wonderings about it. I wondered what might have happened when the teacher actually taught the lesson, if the students were able to actually make connections between the tiles and, again, it seemed like a rote procedure. Were they able to make a connection between the tile and solving equations or was it really just this procedure of I do this, I do this, I put this tile down. (Reiss, VCC 8)

The second is from Whilton as he wonders about a broader coaching principle;

My wondering, then, as a coach, is maybe, how do we press—again, back to the “all” conversation. What do we do about the kids who are conceptually challenged versus—what are the coaching moves to not let that just be like, “Oh, they struggle”? It very well could've happened. I'm not saying that Rice didn't do it, but it makes me wonder, how, maybe, do we press in the moment for the “all” piece on that? (Whilton, VCC 7)

These wonderings represent the two most common types of wonderings, one in which the wondering about what happened in the subsequent lesson and the other a wondering about coaching in general. The first kind of wondering creates an anticipatory mind frame to support coaches to envision how their coaching impacts teaching, while the second kind of wondering is connected to general issues encountered in coaching and how to address them.

Discussion

This study explored the design and implementation of video clubs for mathematics coaches who are learning about content-focused coaching. We adapted a framework previously used to study facilitation in video coaching clubs for teachers because our design had considerable overlap with that of the framework's authors. We used that framework to study facilitation moves in 24 VCC sessions across three facilitators in order to better understand how facilitation might differ in video clubs for coaches and to understand how the source of the coaching videos impacts facilitation.

We found that the facilitators utilized some of the norming and orchestration moves documented elsewhere, showing that they were principled in adhering to facilitator roles for video clubs. The most interesting findings related to the differences between year one and year two of the VCCs, when the source of the video changed from episodes of the facilitators' coaching to that of the participants' videos. We found that the norming moves decreased while the moves in which the facilitators injected their insights increased. We saw this particularly with moves associated with explanations and with questioning and wondering. We attribute this to opportunities in which the facilitators used the videos to reinforce the principles of content-

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focused-coaching, to model how to reflect on videos of coaching, to foster anticipatory thinking, and to conjecture about broader issues in coaching.

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