

VIDEO CLIP SELECTION WITHIN VIDEO CLUBS: RATIONALE AND PURPOSE FOR VIDEO CONTENT

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We explored the videos used to provide professional learning opportunities for coaches taking part in video clubs as part of a three-part professional development project. In year one, professional development facilitators selected the videos, while in the second year of professional development, the coach participants selected videos. We explored the rationale that coaches provided for the selection of their video clips. Findings indicated that coaches selected video clips that included content directly aligned with content-focused coaching, highlighted the practices of coaching, and included content that the selector deemed important for others to notice. We provide implications for those designing video clubs for coaches, as well as teachers, as the findings may be applicable when considering video selection beyond coach video clubs.

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Video Clubs in Research

Researchers have repeatedly shown that video is a powerful tool for teacher education (Brophy, 2003; Coles, 2019; Christ et al., 2017; Gaudin & Chaliès, 2015; Santagata et al., 2021; Seidel et al., 2013). Of the many uses of video to support teachers, video clubs have been shown to be beneficial in improving teacher learning (van Es & Sherin, 2008; 2010). van Es and Sherin (2008) describe video clubs as the gathering of a group of teachers who “meet to watch and discuss excerpts of videotapes of their instruction” (p. 244). Video clubs have most commonly centered on mathematics or science content (Luna & Sherin, 2017), with the intent to develop teachers’ pedagogical development (Kang & van Es, 2019; Luna & Sherin, 2017). Walkoe (2015) notes that the purpose of video clubs is to support teachers to “attend to and reason” about particular content within a video, a purpose mirroring that of professional noticing (e.g., Jacobs et al., 2010; König et al., 2022; van Es & Sherin, 2008)(p. 525). In fact, many video clubs have been intentionally designed to support teacher noticing (e.g., Mitchell & Ariemma-Marin, 2015; van Es & Sherin, 2010; Wallin & Amador, 2019). Researchers have found that what is noticed in the videos in video clubs is consequential for teacher learning opportunities (Borko et al., 2008; Gaudin & Chaliès, 2015; Walkoe, 2015). Given the repeated use of video clubs for teacher learning (Coles, 2019; van Es and Sherin, 2010), and knowing the affordances of the process for learning (Beisiegel et al., 2017; Borko et al., 2008; van Es et al., 2014), we designed and implemented a video club structure for mathematics teacher educators’ learning. Situated in a mathematics education context, our video club was designed to help mathematics coaches improve their ability to: (a) facilitate productive planning and debriefing conversations with teachers, (b) notice the impact of their coaching practices on teachers’ thinking and instruction, and (c) use evidence from what they notice to make decisions about their coaching practices. The 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.

specific focus of the video clubs was to support coaches to notice critical events (see Amador et al., under review) of one-on-one coaching cycles (see Kochmanski & Cobb, 2022).

We designed and implemented the video clubs for a mathematics coaching context because we conjectured that the structure would support coach learning, just as video clubs have supported teacher learning (van Es and Sherin, 2010). However, before studying the outcomes of video club implementation in a coaching context, we considered it important to better understand the design of video clubs, as specific for a coaching context, as a way to delve into the nuances of how the professional learning opportunity was designed. As a result, we worked to answer the following research question: What rationale do coaches provide for how they select clips for video coaching clubs?

Theoretical Framework and Related Literature

We theoretically frame this work with the research literature on noticing. The concept that noticing what is important in educational settings and making decisions based on the interpretation of what is attended to is consequential to learning opportunities (Jacobs et al., 2010; van Es & Sherin, 2008). While the importance of noticing for mathematics educators has gained attention in literature, and researchers have come to recognize the value of noticing (Sherin et al., 2011; van Es & Sherin, 2002, 2021), research on noticing in coaching contexts is limited (Amador et al., 2024). As a result, we frame the video club video selection by considering the opportunities to notice (see Stockero et al., 2017) available in a coaching context.

The coaching approach utilized in our investigation is centered on content-focused coaching (West & Cameron, 2013), differing from instructional coaching or cognitive coaching methods. Content-focused coaching is characterized by its emphasis on disciplinary content during coaching discussions; coaching sessions should delve into the mathematical aspects of the lesson, how these mathematical concepts are incorporated into the task design, and which instructional strategies promote or enhance mathematical comprehension (Callard et al., 2022). The novelty in our professional development initiative was the adaptation of a traditional face-to-face mathematics coaching model into a fully online, video-based coaching model (Amador et al., 2021).

Method

Twenty-three coaches participated in selecting videos as part of video clubs in which they took part during a larger three-part two-year professional development project designed to support coaches of mathematics. The other two professional learning components included an online course and one-on-one content-focused coaching in which a mentor coach (those with more experience who were part of our professional development team) supported the efforts of coach participants (individuals coaching in a school or school district in mathematics).

In the video club structure, four to six coaches met regularly to discuss elements of video of coaching interactions between a classroom mathematics teacher and a coach. These meetings typically lasted from 90-120 minutes and included two focal videos for the coach participants to watch. Prior to the video club meetings, a member of the team selected video clips for participants to watch during the video club. It is the rationale for this selection to which we focus attention. To collect data on the rationale for their selected videos, coaches were asked verbally and in writing to provide an explanation for the video that they selected. Verbal interactions were audio recorded and transcribed verbatim. To analyze data, four members of our research team created a coding scheme that included categories for: (a) content-focused coaching aspects, (b)

coach support of the teacher, (c) teacher practices/knowledge, (d) coaching practices, and (e) video coaching club context. Within each of these broad five categories, the codebook had subcategories that further defined various reasons. To code data, all four researchers coded each rationale response with as many codes as were apparent in the data. The team of four then met to reconcile any discrepancies in the coding and arrived at final counts for the rationales coming from each of the 23 coaches. We then calculated frequency counts to arrive at an overall description of the rationale.

Results and Discussion

Analysis of the data reveals three main trends that indicate that participants selected video clips that: (a) included content directly aligned with content-focused coaching, (b) highlighted the practices of coaching, and (c) included content that the coach selecting deemed important for others to notice. The following provides an overview of the findings, and then each trend is described.

Table 1 shows the breakdown of the overall rationale reasons provided. Recall that in some cases, participants provided more than one reason for a particular decision about (König et al., 2022) video choice.

Table 1: Percent in Each Category Provided as Rationale

Content-Focused Coaching Aspects	Coach Supports Teacher's	Teacher Practices/ Knowledge	Coaching Practices	Video Coaching Context	Total
38.61%	5.94%	15.84%	31.68%	7.92%	100%

Content-focused coaching practices were a main reason participants gave for selecting particular video clips to show during the video club. Within this overarching category, participants said they selected their video clips because they: focused on mathematics learning goals, demonstrated the use of instructional practice goals, provided an example of the structure of the lesson design, showed how to talk about anticipating student strategies, examined evidence of student thinking, illustrated the launching of a lesson or task, demonstrated debrief conversation structure, showed the coach doing the mathematics with the teacher, or illuminated collaboration or co-learning. The following is an excerpt of an example of the rationale one coach provided that was coded for aspects of content-focused coaching:

Yeah, so the first clip is us talking about [...] coaching—if you look at the lesson planning document at the bottom there's the debrief coaching cycle. I was just showing her that and letting her know that I was going to use that in the post discussion. That was my own goals. That first section is me setting my goals and making them apparent to her. I don't know, I chose that for that reason. Then the second section, that's kind of long, is her setting some of her goals. I cut out the part for setting content goals, but we focused on her setting the math practice goals. That's why I chose the first one is just highlighted our conversations around goals. That was my number one reason for choosing it.

In this example, the coach explicitly states that the selection was centered on goals, mathematics practice and content goals, which are both aspects associated with content-focused coaching.

Coaching practices were another main theme for why particular clips were selected. Coaching practices that were commonly coded included language related to: the five practices for orchestrating discussion (Stein et al., 2008), mathematics content development, engagement in related professional learning, and lesson content. In the following excerpt, the coach provided rationale related to the five practices, a key component related to coaching:

As a district we are working on that five practices book [...] Every time we do anything with PD, and I work with Arnold, it's always that—what's the goal of the lesson? What's the goal of the teacher? That focus has been there. When I went back and saw the lesson, I'm like, "Woo-hoo, it is in there." I was celebrating that yes, even—because when I did this with her, she's first year teacher too. Being excited that this is being ingrained in her right from the beginning. I guess that's why I picked it.

In this example, the focus is clearly on coaching a teacher to implement the five practices, a theme that was common among participants, with nearly 32% of the reasons given for video selection related to coaching practices.

Finally, a cross cutting theme that was not coded for directly with the codebook but was presented through thematic analysis was that of noticing (i.e., van Es & Sherin, 2008)—coaches selected videos that included content that they thought was important for others to notice. In the verbal description of her rationale for clip selection, Coach Riess shared her rationale behind the clips she chose for her first video coaching club was to include crucial aspects of content-focused coaching. To focus their time during the video club, Reiss narrowed in on learning goals and anticipating student strategies. She stated,

We felt that those were really important and different to content focused coaching, where you might not see those aspects in other types of coaching, such as cognitive coaching or instructional coaching or student-centered coaching. That was how we kind of chose the topics of our video coaching club. When I went to go look for a clip that showed me having a discussion around learning goals, I first looked for a clip where that was really evident and clear and wasn't chopped up by different conversations that kind of came in and out of that discussion around learning goals. The one I settled on is a clip that, in it, the teacher had provided me with two learning goals for the task, as she had written those learning goals. When I read the learning goals, I felt that one of them really did not match what the task was asking students to do. I knew that the teacher might not have internalized the content as well as I would like. That was one thing I noticed. I also noticed there was other content in the task she had chosen that wasn't encompassed in her learning goals. Those were two things that I thought were interesting as I had looked at the learning goals she provided and the conversation we had.

This example shows that Riess had ideas in mind of what she wanted coach participants to notice in the video club, and she identified a video that contained what she was hoping others would notice during the video club.

These findings illuminate the reasons that specific clips were selected for the video clubs. As researchers have noted, the purpose of video clubs is to support educators to attend to and reason

about particular events (Walkoe, 2015). Knowing what events are selected and why provides important information for both researchers and professional development providers, as the videos that are shown are consequential to the possible learning outcomes and can be a powerful tool for educator learning (Brophy, 2003; Coles, 2019; Christ et al., 2017; Gaudin & Chaliès, 2015; Santagata et al., 2021; Seidel et al., 2013). We encourage researchers and professional development providers to be cognizant of video choice during their projects and to maintain awareness of the rationale for video clip selection as the selection evidenced in this research directly related to the coaches' opportunity to notice and learn.

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