

7-24-2021

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Recommended Citation

Tara Barnhart & Victor Vega (2021) Induction Coaches' experiences with video-augmented coaching in a video club model, *Professional Development in Education*, <https://doi.org/10.1080/19415257.2021.1955734>

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This is an Accepted Manuscript of an article published in *Professional Development in Education* in 2021, available online at <https://doi.org/10.1080/19415257.2021.1955734>. It may differ slightly from the final version of record.

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International Professional Development Association

Induction Coaches' Experiences with Video-Augmented Coaching in a Video Club Model

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To cite this article: Tara Barnhart & Victor Vega (2021):
Induction Coaches' experiences with video-augmented coaching in
a video club model, *Professional Development in Education*,
DOI:10.1080/19415257.2021.1955734 To link to this article:
<https://doi.org/10.1080/19415257.2021.1955734> Published online:
24 Jul 2021

Abstract

This study examines the results of the first phase of a multi-year programme to integrate the use of video to support induction coaches in a suburban school district. Seven coaches participated in a video club in which they analysed videos of both their coaching conversations and mentees' classrooms. A typological analysis of interview and video club meeting transcripts revealed perceived benefits of participation in the video club on the coaches' sense of professional community and the quality of coaching conversations. Coaches also noted reviewing video with mentees stimulated changes in their mentees' classroom practice. Positioning themselves as learners learning from video alongside mentees created a more egalitarian relationship between coach and mentee. The 'pragmatic' professional development design privileged coaches' autonomy and agency and emphasized developing coaching concepts rather than discrete routines. Obstacles to using video included logistical issues related to video capture as well as the time needed to establish trusting relationships with mentees. Further exploration of the video club model for teacher leader development will inform theories of teacher learning and professional development design.

Introduction

The first years of teaching are the most demanding and influential for educators (Ingersoll & Smith, 2004). They must develop strategies to learn about the culture of their site, the community they serve, and skills for teaching their content all while maintaining the same workload as veteran teachers (Darling-Hammond, 2010, Timperley, 2008). As a result, nearly 20% of teachers leave the profession in the first five years of teaching (Gray & Taie, 2015). Teacher attrition and switching campuses disproportionately affects schools serving low income and minority communities (Barnes et al., 2007) and costs the US school system an estimated one to two billion dollars per year (Haynes et al., 2014).

In response, programs to support novices by pairing them with coaches are increasingly common (Darling-Hammond, 2010, Gray & Taie, 2015, Ingersoll & Smith, 2004) Though these programs generally increase teacher retention, the quality of induction support varies (Ingersoll & Strong, 2011, Wang et al., 2008). Coaches are often expert teachers who have been elevated into leadership positions, however, expert teachers of children about subjects are not always expert teachers of adults about teaching (Schwille, 2008). Coaches may receive limited, introductory guidance on how to coach effectively (Admiraal et al., 2019).

Further complicating the support of novice teachers is how to achieve balance between teacher accountability and teacher autonomy, or 'pragmatic professional learning' (Lloyd & Davis, 2018). Increasingly, designers of teacher professional development acknowledge that if programs aim to achieve meaningful changes in teachers' practice, they must engage multiple domains of teacher learning – the cognitive, affective, and motivational (Korthagen, 2017). In California, new state credentialing standards now require mentoring practices that encourage novices to take more ownership of their professional development by identifying their own professional goals and collecting and analysing student evidence of achievement of these goals (California Commission on Teacher Credentialing, 2017). These shifts, though supported by research on teacher learning, may be unfamiliar for some coaches and therefore require support to enact (Aderibigbe et al., 2016, Kersting et al., 2012).

Scheduling challenges and reduced school budgets are leading some schools and universities to turn to video-based observation and coaching protocols (Gröschner et al., 2014, Kraft et al., 2018). Although integrating video into the coaching process shows promise for supporting mentee self-

reflection while addressing the difficulties of scheduling in-person support visits, using video is not a simple solution. One must establish a clear purpose for the collection and analysis of video, the type of clip to be collected, who will collect and edit it, what tools and tasks will accompany discussion of the clip, who will facilitate the discussion and how (Kang & van Es, 2018).

This study explores the use of a video club model to support coaches as they integrate video into their coaching practice. Specifically, we are interested in identifying what participants perceived as benefits and obstacles of using video both with each other in a video club and with their mentees during coaching conversations. We first describe elements of productive coaching practices as well as coaching challenges then review previous video club work with teachers to situate this novel use of the video club structure to support coaching.

Coaching, Induction, and Video as Supports for Teacher Learning

Because experiences in early years of teaching have lasting influence on future practice, coaches play an important role in helping novice teachers develop professional knowledge and skills, while also socializing them into the practice of teaching and the values and practices within a given school culture (Feiman-Nemser, 2001, Hargreaves & Fullan, 2010, Ingersoll & Strong, 2011, Rippon & Martin, 2006). Coaching is distinguished from supervision or mentoring with the main differences being the *intention* behind the interaction (evaluation, instruction, collaboration, stimulation of self-reflection) and therefore, the positionality of each member of the dyad (gatekeeper, expert, or peer) (Costa & Garmson, 2016, Lofthouse et al., 2010, Simkins et al., 2006). Considering the important role of reflection on teacher learning and improving practice, several induction models promote developing a stance of inquiry and reflection to critically analyse teaching and learning rather than focusing on acquiring specific technical skills (Cochran-Smith & Lytle, 2009, Schön, 1987, Stanulis et al., 2019). Coaching, then, can be categorized as a balance between the three dimensions of pragmatic professional development: formal and informal, individual and guided, and directed and teacher identified (Lloyd & Davis, 2018).

However, a variety of challenges can throw what may be intended to be a balanced, pragmatic design into a one that is over-reliant on one teacher learning dimension. These challenges may include: lack of time for sufficiently rich discussion, perceptions of evaluation by those who are coached, and difficulty agreeing on an appropriate grain-size or focus for teaching conversations (Leat et al., 2012). Additionally, some mentees experience feelings of neglect, a lack of freedom to innovate, and of being bullied or 'tormented' by their coach (Hargreaves & Fullan, 2010, Hobson et al., 2009).

Fortunately, coaching, like teaching, can improve with preparation (Hobson et al., 2009, Stanulis et al., 2019). The use of video shows potential in supporting this work. Video enables the capture of a diversity of authentic classroom interactions that can be slowed down, edited and curated for multiple purposes, and viewed multiple times either alone or in groups (Sherin, 2004). It also enables one to see a representation of their practice that is not possible while in the act of teaching, thus 'making one's own practice accessible to oneself,' (Le Fevre, 2004, p. 237). Because of these affordances, video is now used to support teacher learning across disciplines, grades, and continents (Gaudin & Chaliès, 2015). The collaborative analysis of video has resulted in changes in noticing of student thinking and professional vision (Johnson & Mawyer, 2019, Luna & Sherin, 2017, Sherin & van Es, 2009, van Es & Sherin, 2002, Walkoe, 2015), changes in how teachers view and use curricular materials (Wallin & Amador, 2019), and changes in teaching practice (Barnhart & van Es, 2018, van Es & Sherin, 2010).

However, simply watching video together does not ensure lasting learning (Le Fevre, 2004). The structure and focus of a group can determine if a collaboration is seen as a productive opportunity to advance both group knowledge and sense of community or an acrimonious scene for evaluating each other's practice (Borko et al., 2008, Horn & Little, 2010, Lord, 1994, van Es et al., 2020, Zhang et al., 2011). In addition to the decisions about focus, clip selection, and task design (Kang & van Es, 2018) decisions about the roles participants play (logistical coordinator, technical support provider, facilitator, participant) are also consequential (Rich, 2015). Control over video collection is particularly significant because clip features influence the resulting analyses of teaching and learning (Borko et al., 2011, Kang & Anderson, 2015). Clips that provide limited visibility into students' thinking and reasoning offer fewer affordances for productive explorations into the relationship between instruction and learning (Sherin et al., 2009). In many studies, researchers recorded teachers' classrooms and selected a segment to share with the video club group (Jilk, 2016, Sherin & Han, 2004, Walkoe, 2015, Wallin & Amador, 2019) while in others teachers recorded and edited their own video clips (Johnson & Cotterman, 2015, Luna & Sherin, 2017, Sherin & Dyer, 2017, Tripp & Rich, 2012, Youens et al., 2014). Though participants appreciate being able to select their own clips, designers often prefer to shape meeting discussions by selecting clips that feature elements of student thinking and instruction that are closely tied to the purpose of the professional development (van Es et al., 2020, Zhang et al., 2011). Balancing this tension can be challenging for those who design learning environments around the use of classroom video and is often overlooked when studying teacher learning (see Xu & Widjaja, 2018 for exception).

Though the use of video clubs, video observations and virtual coaching to support teaching practice have been in use for several years (Killion, 2012, Smith et al., 2020), the affordances and limitations of video to support the development of *coaching* practice is less clear. Two studies, both involving teacher coaches, examined and reflected on video or transcripts of their coaching sessions reported that viewing their group interactions permitted a deeper exploration of their teaching, coaching, and their metacognition (Charteris & Smardon, 2013) but also remarked about the difficulties they experienced recording coaching conversations (Lofthouse et al., 2010). Tellingly, only 29 coaching conversations were captured on video during the two year study involving thirteen schools. Further, though the mentee teachers had access to their classroom videos prior to their coaching sessions, mentees rarely explicitly referred to video evidence during their observation debriefs with coaches. Despite its potential value to stimulate meaningful reflection, using video to improve coaching remains a challenging venture.

The intervention in this study seeks to explore shifts in coaches' routines for working with teachers using video organized around a video club model. Additionally, we ask what study participants perceive as benefits and obstacles of using video during the first year of implementation.

Study Context, Data, and Methods

The first author, an assistant professor of teacher education and former high school teacher, and second author, a doctoral student in education and current elementary school teacher, worked with the Induction Coordinator from a local suburban school district in California to design a program to introduce video-augmented coaching into the district's induction program. The goal was to address budget constraints related to releasing coaches to conduct in-person classroom support visits for new teachers as well as provide more robust support for coaches' professional development in alignment with the new state induction standards.

This video club design assumes that learning is situated, social, and active (Putnam & Borko, 2000, Wenger, 1999). Just as teachers and coaches learn when they engage in tool-supported dialogue with each other about their work, the same is true for professional developers and participants. This design is also informed by frameworks that seek to balance teachers' catalytic learning needs with the performative demands of the state credentialing agency (Lloyd & Davis, 2018).

Our multi-year project engages a cadre of coaches in monthly video club meetings. The monthly video club meetings are designed to influence participants' coaching practice when they, in turn, help their mentees capture and analyse videos of their own practice over the course of the school year. By engaging in the study of their own coaching, participants will develop a professional coaching community, a professional vision for working with candidates in ways that focus on making connections between content, instruction, and student learning, as well as routines and procedures for collecting, editing, and sharing video.

The authors presented the purpose and design for the video-enhanced coaching project to the entire coaching team at the district's fall orientation meeting. Six induction coaches elected to participate along with the Director of Induction and received stipends for their participation. The coaches varied in both coaching and teaching experience (see Table 1). The group attended five, hour-long video club meetings between January and May. During the first video club meeting, the facilitator selected a classroom video clip and lead the group in brainstorming coaching questions that could be asked to promote the teacher's reflection. In the rest of the video club meetings, coaches brought in their own observation videos and post-observation coaching conversations to discuss with the group. The observations and coaching conversations were between 30-60 minutes long, but the clips selected by coaches to show in the meetings were each less than five minutes. Coaches also consented to a pre-interview conducted in December and a post interview conducted in May. Each interview lasted 30 to 60 minutes. Each coach worked with at least one new teacher during the 2018-2019 school year. All the coaches except for the Induction Director recorded at least one classroom observation or coaching discussion.

****INSERT TABLE 1 HERE****

The pre- and post-interviews were audio recorded and video club meetings were video recorded. Both researchers wrote reflective memos after each video club and interview. The second author took field notes during the video club meetings. Data analysed for this phase of the study included the interview and video club meeting transcripts, as well as the memos and fieldnotes.

Both researchers conducted a typological analysis of the data (Hatch, 2002). We independently coded a subset of the interview transcripts to capture emerging instances of what the coaches identified as benefits and obstacles of using video-augmented coaching and participating in the video club. We compared our initial lists of obstacles and benefits and grouped them into themes such as 'lack of time', 'need for trust', and 'useful feedback'. We returned to the entire data set and categorized the instances from the transcripts according to these themes and organized them into a summary sheet for each coach. We triangulated these themes with the impressions each researcher had captured in their memos and fieldnotes from the video club meetings and interviews to identify confirming and disconfirming examples and resolve any difficult to categorize instances – for example 'having the video helped one to be more organized' and 'being a quasi-administrator made it difficult to gain trust' (Miles & Huberman, 1994). We then conferred to identify common themes across coaches. We shared a summary table of the common themes with the coaches during a Zoom meeting and emailed a copy to

each coach for feedback (Miles & Huberman, 1994). The final themes are reflected in Tables 2 and 3. The next section provides illustrative examples of each theme lifted from the interview transcripts.

Results

Benefits and Obstacles of Participating in a Coaching Video Club

Analysis of the summary sheets revealed three perceived benefits of the video club and three obstacles (see Table 2). Several coaches remarked that participation in the video club gave them the feeling that they were 'all in the same boat' and that they were 'part of a cohort instead of just me and my candidate.' Jasmin described the benefits of showing the classroom video she planned to coach from as well as watching others' coaching videos:

The colleagues in there, they're all brilliant in that room ... When I showed my video there was a lot of, 'how do I say this', 'how do I approach this' kind of thing. Having those conversations really just helped me ... I think that watching her [Suzi's] coaching conversation really impacted me because as soon as we left there it kind of changed the way I coached. So, her first conversation wasn't perfect, even though it really looked perfect to me, it wasn't perfect to her. [I felt] It's gonna be OK. Just knowing that everything doesn't have to be perfect and just grow from all of these experiences. It was a safe place to kind of be like, 'I don't know.'

****INSERT TABLE 2 HERE****

The relationships coaches described establishing with peers in the study supported both their confidence as well as their ability to critique their own practice. Pete mentioned that his relationships with fellow coaches were buoyed by participating in the close study of their coaching in the meetings:

Talking to Jasmin, we wouldn't be having conversations about this unless we did [the video club]. Now that we did it, we've had a few good conversations like, better conversation and it actually got us to open up and talk about our past work experiences. We used to sit in the same office for three years and we never talked about this.

Through the interactions in the video club there emerged a shared sense of purpose and collegiality around coaching with video and coaching in general.

Coaches also mentioned the importance of seeing other ways of coaching and how other coaches worked through challenging situations. Lisa remarked:

There are grumblings among mentor-like people, and they come to trainings and they're like, 'Oh, I know all this, this is a waste of time, I don't need this.' But seeing the practical applications, like seeing those conversations makes way more sense to a teacher brain, I think. It's not just another hoop to jump through. This is actual people doing the actual work using the actual tools they've been given.

Because this type of professional development was more connected to day to day practice the value was more obvious to her.

Several coaches identified enhancing the quality of evidence-based coaching conversations for improving their mentee's teaching as a motivation for participating in the study. But many coaches were surprised by the insights the video club enabled on their personal coaching practice. Pete reflected on the mutual benefits for coaches and mentees:

The teacher learns a lot. But I feel like the coach is like sitting there, with Suzi and Jasmin especially, and like they talk about it, they think about it, and then they're wondering [out loud] how it plays out... it's a win-win. I think a coach really gets a lot out of it.

Likewise, Suzi explained: 'So I feel like I expected it to help improve [my mentee's] instruction and my coaching, but it was really just eye opening on different things that I could work on as a coach.' Coaches expressed very positive impressions about the value using video together had on both their coaching conversations with peers and with each other.

The biggest obstacle to coaches' participation in the video club was time. Several mentioned that the meetings felt too short. This was often compounded by coaches frequently arriving late due to their busy schedules. As the districts' instructional leaders, they were often tasked with multiple responsibilities and often found themselves pulled away from the video club to address emergent situations at their sites. Of the seven participants, only three were able to attend every meeting.

Benefits and Obstacles of Using Video with Mentees

Coaches reported seeing positive changes in the quality of conversations and relationships with their mentees when using video. The coaches felt these improvements resulted in their mentees' professional growth. Viewing video with their mentee afforded a more focused and purposeful conversation. Less time was spent negotiating what happened and instead the pair went into discussing the evidence in front of them. Jasmin mentioned that the video provided a shared 'target that she could talk from.' Karen described how viewing a video with her candidate changed the focus and tone of their conversation:

Before I would just take notes and then you would talk to them, but sometimes you get a look on the face like, there's this disconnect. They really wouldn't get what you're saying. But being able to *show* them is a lot more powerful tool because I'm not exaggerating anything. This is what happened. And it's not good, it's not bad, there's no judgment.

The video served as a shared object of knowledge from which the coach-mentee dyad could engage in intentional analysis about significant moments of instruction.

Reyna, the Induction Program Director, mentioned that she also appreciated that using video focused coaching conversations on understanding the impact instruction had on students in the video and enabled mentees to take more control over their own development:

I think one interesting thing to me that I didn't really expect came out of the conversations is that it really comes back to refocusing people and really thinking about what they saw versus what the next step was. I know that first meeting that I attended we were watching a video that was kind of set up with this teacher struggling a little bit and coaches automatically all went to the fixes, the fixes, the fixes. But thinking about what is there in this video to celebrate? What can be built from? It's not just about

'what's the next thing?' [Mentees] need to know what to see. That's what we're getting from our candidate. And if I'm attuned to what to see I can make better decisions for myself.

The 'attuning' of vision, or what Sherin (2007) refers to as the 'refinement of selective attention', enabled the coach-mentee dyad to engage in productive conversations about teaching and learning based on evidence from the video. It also promoted a focus on building on a mentee's assets rather than focusing on evaluative corrections.

Mentees were not always comfortable with what their refined selective attention helped them to see but coaches mentioned that this discomfort provoked changes in their practice. The video established an objective perspective so the conversation could be about the work rather than the person. As Karen explained, 'the video doesn't have to be diplomatic.' However, many coaches mentioned that it took several months to build enough trust to convince their mentee to record themselves teaching. Luz mentioned that once they finally watched the first video together, it was a transformational moment for her mentee:

I really think that maybe after that video it was when things started to, like when he started to actually *bite* when I was talking to him about things that needed to be done ... He was able to *see* things that he didn't really think [was happening]. Believe me, I was talking to him about it beforehand, you know, I was asking him questions. I think he looked at it and he realized. I could tell by his body language.

Conversations with the video served to help Luz's mentee begin to take ownership of his potential areas for growth and engage in doing the work of improvement.

Even though the video caused some discomfort for the mentees it also opened ways for coaches to offer affirmation. Suzi explained how she approached mentees' discomfort with their video:

I mean they *see* it, and you can see their reaction and I think that was probably the most powerful is seeing them like all of a sudden get a little uncomfortable because they're noticing the things that they know that you're noticing. But then the next powerful point is saying, 'Hey, that happens to everybody. But how great that you're noticing that. And now can do something about it.'

Using the video provided an opportunity to affirm that teaching is not about being perfect but instead about recognizing areas for improvement and deliberately working on them. When both members of the pair were willing to investigate their practice, it regularized the practice and made for a more egalitarian relationship between mentee and coach. For example, Pete discussed a shift in his approach towards his mentee:

When she was watching the video I didn't even ask, she's noticing one thing and I'm noticing something totally different ... Like one of the goals should be to improve coaching but in specifically finding out what the intention is of the teacher and how I can help them mould something to meet their intention.

Coaches also identified challenges with using video with mentees Most of the challenges were logistical. Capturing, editing, and uploading video was time consuming. Even though most coaches and mentees used their personal phones or tablets to record, it was perceived by mentees as 'one more

thing to do.’ Some coaches, to relieve some of the stress of recording, offered to record lessons for their mentees. Lisa described her experience as a first-year teacher at a school and the insights it provided for her mentee’s objections to recording:

We had school cameras that were solely for this purpose and it was stressful because I had to like, get the right angle and do all that stuff. But if it was set up in a way that I knew I didn't have to do anything it would seem less like a burden ... I think [my mentee] felt like she had a lot on her plate. And whereas I thought of it as just me kind of sitting in the back of a classroom videoing her it wouldn't be adding anything, I think she felt it would be more intrusive than it was or than I thought it was.

The strategy of the coach recording for the mentee did not alleviate the stress on Lisa’s candidate nor did it address the scheduling issues in-person observations posed for coaches whose assignments spanned the entire district. But for site-based coaches having mentees record themselves created new entry points for dialogue about practice. Suzi stated:

About halfway through the whole process of doing it I was like, ‘OK.’ I was willing to release kind of my control over it to her and I said, ‘OK, you video yourself.’ And I almost think that worked a little bit better than me being in there videoing and having preconceived notions before even watching the video again.

She elaborated further on the affordances of having mentees drive the process:

Like I said, really letting the teacher kind of guide where we go. Not always having a preconceived notion where I want to take them. Not that it's bad to have that but being flexible. I may want them to go here but they're not quite ready for that. So, let them go where they're comfortable so that they own it and then it lasts longer.

By giving up some control over the topic of the conversations around video, mentees moved from simply *participating* in their professional development to *driving* their professional development. The release of responsibility for capturing video contributed to more mentee agency and a more egalitarian relationship.

Although coaches identified the benefits of increased autonomy for mentees, the quality of mentee-captured video was mentioned as a major problem. The recordings frequently consisted of a stationary camera set up on the side of the classroom making it difficult to adequately see and hear students’ thinking. Coaches reported making the best of them as ‘there was always something to comment on,’ but their comments may not have been tightly related to the goal the coach and mentee agreed upon for the observation cycle. Jasmin described a video captured by her mentee that did not provide the evidence she and her mentee needed to address her mentee’s professional improvement goal:

She took a video herself first and then the angle didn't show, like, she said, ‘Oh yeah, there's a part here where I had to talk to a student because he wasn't doing what he was supposed to be doing but it was off camera.’ And so, I couldn't see him and I couldn't see what the trigger was before the behaviour. So, I couldn't use that.

Though frustrating in the moment, working with examples of less useful video did help clarify for both the coach and mentee what was important to capture for future conversations – an

important learning moment if the mentee were to continue to learn from her practice after induction.

Additionally, many coaches were surprised by how resistant mentees were to video recording due to previous negative experiences in their teacher preparation programs. It was only after having established a trusting relationship with their mentee that some were willing to be recorded. Coaches speculated that these mentees associated video recordings with high-stakes evaluations of their practice rather than supportive coaching opportunities. In several cases, the mentee agreed to video after two face-to-face sessions with their coach. Two coaches reported that their mentee agreed to have their lesson recorded after pointing out that they were also engaging in the same risk by recording their coaching. Suzi elaborated:

I think you also really have to say, 'I'm doing this with you.' If you just do the video of them and don't agree to do the video of your coaching I think that lessens the value, number one, and also doesn't provide that 'Hey, you're gonna feel uncomfortable when you're being videoed. I'm going to feel uncomfortable right there with you and we'll support each other through it.'

Similarly, Luz disclosed her discomfort recording herself coaching with her mentee and described the shift it caused in their relationship:

Maybe it was like, you know, a little vulnerability that came through on my part by talking to him about the video thing and telling him 'This kind of makes *me* nervous. I'm like not super comfortable being recorded.' You know? I'm not really sure but something happened after that that really opened the door a little bit more to him being more willing to listen.

Although the reluctance and discomfort with using video posed obstacles for mentees, conversations about being vulnerable and encouraging mentees to take on the responsibility, and therefore control over what was being recorded did yield benefits for the coaching relationship and the mentees' teaching practice.

Discussion

This study explored two uses of video: coaches' use with mentees and coaches' use with other coaches. Our results indicate that the coaching video club supported coaches in some similar ways teacher video clubs supported teachers. The collaboration around problems of coaching practice permitted the development of a professional community of practice among coaches and between coaches and their mentees (Borko et al., 2010, Goodwin, 1994). Analysing video together permitted rich conversations around a shared object of focus that equalized the experience of all participants (Hollingsworth & Clarke, 2017). This was true of both coaches' conversations with mentees and coaches' conversations with each other (Lofthouse et al., 2010). The coaches noticed features of their own coaching practice in the videos that they would not have noticed otherwise and benefitted from what others noticed as well so they could 'break set' and engage in dialogue about potential changes in teaching and coaching practice (Charteris & Smardon, 2013, Putnam & Borko, 2000, Zhang et al., 2011). The video club enabled them to highlight and reason about their practice and begin to develop a shared discourse about their work (Sherin & van Es, 2009).

Moving towards a more critical dialogue with mentees was a recurring theme in the data and a challenging aspect for coaches. Though many expressed wanting to push their mentees' thinking and practice they also voiced concerns about endangering their relationship by pushing too hard (Lofthouse et al., 2010). Although coaches understood the value of non-evaluative, or non-judgmental approaches to observation in order to develop trust and build a rapport with their teachers, it was nevertheless difficult for them to release the responsibility for noticing problems of practice, or identifying areas of focus, to their mentees (Leat et al., 2012). Though video clip quality is consequential for noticing of student thinking (Sherin et al., 2009), the act of recording, editing, and determining the direction of conversations also influences mentee agency and the quality of their self-reflection (Youens et al., 2014).

These tensions are potentially worrisome because the initial motivation to incorporate video in this study was to permit *remote* coaching. If face to face mentorship to establish a trusting relationship is required, the resource-saving benefit of video coaching is reduced. Some obstacles shared by coaches could be mitigated by establishing new routines of practice. If the initial investment of time to develop a relationship and routines for capturing and editing video results in more focused and productive coaching meetings later in the semester, initial face to face visits during which the coach records or assists with recording to apprentice mentees into this practice may be a worthwhile trade-off. Not only would this reduce mentee anxiety, but it would model the type of video that is ideal for productive analysis.

Another adjustment that can be strategically and incrementally shifted from coach to mentee is identifying clips within the video for analysis. Some coaches asked their mentees to view the video before their meeting and others did not. Most coaches reported selecting the segments of the video to watch or were consistently the ones to pause the video to ask a question with their mentee rather than encouraging the mentee to select noteworthy moments for discussion. These choices potentially shifted the dynamic in ways that positioned the coaches as evaluators rather than supportive peers (Costa & Garmson, 2016, Kim & Silver, 2016, Leat et al., 2012). Explicitly shifting the responsibility to both record and note moments in the video for further exploration to mentees over time can result in a collection of artifacts that provide valuable insights into what mentees find noteworthy of discussion in their classroom interactions over the entire induction period (Kang & Anderson, 2015, McDonald & Rook, 2015, Sherin et al., 2008).

The purpose of this study was to ascertain how coaches perceived video could be useful for their coaching practice. In this first phase of regularizing the use of video as a part of inquiry into practice the focus was primarily on establishing a sense of community among the participating coaches and working out how video could work into their existing routines and district culture. In this way, the video club design was intended to be 'pragmatic' – one that balanced teacher autonomy with the performative nature of state credentialing standards (Lloyd & Davis, 2018). Coaches chose video club goals as well as what clips to view. The first author facilitated conversations around how to document what the coaches were learning about how best to use video into tools such as forms and questioning stems to support their ongoing work with mentees. The emphasis was not on developing strict procedures but to capture coaching concepts developed by the group. The research team's decision to avoid focused discussions about specific coaching moves and approaches was an intentional one – being too directive can undermine coach autonomy and engagement, minimize long-term impacts of professional development, and be prohibitively disruptive to flow (Janssen et al., 2013, Kennedy, 2016, 2019). Working through the logistics of implementing video into coaching practice dominated early video club meetings (Kang & van

Es, 2018) but permitting this time empowered this group of coaches and in turn may have led to their decisions to release responsibility to their mentees.

The focus of the next phase of the video-augmented coaching program will include an increased focus on the types of strategic questions coaches ask, how to involve mentees in the recording and selection of video segments to increase their sense of autonomy in the process and investigating what type of dialogue results from these changes. Because the strategic learning of the coaches has been captured in coaching tools they developed, we suspect other coaches will find integrating video use less disruptive as it is already aligned with the culture and routines of the district. Because these tools were designed internally, they may be perceived as more a product of teacher agency rather than an external mandate. Additionally, the decisions the coaching team continues to make about tools and routines for capturing and discussing video will reveal what features of classroom interactions they deem worthy of highlighting and what forms of knowledge-based reasoning they can engage in (Sherin & van Es, 2009).

Conclusion

To date, the impact of video clubs has largely focused on groups of teachers analysing their classroom practice. Our findings indicate that the affordances of video clubs were similarly experienced by coaches in a video club model and represented a pragmatic form of professional development. In our view, the coaches' willingness to model vulnerability in the professional development setting contributed to their awareness of the coaching moves in their conversations with mentees. Video artifacts provided coaches with the opportunity to investigate their own language and interactions with mentees. The flexibility and adaptability of video artifacts has implications for professional learning contexts. Using video to capture authentic, in-process, in-the-moment strategies of coaches can inform the design of professional learning programs that aim to disrupt traditional coaching and classroom practices while preserving teacher autonomy.

Further, the barriers to recording and managing video as well as identifying segments that suggested opportunities for teacher growth created an opening for coaches to adopt a learner stance. In other words, the challenges inherent in early implementation of video-based artifacts for professional learning caused a shift in the coaches' perspectives. Mistakes were allowed and normalized. Risk-taking and vulnerability were common themes that illustrated how coaches sought to disrupt the comfortability of classical professional development workshops. As researchers, we adopted a flexible approach in response to the needs of coaches to build a community of practice centred on coaching. We navigated between coaches using video to support teachers to coaches using video to support each other. Specifically, problem-solving with video promoted discussions about coaching alongside issues of pedagogy and professional vision. So, while traditional professional development focuses on *delivering* content to teachers, video-based artifacts can become an opportunity to learn *with* teachers and coaches.

Research has shown that using video of classroom practice can shed light on the complex interactions between teachers and students. Further exploration of how video might help us to understand coaching contexts and processes is needed. The video club structure holds promise for this work. By analysing encounters between coaches and teachers and coaches and each other, we can gain insight into an understudied, yet crucial aspect, of the work of improving teaching.

References

- Aderibigbe, S., Colucci-Gray, L., & Gray, D. S., 2016. Conceptions and expectations of mentoring relationships in a teacher education reform context. *Mentoring and Tutoring: Partnership in Learning*, 24 (1), 8–29. <https://doi.org/10.1080/13611267.2016.1163636>
- Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y., & Sligte, H., 2019. Schools as professional learning communities: What can schools do to support professional development of their teachers? *Professional Development in Education*, 1–15. <https://doi.org/10.1080/19415257.2019.1665573>
- Barnes, G., Crowe, E., & Schaefer, B., 2007. The cost of teacher turnover in five states: A pilot study. *National Commission on Teaching and America's Future*, Washington, D.C.
- Barnhart, T., & van Es, E. A., 2018. Leveraging analysis of students' disciplinary thinking in a video club to promote student-centered science instruction. *Contemporary Issues in Technology and Teacher Education*, 18 (1), 50–80.
- Borko, H., Jacobs, J., Eiteljorg, E., & Pittman, M. E., 2008. Video as a tool for fostering productive discussions in mathematics professional development. *Teaching and Teacher Education*, 24 (2), 417–436. <https://doi.org/10.1016/j.tate.2006.11.012>
- Borko, H., Jacobs, J. K., & Koellner, K., 2010. Contemporary approaches to teacher professional development. *International Encyclopedia of Education*, 7 (2), 548–556. <https://doi.org/10.1016/B978-0-08-044894-7.00654-0>
- Borko, H., Koellner, K., Jacobs, J., & Seago, N., 2011. Using video representations of teaching in practice-based professional development programs. *ZDM - International Journal on Mathematics Education*, 43 (1), 175–187. <https://doi.org/10.1007/s11858-010-0302-5>
- California Commission on Teacher Credentialing, 2017. *Teacher induction program preconditions and program standards*. October 2016.
- Charteris, J., & Smardon, D., 2013. Second look - second think: A fresh look at video to support dialogic feedback in peer coaching. *Professional Development in Education*, 39 (2), 168–185. <https://doi.org/10.1080/19415257.2012.753931>
- Cochran-Smith, M., & Lytle, S., 2009. *Inquiry as stance*. Teachers College Press.
- Costa, A. L., & Garmson, R. J., 2016. *Cognitive coaching: Developing self-directed leaders and learners* (3rd ed.). Rowman & Littlefield.
- Darling-Hammond, L., 2010. Recruiting and retaining teachers: Turning around the race to the bottom in high-need schools. *Journal of Curriculum and Instruction*, 4 (1), 16–32. <https://doi.org/10.3776/joci.2010.v4n1p16-32>
- Feiman-Nemser, S., 2001. From preparation to practice: designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103 (6), 1013–1055. <https://doi.org/10.1111/0161-4681.00141>
- Gaudin, C., & Chaliès, S., 2015. Video viewing in teacher education and professional development: A literature review. *Educational Research Review*, 16, 41–67. <https://doi.org/10.1016/j.edurev.2015.06.001>
- Goodwin, C. 1994. Professional Vision. *American Anthropologist*, 96 (3), 606–633. <https://doi.org/10.1525/aa.1994.96.3.02a00100>

- Gray, L., & Taie, S., 2015. Public school teacher attrition and mobility in the first five years: Results from the first through fifth waves of the 2007—08 beginning teacher longitudinal study. In *National Center for Education Statistics*.
- Gröschner, A., Seidel, T., Pehmer, A.-K., & Kiemer, K., 2014. Facilitating collaborative teacher learning: The role of “mindfulness” in video-based teacher professional development programs. *Gruppendynamik Und Organisationsberatung*, 45 (3), 273–290. <https://doi.org/10.1007/s11612-014-0248-0>
- Hargreaves, A., & Fullan, M., 2010. Mentoring in the new millennium. *Theory Into Practice*, 39 (1), 50–56. <https://doi.org/10.1207/s15430421tip3901>
- Hatch, J. A., 2002. *Doing qualitative research in education settings*. State University of New York Press.
- Haynes, M., Maddock, A., & Goldrick, L., 2014. On the path to equity: Improving the effectiveness of beginning teachers. In *Alliance for Excellent Education* (Issue July).
- Hobson, A. J., Ashby, P., Malderez, A., & Tomlinson, P. D., 2009. Mentoring beginning teachers: What we know and what we don't. *Teaching and Teacher Education*, 25 (1), 207–216. <https://doi.org/10.1016/j.tate.2008.09.001>
- Hollingsworth, H., & Clarke, D., 2017. Video as a tool for focusing teacher self-reflection: supporting and provoking teacher learning. *Journal of Mathematics Teacher Education*, 20 (5), 457–475. <https://doi.org/10.1007/s10857-017-9380-4>
- Horn, I. S., & Little, J. W., 2010. Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. *American Educational Research Journal*, 47 (1), 181–217. <https://doi.org/10.3102/0002831209345158>
- Ingersoll, R. M., & Smith, T. M., 2004. Do teacher induction and mentoring matter? *NASSP Bulletin*, 88 (638), 28–40. <https://doi.org/10.1177/019263650408863803>
- Ingersoll, R. M., & Strong, M., 2011. The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of Educational Research*, 81 (2), 201–233. <https://doi.org/10.3102/0034654311403323>
- Janssen, F., Westbroek, H., & Doyle, W., 2013. How to make innovations practical. *Teachers College Record*, 115 (July 2013), 1–43.
- Jilk, L. M., 2016. Supporting Teacher Noticing of Students' Mathematical Strengths. *Mathematics Teacher Educator*, 4 (2), 188. <https://doi.org/10.5951/mathteduc.4.2.0188>
- Johnson, H. J., & Cotterman, M. E., 2015. Developing preservice teachers' knowledge of science teaching through video clubs. *Journal of Science Teacher Education*, 26 (4), 393–417. <https://doi.org/10.1007/s10972-015-9429-0>
- Johnson, H. J., & Mawyer, K. K. N., 2019. Teacher candidate tool-supported video analysis of students' science thinking. *Journal of Science Teacher Education*, 30 (5), 528–547. <https://doi.org/10.1080/1046560X.2019.1588630>
- Kang, H., & Anderson, C. W., 2015. Supporting preservice science teachers' ability to attend and respond to student thinking by design. *Science Education*, 99 (5), 863–895. <https://doi.org/10.1002/sce.21182>

- Kang, H., & van Es, E. A., 2018. Articulating Design Principles for Productive Use of Video in Preservice Education. *Journal of Teacher Education*, 70 (3), 237–250.
<https://doi.org/10.1177/0022487118778549>
- Kennedy, M. M., 2016. How does professional development improve teaching? *Review of Educational Research*, 86 (4), 945–980. <https://doi.org/10.3102/0034654315626800>
- Kennedy, M. M., 2019. How we learn about teacher learning. *Review of Research in Education*, 43 (1), 138–162. <https://doi.org/10.3102/0091732X19838970>
- Kersting, N. B., Givvin, K. B., Thompson, B. J., Santagata, R., & Stigler, J. W., 2012. Measuring usable knowledge: Teachers' analyses of mathematics classroom videos predict teaching quality and student learning. *American Educational Research Journal*, 49 (3), 568–589.
<https://doi.org/10.3102/0002831212437853>
- Killion, J., 2012. Coaching in the K-12 context. In S. J. Fletcher & C. A. Mullen (Eds.), *The SAGE handbook of mentoring and coaching in education*. Sage, 273–294.
- Kim, Y., & Silver, R. E., 2016. Provoking reflective thinking in post observation conversations. *Journal of Teacher Education*, 67 (3), 203–219. <https://doi.org/10.1177/0022487116637120>
- Korthagen, F., 2017. Inconvenient truths about teacher learning: towards professional development 3.0. *Teachers and Teaching: Theory and Practice*, 23 (4), 387–405.
<https://doi.org/10.1080/13540602.2016.1211523>
- Kraft, M. A., Blazar, D., & Hogan, D., 2018. The effect of teacher coaching on instruction and achievement: A meta-analysis of the causal evidence. *Review of Educational Research*, 88 (4), 547–588. <https://doi.org/10.1017/CBO9781107415324.004>
- Le Fevre, D. M., 2004. Designing for teacher learning: Video-based curriculum design. In J. Brophy (Ed.), *Using Video in Teacher Education*. Elsevier, 235–258.
- Leat, D., Lofthouse, R., & Towler, C., 2012. Improving coaching by and for school teachers. In S. J. Fletcher & C. A. Mullen (Eds.), *The SAGE handbook of mentoring and coaching in education*. Sage, 43–58.
- Lloyd, M., & Davis, J. P., 2018. Beyond performativity: a pragmatic model of teacher professional learning. *Professional Development in Education*, 44 (1), 92–106.
<https://doi.org/10.1080/19415257.2017.1398181>
- Lofthouse, R., Leat, D., & Towler, C., 2010. *Coaching for teaching and learning: A practical guide for schools*. CfBT Education Trust.
- Lord, B., 1994. Teachers' professional development: Critical collegueship and the role of professional communities. In N. Cobb (Ed.), *The Future of Education: Perspectives on National Standards in America*. College Entrance Examination Board, 175–204.
- Luna, M. J., & Sherin, M. G., 2017. Using a video club design to promote teacher attention to students' ideas in science. *Teaching and Teacher Education*, 66, 282–294.
<https://doi.org/10.1016/j.tate.2017.04.019>
- McDonald, S., & Rook, M. M., 2015. Digital video analysis to support the development of professional pedagogical vision. In B. Calandra & P. J. Rich (Eds.), *Digital video for teacher education*. Routledge,

21–35.

- Miles, M. B., & Huberman, A. M., 1994. *Qualitative Data Analysis* (2nd ed.). Sage.
- Putnam, R. T., & Borko, H., 2000. What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29 (1), 4–15.
<https://doi.org/10.3102/0013189X029001004>
- Rich, P., 2015. Examining the role of others in video self-analysis. In B. Calandra & P. J. Rich (Eds.), *Digital video for teacher education*. Routledge, 71–88.
- Schön, D. A., 1987. *Educating the reflective practitioner*. Jossey-Bass.
- Schwille, S. A., 2008. The professional practice of mentoring. *American Journal of Education*, 115 (1), 139–167. <https://doi.org/10.1086/590678>
- Sherin, M. G., 2007. The development of teachers' professional vision in video clubs. In R. Goldman, R. Pea, B. Barron, & S. J. Derry (Eds.), *Video research in the learning sciences*. Routledge, 383–395.
- Sherin, M. G., 2004. New perspectives on the role of video in teacher education. In J. Brophy (Ed.), *Using video in teacher education*. Elsevier, 1–28.
- Sherin, M. G. & Dyer, E. B., 2017. Mathematics teachers' self-captured video and opportunities for learning. *Journal of Mathematics Teacher Education*, 20 (5), 477–495.
<https://doi.org/10.1007/s10857-017-9383-1>
- Sherin, M. G. & Han, S. Y., 2004. Teacher learning in the context of a video club. *Teaching and Teacher Education*, 20 (2), 163–183. <https://doi.org/10.1016/j.tate.2003.08.001>
- Sherin, M. G., Linsenmeier, K. A., & van Es, E. A., 2009. Selecting video clips to promote mathematics teachers' discussion of student thinking. *Journal of Teacher Education*, 60 (3), 213–230.
<https://doi.org/10.1177/0022487109336967>
- Sherin, M. G., Russ, R. S., Sherin, B. L., & Colestock, A. A., 2008. Professional Vision in Action: An Exploratory Study. *Issues in Teacher Education*, 17 (2), 27–46.
- Sherin, M. G. & van Es, E. A., 2009. Effects of Video Club Participation on Teachers' Professional Vision. *Journal of Teacher Education*, 60 (1), 20–37. <https://doi.org/10.1177/0022487108328155>
- Simkins, T., Coldwell, M., Caillau, I., Finlayson, H., & Morgan, A., 2006. Coaching as an in-school leadership development strategy: Experiences from leading from the middle. *Journal of In-Service Education*, 32 (3), 321–340. <https://doi.org/10.1080/13674580600841901>
- Smith, A., Meetze-Hall, M., Walters, K., & Arnold, B. J., 2020. Utilizing video mentoring to support policy and practice in K-12 and higher education. *The CTE SPAN 2020 Research Monograph*, 109–118.
- Timperley, H., 2008. *Teacher professional learning and development*. International Academy of Education.
- Tripp, T., & Rich, P., 2012. Using video to analyze one's own teaching. *British Journal of Educational Technology*, 43 (4), 678–704. <https://doi.org/10.1111/j.1467-8535.2011.01234.x>
- van Es, E. A., & Sherin, M. G., 2002. Learning to notice: Scaffolding new teachers' interpretations of classroom interactions. *Journal of Technology and Teacher Education*, 10 (4), 571–596.

- van Es, E. A., & Sherin, M. G., 2010. The influence of video clubs on teachers' thinking and practice. *Journal of Mathematics Teacher Education*, 13 (2), 155–176. <https://doi.org/10.1007/s10857-009-9130-3>
- van Es, E. A., Tekkumru-Kisa, M., & Seago, N., 2020. Leveraging the power of video for teacher learning. In *International handbook of mathematics teacher education, Volume 2*. Springer, 1–32. https://doi.org/10.1163/9789004418967_002
- Walkoe, J., 2015. Exploring teacher noticing of student algebraic thinking in a video club. *Journal of Mathematics Teacher Education*, 18 (6), 523–550. <https://doi.org/10.1007/s10857-014-9289-0>
- Wallin, A. J., & Amador, J. M., 2019. Supporting secondary rural teachers' development of noticing and pedagogical design capacity through video clubs. *Journal of Mathematics Teacher Education*, 22 (5), 515–540. <https://doi.org/10.1007/s10857-018-9397-3>
- Wang, J., Odell, S. J., & Schwille, S. A., 2008. Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59 (2), 132–152. <https://doi.org/10.1177/0022487107314002>
- Wenger, E., 1999. A social theory of learning. In *Communities of practice: Learning, meaning, and identity*. Cambridge University Press, 3–13.
- Xu, L., & Widjaja, W., 2018. *Seeing Through the Eyes of the Teacher ? Investigating primary school teachers ' professional noticing through a video-based research methodology Seeing Through the Eyes of the Teacher ? Investigating primary school teachers ' professional noticing throug. July*. <https://doi.org/10.1080/1743727X.2018.1499016>
- Youens, B., Smethem, L., & Sullivan, S., 2014. Promoting collaborative practice and reciprocity in initial teacher education: Realising a “dialogic space” through video capture analysis. *Journal of Education for Teaching*, 40 (2), 101–113. <https://doi.org/10.1080/02607476.2013.871163>
- Zhang, M., Lundeberg, M., Koehler, M. J., & Eberhardt, J., 2011. Understanding affordances and challenges of three types of video for teacher professional development. *Teaching and Teacher Education*, 27 (2), 454–462. <https://doi.org/10.1016/j.tate.2010.09.015>

Table 1*Coaching Video Club Participants' Previous Professional Experience*

Coach	Formal coaching experience	Classroom teaching experience	Video club meetings attended	Video observations recorded	Coaching conversations recorded
Pete	3 rd year (special assignment)	Secondary Mathematics, 18 years	3	2	1
Karen	6 th year (special assignment)	Special Education, Secondary ELA, 10 years	4 [†]	2	0
Suzi	7 th year (special assignment)	Elementary 7 years	5* [†]	3	3
Lisa	1 st year (added assignment)	Secondary Spanish 7 years	3	0	1
Luz	3 rd year (special assignment)	Secondary Social Science and ELA, 13 years	5	3	0
Jasmin	8 th year (5 added assignment, 3 special assignment)	Elementary, 14 years	5 [†]	3	0
Reyna	11 th year (6 special assignment, 5 administration)	Elementary, 16 years	3	0	0

Note. Bold denotes the Director of Induction Program. * indicates the coach shared a coaching conversation video. † indicates the coach shared a mentees' classroom video.

COACHES' EXPERIENCES WITH A VIDEO CLUB

Table 2*Coaches' Perceived Benefits and Obstacles of Participating in a Coaching Video Club*

Benefits
Promotes the feeling of a cohort
Affirms that it is OK to struggle and be vulnerable
Provides examples of how others coach
Provides opportunities for feedback and advice
Provides opportunities to hear oneself coach and reflect on one's coaching
Obstacles
Must be a feeling of safety and a willingness to be vulnerable
Video club meetings were too short
Meetings are difficult to schedule to accommodate everyone's schedules

Table 3*Coaches' Perceived Benefits and Obstacles of Using Video with Mentees*

Benefits
Provides an objective third point
Promotes more focused and purposeful coaching conversations
Provides opportunities for mentees to see the classroom from a different perspective
Provides opportunities for mentees to see models of what is possible with their students
Provokes enough discomfort to stimulate change in practice
Provides evidence of professional growth over time
Obstacles
Capturing, editing, and uploading video is logistically challenging
There is not enough time to watch the video, select and analyze segments, and debrief
Video is intimidating and seeing as evaluative to mentees, there is a reluctance to record
Video is seen as "one more thing to do" for new teachers who are already at their limit
Building trust takes time and face to face relationships