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# A Teachers' Guide to Video Club and Other Tips for Professional Development

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Acknowledging that our professional development (or methods course) was not going as well as we had hoped was difficult. However, knowing what to do and correcting the problem was even more challenging. This article explains how we engaged teachers in helping us rethink our video club by listening to and acting on their ideas. Through "coffee chats" with teachers during our video club professional development, we received advice on what (and how) to change and what to keep. That advice led to a guide to future video clubs and principles for professional development.

**Keywords:** Professional development; Video club; Teacher voice

Imagine you are sitting in a coffee shop and overhear a table of teachers next to you talking about professional development (PD) in which they are participating. From the tidbits you pick up, it is apparent that the PD includes a video club, and the teachers are sharing what they liked and did not like about it. You are struck by one teacher's comment about watching videos focused on the students in their class. She says, "When we're circulating, sometimes you just hear noise. But it's not noise. They're talking, and they're talking about math. So that was amazing to me." You pretend to continue your work, but instead listen in on their conversation and realize that if mathematics teacher educators offered teachers more opportunities to share their perspectives, we would do a better job supporting them. When we are simultaneously facilitating PD (or teaching methods) and conducting research, we often face a dilemma about doing the things we assume are best for teachers versus doing the things that will contribute to our research. We suggest not only that allowing teachers to share their insights on what is best for them, but also that letting teachers tell us what is best for them, will lead to better PD and research. As mathematics teacher educators, we often deliberate over

our agendas/plans for PD or syllabi for methods courses to provide the best for our teachers (see for example Amidon et al., 2023; Martinez Hinestroza et al., 2024). That means continuously revisiting the literature and reflecting on our experiences to be better educators. We were faced with this situation in our research project as we planned for the video club component of our PD. Our first few sessions with the teachers did not go as well as we had hoped, so we revisited the literature and reached out to colleagues who were experts in the area to get advice. On the basis of what we read and heard, we made another round of revisions to our structure but remained frustrated by the outcome; were we doing something wrong, or were our expectations too high? We wondered what would happen if we paused our research for a minute, asked the teachers for their suggestions to improve PD (and video club in particular), and then listened to that advice and changed how we approached PD. We took that first step last summer and started our mornings with a "coffee chat," where we sat with groups of 2–3 teachers and asked them about their experiences with our video club, our PD, and PD in general. What we heard from them is shared below in the form of an advice column. We recognize this is a non-traditional format, with our findings coming first, but our decision to do so is based on our desire to elevate our teachers' voices by bringing them to the front. Using narrative inquiry, we analyzed the transcripts from our coffee chats to construct the advice column, representing the collective voices of the teachers with whom we worked. On the basis of this advice, we then offer a teachers' guide to a video club and design principles for PD, which we compare to what is currently in the literature.

# **Findings**

The following advice column makes recommendations (from teachers to facilitators of PD) about PD in general and video club PD in particular. The general advice attends to things teachers need from PD for it to be effective, how to balance various content and activities in PD, and what does not work in PD. The advice about video club PD includes suggestions for getting started, when to bring in videos of teachers (rather than students), and setting goals. From the advice below, we will provide a list of dos and don'ts for PD in the discussion section, as well as an **Appendix** with a suggested structure for video club. This **Appendix** shows how we planned video club for this year with the teachers whose advice guided its design.



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### **Advice for PD Generally**

#### Dear Teachers,

We are in the process of planning PD for next year. We have our own ideas about what worked well this year and what we want to do again, but we know you experienced it firsthand. What ideas do you have for us?

#### Signed, Planning

#### Dear Planning,

PD should be practical and provide us with ideas, advice, suggestions, and choices. We want flexibility to skip over things that aren't applicable to us and spend more time doing things we care about or are engaged in. If we are "nerding out" over something, don't stop us and move on to the next topic. Give us time to think, talk, and grapple with ideas. Part of this also includes giving us breaks. Lots of breaks. And we need food and drinks and don't forget the chocolate. We need balance when it comes to learning new things. Plus, the breaks give us time to talk with each other, build relationships, and learn about each other. While we have been teaching alongside each other for years, we got to know about our families, our hobbies, and even got to meet our dogs during these times.

#### Dear Teachers,

We are constantly challenged trying to decide how much time to spend on the math content and how much time to spend letting you engage in activities.

#### Signed, Balancing Act

#### Dear Balancing,

Another aspect that makes PD memorable is the opportunity to try things out. As we got to play games, we thought of ways to use these activities in our classrooms. Try to balance the content you share with other things like engaging with materials, doing hands-on activities, and, most importantly, planning for how we will use these ideas to modify our lessons. You asked us what the most valuable aspect of PD was, and while we unanimously felt that planning future lessons based on what we learned was the most crucial aspect, we agreed that playing and learning new content also benefited our learning. Sometimes we want to hear about new approaches to teaching, and sometimes we want to play. Balance is key when it comes to PD.

#### Dear Teachers,

There are many kinds of PD: some are offered by the school or district, and others are more focused PD experiences that include facilitators (like us) who are doing PD as part of a research project. Thinking about any PD you've experienced, what doesn't work for you?

#### Signed, Avoiding Bad PD

#### Dear Avoiding,

When PD is too generic, we lose interest; we don't listen, and you'll notice us checking our watches and waiting for it to end. That means whole school PDs don't usually work for us, and we can tell when it's filler to get in our PD hours. We also don't like getting called out in PD—the ones where you're forced to go around and share are uncomfortable. It should be more of a conversation, which is when we're more open to sharing. And it shouldn't always be just about the content. When we've done things like play games or just get to know each other, it makes it a lot more comfortable.

#### **Video Club Advice**

#### Dear Teachers,

When we first started video club on this project, we felt there was some resistance on your part. Do you have some ideas about what could make it easier to start video club?

#### Signed, At a Loss

#### Dear Lost,

One thing that was difficult, but did impact what we learned, was watching the videos of our own teaching. We were nervous at first to have our teaching on display. We didn't like the idea that our colleagues would watch us mess up, evaluate our teaching, or think about what we could have done better. It's true that we work together and know each other already, but the idea was still daunting. So, sharing videos with just the children in small groups when we weren't present is the best way to start. Another thing that helped was knowing how we would talk about the videos; it was helpful to have prompts because we were a little uncomfortable. At first, we wanted to know what we should be looking for and what we should be talking about. Don't worry, it got easier to watch videos of our teaching, but don't start there.

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#### Dear Teachers,

We noticed over time that you seemed more engaged in video club and willing to discuss your own teaching practices. We had our own ideas about what you would get from watching each other's videos, but what did you learn from this?

#### Signed, Wondering About Your Learning

Dear Wondering,

We found watching videos very valuable for our own learning and to gather ideas as we watched video of other teachers. Video club became a place for reflection and thinking, but also became a place of pride as we shared techniques for keeping children engaged and helping them learn. After watching how our colleagues teach the same lesson in different ways, we were able to imagine going back to the lesson and doing it differently to support our students. It was also valuable to see how our partner teachers worked with students – we learned new strategies they used with particular students that we could try. What started as something terrifying became something that really impacted our teaching and professional learning.

#### Dear Teachers,

We had goals in mind when we showed you videos of the students engaged in playful math, but we are wondering what you got out of it.

#### **Signed Curious**

#### Dear Curious,

The best part of watching videos was seeing what the students did when we weren't there. We were impressed and even surprised. We were amazed that some students who didn't seem engaged when we were teaching were very engaged during center playtime. It was validating to see that our students were so engaged in math. We hope that will make us more flexible and comfortable with letting the students work on their own. We saw that when we let them work without us hovering, there was evidence of learning; when they were making up their own games, they were still doing math. So, when we are walking around and see a student who looks like they're not doing what they're supposed to, we hope we can remember that, in their own way, they are. We see them being more curious and not just shutting down. A lot of us are from an entirely different generation, and the way we learned math was drill, drill, drill, drill, and rote memory. And so, it was really hard to get used to the idea of students learning when they were playing and having that freedom to explore. But it was good. And being able to watch them do that was very helpful. A big takeaway for us with video club is that it was validating – it validated that students were learning during playful math, that students were learning when they were working on their own, and that we were doing a good job teaching.

We turn now to the literature that informed our PD and this manuscript. We will then describe our methodology; offer a discussion of the findings presented above in the form of the teachers' guide to video club and teachers' principles for PD; and conclude with implications and further considerations.

### **Professional Development Best Practices**

The importance of teacher voice has never been more critical than in the current environment where state and local laws are de-professionalizing teaching and stripping teachers of their autonomy. This is especially true in our current era of positivistic accountability measures, where teachers are often incentivized to undermine humanistic and responsive approaches to teaching in favor of meeting high-stakes testing goals (Horn, 2018). Instead of elevating their expertise, teachers are more often pressured to narrow their curricular and pedagogical approaches to mirror the format of testing or other evaluative measures (Palmer & Rangel, 2011). To counter this, we build on Hawley and Valli's (2013) design principles to incorporate what teachers say they need and want from PD.

While quite a bit is known about high-quality and effective PD (e.g., Borko et al., 2010; Hawley & Valli, 2013; Horn & Garner, 2022; Ping et al., 2018), research on PD needs more work that focuses on teachers' perspectives and experiences (Sancar et al., 2021; Schindler et al., 2021). We draw on the work of Sancar, Atal, and Deryakulu to define PD as a hybrid process that views teachers as lifelong learners in the process of accumulating skills, professional knowledge, and personal qualities (we also include video club as a type of PD). This holistic view of PD extends beyond the workshops and activities in which teachers participate. We view teachers as professionals who enter the field with ideas, knowledge, passion, and a plethora of experiences that impact what and how they participate in professional learning experiences. These values are evident in our efforts to elicit their feedback on best practices for PD. In the sections that follow, we highlight (a) the current shift to integrate both content and lasting professional learning communities in PD; (b) what is known about effective PD; and (c) what is known about effective video clubs.

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# **Integrating Both Content and Professional Learning Communities**

There has been a shift in PD to move beyond only providing teachers with a set of activities to take up and implement in their classrooms (Borko et al., 2010; Sancar et al., 2021). Instead, a holistic or contemporary approach to PD focuses on building capacity in various formats and viewing teachers as professionals and lifelong learners. This happens through a co-design process with teachers with the goal of supporting practice and long-term knowledge (Borko et al., 2010). The co-design process we engaged in through the coffee chats is an example of the holistic approach these researchers call for. Moreover, the teachers' advice that PD should be both relevant and provide flexibility aligns with what other scholars are calling for.

Holistic PD also includes building capacity for lasting learning communities (Borko et al., 2010; Hawley & Valli, 2013). Involving teacher input and supporting community building are central to designing PD programs that are effective, relevant, and long- lasting (Sancar et al., 2021). We know that teachers are justifiably skeptical of how they are asked to perform in classrooms, whether from a curricular or administrative perspective, and regularly consider the complexity involved in aligning these various demands to the specific needs of their classrooms (McDuffie et al., 2017). However, teacher agency is often impeded by their own sense of authority and expertise (Remillard, 2005). In our work, we aim to center teachers' experiences and opinions as we move toward this holistic view of PD. Our teachers' advice about the need for flexibility and balance exemplifies this.

#### **Effective PD**

Hawley and Valli (2013) synthesized a decade of research and identified a set of design principles for learner-centered PD. Similarly, Borko, Jacobs, and Koellner (2010) developed characteristics of high-quality PD. These reviews suggest that the most effective PD incorporates the following with respect to students, teachers, and structure.

Students. In planning content to be offered, PD should consider expectations for student performance, have goals for student learning, and reflect what students are meant to learn (Hawley & Valli, 2013). In their advice related to the video club, the teachers described how watching videos of their students opened their eyes to the possibilities for learning in play. Further, in our coffee chat sessions, we listened to how teachers' involvement with PD impacted their students' learning and experiences with playful mathematics throughout the school year. We also asked teachers to reflect on aspects of teaching

and learning that are commonly overlooked during PD when it comes to enacting pedagogical approaches with students in real time.

**Teachers.** PD should be part of teachers' everyday work; provide an experience where teachers can develop understanding and reflect on the skills and knowledge they are learning; and include teachers in the design of PD to identify what and how they will learn (Hawley & Valli, 2013). The first two aspects are highlighted in the advice the teachers provided: They want relevant PD that supports them in modifying and planning lessons and working with students. The third aspect is reflected in the way we framed our own coffee chat sessions as an opportunity for teachers to provide advice to future educators participating in the larger project, as well as advice for the research team on how to design future PD.

Structure. PD should be research-based; long-term; ongoing, and provide additional support (Borko et al., 2010); situated in a larger system that is focused on comprehensive change with goals of supporting student learning (Hawley & Valli, 2013); and take a holistic approach that considers the interrelated nature of all the variables (Sancar et al., 2021). Additionally, as part of PD, facilitators should model the practices they are teaching (Borko et al., 2010). The longitudinal aspect of the larger project, as described in the Methods section below, made our coffee chats an ideal space for designing PD with change in mind to better meet the needs of future participating teachers.

Adding to these principles, other work has identified additional elements to take into consideration when designing PD, such as teachers' starting beliefs and practices (Schindler et al., 2021) and how PD is defined (Sancar et al., 2021). Of relevance for this piece that aims to elevate teachers' voices are ways that teachers can be included in the design of PD, and how PD is both a conduit for information and a community-building site. We affirm the advice that teachers have given that has been shared in this issue and situate it within the larger body of literature, while simultaneously expanding what we know about PD from the perspective of teachers.

#### **Effective Video Clubs**

While much work has been done on the facilitation of video clubs, much of this literature has concentrated on strategies for supporting teacher noticing, with less attention to the design and structure of video clubs. Many video clubs, for instance, incorporate video annotation tools as a method for teachers to "tag" important moments for later discussion (Levin & Walkoe, 2022; Walkoe et al., 2020, 2022). In other examples of video

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clubs, teachers were provided with transcripts of videos (Sherin & Van Es, 2009). Subsequent whole-group discussions often included facilitator prompting, such as, "What do you notice? What stood out to you?" (Van Es & Sherin, 2008), with the goal being to support teacher reflection on past and future practice.

The advice column affirmed the teachers' need for guiding prompts to facilitate viewing and discussion of videos.

Additional approaches to video clubs have incorporated more specific goals for teacher noticing, such as Jilk's (2016) protocol for disrupting deficit talk by concentrating on student strengths in video club discussions. Linsenmeier and colleagues (2014) introduced three lenses for analyzing videos in their facilitation of video clubs: (1) taking an initial look, where teachers concentrate on the content of a student's idea or misunderstanding; (2) going deeper, where teachers consider how a student's idea may have developed; and (3) looking across, in which teachers compare the student's idea to other ways of approaching the particular task or problem. Building on this work, we examined what our teachers value within video club spaces as described in the advice column and used that to frame future video club sessions. We view teacher voice as essential to designing effective video clubs where teacher noticing and learning can occur.

#### Method

#### **Context**

As part of a multi-year PD on playful mathematics learning, our research team is collaborating with a local public charter elementary school to study how to make mathematics teaching and learning more playful. The longitudinal study started with three kindergarten teaching teams (one lead and one assistant teacher) and their students. The first teaching team, Ms. Conway and Ms. Nichols, started their second year of teaching together at the start of the study. Ms. Conway had taught previously in other elementary grades but was in her second year of teaching kindergarten. The second team, Ms. Rosinsky and Ms. Young, were new teachers at the school. Ms. Rosinsky had previous teaching experience in pre-K and was a first-year teacher for elementary. Ms. Lane and Ms. Cooper had been teaching together for over 10 years, predominately in early elementary classrooms (kindergarten and first grade). Last year, the teachers participated in a week-long PD workshop in the summer; four cycles of PD; implementation and reflection during the year; and a two-day video club in the summer. Each of the four cycles included (a) a daylong Saturday PD during which we taught content aligned with the upcoming week's curriculum and then collaborated with the teachers to

modify the curriculum to embed play; (b) four days during which they implemented the modified curriculum in their classrooms (this was video recorded in each room); and (c) a Friday afternoon meeting to reflect on the week's activities. The Friday reflections included some aspects of video club where we shared videos from each teacher's classroom and had them comment on the videos using MarkUp. This year, we added the first-grade team for all the PD; next year, we will add the second-grade team.

For the most part, the researchers took the lead in structuring and facilitating the PD. As we planned for the next round in the coming year to add the first-grade team, we recognized the importance of hearing from the teachers about what went well, what did not, and what they needed as a way of humanizing teacher learning (Horn & Garner, 2022). Like Horn and Garner, we wanted to incorporate more humanistic approaches to counter the typical accountability-based experiences that teachers often face in PD. We also recognized that our PD would be improved if teachers knew they had the agency to change the experience.

To that end, we started our summer video club sessions with coffee chats, informal conversations about the PD and teaching playful math. In these conversations, a research team member met with a small group of teachers to elicit their advice about the PD to learn about what they needed for PD to better plan going forward. We sent a document to the teachers in advance of video club outlining our plans and the questions that we would use to guide the coffee chats (see Figure 1). These are the kinds of questions we often ask participants at certain points during a study of PD to inform our own practice and improve the PD, but it usually stops there. By explicitly making space for teacher voice through coffee chats, we have shifted our design of future PD on the basis of their responses and suggestions. For example, the teachers discussed the difficulty and taxing nature of having reflections following a long week of modified lessons and video data collection but talked about the value of watching videos of their own teaching. Given this feedback, we shifted the design of the PD to focus more on video club and less on lesson reflections; we also canceled the Friday afternoon sessions and incorporated an extended video club in the full Saturday PD. While this is just one example of a small change, honoring teachers' preferences is a powerful way to elevate teacher expertise in the process of supporting their professional learning.

## **Data and Analysis**

Narrative inquiry fosters a deeper understanding of the complexity of the human experience and social

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#### Figure 1

Coffee Chat Questions

We are aware that some people like time to think about responses to questions, so we are providing them to you now. But please don't feel compelled to prepare answers – this is just an FYI.

Imagine that you are giving advice to us or other leaders of professional development:

- 1. When you think about the best PD you ever attended, what made that so great? What about the worst PD; what made it so bad?
- 2. Thinking about this PD in particular, what went well and what didn't?
- 3. What advice would you give to new teachers who are just starting on this project?
  - a. What do you wish you'd known about this project ahead of time (e.g. time commitment, videos, working with us, what it is like having us in your classrooms)?
  - b. What concerns do we need to address ahead of time?
- 4. What did we do that got you excited about bringing more play to math?

Again, imagine that you are giving advice to us or other leaders of professional development:

- 1. The two main ways we had you reflect on practice was looking at video of your teaching and looking at the lessons from the play-weeks. What was helpful or not about both of these?
- 2. In terms of video club:
  - a. What does it feel like to watch videos of yourself and others?
  - b. What is useful about watching videos of your teaching? How could it be more useful?
- 3. How could the structure of video club be more useful?
- 4. What are the realities of teaching that you feel are ignored when we make suggestions for changes to the curriculum or your practice?

interactions by centering individuals' stories, personal experiences, and narratives. Clandinin and Connelly's (2004) core principles of narrative inquiry argue that stories are (a) central to human experience, (b) coconstructed in social contexts, and (c) instrumental in shaping human actions and interactions. These principles resonated with the work we were doing to understand how the teachers experienced PD individually and as a group.

We used narrative inquiry (Clandinin & Connelly, 2004; Jalongo & Isenberg, 1995; Olson, 2000) to gather stories from the coffee chats, which were analyzed to reveal common themes, metaphors, and plotlines (Clandinin & Connelly, 2004, p. xv). From these plotlines, we used a thematic analysis (Reissman, 2008) to develop the advice column for mathematics teacher educators to follow as they structure PD and plan methods courses. Our process for narrative analysis included the following steps: (a) each coffee chat was video recorded and transcribed using Otter.ai and then cleaned by at least one of the authors; (b) as the transcriptions were cleaned, we set up a table with the questions from the coffee chats with each teacher's responses to the questions; (c) we read through

the responses to identify the key phrases and ideas, which were noted in a second column in the table; (d) these common themes became the plotline that informed the narratives for the advice column; and finally, (e) we used our analysis in addition to key phrases to craft the narrative for the dos and don'ts section in which we did not rephrase, but used teachers' quotes and noted the importance of centering the teachers' voices.

#### **Discussion**

### Teachers' guide to video club

Synthesizing the advice provided in the first section left us with the following dos and don'ts:

- Don't force us to share when we haven't had time to process. (Ms. Lane, Ms. Rosinsky)
- Do start with videos of just our students (Ms. Cooper, Ms. Rosinsky), and then share videos of teachers after we are comfortable with the format. (Ms. Conway, Ms. Rosinsky)

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- Do provide opportunities to see other's teaching. (Ms. Cooper, Ms. Rosinsky)
- Do give us a chance to engage with the videos in a guided way (e.g., focus questions, using a platform where we can tag videos). (Ms. Lane)
- Don't wait to share videos of topics that have passed; we want to see them when we are in the same unit so we can adjust our teaching. (Ms. Conway)
- Do show us the whole clip. (Ms. Conway)

From these ideas and the more detailed recommendations from the teachers, we have developed the following approach to video club. As we detail in the **Appendix**, we are planning (and have started implementing) a video club that includes four 2.5-hour sessions over the course of the year. The foci for the sessions are video as validation of mathematics learning in play; focus on student thinking during playful mathematics; teachers' moves during playful mathematics instruction; and choose your own adventure, wherein teachers identify what they want to focus on. This approach is specific to our context, where we are focused on implementing playful mathematics, but the big ideas are applicable across contexts and broader possibilities are highlighted in the **Appendix**.

#### **General PD**

With respect to PD more generally, the following dos and don'ts led us to the additional design principles we discuss below.

- Do provide flexibility to spend more time on things or skip over them depending on our (the teachers') interests. (Ms. Conway, Ms. Lane)
- Do cover topics and ideas that are relevant and that can be implemented in the classroom. (Ms. Conway, Ms. Cooper, Ms. Rosinsky)
- Don't waste our time. (Ms. Conway)
- Do encourage us (the teachers) to have an open mind; sometimes, this can be overwhelming. (Ms. Cooper, Ms. Conway)
- Don't have us pack in too much during one week.
   (Ms. Rosinsky)

This advice extends the design principles set forth by Hawley and Valli (2013). We offer three suggestions that extend these principles and elevate the teachers' voices from our work. These suggestions include (1) balance and humanize teacher learning spaces, (2) prioritize listening to teachers, and (3) support teacher learning, even when it is uncomfortable.

Suggestion 1: Balance and Humanize Teacher Learning Spaces

Related to structure and teachers, a common element that teachers liked in PD was features that were supplemental to the content. These included having time for breaks, having group lunches where they could build relationships, and taking extra time on content that felt important at the moment, instead of strictly adhering to the schedule. While these elements align with the push for supporting a professional learning community, they extend what we know about effective PD because these issues may seem peripheral. As one teacher in our project shared, "There's flexibility to focus on something or skip something depending on where everyone's at, or just kind of have fun nerding out on whatever it is we're doing" (Ms. Conway).

On the basis of the feedback given by our teachers, we suggest a balanced, humanizing approach to PD that is central to the structure. This includes flexibility, time for processing and breaks, and built-in opportunities to develop relationships and community. This also involves balancing content, planning, and active engagement.

#### Suggestion 2: Prioritize Listening to Teachers

We recognize that PD centered on play may enable more humanizing conversations to begin with as teachers attend to open-endedness, choice, emotion, etc.; however, the findings from our particular context extend beyond the changes we made to our PD and apply broadly to other PD and mathematics methods classes. These findings are significant because we intentionally made space for these conversations. We are not only elevating teacher voice by sharing their stories here, but we are also providing a model for what listening to those voices might look like for future PD facilitators. As such, the questions we asked the teachers can be used as a model to guide others as they make time to listen to teachers. When we listen to teachers, we can make practical adjustments to PD. This may be about content (I want to know more about supporting counting), about structure (I need more time to plan for this in my classroom), or even about elements that are not supporting teachers' learning (the reflections at the end of the long week are not helpful and feel like a waste of time). When we listen to teachers, we can make these shifts as we support their learning.

Suggestion 3: Support Teacher Learning, Even When it's Uncomfortable

Teacher learning in any capacity (PD or methods courses) needs to create spaces that push for teacher learning, even though those spaces may be uncomfortable. As the teachers in this study identified, video club was an uncomfortable space, at least initially. However, as teachers engaged in this space, they came to see it as a



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valuable site for learning. The teachers got to see their students when the teachers were not at tables, they got to reflect on their practice, and they got to see how other teachers did things. Even on our end, we thought that the teachers did not see video club as a productive space because they were often hesitant to participate, but as the year progressed and as we learned from our discussions with them, we came to realize the benefit of this seemingly uncomfortable space. Ultimately, the teachers appreciated video club and found that it impacted their practice. From these data, we suggest that teacher educators push through activities and spaces that feel uncomfortable, push teachers to take the time to reflect and learn from others, and make time for this deep learning to happen. Teachers like it, even when they do not seem to.

## **Implications**

This study contributes to the field in two ways; one very specific to our study and how we take what we've learned from teachers in terms of PD design; the second is how others might use these ideas when enacting PD and classroom teaching. With respect to the first, we have already modified our plans for PD and video club for this year following these guidelines. During our first video club this year, we found the plans as co-constructed with the teachers to be much more effective than what happened last year (see details of the current plan in the **Appendix**). The teachers were actively engaged in watching, tagging, and discussing the videos. They noticed ways children engaged in rich mathematical discourse while exploring and playing with materials and used the ideas they saw as they planned for the coming week's lessons.

More broadly, we suggest that those facilitating PD, video clubs, and/or teaching methods courses should listen to the big ideas our teachers offered but also ask their own teachers. In imagining a co-constructed plan for PD, one could do as we did and have informal conversations or focus groups to gather ideas and then implement them. A more purposeful approach would include sitting with teachers to take their advice and develop the plans. This is something we offered our teachers, but they wanted us to do the planning. It was more important that we value their time than it was for us to require their full participation in PD planning, but we were intentional in responding to all their suggestions. We found that by making space for and elevating teachers' voices, we can provide more humanistic learning opportunities.

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# **Appendix**

# **Teachers' Guide to Video Club**

Session #1 Video as Validation			
Broad Goal	Provide videos of students demonstrating what math learning might be possible		
	when engaging in the ideas of your study.		
Play Project Goal	Observe what is possible when students engage in playful math activities on their		
	own.		
Video Type	Students engaging in playful math activity (either free play or guided play) without		
	a teacher present.		
Prompting Questions	Watch and tag the video for:		
	What seemed playful in the interaction?		
	<ul> <li>How was the interaction mathematical?</li> </ul>		
	What could make this more playful?		
	What could make this more mathematical?		
Logistics	In our context, we won't have video of the current class yet. Select a 3-8 minute video for each teacher from the prior year (same content area that they are staring following the PD)		
	<ol> <li>Introduce and elicit answers for the guiding questions for the year: What is playful math? What does it look like?</li> <li>Introduction to video club – why we do it, norms</li> <li>Model what it looks like to watch and mark up video, select segment to</li> </ol>		
	share, and share		
	4. Work with teaching partner to watch and mark up video, select segment to share		
	5. Each pair shares their video and what they noticed		
	6. End with a general discussion about the videos with prompting questions		
	like:		
	<ul><li>a. Why did this work without a teacher at the table?</li><li>b. What did you notice across the videos?</li></ul>		
	c. What can I take from this for my practice next week?		
	d. Let's go back to our original question - What does it look like for a		
	teacher to be playful? (add to poster in different color)		



# A Teachers' Guide to Video Club and Other Tips for Professional Development

Session #2 Focusing on Student Thinking			
Broad Goal	Provide videos of students demonstrating what math learning might be possible when engaging in the ideas of your study. Specifically, showcase what students do and say as they engage.		
Play Project Goal	Observe how students play, what they say, and what they do when they engage in playful math activities on their own.		
Video Type	Students engaging in playful math activity (either free play or guided play) focused on students doing and/or talking about mathematics during play without a teacher present.		
Prompting Questions	Watch and tag the video for: Round 1:  What math did you notice? Round 2:  What did the children do/say to demonstrate their math knowledge?  What could the teacher do to support children's math thinking?		
Logistics	<ol> <li>Using the clips teachers work with their teaching partner to watch and mark up video, select segment to share</li> <li>Each pair shares their video and what they noticed</li> <li>End with a general discussion about the videos with prompting questions like:         <ul> <li>a. What did you notice across the videos?</li> <li>b. What can I take from this for my practice next week?</li> <li>c. Let's go back to our original question - What does it look like for a teacher to be playful? (add to poster in different color)</li> </ul> </li> </ol>		



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Session #3 Teacher Moves in the Spotlight			
Broad Goal	Provide videos of teachers as they enact their instruction.		
Play Project Goal	Observe teacher moves as teachers are being playful during mathematics		
	instruction.		
Video Type	Teachers being playful as they are working with students during mathematics. This		
	can be whole-class or small-group with the teacher being present the majority/the		
	entire video. (3-8 minutes)		
Prompting Questions	Watch and tag for:		
	• When were you (the teacher) being playful?		
	How could you (the teacher) have been more playful?		
Logistics	1. In this round we shift the focus to teachers and their practice		
	2. Work with teaching partner to watch and mark up video, select segment to		
	share		
	3. Each pair shares their video and what they noticed		
	4. End with a general discussion about the videos with prompting questions		
	like:		
	a. What did you notice across the videos?		
	b. What can I take from this for my practice next week?		
	c. Let's go back to our original question - What does it look like for a		
	teacher to be playful? (add to poster in different color)		
	5. Make sure to ask teachers during this round what they would like to focus		
	on for the final round of Video Club. This can be open to the teachers or		
	you can share the focus from the other sessions to give them some ideas		
	(what's possible, student thinking, teacher moves)		



# A Teachers' Guide to Video Club and Other Tips for Professional Development

Session #4 Choose Your Own Adventure		
Broad Goal	To focus on an area that the teachers themselves identify.	
Play Project Goal	Observe videos with a teacher-identified focus (student thinking, teacher moves,	
	children's engagement during playful math, etc.)	
Video Type	Pick different videos based on what the teachers want to look at. For example, if	
	the focus is on student thinking, provide videos of students engaging in math. If the	
	teachers want to focus on teacher moves, provide a video of teachers.	
Prompting Questions	These questions will come from the previous Video Club sessions.	
Logistics	1. Work with teaching partner to watch and mark up video, select segment to	
	share	
	2. Each pair shares their focus, their video and what they noticed	
	3. End with a general discussion about the videos with prompting questions	
	like:	
	a. What did you notice across the videos?	
	b. What can I take from this to my practice next week?	
	c. Let's go back to our original question - What does it look like for a	
	teacher to be playful? (add to poster in different color)	