(HOW) CAN VIDEO BE USED TO SUPPORT TEACHER LEARNING?

Deborah Loewenberg Ball, Meghan Shaughnessy, Nicole Garcia, and Sarah Kate Selling

NCSM 2016 Annual Meeting • Oakland, CA • April 12, 2016
COMMON WAYS OF USING VIDEO IN PROFESSIONAL DEVELOPMENT

Exemplify “best practice” (the model)

View and discuss (what did you notice?)

Analyze using some frame

All of this rooted in a belief in the basic value of “seeing” and discussing teaching
CLASSROOM VIDEO CONTEXT

- An 5th grade teacher in a multilingual classroom is leading a discussion around comparing decimals.
- Students are starting work on several comparison problems and have offered several key ideas related to decimal comparison.

Which is greater, 0.9 or 0.13?
WHAT DO YOU NOTICE?
WHAT MIGHT BE THERE TO NOTICE?

TYPICALLY COMMENTED ON

- The teacher uses “talk moves” such as asking students to restate ideas shared by classmates
- The teacher has a “serious tone” and “serious face”
- The teacher does not “complete work’ on the warm up problem and instead tells students that they will be returning to the problem at the end of class
- Might have been better to do a turn and talk or partner work

RARELY COMMENTED ON

- The work that students are doing to translate across tenths and hundredths
- The teacher asks to share a student’s work and names for the class that she thinks that there is something for the class to learn from it
- The teacher assigns competence to particular students and she notes specific features of their work
- The particular number choice and what it affords for student explanation
Using Videos to Support Teacher Learning

Identifying PD learning goal(s) → Selecting video to use (in service of the PD learning goal(s)) → Framing the video → Facilitating activity after viewing

Different types of learning goals include:
- Identify and work on possible ways to manage particular recurrent pedagogical problems
- Learn to see specific issues related to equity, and to develop skills for promoting equitable classrooms
- Learn to hear and interpret student thinking in a specific mathematical content domain
- Develop and practice mathematical knowledge for teaching (MKT; Ball & Bass, 2001; Hill, Rowan, & Ball, 2005; Ball, Thames, & Phelps, 2008)

For more information about different types of learning goals that could be identified, see: http://www.teachingworks.org/images/files/041515_NCSM.pdf
Using videos to support teacher learning

Identifying PD learning goal(s) → Selecting video to use (in service of the PD learning goal(s)) → Framing the video → Facilitating activity after viewing

Different types of learning goals include:

- Identify and work on possible ways to manage particular recurrent pedagogical problems
- Learn to see specific issues related to equity, and to develop skills for promoting equitable classrooms
- Learn to hear and interpret student thinking in a specific mathematical content domain
- Develop and practice mathematical knowledge for teaching (MKT; Ball & Bass, 2001; Hill, Rowan, & Ball, 2005; Ball, Thames, & Phelps, 2008)

For more information about different types of learning goals that could be identified, see: [http://www.teachingworks.org/images/files/041515_NCSM.pdf](http://www.teachingworks.org/images/files/041515_NCSM.pdf)
DIFFERENT TYPES OF VIDEO

- **“raw”**
  - Participants’ classrooms (e.g., video clubs)
  - Available classroom video (may or may not be professional quality) (e.g., MET-X collection)

- **Edited**
  - Professional video clipped for particular purposes (e.g., TeachingWorks Video Exemplars)

- **Highly edited and annotated**
  - Professional video used in a “popcorn” style (e.g., Annenberg; Book companion discs; Inside Mathematics)
  - Professional video pieced together with commentary (e.g., Teaching Channel)
SELECTING A VIDEO: FOUR CONSIDERATIONS

① Video source
② Context comparison
   ▪ Classroom demographics
   ▪ Grade level and content
   ▪ Teacher characteristics
③ Alignment with learning goal
④ Visibility of work associated with learning goal
SELECTING A VIDEO: QUESTIONS TO CONSIDER

- **PD LEARNING GOALS:** What is the PD learning goal? Does video support work on the PD learning goal? If so, how?
- **VIDEO SOURCE:** How will each possible video source enable or constrain participants’ work towards the PD learning goal?
- **CONSIDERATIONS OF CONTEXT:** Consider the group of participants ➔ How will the video context influence their engagement in the work?
- Consider the PD learning goal and this group’s progress towards the PD learning goal:
  - **ALIGNMENT WITH LEARNING GOAL:** For this group of participants, will this video push their progress towards a particular PD learning goal? For example, will an example, non-example, or borderline case best help these participants refine their practice or knowledge?
  - **VISIBILITY OF WORK:** Will “noise” or other distractions support or constrain these participants’ work?
PRACTICE #1

- **PD LEARNING GOAL:** Giving directions for small group work
- **VIDEO SOURCE:** Edited
- **CONTEXT COMPARISON:** Similar

Questions for you to consider:
- Is this video an example, non-example, or borderline case?
- What would you say about the clarity of the practice of giving directions in this video?
Is this video an example, non-example, or borderline case of giving directions?

What would you say about the clarity of the practice of giving directions in this video?
POSSIBLE OBSERVATIONS

- Is this video an example, non-example, or borderline case of giving directions?
  - A borderline example that pushes participants to consider ways of organizing directions in ways that are clear and concise

- What would you say about the clarity of the practice of giving directions in this video?
  - For some groups, the behavior management may get in the way of being able to see all of the work that she is doing around giving directions.
  - For some groups, the mathematical representations recorded on the board may distract participants from noticing the work of giving directions.
USING A VIDEO TO WORK ON GIVING DIRECTIONS

What else could participants notice?

- The teacher’s response to a student groaning
- The children’s behavior
- The teacher’s recording strategy
- What happened 5 minutes earlier
- The game that the children are playing

How do you focus participants such that they will engage in ways that are in concert with the learning goal?
PREPARING TO USE THE VIDEO

1. Identifying PD learning goal(s)
2. Selecting video to use (in service of the PD learning goal(s))
3. Framing the video
4. Facilitating activity after viewing

Giving directions
### FRAMES AND PROTOCOLS FOR WATCHING VIDEO

<table>
<thead>
<tr>
<th>Frames involve:</th>
<th>Protocols involve:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the information that is given to participants prior to watching a video</td>
<td>- the structure of the activity</td>
</tr>
<tr>
<td>(e.g., classroom context; prior work of class; mathematical content)</td>
<td>(e.g., individual write time; partner talk before whole group)</td>
</tr>
<tr>
<td>- the delivery of that information</td>
<td>- the work that participants are doing at each stage of the activity (e.g.,</td>
</tr>
<tr>
<td>(e.g., whether participants will do the mathematical work)</td>
<td>notetaking in T table)</td>
</tr>
</tbody>
</table>
CONSIDERATIONS FOR FRAMING

① Context of video
② Instructional goals for children
③ Supports for viewing
④ Other considerations
FRAMING: CONTEXT OF VIDEO

QUESTIONS TO CONSIDER

- Do participants need to know the context in advance?
- What aspects of the context are important for participants to know?
- Which aspects might be distracting?

EXAMPLES

- Grade level & size of class
- Demographics of the class and the school
- Teacher characteristics
- Norms and routines in the classroom
- Prior instructional experiences
FRAMING: CONTEXT OF VIDEO

INSTRUCTIONAL GOAL: Learning to use specific moves to help orient students to others’ ideas

• Do participants need to know the context in advance?
• What aspects of the context are important for participants to know?
• Which aspects might be distracting?
FRAMING: CONTEXT OF VIDEO

QUESTIONS TO CONSIDER

- Do participants need to know the context in advance?
  - Yes
- What aspects of the context are important for participants to know?
  - Multilingual classroom
  - Problem the students are working on
- Which aspects might be distracting?
  - Longer trajectory of work in the lesson

POSSIBLE CONTEXT FEATURES

- An 5th grade teacher in a multilingual classroom is leading a discussion around comparing decimals
- Students are starting work on several comparison problems and have offered several key ideas related to decimal comparison
- Problem
FRAMING: INSTRUCTIONAL GOALS

QUESTIONS
- Do participants need to know the instructional goals?
- What aspects of the instructional goals for the lesson and the unit are important for participants to know?
- Which might be distracting?
- Who shares the information?

EXAMPLES OF INFORMATION TO PROVIDE
- Students’ prior knowledge (from previous grades)
- Students’ prior work this year
- Location of the lesson within the unit
- Time of year

Framing the video
1. Context of video
2. Instructional goals
3. Supports for viewing
4. Other considerations
FRAMING: SUPPORTS FOR VIEWING

QUESTIONS TO CONSIDER

□ What mathematical supports might participants need to watch the video?
□ What are the affordances/constraints of unpacking the mathematics prior to watching?
□ What teaching practice supports might participants need to watch the video?

EXAMPLES

□ Doing the “student work” prior to watching
□ Highlighting patterns of student thinking
□ Unpacking a focal instructional practice

Framing the video

1. Context of video
2. Instructional goals
3. Supports for viewing
4. Other considerations
FRAMING: OTHER CONSIDERATIONS

- Are there any aspects of the video that need to be highlighted before viewing? (e.g., distracting student behavior, mathematical mistake)
- Are transcripts useful? Why?
- Are screen shots needed (e.g., board work)? Why?
- Are student learning measures from the lesson (e.g., exit tickets, student work samples) needed? Why?
CONSIDERATIONS FOR FRAMING

① Context of video
② Instructional goals for children
③ Supports for viewing
④ Other considerations
SUMMARY

Selecting video to use
(in service of the PD learning goal(s))

Framing the video

Considerations for selecting video

① Video source
② Context comparison
  ▪ Classroom demographics
  ▪ Grade level and content
  ▪ Teacher characteristics
③ Alignment to learning goal
④ Visibility of work associated with learning goal

Considerations for framing video

① Context
② Instructional goal(s)
③ Supports for viewing
④ Other considerations
NEXT STEPS/QUESTIONS

QUESTIONS ABOUT THE SOURCES OF VIDEO
- How to think about the quality of the teaching or the “approach” to teaching, and how this does or does not matter
- (How) Does grade level matter for the usefulness of video?

NEXT STEPS
- Continue to develop collections of videos with a broader range of diversity represented
- Continue to extend kinds of specific practice-based (i.e., not just analytic) learning goals for which video could be a productive resource
THANK YOU!

Slides will be available on the TeachingWorks website