

Supporting Reasoning and Explanations in Elementary Mathematics Teaching **Session 6 Slides**

Overview of Session 6

- Engaging in a video workshop
- Noticing aspects of a student's explanation

Video workshop – Before viewing

Before viewing a video, the sharer will:

- Situate the viewing by providing context for the video
 - Grade, task, and lesson goals
 - Routines that appear in the clip that may be unfamiliar to colleagues
 - Description of what happened immediately before the clip
- Provide and quickly describe documents that will support understanding of what is happening in the video
 - Copies of student work, transcript, etc.
- Zoom in on the focus questions that guided the selection of the video clip

Video workshop – While viewing

During the video:

• Jot down a few notes that will serve as reminders about places in the video where student thinking or the mathematics seem interesting

6.2b			
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Video	worksho	p – After	viewing
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After viewing a video, consider and discuss the focus questions, making sure to:

- Connect with instances from the video that are relevant to the focus questions
- Attend closely to talk, student thinking, teacher's moves and comments
- Offer details from the video and provide evidence
- Experiment commenting using the "contribution starters"

6.2c

Contribution starters

The contribution starters may help to spark or sustain conversations about the teaching being shared.

"Starters" have a grid and examples with:

- Openings that invite responses
- · Ways of using video and other examples shared
- Connections to the core content of the work we are doing

6.2d

Debriefing video workshop

- Understanding the process: Selecting a video clip
 - How did you select a video clip for the workshop today? Did the clip provide material for a productive discussion?
- Analyzing teaching and learning: Attending to mathematical practices
 - How well did the focus questions support discussion of student reasoning and teaching moves that support reasoning? What might help improve the focus?
- Building productive norms: Contribution starters
 - How did the contribution starters enhance the discussion?

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Betsy's	conjecture

Is the following conjecture **true** or **false**? Explain your reasoning.

Betsy's conjecture: An odd number plus an odd number equals an even number.

6.4a

Context

- Third graders (8 year-olds)
- Late January
- Students have been working on concepts of even and odd numbers, and patterns with even and odd numbers
- Diverse classroom, many English language learners

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Focus questions

To what extent does the explanation:

- Have a clear purpose
- Have a logical structure
- Use representations and language clearly and carefully
- Have a focus on meaning that is oriented to the listener(s)

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Summary

In this session, you:

- Engaged in a video workshop with a focus on:
 - Student reasoning and teaching moves that support students' engagement in reasoning
 - Selecting video clips that provide material for a productive discussion
 - Experimenting with ways to contribute to discussions
- Appraised a student's explanation using the features of a "good" explanation

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