

Lesson Study with Video:

A Professional Development Model for Mathematics, Language, and
Literacy Integration in Dual Language Programs

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Lesson Study Overview

- Lesson Study, *jogyokenkyu*, a PD model originating from Japan, 1960s
- In a lesson study approach, teachers conduct cycles of inquiry:
 - Collaboratively study the curriculum
 - Plan
 - Refine
 - Teach and observe a “study lesson”
 - Discuss and revise the study lesson
 - Reteach the revised study lesson
 - Share reflections



Video Club Overview

- Starting in the 1990s
 - Video recording lessons
 - Teachers watch themselves in small groups
 - Discussions
- ↓
- Reflect on instruction and student learning
 - Improve teaching and better facilitate student learning



Overview of the Mathematics and Language, Literacy Integration (MALLI) in Dual Language Settings Project



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MALLI Study Overview



- A professional development (PD) model that:
 - Combines lesson study and video club elements
 - Compensates teachers for their participation
 - Supports dual language program (DLP) teachers to integrate mathematics, language, and literacy
 - Utilizes a collaborative workshop to share research and best practices in two dimensions:
 - Content learning
 - Meta-language
 - Works with preservice teachers paired with cooperating/mentor teachers
 - Establishes a teacher learning community across grade levels, programs, schools, and states
 - Establishes a digital library of classroom videos for Spanish/English DLP teachers teaching mathematics



MALLI Study Overview: Teacher Set Up



- What do you need?
 - iPads or any smartphones that can video record
 - Tripod to hold your device
 - Internet access to upload your recordings
- What does the process look like?
 - Plan your lesson
 - Record your lesson
 - Upload your lesson to an online folder that's shared among your group
 - Watch your own video and other(s)'
 - Talk with each other and learn!



MALLI Study Overview: Admin Set Up



- What do you need?
 - Purchase recording devices (e.g. iPads or smartphones)
 - Purchase tripods to hold recording devices
 - Access/permission to create shared folders among teachers
- What does the process look like?
 - Time & Place to collaboratively plan lessons with set intention/focus, agreed upon goal.
 - Time to record lessons
 - Set up online folders that's shared among your group
 - Partner T's, organize meetings, provide time to watch each other's videos
 - Provide structures and place for conversations to happen
 - Step away from the collaborating



Does Lesson Study with Video Work?

Timeline:

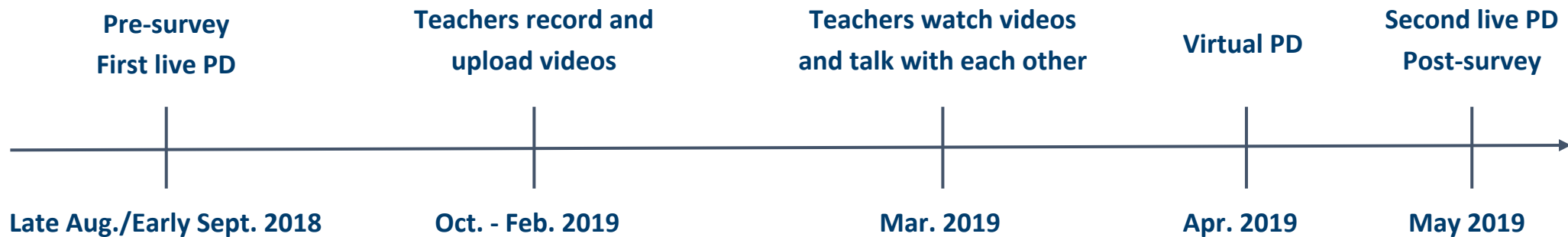
- 2 live PDs and 1 virtual PD in a year-long period



Does Lesson Study with Video Work?

Timeline:

- 2 live PDs and 1 virtual PD in a year-long period





Does Lesson Study with Video Work?

Participants:

- 21 K-5 Spanish/English DLP teachers
 - 14 in California, 7 in Texas
 - 3 in K, 3 in first grade, 1 in second grade, 4 in third grade, 4 in fourth grade, 3 in fifth grade, 3 instructional coaches

** All teachers names are Pseudonyms*



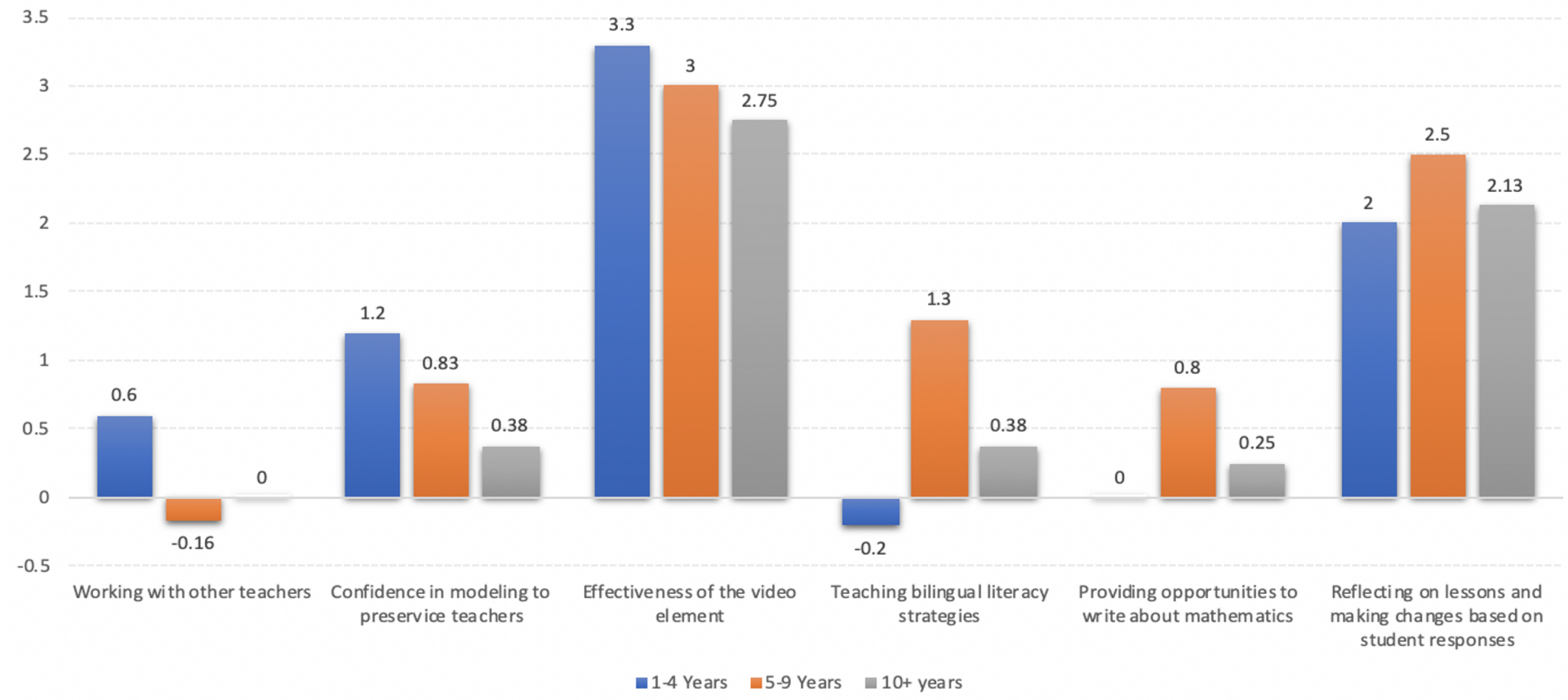
Does Lesson Study with Video Work?

The data:

- Pre- and post-survey completed by 19/21 teachers
- 5 in-depth interviews
 - 3 California teachers
 - 2 Texas teachers



Teachers with various levels of experience showed different growth patterns



1-4 Scale (1: Strongly Disagree; 2: Somewhat disagree; 3: Somewhat agree; 4: Strongly Agree)

1-5 Scale (1: Never; 2: Less than once a month; 3: Once or twice a month; 4: Once or twice a week; 5: Daily or almost daily)



Lesson study with video *is* an effective model of PD

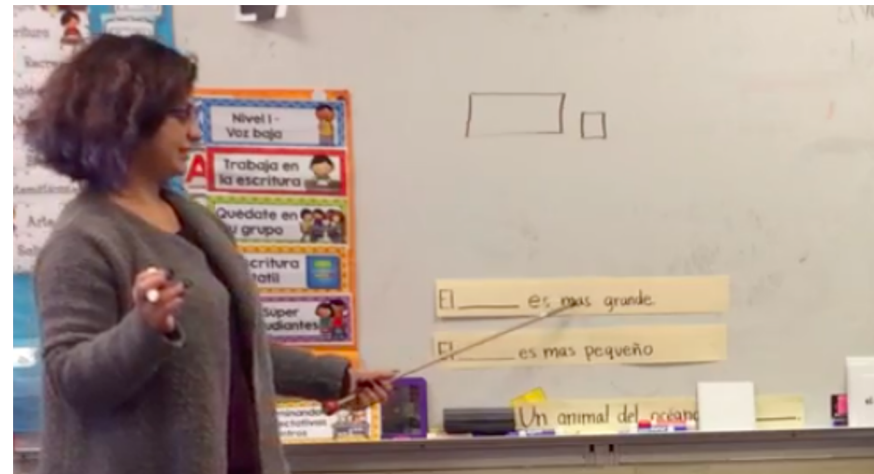
- After participating in the year-long PD:
 - Teachers felt implementing mathematics, language, and literacy integration was less difficult for them
 - Teachers received more feedback from other teachers
 - Teachers reflected on lessons more and made changes based on student responses



Lesson study with video is an effective model of PD

- Alysa was “amazed” to see how her partner Lola was using sentence frames with her kindergarteners:

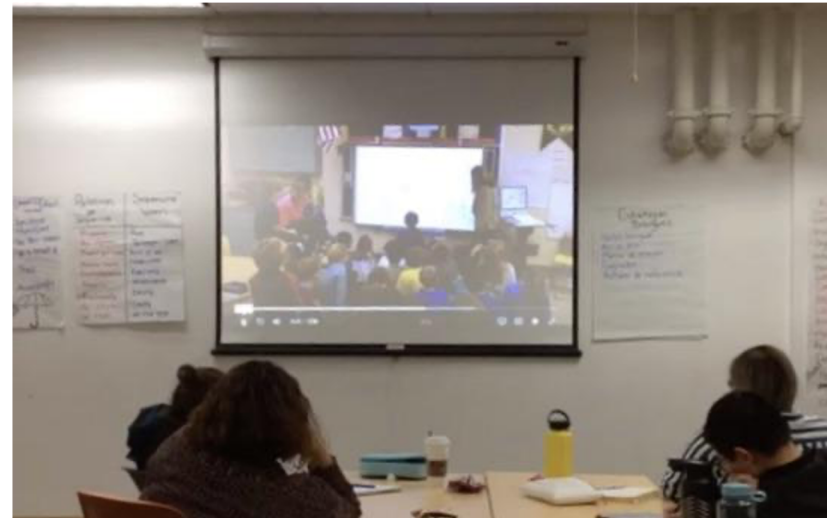
“... she had a lot of writing and she has sentence frames and ... to see how she was doing that with kindergarteners, because sometimes we think that they're not ready for it, but I was very amazed to see how she was integrating literacy throughout her math lesson.”





Lesson study with video is an effective model of PD

“I think that watching the video let me see different things in action. It's easy to read and study different information, but it becomes a lot more clear if you're able to see the things in action. ... It also allows you to identify or see different strategies that others use, so you can reflect on them and see how you can integrate them into your own classroom.” -- José





Lesson study with video model is helpful for mentoring preservice teachers

- Regarding mentoring preservice teachers or interns:
 - Teachers feel more prepared to model bilingual instructional practices
 - Teachers also felt more confident to mentor preservice teachers or interns in bilingual classrooms



Lesson study with video model is helpful for mentoring preservice teachers

*“I feel that watching all of the videos, reflecting and discussing, I have gained a lot more skills that **I can share with a preservice teacher.** For example, I can have word/sentence walls, visuals, objects, time for discourse and opportunities for students to use the vocabulary they have learned.”*

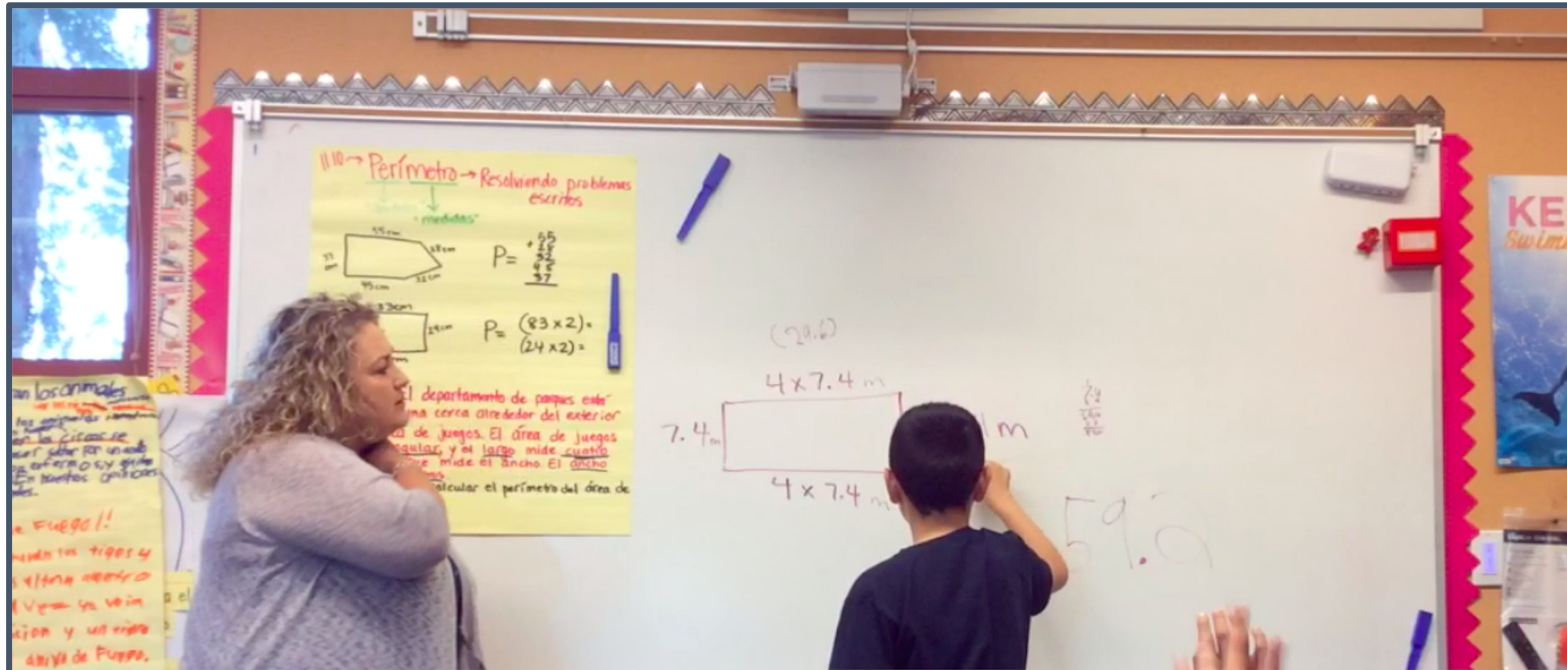




What does this Model Look Like?



Video Examples: **Enactment**, Reflection, Library

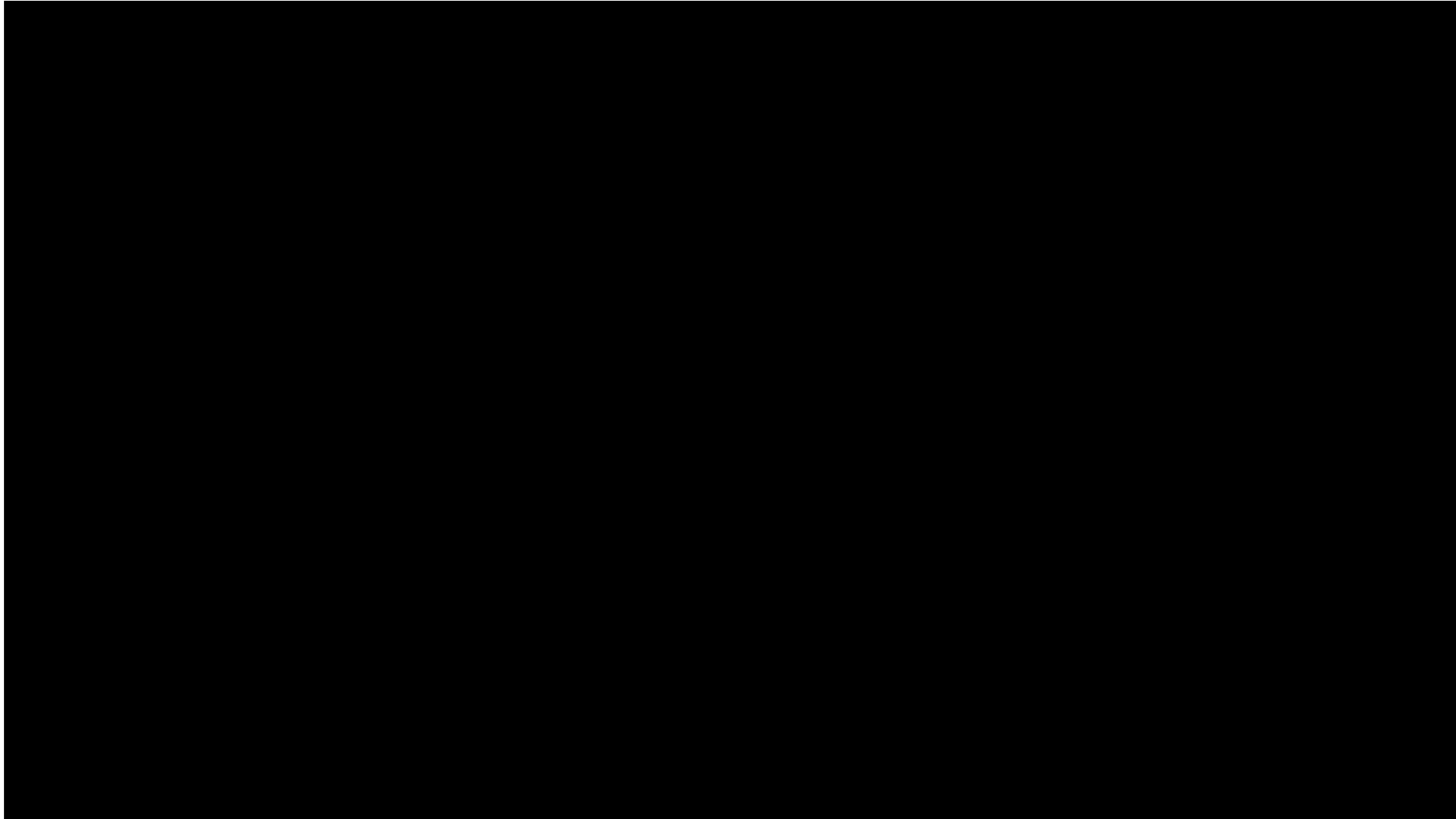


H: Los lados de ... aquí, siete punto...
The sides of ... here, seven point ...

- **Grade:** 5th
- **Experience:** 20 + years
- **Language of instruction:** Spanish
- **MALLI pedagogy:** discourse
- **Lesson Objective:** perimeter of a quadrilateral



Video Examples: **Enactment**, Reflection, Library





Video Examples: Enactment, **Reflection**, Library





Video Examples: Enactment, **Reflection,** Library





Video Examples: Enactment, Reflection, **Library**

Exemplar Video - Discourse





What's Unique?

- Lesson study + video club
- Across programs, schools, districts, and states
- Accessible, affordable, relevant, and self-paced
- Dual language programs + mathematics



Implications

- Quality PD doesn't (and perhaps shouldn't) require an "expert"
- Quality PD doesn't require days of release time
- Distance is an easily navigated obstacle to collaboration
- Compensate teachers for preparation/reflection on instruction
- Teachers learn best from other teachers



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Thank you for attending our session!



For more information, the slides and more resources are on the MALLI website: <https://malli.sites.ucsc.edu/>.

For any questions or feedback (much appreciated),
please feel free to contact us:

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