

# The Intentional Use of Videos and Interactions as Teaching Tools



Presenters

Paulo Tan, Samantha Mockler, and Erik  
Tillema

IUPUI School of Education

# Pre-service elementary school teacher course



- ❧ Components of the course
  - ❧ Videos and interactions
- ❧ Two types of knowledge (Ball, 2000; Phillip et al., 2007)
  - ❧ First-order
  - ❧ Second-order

# Objectives



- ❧ Experience
- ❧ Understand the difference between first and second-order knowledge
- ❧ Understand how formative and summative assessments are used in the course
- ❧ Engage in a discussion about the application of videos and interactions to other courses

# Overview of the Presentation



- ❧ Individually work on a math problem
- ❧ View student video
- ❧ Discussion with a partner
- ❧ View a 2<sup>nd</sup> student video (if time allows)

# Overview of the Presentation (cont.)



- ❧ Large group discussion
  - ❧ Sharing solutions to math problem
  - ❧ Summary of the session
  - ❧ Discussion on assessment procedures
  - ❧ Implications for other disciplines

# Think about...



How the use of videos and interactions in developing first and second order knowledge could be applied to other disciplines?

# Math Problem



Sharing candy bars

Work individually for 5 minutes

# Math Problem



Sharing candy bars

Discuss with a partner



# Summary



- ❧ Videos and interactions
- ❧ First and second order knowledge
- ❧ Assessments

# Assessments



Examples

# Applications



☞ Social work

☞ Nursing

☞ Law

# References



- ❧ Ball, D. L. (2000). Bridging practices: Intertwining content and pedagogy in teaching and learning to teach. *Journal of Teacher Education*, 51, 241-247.
- ❧ Phillipp, R. A., Ambrose, R., Lamb, L. L. C., Sowder, J. T., Schappelle, B. P., Sowder, L., et al. (2007). Effects of early field experiences on the mathematical content knowledge and beliefs of prospective elementary school teachers: An experimental study. *Journal for Research in Mathematics Education*, 38(5), 438-476.