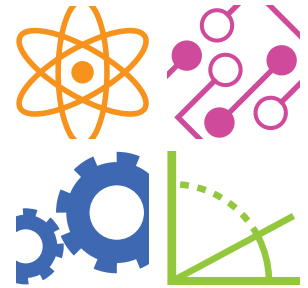


The Illinois STEM Education Colloquium



Research Connections

Friday, February 2, 2018
Education Building, Room 22

10:15 AM–11:15 AM

Dr. Perry leads a book club discussion of *Why Gesture?*, co-edited by Dr. Alibali.

12:30 PM–1:30 PM

Presentation by Dr. Alibali, *Understanding Change in Mathematical Thinking: A Perception-Action Perspective*. Light lunch will be provided.

FEATURED GUEST

Dr. Martha W. Alibali,
Vilas Distinguished Achievement Professor,
University of Wisconsin–Madison.



Understanding Change in Mathematical Thinking: A Perception-Action Perspective

Mathematical thinking involves perceiving mathematical problems and taking actions—both mental and physical—to solve them. Dr. Alibali studies students' perceptions and actions to better understand mathematical thinking and learning. In her talk, she will illustrate three aspects of her work. First, how learners' perceptions guides problem-solving actions. Second, that physical actions affect mathematical thinking because mathematical ideas are grounded in physical actions. Finally, how teachers' instruction guides learners' perceptions of mathematics problems and their actions. Dr. Alibali's work helps us understand how perception and action affect mathematical thinking, while highlighting new questions about mathematics learning and instruction.



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