### Math in Your Feet: Moving Bodies are Learning Bodies

8:00am - 9:30am | Convention Center 005 | Session 615 NCTM ANNUAL 2017 San Antonio



Presenter: Malke Rosenfeld

Author • Dance Teaching Artist • Math Explorer • Editor

mathinyourfeet.com | malkerosenfeld.com | mathonthemovebook.com | malke@malkerosenfeld.com

# Further resources for getting started with whole-body math learning

- For more in-depth discussion, resources for body-based math learning (including 40 online videos of classroom action) and a sample chapter visit Malke's <u>book page</u> on the Heinemann website.
- 2. <u>Math on the Move Book blog</u> with ongoing posts focused on the hows and whys of getting started with #movingmath.

3. <u>Math on the Move book group on Facebook.</u> Ongoing discussions, book study and community for adding whole-body math learning to your teaching toolkit!

## FURTHER READING ON SPATIAL REASONING

Free PDF: Paying attention to Spatial Reasoning

**Blog Post: Making Sense of Spatial Sense** 

Spatial Reasoning tasks on Mark Chubb's Blog

<u>Article: How teaching spatial skills could be part of a school's strategic plan</u>

5 Articles that answer "How can they learn math if they're moving?"

#### SCALE UP!

Math tools that harness spatial concepts to help kids make sense of math include but are not limited to: Hundred chart, number line, analog clock, calendar, graphs, arrays...

- 1. <u>Here's an example</u> of scaling up a math tool AND using the body as a tool for mathematical reasoning!
- 2. And <u>here's another scaled-up hundred chart</u> with older kids.
- 3. Blog post: Getting Started with Whole Body Math Learning: Scale Up!

# LANGUAGE INCLUDES GESTURES / GESTURES ARE BODY-BASED SPATIAL EXPRESSION

Taking notice of students gestures while they're talking about math (with or without paired speech) provides insight into their spatial and mathematical thinking. Notice student gestures and mirror the gesture back to the class while remarking on the action and using the appropriate spoken language label.

#### DIAGRAMMING AND MAPPING ARE SPATIAL REASONING IN ACTION

Maps and diagrams move a math idea into the spatial realm. (These are all K-2 students.)





