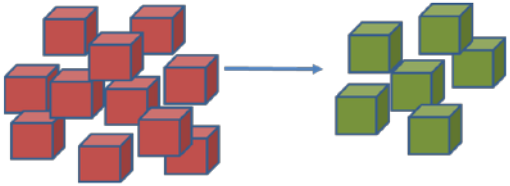
# From Arithmetic to Proof:
## Creating Mathematicians in the Elementary School Classroom




## Reva Kasman, Salem State University


**Wednesday, April 18, 2018, 7:30 PM – 8:30 PM**
**Alumni Room, 3rd Floor, D. Justin McCarthy Center**

Traditional mathematics learning tends to begin with the presentation of a polished result which is then applied to carefully chosen illustrative examples. But this format hides the true nature of a mathematician's work, which is creative, exploratory, messy, and meandering. Long before mathematicians prove a useful theorem, they play with examples, cultivate their intuition, and make a lot of false starts in their search for something that is plausibly true.

How does the mathematical experience change for elementary students when they function as a community of mathematicians? In this talk I will share work from a project which brings mathematical argument about the four arithmetic operations into 2nd – 5th grade classrooms. We will explore what it means for young students (and their teachers) to engage in the earliest stages of creating conjectures, searching for evidence and counterexamples, and ultimately supporting their claims with representation-based proofs.

Images courtesy of Dr. Reva Kasman.


Please contact Sarah Mabrouk, smabrouk@framingham.edu, 508-626-4785, Mathematics Department, for additional information.


https://www.framingham.edu/faculty/smabrouk/preskenis/annual/sixteenth.htm