Erin R Moss* (erin.moss@millersville.edu). *Math meets drama: Introducing constructivist pedagogy to prospective elementary teachers.*

In this talk, I share an activity I use at the beginning of each semester in a mathematics course for preservice elementary teachers, and I discuss how I use it to introduce constructivist pedagogy that builds on student thinking. I select student volunteers to read and act out a “play” that dramatizes an actual situation that occurred in an elementary classroom. The play presents a Kindergarten student’s interactions with his teacher as he encounters the square root concept. At certain key moments in the dialogue, I stop the play and ask all of my students to write down how they would respond to the boy if they were his teacher. Afterwards, we compare and contrast the ways that my students envisioned responding to the boy with the ways that his teacher chose to interact with him. My preservice teachers typically write down responses that discourage the boy from continuing his mathematical explorations, yet the boy’s actual teacher engages with him in a way that promotes his curiosity and helps him make profound yet age-appropriate discoveries about the square root concept. This activity highlights the differences between the didactic mathematics pedagogy that most of my students experienced in grades K-12 with a pedagogy that is responsive to students’ thinking. (Received September 18, 2013)