Engendering Productive Ways of Reasoning About Angle Measure with Prospective Elementary Teachers

Dr. Hamilton L. Hardison
Texas State University
1:00 pm in DERR 227
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Abstract: Developing productive quantifications of angularity is crucial for students' progress in K-12 school mathematics and beyond. Therefore, it is important that mathematics teachers' quantifications of angularity are robust enough to support their students' learning. In this talk, I will discuss a study involving an instructional intervention designed to influence prospective elementary teachers' ways of reasoning about angle measure. I will present some of the activities constituting the intervention and discuss the PSTs' conceptions of angle measure before and after the intervention. The results I will share suggest the intervention was successful for the majority of participating PSTs; however, I will also discuss limitations of the design of the study, as well as future directions for addressing some of these limitations.

Dr. Hardison received his Ph.D. in Mathematics Education from the University of Georgia and is a lecturer in the Department of Mathematics at Texas State University. His primary research interests lie in investigating students' mathematical thinking. His current research focuses on modeling students' constructions of quantities (e.g., angularity), how these constructions change over time, and how they vary across contexts.

Next Friday, March 15: 3MT Practice Talks