Angle measure is pervasive in mathematics curricula from elementary grades through higher education. Yet, students and teachers alike tend to experience challenges quantifying angularity. To occasion reflection on measuring angles as well as tools designed for this purpose, I designed non-standard tools that might be used for measuring angles (i.e., funky protractors) and asked prospective elementary teachers to assess the validity of these tools. In this talk, I present the funky protractors, an analysis of prospective teachers’ justifications regarding their validity, implications of these results for mathematics teacher educators, and my plans for further research in this area.

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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 interest is 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.