1154-N1-2446 Frank Savina*, 3925 W. Braker Ln., Suite 3.801, Austin, TX 78759. Rethinking Calculus Pre-requisites—What does it take for Students to be Successful in Calculus?

We often identify algebraic fluency as one of the core mathematical skills necessary for success in Calculus. However, it is important to recognize that in addition to fundamental algebraic fluency, students in programs that require Calculus also need to develop reasoning skills that allow them to grapple with deep and meaningful problems associated with change. How do we as math faculty create preparatory courses that develop these skills while simultaneously developing algebraic fluency? This session will share insights from a 2-year long project at the Charles A. Dana Center at UT Austin that attempted to answer this question, and culminated in a re-envisioned sequence of preparatory courses for Calculus. (Received September 17, 2019)