1135-J5-3053　　　　**Andrew J Krause*** (`krausea3@msu.edu`). *The Learning Experience Framework: Conceptualizing Student Engagement In and Out of the Classroom.*

Institutions with successful calculus programs collect and use local data to inform their teaching. Many departments carefully track quantitative student achievement data–such as grades, exam scores, and homework completion rates–but lack qualitative data about what students are doing while they learn mathematics. Achievement data is important for evaluating a course and identifying issues, but qualitative data about students' learning experiences reveals how students engage with our courses. Do student use online homework as a learning tool? How do the resources we provide to help students learn? How does the course facilitate or hinder collaboration? A potential barrier to collecting qualitative data is the lack of a conceptualization that unifies existing literature and frames research about students' learning experiences. I present a framework that highlights distinct features of the mathematical tasks that shape student engagement and explain how that framing facilitates research that can inform teaching. I will present findings from a study about students' experience with online calculus homework to demonstrate the utility of this theoretical approach and explore how other learning contexts might be examined similarly. (Received September 26, 2017)