

1125-A5-2291 **Andrew J Krause*** (krausea3@msu.edu) and **Ralph Putnam**. *Nuances of online calculus homework: Insights from the student perspective.*

Online homework is propagating rapidly across the nation, especially in large, introductory courses in STEM fields. The literature provides some evidence that the implementation of online homework is correlated with higher exam scores and course grades, but research and theory about how students engage with and experience online homework to support their learning is lacking. This study examines student experiences with online homework by identifying various homework environments, resource use, perceptions, and strategies that characterize diverse student experiences and learning opportunities. Student achievement data is only one of the many forms of data required to understand how online homework supports learning and inform improvements to its implementation; this research draws on interviews and screen recordings and demonstrates the importance of qualitative inquiry about student learning. The findings provide a nuanced portrayal of students' experiences with online calculus homework and illustrate the importance of factors such as individualized homework sets, the types of resources accessed, and the structure of due dates. Interviews with the students provided insights about adjustments that could improve the learning opportunities facilitated by online homework. (Received September 20, 2016)