

1145-J5-1887

Matthew Voigt (mkvoigt@gmail.com), **Antonio Martinez*** (aemartinez@sdsu.edu) and **Chris Rasmussen**. *Calculus variations as figured worlds for math identity development.*

Calculus is often an essential milestone during a students' time in college and can be especially impactful for students wishing to major in in a math or science field. Given its relative importance, the ways in which calculus courses are delivered can have a lasting impact on a student's trajectory and relationship with mathematics. Most notably, with how students perceive themselves as learners and doers of mathematics. In this study we document the ways in which three calculus course variations at the same university operate to promote different mathematics identities for students. In addition to the standard calculus, this university has a coordinated calculus-physics course for advanced students and a life science course, which includes a focus on biology. We conducted focus groups with 3-5 students from each course variation. Drawing on the Holland et. al.'s (1998) framework of figured worlds, we showcase the ways in which these course variations act as if they are different calculus worlds that constitute socially organized and produced realms of being. We highlight the ways in which these figured worlds position or fail to position students with the opportunity to refigure themselves and others in relation to mathematics. (Received September 24, 2018)