

1135-VJ-1232 **Abigail L. Higgins*** (ahiggins@csum.edu), California State University Maritime Academy, 200
Maritime Academy Drive, Vallejo, CA 95490. *A Case of Community, Investment, and Doing in an
Active-Learning Business Calculus Course.*

Teaching business calculus exposed me to unique instructional challenges. Pilot interviews revealed that students in this course at this particular institution identified two main concerns: (seemingly) irrelevant content and a lack of opportunities to be active in class. This project involved an instructional redesign of this course that intended to address these concerns. In this talk, I will present a case study of Christina - a very engaged student who was retaking this course. It was clear from analysis that the size of class mediated Christina's access to classroom community, which she perceived to be a necessary condition for her learning. Additionally, Christina drew a distinction between authentically situated mathematics and pseudo-situated problems that fail to invest her in the problem-solving process. She noticeably valued opportunities to do mathematics during class and receive feedback from her instructor and her peers. This project has implications for active-learning in higher education and situated mathematics problems. Furthermore, this work hopes to contribute to the limited body of research on the teaching and learning of business calculus. (Received September 20, 2017)