

Welcome to the Twenty First Annual Hawaii International Conference on Education



Time: 3:00 - 4:30 PM / **Wednesday** - 1/4/2023 / **Room:** Kahili 1
Session Topic: STEM Education **Session Chair:** McCormick, Kelly

Physics and Elementary Mathematics in Undergraduate Teacher Preparation

In order to support preservice elementary and middle school teachers' STEM development, physics was integrated into a mathematics content course. Changes in thinking were explored in relation to mathematical beliefs. The new content emphasized the use of motion to contextualize algebraic concepts like slope and intercept. The results showed statistically significant improvements in the preservice teachers' self-efficacy. Our results provide guidance regarding the use impact of physics in mathematics.

Kurz, Terri — Arizona State University

Meltzer, David — Arizona State University

Nation, Marcia — Nation Evaluation Consulting