

F22.004: Virtual TACTivities for the Mathematics Classroom

Faculty mentor: Angie Hodge-Zickerman

Overview

The scholar involved in this research project will help in the creation and implementation of virtual tactile learning activities called TACTivities. These activities will be designed to have movable pieces and engage the learner in both hands-on and minds-on ways. Ideally, the scholar would have an interest in either elementary education or calculus. The TACTivities will be created in partnership with the faculty member and be catered to the interests of the scholar. At least one well-designed TACTivity will be field tested during the spring semester working with the faculty member to conduct a small-scale research project on the TACTivity.

What the student will DO and LEARN

The student will learn what a TACTivity is and what a virtual TACTivity is. The student will learn how to create a virtual TACTivity (and will do so). The student will learn how to use Desmos and Google slides to create the virtual TACTivities (and will do so). The student will learn about mathematics education research and get to learn how to conduct a pilot study to test out their work (testing out a TACTivity they created).

Additional benefits

The student will learn to work collaboratively with a faculty member on a project that gives them skill in both research and creating engaging classroom activities. The student will also learn how to use Desmos Activity Builder and Google Slides to create these activities. Most importantly, the student will hopefully have fun learning mathematics and mathematics education research in a fun way!

Additional qualifications

Experience in either calculus or mathematics for elementary teachers

Time commitment

6 hrs/week for 30 weeks