

# Using Mathematics to Understand Our World Teaching and Learning Project

**Project Goals:** This project explores learning and teaching from two perspectives. How can you embed the mathematics that you learn in your classroom? Does there exist a relationship between how well you understand the mathematics, how much you enjoy the mathematics, and how successful you can be as a teacher of that mathematics? Can you convince your students that mathematics is used in important real-world problems and that it is interesting?

**Project Tasks:** Find something we have done this semester that

- (a) You found especially interesting, and
- (b) You think you could adapt to the level of your students.

Tell your students about what you have learned, why you found it interesting, and how it can be used in the real world. I also ask you to emphasize in your conversation the real-world importance of mathematics- that it can be used to help make decisions in critical social issues. It is not just something you use to figure out how much it will cost to carpet your basement.

Write one page telling me the topic you chose and about the conversation you had with your students on this topic. Were they as excited and interested as you?

If you were not also busy with your *Research Action Project*, I would ask you to take something you learned in this class and present it as a lesson to your students, at an appropriate level. To adapt material to the appropriate level can be difficult (for example, Wendy Hines had to think hard before she came up with the idea of the schoolpox problem; she had started with the goal of wanting to share the smallpox paper with you).