First Generation Students enter college with specific challenges:
- lack of preparation
- incorrect assumptions or perceptions
- poor study skills
- poor time management
- poor critical thinking skills

These issues tend to cause serious problems while in college and can lead to:
- too much emphasis on "getting the right answer"
- lack of understanding of fundamental principles
- lack of understanding of engineering principles

The big question, then, is: What can we do in the standard "number-crunching" engineering curriculum to help these students?

Oregon Tech Students Are:
- Primarily Male (85% in School of ETM)
- Primarily White (64%)
- Oregonians (75%)
- First Generation Students (56%)
- Underprivileged (56% on financial aid)

What makes OIT students cool is their EXTERNAL diversity. It is not their INTERNAL diversity.

As a participant in the Institute for Scholarship in Engineering Education, I was able to:
- Refine methodology into a workable strategy
- Work with other engineering education scholars
- Define a suitable scope for the study
- Develop an appropriate research question

The most beneficial part of being an ISEE scholar is realizing that, just as there may be no single right answer for engineering problems, there is no single way to conduct engineering education research.

This material is based on work supported by the National Science Foundation under Grant No. ESI-0227558, which funds the Center for the Advancement of Engineering Education (CAEE) as a collaboration of five partner universities: Colorado School of Mines, Howard University, Stanford University, University of Minnesota, and University of Washington.