

Engaging Students Through Research at a 2-YC

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I can honestly say that for the past six years of teaching full-time I have been excited about going to work everyday. The prospect of having the opportunity to introduce something new to a group of students, or explain something that they take for “granite” everyday gives me as much excitement and contentment as my regular morning tall Starbucks House Blend coffee! I like to think that all college professors had that one instructor, professor, or advisor that made them want to go down the path of education and forgo the path of fame or fortune in the geosciences.

As a 2YC professor I have this rare privilege to be that same professor I had and inspire my students to learn our language of Geology. But as 2YC professors we face more unique challenges than our 4YR counterparts. Many of students are non-traditional students and are not typically encountered at 4YC. But it's these types of students that make teaching at a 2YC, in my opinion, a more rewarding and challenging experience. Our non-traditional students are enthusiastic and determined individuals who are; single parents, returning for a second career, have disabilities, are at an economically or social disadvantage, or are in a family where culturally a college education is not encouraged, and this is just to name a few.

A challenge we face in STEM education is not in inspiring our students to be passionate about geology, (our passion and knowledge on our subject should make it infectious and incurable!) but making our students see themselves as scientist. The teaching of science as an inquiry, and the incorporation of science activities as part of the learning process has been successful in getting students learning and envisioning science. But to be truly successful we must continue this process. By having our students do the science they learn to envision themselves as scientists. When student can envision themselves themselves as scientist, they learn the capability to make themselves scientists. It's easy to get students to think about science, but it's difficult to get them to think of themselves as scientist.

At El Paso Community College (EPCC) I've tried to facilitate my students envisioning process by offering research to our geology majors. Through a grant from the NSF's Opportunity in Enhancing Diversity in Geosciences I've been able to create a research program Student Opportunities in Learning Advanced Research in the geoSciences (SOLARIS) at EPCC.

The SOLARIS program funds 10 EPCC geology majors to conduct research with either EPCC faculty or participating faculty at University of Texas at El Paso. Students learn by taking ownership of their research projects and learn the process of research (data collection, use of equipment, data processing, writing abstracts, oral presentations, etc.) to help facilitate their vision of becoming a scientist.

