

One-page essay describing what I do, or what I would like to be doing, to improve the preparation of students in two-year colleges for geoscience careers.

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After transferring to a 4YC, my 2YC students should feel competitive, confident, and supported. To achieve that goal means setting up a support network of faculty and fellow students and giving them strong foundational skills, knowledge, and experiences. It also means building career and workforce skills. Since I cannot supply all of this myself, I rely on colleagues at 4YCs and research labs and industry and consultants. And I strive to bring part-time faculty into my department who can help us stay fresh in what the workforce wants.

Right now I am working towards these goals with the following programs/resources:

- **Mentoring program** – A students, especially those identified as majors, are encouraged to act as tutors and lab aides to the same classes they have completed – they develop personal relationships with the instructors – ie, they get mentored – and they develop tutoring skills and expertise in the subject matter – ie., they mentor.)
- **Transfer website** – We provideh sections for each surrounding 4YC, including links to websites, and ideally blurbs written by their departments and how to get involved. We also include job/career/internship info; and we develop majors around basic transfer skills and foundations (physics, calculus, etc.).
- **Reciprocal relationships with local 4YCs** –having our students attend Club meetings and department seminars while they have their graduate students shadow our instructors and get experience teaching (this is a fledgling program, and would benefit from expansion and continuity – it helps if there’s one instructor who can fan/support each 4YC relationship, as there are many in our area).
- **Earth Sciences Club** – to foster shared experiences, networking, and long-lasting connections
- **Internships** – This program is also something that exists in a fledgling offering now – with the USGS Benthic Lab and the National Park Service, but which would benefit from deeper, more consistent and varied research/lab relationships.

Website: www.ccsf.edu/Earth (choose Students and follow through to learn more about our Club, Mentoring Program, Internships, Transfer information, etc.)

The program listed above that has great potential, but that is the weakest at the moment is INTERNSHIPS. And the challenge there is finding a greater diversity of labs and colleagues to make those experiences available to students. I can give students work experience college credit, and in some cases they can earn a small stipend. But making the connections required to create a pipeline that the researchers value and that I can value for my students is limited by time and connections. The value for my students comes from hands-on research experience and field work – networking with professionals, improving their resume, learning what aspects of their field most interest them, and developing support networks and mentoring from other scientists. Evidence of the positive value comes from the future career options and potential of the students who have had these experiences. They either decide science is not their bag, and focus their energies in other directions, where they’re more happy, or they end up top of their class at the 4YC (though they do start out that way at the 2YC as well), and they end up actively engaged in research prior to graduation with a BS and continue onward for a PhD. That being said, I don’t have a statistically large enough group yet to say that I have a guaranteed model.