

Domain 1. Assuring Access

College of Science and Mathematics

On February 2, 2007, the Domain 1 group met. The group members were Jodi Christiansen (Physics), Grace Ann Neff (Chemistry), Michael Black (Biology), Matt Carlton (Statistics), Linda Patton (Math), and Kent Morrison (Math and group leader).

We should look for students who are on an improving trajectory and give them the attention they need to succeed even if they are coming from a deficient background.

As the number of students applying in the STEM disciplines declines, should Cal Poly accept less qualified students in order to keep the number up? Yes if we can identify those with the will to succeed, but we already have a wide spread in qualifications of students and broadening the spread would be bad.

Are economic considerations like salary keeping students out of science and math? Yes, to some extent, but the life style and possibility to work in an area that one loves should make up for that. However, we need to get the message out. Sending cool, young, financially successful alumni into schools to talk about careers would be better than sending faculty.

Cal Poly should encourage and ease major changes into science, math, and engineering.

It appears impossible to have grammar school teachers well-qualified to teach science and mathematics. We believe that schools should create positions of math and science specialists in the lower grades, teachers who work with several classes in those subjects.

The CSU has disincentives for campuses to invest in lab based programs because of the funding formulas.

Vocational education should be brought back to high schools and community colleges. Many of the programs would involve practical science and math and would serve to prepare high school students for real jobs, attract some of them to more advanced jobs requiring college, and give society a better qualified work force.

Too many students work too many hours while going to college. Grants for students in STEM disciplines would both attract students and improve their success.

It appears that students entering community colleges are not very likely to transfer to four year colleges. We would like to identify those students in their first year at a CC who have the potential and interest to make it to a B.S. in science/math/engineering.