What is the SMI CalTeach program?

Program Structure

1. Recruitment and Advising
2. Coherent Curriculum
3. Field Experiences
4. Research Experiences
5. Faculty Participation and Collaboration between Departments of Science, Education, and Mathematics
6. Continuity Components
7. Master and Mentor K-12 Teachers
8. Ongoing Data Collection, Research, and Evaluation
9. Partnerships between Community Colleges and CSU
10. Financial Incentives

SMI enrollments by term and campus

Patrick will put a couple other slides here…

UCSD’s New Math and Science Education Minors

<table>
<thead>
<tr>
<th>Academic</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>Teaching Math (or Science): The Challenge</td>
<td>Introduction to Teaching Mathematics (or Science) &amp; Practicum</td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>2+2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior 4+4+4</td>
<td>CDS 17: Language, Culture, &amp; Education</td>
<td>Foundations of Teaching &amp; Learning Mathematics (or Science) I</td>
<td>Foundations of Teaching &amp; Learning Mathematics (or Science) II</td>
</tr>
<tr>
<td>Senior 4+4+4 2+2+2</td>
<td>Introduction to Teaching and Learning I &amp; Practicum</td>
<td>Introduction to Teaching and Learning II &amp; Practicum</td>
<td></td>
</tr>
</tbody>
</table>
Math, Science, Education Partners

Faculty (including new lecturers-LPSOE) in Physical Sciences and Education Studies collaborated to build the program and share the teaching of the courses in the minor.

• Students learn about the pedagogy in the context of the mathematics and science content, rather than education courses being tacked onto students' math and science courses. Students gain:
  • An understanding of the mathematics and science content.
  • Insight into how students learn the mathematics and science content.
  • Knowledge of how to develop curricula and assessments that promote learning.
  • Experience in the culture of classroom teaching.

Recruitment

Presentations
  Classroom presentations

Collaborations
  Orientation Department
  Career Center
  Science and Math Departments
  Community Colleges
  Graduate School of Education & Credential Programs

Flyers/Advertisements
  Letter from Governor
  Polo shirts
  Websites
  School Newspaper
  Brochures
  On-campus office
  Emails

UCLA-recruitment

Open door policy

Pre-Professional Development workshops
  Credential Programs and Intern Programs
  “Pathways to Teaching”
  Financing a Career in Teaching

Collaborative efforts with academic, departmental and career counselors

California Teach Science-Math Initiative

CONTINUITY COMPONENTS

• It is of extreme importance to create a community of lifelong learners and future educators within our cadre of Cal Teach students.
• Much like the students that they will teach, our students must also be provided with opportunities and support for growth and development.
• Creating opportunities for our students to invest in the program beyond our seminars is crucial.
• We will see growth if we always keep the students interest in mind.
How do we promote and sustain community?

- Physical Space
- Advising
  - Academic
  - Career
  - Personal Counseling
- Seminar & Fieldwork Experience
- On-going Enrichment Workshops
  - Financial Aid for Future Teachers
  - How to Write your Statement of Purpose
  - Test Preparation

How can we strengthen our support for students?

- Program Orientation
  - History
  - Goals
  - Expectations
  - Program Calendar (students lead very busy lives)
- Student Leadership Positions
  - Peer Advisor(s)
  - Student Leadership Team (ongoing focus group)

UCD -advising

Early advising helps students…
Keep Their Options Open!

Choose GE and “extra” courses wisely to …

- Satisfy credential requirements
- Add breadth to your major
- Satisfy an education minor
- Get field experience

Advice to math majors

While completing your major, include courses that …

- you will be teaching
- will add depth to your teaching
Science & Engineering

Science majors
- add breadth in other sciences

Engineering or Physics majors
- add specific math

UCR faculty collaboration

Faculty Participation and Connections

- College of Natural Agricultural Sciences
- Created new courses
- Designed new emphases within STEM degree programs
- Grant submission (Dept. of Sci. - nG)

- 6-12 Outreach
- Grant submission (NSF)

- Community
- Provided formal/informal forums for school district awareness and recruitment.
- STEM outreach

FACULTY PARTICIPATION
- Developed STEM Degree Emphases in Education
- Designed Summer Institute Training Activities
- Engaged First-Year Students in Early Field Experiences
- Created New Courses (CaT1, 2, Career Seminar)
- Participated in National STEM-Education Conferences
- Submitted STEM-Education Grant Proposals
- Consulted during SSMP (Biology, Chemistry, Earth Science, Physics) development
- Constructed Mentor Teacher Certification Program