



Building Bridges from 2YC to 4YC

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Background

El Paso Community College

- 28,000+ students (2015)
 - 85% Hispanic
 - Geological Sciences A.S.
- 6 campuses

University of Texas at El Paso

- 20,000+ undergrads (2015)
 - 80% Hispanic , 5% Mexican National
- Geological Sciences
 - B.S, M.S., Ph.D.
- Environmental Sciences
 - B.S., M.S.

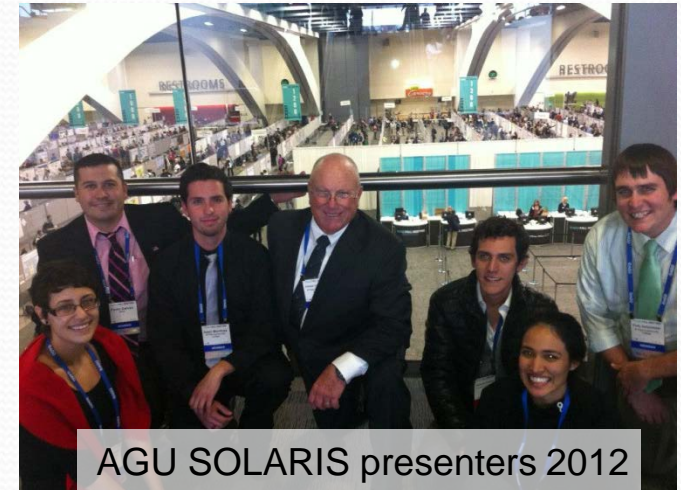


NSF Opportunity in Enhancing Diversity in the Geosciences- Track 1- SOLARIS research program provided non-traditional students:

- Stipend of \$1000/semester
- \$500 for supplies/rentals
- Travels for students to presentations



Various internships awarded to SOLARIS participants



AGU SOLARIS presenters 2012

Building a common curriculum “bridge”

2+2 plan

- At EPCC students take:
- Physical and Historical Geology
- 2 Sophomore courses (Envir. Geol., ~~Field Methods, Mineralogy~~ or **Research Topics**) transfer as electives
- Precalculus and 2 semesters chemistry required for A.S.

Building a common curriculum “bridge”

2+2 plan

- At UTEP students take:
- Remaining geology core (mineral., geoscience processes, petrol., sed., structure, two 3-week field courses)
- Finish calculus and physics (can dual enroll at EPCC for this)
- Remaining upper division electives
- Timing is critical – must start in fall semester

Building a common curriculum “bridge”

Introducing new pedagogy and materials (InTeGrate) through one-on-one consultations and group workshops for instructors at UTEP and EPCC

Fall 2015:

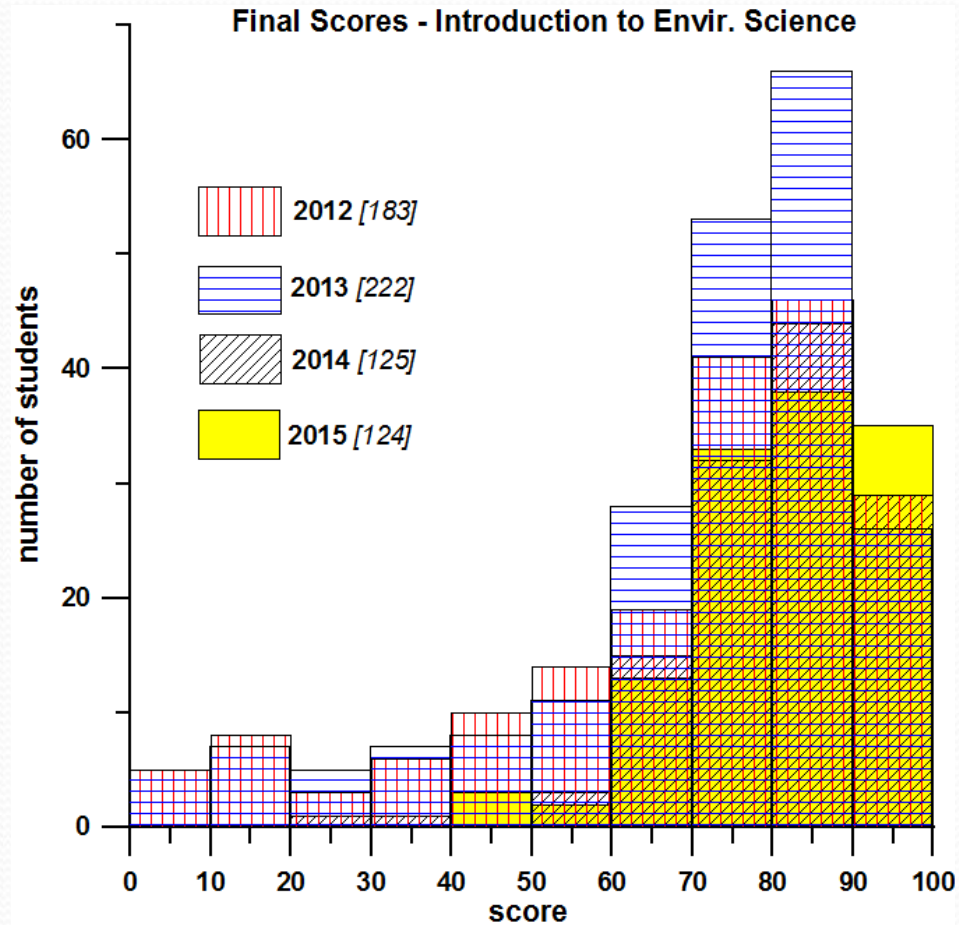
14 instructors (TA's, adjuncts, assistant to full professors)

21 courses (e.g., phys. geol. labs, hist. geol., intro. to env. sci., blue planet, earth science 1 and 2, envir. geol.) – face to face and on-line sections

Taught units from 5 modules (climate change, hazards, envir. justice/freshwater, mineral resources, soils/agriculture)

~500 students

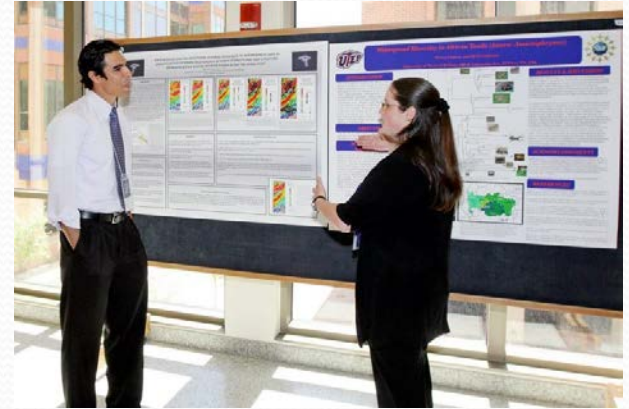
Building a common curriculum “bridge”



Building a research “bridge”

Individual Research Projects

- Project guided by UTEP faculty member with aid from UTEP undergraduate(s)
- Project culminates with presentation at UTEP geoscience colloquium
- Finding funding is challenging!
- Depends on UTEP faculty buy-in



Building a research “bridge”

Class Research Project

- UTEP and EPCC classes meet together in the field
- Students work together on similar data set and compare results
- Depends on course scheduling



How do we help students cross the “bridge”?

- Have students register as geology majors at EPCC as soon as possible
- Have students meet UTEP advisors their second year so no surprises occur during transfer
- Encourage students to apply for scholarships, internships
- Help them anticipate “sticker shock” of UTEP tuition, parking, computer, books, commuting
- Learning communities at UTEP
- New and continued undergraduate research at UTEP

New ways to build “bridges”

- UTEP Campus Office of Undergrad. Research Initiatives
(funding, mentoring)
- Revamping UTEP Envir. Sci. curriculum
- InTeGrate program is using curriculum across EPCC, UTEP and early college high schools

