

Concurrent session #24 Undergraduate Research and the Two Year College: Opportunities and Challenges

AACU meeting Providence, RI : Engaging Science, Advancing Learning

November 6-8, 2008

Barriers/Challenges to Success

1. Money (for faculty and students)
2. Time (for faculty and students)
3. Space
4. Institutional support
  - a. Inertia
  - b. Teaching load
  - c. Partnership creation time
5. Have to get underprepared students up to speed in understanding research
6. Misconception that science is hard and has to be “rocket science”

Incentives to pursue research with our students/Opportunities to consider

1. Good for the students
2. Research IS teaching: faculty member’s enthusiasm is easily transferred when working on interesting topic
3. Research in teaching pedagogy is also a way to involve students
4. Giving students skills to understand the basic process of science helps them make decisions about their future
5. Opportunity for interdisciplinary collaboration
6. “Research” equipment can be used by all students
7. Increased institutional visibility (i.e. branding/niche)
8. NSF continuing to look at 2 YR – 4 YR partnerships – this may be a way to leverage such opportunities
9. Student self empowerment and confidence is increased
10. REU – need help convincing our four year partners that our students are worthy of consideration
11. Science literate public
12. Increases student retention
13. Prepare students for smooth transition to 4 YR
14. Students need a chance to see that STEM education is a possibility for them (particularly challenging for first generation students) and introducing research opens the door to that potential.

Other strategies discussed:

1. Leverage the PSEO (HS concurrent enrollment); shared sense of community for what these science skills mean and show how complex learning relates to students’ lives
2. Get a 4 year partner to host a research conference
3. Create a “tips” video on how to encourage students to pursue research
4. Chemetka CC = Wynne Cudmore has done an NSF project on environmental education that has booklets to download for use

5. Combat the urban legend that biotech companies need bachelor degree (or higher) prepared workers
6. Partner research with 4 yr institution – each group does a portion of the work
7. Consider this as a way to increase workforce development/benefit to the economy
8. Idea of “going back” for an education is changing. Often students do this in steps and it is advantageous for the institution to have students think of you when they consider the next step in their education.