Division III Open Meeting

Feb. 19, 2015

Notes

Present: Dave Berque, Tim Cope, Dana Dudle, Jacob Hale, Jeff Kenney, Alex Komives, Rich Martoglio, Kevin Moore, Selma Poturovic, Pam Propsom, Jackie Roberts, Michael Roberts, Fred Soster, Christina Wagner, Scott Wilkerson

Diversity data. Jackie and Pam shared OIR data on DePauw science and math majors by gender, ethnicity, and first-generation student status (see PowerPoint slides). Every DePauw science and math discipline is below the overall university percentage with regard to domestic students of color. Having a critical mass of women or students of color might be important to maintain diverse students in a major.

Also data on how many science and math classes non-majors take. On average, these students take 3 science and math courses (one above the minimum required), international students take 4 (see PowerPoint slides).

There was an update on Senior Assessment Day (or the Senior Celebration; the name is still under consideration, as is the format). The idea is to have seniors take the TOSLS (Test of Scientific Literacy Skills) and get future contact info from them (for the Hubbard Center). While students are there we can also ask them what they thought they would major in when they entered, what they eventually majored in, what drew them in or pushed them away from particular majors.

How can we make our courses more welcoming for all students? Some national data on minority students dropping out of science/math at higher rates than majority students. The Introductory courses are often where the “melt” occurs. One suggestion from David Asai (HHMI Senior Director of Undergraduate Programs) is to put greater resources into Intro course labs rather than individual student research experiences, the latter which is expensive, comes late in a student’s career, and affects a much smaller number of students.

We had some discussion about what we might be able to do to make our courses more welcoming to all students. Do we tend to use examples that are “male-focused” (e.g., football) versus something might be interesting to a wider variety of students? Physics education has been in the lead in examining instructional methods. Physics faculty from DePauw who were present talked about how their Intro courses are much less lecture-based and more interactive, giving students more questions to talk about, but this is less the case with their upper-level courses. Faculty from Geo mentioned that they’re using more collaborative activities in lab, students collaborating with each other and with the instructor. It has been working pretty well so far. One faculty member reported research recommending that when you form groups of three students to work together, you should not just have one female in a group. Another faculty member described using playing cards to randomly assign students to groups; students forced to interact with different people. Pam shared ideas that Gloria Townsend has successfully used in drawing more females to the Computer Science major at DePauw and suggestions that Valerie Purdie-Vaughns (our Faculty Institute speaker) provided for reducing stereotype threat.

General education curriculum revision proposals. We discussed the current DePauw proposals, focusing on the “Four Pillars” proposal from faculty in Geoscience. They explained their rationale for the proposal: it puts everyone (departments/programs) on equal footing (i.e., “Everybody’s got to have skin in the game”), reinstates some requirements removed by the 2-2-2 (i.e., lab, literature, self-expression), beefs up the requirements, adds Diversity and Difference requirement. During the discussion, there were some initial concerns regarding Modern Languages and the Diversity component. Is “diversity” just shoved into one little box or do we view it as on equal footing with other requirements? Do First Year Seminars count? Where would interdisciplinary courses fit in the scheme? They could fit in somewhere, or the faculty member or student could choose how/where each course counts. Every area has the responsibility to design its own courses that will count; this provides some structure, but also flexibility. The key is to have goals for each requirement. There was some discussion about the lab requirement. Perhaps dropping the labels from the top (AH, SM, SS) might make it more acceptable to people. Maybe over time some of the departmental boundaries may disappear.

Future meeting dates.

* Brown bags:
  + Wed., March 11, 11:30-12:30 (Julian 152)
  + Wed., April 8, 11:30-12:30
* Next Division-wide meeting:
  + Wed., April 29, 7:00-8:30 p.m.
* Summer workshop:
  + Tuesday, May 26
  + Stephanie Chasteen, PhD in Physics, Associate Director of CU-Boulder’s Science Education Initiative
  + Learning goals, interactive instructional techniques