S & M Brown Bag

Meeting Notes

11/20/15

Present: Dave Berque, Steven Bogaerts, Bridget Gourley, Carrie Klaus, Jim Mills, Selma Poturovic, Pam Propsom, Jackie Roberts, Henning Schneider, Rick Smock

Jackie reported—HHMI grant guidelines have changed dramatically, taking focus off of changing the students and on to changing the institution. This year’s theme is “inclusive excellence.” Pre-proposal due Dec. 1 and if invited the entire grant proposal is due Oct. 2016. David Asai (head of HHMI undergrad division) suggests focusing on the introductory courses, which is where students often get turned away from science and math.

Diversity defined by gender, domestic students of color (DSOC), and first-generation college students.

Jackie shared DePauw data and slides, some previously presented at a division meeting. First set of data was on diversity representation by major. (How is “first-generation” determined?).

Data on diversity and students’ GPA in their SM major (although this is by “first major,” and it would be better to do it for both majors if a student is a double-major).

Final set of slides on diverse students’ representation in and success in 100-level science and math courses. Departments were not identified (just labeled A-H).

Most striking finding was DSOC lack of success (defined here as a C- or below or withdrawal) in our 100-level courses. (It would be good to have the comparison data across the CLA in 100-level courses.)

It seems like we have identified a problem—lack of success for DSOC in our introductory science and math courses. How do we address this? What are ideas for the HHMI proposal?

Bridget shared some focus-group data from students—for DSOC or first-gen, do they not get the message that SM is hard, a 65% on a first exam is not unusual or the end of the world, need to help them develop resiliency. Do we admit students who cannot do college work or succeed in our courses? But we have admitted these students to our institution, how do we help them succeed?

One person suggested that people have different abilities and can’t we just admit that? Not everyone can do music, and not everyone can do math.

Ideas

--Adding a summer bridge program? Hard to sustain, and Carrie suggested that it’s her perception that’s not what HHMI wants.

--Data for SM FYS suggest more success. Might this be a model for us? An argument against this might be that FYS are small (approximately 15 students); doing this for all our intro SM courses would probably require doubling the number of science and math faculty. In addition, FYS tend to be pretty “content-light.” Might there be some elements of FYS that we could use in our other SM intro courses? For example, nurturing, peer mentors. (Talk with Gloria Townsend about mentoring she’s used in CS. Susan Wilson about the subject tutors she’s training; valuable for both the tutors and tutees. Integrate best practices that have already demonstrated effectiveness.)

--Developing students’ resiliency is also on us as faculty. Are we doing enough in helping students understand college? Using upperclass students as mentors for first-year students, especially DSOC and first-gen. We are participating in an ongoing study of developing students’ resiliency.

--Improving teaching practices in general has been demonstrated to increase student learning. Big meta-analysis on how active-learning strategies lead to better student performance.

Will share identified departmental data with each respective department.