SM Open Meeting on Gen Ed

Notes

3/17/15

Present: Pat Babington, John Caraher, Jim Benedix, Sharon Crary, Bridget Gourley, Dan Gurnon, Doug Harms, Rich Martoglio, Pam Propsom, Jackie Roberts, Fred Soster, Christina Wagner, Scott Wilkerson, Brian Wright

John shared a general education proposal (handout) put together by Dave Guinee. It is organized by competencies (W, Q, S), Liberal Arts Foundation, and Global and Local Awareness (Foreign Language, Society & Culture, Intercultural Experience, Power/Privilege/Diversity). He also shared a working draft from CAPP, a revision to the “Six Experience” model (handout). CAPP is wrestling with the number of courses that would be required. CAPP would like to have a vote at the May Faculty Meeting; therefore, they must give prior notice at April Faculty Meeting. March 30 is CAPP’s last meeting before the April Faculty Meeting. They will still be seeking feedback between April and May.

To direct today’s discussion, Jackie shared a set of guiding principles, questions to address, and different models to think about (handout).

One suggestion: Might we be able to use January/May term as a “laboratory/experiential” science component? One proposal is a 2 course Science and Math (SM) requirement: 1 math/logic/computation and one natural science with a lab, but could also meet the latter requirement by taking a science class without a lab and a Winter/May term lab/experiential component.

If we want a lab requirement, we have to be clear on why and what that course would entail.

Do we want to separate out the S and the M requirement? At the Brown Bag lunch where we looked at results of the attitude survey used in some SM courses this fall, the discussion made it obvious that faculty view them as two different things. The TOSLS that we’re using to test students’ “scientific literacy” skills divides them. John said he can’t envision CAPP making a proposal that doesn’t separate them.

Where would Computer Science go? Probably in the Math and Computational category. Doug, speaking for CS, said that his department currently does offer a lab course. Would CS1 count as a “science lab?” What’s the goal of the labs?

One person suggested that labs should entail hypothesis generation and testing. Another person suggested that what matters more than the gen ed model or designation is the *way courses are designed and taught*. Process of science is important and not just content for the major. Could this be accomplished in class and not necessarily a lab? Lab provides additional time to do these things. We want a system that’s inviting for all students, including those who are “science-phobic.”

What is our *ideal* SM requirement and what might we have to compromise on?

If you look at schools that have strong science programs, they all have a lab requirement in biological and physical sciences.

Perhaps we need to separate the questions of whether we think students *should* have a lab and what our current labs do, and *then* deal with revising our current labs to make them do what we think they should accomplish.

David Asai, head of HHMI, has suggested that money should be shifted to labs in Intro courses rather than upper-level courses that only reach a small number of students. This might lead us to HHMI grant proposal.

*Why* do students need a science lab? Writing requirement is that students physically write. Shouldn’t we have a parallel in the sciences: *doing* science? Increase student intellectual ownership by going through the process of doing science. When students take “Acting,” the instructor doesn’t just lecture on acting and demonstrate; students *do* acting. The same thing occurs in coaching. The experience of actually doing the behavior is important; the creativity, critical thinking, careful observation. What we’re focusing on is an *experience* we want first-year/non-majors to have. It is up to the faculty member to decide how to create it, in whatever timebank/period works.

Then there’s the practical issue of staffing, if we do go to a lab requirement. Christina went to Knox and there was a lab in Intro Psych, run by upper-level majors, students wrote lab reports that the faculty member ultimately graded. DePauw used to have a science lab requirement and we dealt with it. It doesn’t necessarily have to happen in a 3-hour lab period.

What if someone comes in with AP Calculus credit? Will this meet one of the university’s gen ed requirements? John said distribution requirements have to be met on campus; foreign language is the exception.