Working Group Meeting

4/11/14

Present: John Caraher, Bridget Gourley, Wade Hazel, Jeane Pope, Pam Propsom, Jackie Roberts, Michael Roberts, Brian Wright

Sentiment was that the Division III Open Meeting last night was fun and productive.

Where do we go from here? Jackie and Pam have a Faculty Fellowship to continue this; they will share it with Working Group members so they can see our plan.

Ideas for integrating skills into SM gen ed curriculum: could we both develop the interdisciplinary, team-taught “Great Ideas in Science” gen ed course and embed/revise our current departmental intro courses? And/or while developing interdisciplinary course, have the faculty in individual disciplines develop the content, and then with Faculty Development teach this to other individuals so that they could teach this course all on their own (rather than it being team-taught).

What are the pitfalls of a team-taught course? Other places have done this, but some have gone away from it. Why have they quit? How can we avoid the dangers and learn from others’ experiences? Michael suggested that these things may have failed in the past because they’re too rigid. If we allow faculty to keep developing new “great ideas,” it may be more flexible and sustainable.

But would also need faculty development to learn how to integrate the skills component. Crucial to link up and coordinate the individual models/sections. Might also be a good idea to have the student groups and faculty getting together regularly. It’s a “learning community.” Might also be good to have students see faculty grappling to understand new topics, modeling the process of how they go about approaching a novel scientific problem.

It’s ok that we don’t have a fully articulated, complete list of divisional learning goals yet. Learning goal development is an on-going process and we need to continually refine and revise them.

This course could be the second semester counterpart to FYS. Schedule all these courses in the same timebank so it’s easier to coordinate. Or could these be FYS?

John suggested that this course should have a lab, but we need to decide what is the purpose of a lab and how these labs would be structured.

Assessment—would be good to measure where students start off (in terms of knowledge, skills, attitudes), compare whether they take this new course vs. non-majors courses or majors courses, and get evidence on the efficacy.

Is there a downside if we get lots of students interested in science, and then they take the majors courses where there’s heavy emphasis on content and they lose the enthusiasm?

Get Melanie Cooper here. She’s a chemist who has written about cutting down on content (just because you cover it doesn’t mean students are going to get it), cover less with more depth and understanding, and it doesn’t hurt them in terms of performance on ACS test.

Is there money to have speakers and workshops? Maybe from GLCA. Different models of how others do a “great ideas” workshop. Talk to FDC. DePauw recently held a digital humanities workshop and it was funded by everyone who participated agreeing to give up some of their PDF funds to cover expenses. Looking into external funding opportunities. Greater potential for funding for a new class than just plugging stuff into current classes.

Bert Holmes, chemist with lots of experience with grant-writing and reviewing, will be on campus Friday, April 25. We will ask if the working group could meet with him while he’s on campus, maybe 2:30. He’s speaking at 4:00 too and maybe this could be our Brown Bottle.

We would like to get some input from departments. Rather than doing something via Survey Monkey, folks suggested going through Working Group members as departmental liaisons in department meetings. What would we want to know?

Regarding TOSLS skills, Wade reported that last night there was agreement with the two broader roman numeral skills (Understand methods of inquiry that lead to scientific knowledge; Organize, analyze and interpret quantitative data and scientific information) rather than the nine more specific subgoals . The great ideas course could address the roman numeral skills, but then the Arabic/specific ones are done within the context of the particular discipline.

Jeane reported that Geo may re-open the “can of worms” about “natural world” description of our S & M gen ed group. But “great ideas” might be able to address this because it’s melding multiple disciplines and will cover enough of the “natural world.”

Could this course be described or named something other than “Great Ideas in Science“ (which might imply a walk through dead white men, and might turn people off). What about “Problems in Science” or maybe “Big Ideas” or “Interesting ideas” or Fundamental Science (for an SOC abbreviation of Fun Sci).

Our Working Group members are now our S & M departmental “liaisons.” We would like to continue meeting occasionally. Pam and Jackie should map out goals, share Faculty Fellowship, plan, so liaisons can be working with departments to get the info and buy-in that’s necessary. What would the timeline be for developing a “great ideas” course? Maybe next year have all departments suggest a “great idea” in disciplines. Need some buy-in from departments to get the release time to teach the course. Or do we just pilot one section with 5 people teaching a 3-week overload?

Ask MAO to create a new listing for SCI (rather than UNIV) to offer these courses.

Maybe a workshop in the fall with people from other places who do this kind of interdisciplinary course. Get some ideas about different models.

John would like us to also consider what else we want included in these courses that might not meet the “skills” list.