Fostering Interdisciplinary teaching, research, and creative activity

February 26, 2013

Contributors

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What this Report is.

This report summarizes responses of the unit heads to our queries about how we can best foster interdisciplinary cooperation in the College of Arts and Sciences. We received many helpful and thoughtful responses, but we hasten to add that almost everything we mention here was already covered in the earlier report

FINAL REPORT Recommendations for the Integration of the College of Liberal Arts and the College of Sciences, 30 June 2012, Appendix 12: Synergistic Opportunities Subcommittee Report, researched and written by Rich King (chair), Sue Clark, Andrea Davis, Christine Portfors, Jeff Vervoort, and Lori Wiest,

which is recommended reading.

Impediments

The major impediment to interdisciplinary teaching, research, and creative activity is the compartmental structure of the university. Every endeavor that crosses departmental boundaries generates questions about sharing of resources and credit. For example, who and which unit gets credit for a team-taught course? How are grant funds allocated between units? How much credit does a researcher get for publications in journals outside one's discipline? Will efforts that are judged as positive in one unit be equally recognized in another? These questions loom

particularly large for untenured faculty, who are in the position of having to develop a track record in their own discipline fairly quickly. For a faculty member with a joint appointment in two units, there is the problem of pleasing two departments, which will have different expectations and criteria for tenure and promotion.

Consequently, interdisciplinary activities may be somewhat more appropriate and likely to be embraced by tenured faculty. Yet, this is undesirable since untenured faculty, more recently trained, may bring innovative approaches to their research and teaching. Moreover, interdisciplinary approaches will grow slowly if they are only adopted by tenured faculty.

Most faculty have heavy responsibilities in their home units, many have heavy teaching loads and are under pressure to produce high-profile scholarship in their own fields and face an emphasis on individual achievements rather than collaborative efforts.

One other noteworthy consequence of compartmentalization is that faculty do not cross disciplinary lines because they do not know what is going on outside their own departments.

In spite of these impediments, we believe that there are many situations in which interdisciplinary efforts can be rewarding for faculty and students and positive for the host units and the university as a whole. Many interesting and challenging problems are inherently interdisciplinary; we limit our possibilities for engagement by not embracing interdisciplinarity. Indeed, a common undergraduate experience is surprise at the degree of disciplinary segmentation in the university, and puzzlement at the unwillingness or inability of faculty to follow problems across these boundaries.

Strategies

If the College of Arts and Sciences wishes to promote interdisciplinary work, it must provide significant incentives to overcome these barriers. We make the following recommendations.

Provide funds especially designated for interdisciplinary activities. Some possible uses for such funds:

- 1) Internal seed grants to kick-start interdisciplinary research efforts. These might go to an interacting group of faculty for seminars, grad student support and other activities with the goal of eventually securing significant extramural funding.
- 2) Grants to fund initiation of new interdisciplinary courses. If successful, student enrollment could justify their continuation and ongoing funding.
- 3) Interdisciplinary workshops and other immersion experiences. These might be offered for student credit and possibly offered immediately after the end of spring or beginning of fall semester.

4) Visits by guest speakers who have a successful interdisciplinary track record. These might be integrated with the internal seed grants discussed above.

Hire faculty in overlapping research areas (e.g. materials science, mathematical biology, evolutionary biology and ecology...) There are examples of highly successful appointments of this sort. Expand this concept to make judicious cluster hires when the opportunity arises.

Hire selected faculty with the specific expectation that they will collaborate across disciplinary boundaries. This requires advance understanding within the host units and support from the Dean. For purposes of tenure and promotion, such hires would have to be given ample credit for their interdisciplinary work. In recognition of successful interdisciplinary efforts, they would not necessarily be held to all of the traditional expectations of all of the units to which they belong. (Note: We do not intend this to apply to all faculty. Interdisciplinary work is not for everybody, and we do not advocate trying to force everyone to take part.)

Give chairs credit for fostering interdisciplinary work where appropriate. Make it a part of their job description.

To facilitate interdisciplinary teaching, give a generous interpretation of teaching credit for team-taught interdisciplinary courses. Funding directly from the College would be helpful here.

Offer interdisciplinary graduate certificates, such as the Print Culture Certificate suggested by Will Hamlin or the Museum Studies Certificate suggested by Carol Ivory in late 2007. These would provide interdisciplinary education to graduate students, while simultaneously providing an opportunity for faculty members of various departments to work together.

Take steps to educate faculty across the College about what their colleagues are doing. For example:

- 1) Create opportunities for faculty to mingle socially. Colleagues need to get to know one another personally. The university needs a faculty club.
- 2) Sponsor talks by CAS faculty who wish to introduce themselves or their unit to the College in a general, understandable way. Such talks could be combined with social mixers.
- 3) Develop a database of research expertise across the college that is managed and maintained centrally at the Dean's level but can be shared among colleagues throughout the college.

Build on the strengths of our existing research centers. In the interest of peace between the research centers and the departments, and for the benefit of all, equitable sharing of F&A needs to be worked out. Successful interdisciplinary programs are likely to expand rather than subtract from the total endeavor.

Fix WORQS so that the author section can be listed without hierarchy (first author, second author, etc.) for collaborative ventures that are genuinely equal.

The museums and galleries on campus offer unique opportunities for interdisciplinary cooperation. For example, the Ownbey Herbarium has a campus-wide presence among plant researchers. The Conner Museum is also an important place for interface. Recent examples are a poetry reading in cooperation with the English department and a seminar on ancient mammoth DNA in collaboration with Anthropology. The Museum of Anthropology is an important interface with native communities and WSU's Plateau Center. The WSU Museum of Art offers exhibitions, such as the Contemporary Aboriginal Art exhibition, that provide opportunities for interdisciplinary work. All of these museums also have a public outreach function that expands the formal education opportunities offered by the university.

Metrics

- Publications and external funding that involve faculty or students from multiple units.
- Publications crossing disciplinary boundaries
- Membership on graduate committees outside home unit
- Cross-listed or team-taught courses at either the undergraduate or graduate levels.