Facilitating Faculty Professional Development in Interdisciplinary Research

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From NAS / NAE / NIM report on Facilitating Interdisciplinary Research (~200 pages + appendices, 7 pages Executive Summary!)



"I'M ON THE VERGE OF A MAJOR BREAKTHROUGH, BUT I'M ALSO AT THAT POINT WHERE CHEMISTRY, LEAVES OFF AND PHYSICS BEGINS, SO I'LL HAVE TO DROP THE WHOLE THING!"

Abstractly, what's the problem?

- Knowledge is a continuum
- Continuum has traditionally been partitioned into disciplines (physics, chemistry, sociology, history,...)
- Disciplines are reflected in the organizational structure (departments, colleges) of universities
- Any partition produces boundaries
- Research and teaching on the boundaries will overlap multiple disciplines and departments.
- Disciplines have funding sources, publications, conferences,...
- Departments hire, promote, award raises, hand out resources, assign teaching,....

What can departments do to facilitate interdisciplinary research and teaching?

- Allow for flexibility in the graduate program; get away from "every student in my discipline has to know (favorite topics to go here)".
- Provide opportunity to offer special topics course.
- Ask:

Does research successfully address an important problem? rather than

Does research advance my discipline?

 Beware of evaluation bias "interdisciplinary" != "good" or "bad" (PH)

What can departments do to facilitate interdisciplinary research and teaching?

- Find out about quality / selectivity of publication venues and conferences outside the discipline
- Be prepared to educate department members, College Council, Dean,...

For faculty members with joint appointments

At time of appointment create memorandum of understanding spelling out:

- Who provides startup funds, administrative support, supplies, and space (two offices?)
- Teaching and service responsibilities in the two units
- Distribution of RCR
- Course buyout policy who gets buyout money?
- Distribution of leave recapture funds
- Procedure for assigning merit raises
- Promotion procedure (One committee or two? Who decides on referees? What happens if units disagree?)

For junior appointment, set up committee to look out for faculty member and make sure everybody is on the same page.