October 16, 1997

To: Chairs, Divisional Committees

From: Mary Anderson, University Committee

Maury Cotter, Office of Quality Improvement
Betsy Draine, Associate Vice Chancellor
Brent McCown, University Committee
Bob Skloot, Associate Vice Chancellor

Subject: Planning for the Future of Interdisciplinary Teaching

Enclosed you will find a document: Planning for the Future of Interdisciplinary Teaching.

We have met as a committee since May to consider concerns on campus regarding interdisciplinary teaching. We have consulted with numerous people across campus who are involved in a variety of interdisciplinary efforts and structures, as well as deans and administrators.

At the recommendation of the L&S dean’s office, this report is being offered to the divisional committees for consideration. Divisional committees should consider the information and options presented here and make their recommendations for action to Associate Vice Chancellor, Bob Skloot, by January 16, 1998.

If you have questions regarding this report, please contact Bob Skloot (skloot@mail.bascom.wisc.edu).

pjb
Enclosure

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Aaron Brower, Bill Cronon
Ann Burgess
Jean Heitz
Kevin McSweeney
Bezalel Haimen and Jean Bahr
Catalyn Allen, Susan Friedman,
Marianne Whateley
Sharon Dunwoody and
Eileen Hanneman
Bob March
John Mitchell
Don Woolston
Jane Tylus

Ways of Knowing
Biocore
Biology 151-152
Sustainable Land Management
Geological Engineering
Women’s Studies
IES
ILS
EPD 160, the Freshman Design
course
Engineering 100
Humanities Divisional Committee
Planning for the Future of
INTERDISCIPLINARY TEACHING
at UW-Madison

October 16, 1997

"The strength of UW-Madison lies in having quality in so many places. To exploit broad expertise through interdisciplinary teaching is a natural way to promote greater excellence in the classroom. Not only that, but interdisciplinary teaching often serves to initiate truly great ideas that would not be hatched individually, and this can lead to wonderful research."

Faculty member, UW-Madison

Aim: The aim of this document is to raise the following issues and, ultimately, to establish policies that will foster success in interdisciplinary teaching on campus. Issues addressed in this document include:

- How to support innovation, particularly in interdisciplinary and interdepartmental courses, in a time of fixed teaching resources.
- How to stabilize the resources available to established interdisciplinary and interdepartmental courses.
- How to create mechanisms to properly assess the relative value of interdisciplinary and interdepartmental teaching in comparison to departmental teaching.
- How to create accountability to the overall instructional program without destroying flexibility and innovation.

Definitions: Interdepartmental courses: courses where faculty members from two or more departments collaborate on a course of mutual interest to all participants. (E.g. Biology 151/152)

Interdisciplinary program courses: Courses offered by an interdisciplinary program by faculty drawn from a variety of disciplinary departments. (E.g. area studies programs)

Interdisciplinary courses: Courses offered by a single instructor (E.g. women's studies courses)

Defining the Issue:

The majority of courses at UW-Madison are taught by a single instructor within a single disciplinary department. Systems of resource allocation (both financial and human) have been developed primarily to support these typical course offerings. Resources flow from dean's offices to departments, which then allocate them to courses.
Courses that involve faculty and staff from more than one unit, courses within a department that are interdisciplinary in nature, and courses offered by interdisciplinary (non-departmental) programs are more problematical. Resource allocation to support such courses is often ad hoc and inconsistent. And yet, such courses often capture the imagination of our best faculty and staff, and are attractive to our students.

In today's environment, the teaching capacity of the University is essentially fixed. *This is an over-riding fact that has the potential to stifle innovations of all kinds.* New teaching endeavors of all kinds — interdisciplinary teaching, collaborative learning, instructional technology, etc. — involve reallocation of financial and/or teaching resources.

With purely departmentally based courses, the reallocation decisions are made by the faculty of the department (although the department may also be persuasive in obtaining additional funds from its dean or other sources). While there is a great deal of flexibility in the teaching activities of an individual faculty member, fundamentally the department as a whole has responsibility for teaching the courses it offers with the staff available.

With interdepartmental and interdisciplinary teaching, new problems arise. Often the new course that is proposed is not viewed as "mainstream" by the disciplinary department, which is thus reluctant to lose teaching capacity from its disciplinary courses, even if the course is to be taught under the department’s aegis. Often the department is willing to allow this only if replacement resources are provided, or if the faculty member involved does the teaching as an "overload."

Other departments have developed a teaching ethos that supports consistent participation in interdisciplinary and interdepartmental teaching. (E.g. History of Science, English, and Classics with ILS).

**Planning for the Future**

**Supporting Innovation:** Faculty members have great flexibility in allocating their *time* to various activities. Whenever a faculty member wishes to engage in a new teaching activity, the question naturally arises as to what happens to existing patterns. This is the "back-fill" problem: how are the former responsibilities to be met? What are the barriers to innovation at the departmental, school/college, and campus level? Recognizing that all new programs are likely to be supported through reallocation, what are strategies for reducing or removing these barriers at the various levels? If gift funds are used to initiate innovative teaching, how can it be sustained after funding runs out?
Stabilizing resources: Typically, interdisciplinary programs are developed by existing faculty who become interested in an area and reallocate their time to it. These reallocations are rarely formalized, so if a participating faculty member departs, there is no easy way to consider a replacement, since the tenure-granting department generally controls the prioritization of positions. Is there an appropriate way to account for participation in interdisciplinary programs for the purpose of maintaining resources, without at the same time creating additional barriers for the creation of such programs?

Assessment: Interdisciplinary teaching is only one method of carrying out the full teaching mission of the University. What are the mechanisms to assess the value of interdisciplinary courses relative to disciplinary courses? Does interdisciplinary teaching have "pride of place" among all possible innovative approaches to teaching?

Accountability: The campus level teaching load policy calls for an average of two group instruction sections ("courses") per full-time equivalent faculty member per semester. In many departments and some schools and colleges, the policy is to apply this to each faculty member. This works against team-taught courses in general, and interdisciplinary courses in particular. What more flexible system of accounting for teaching might be devised to encourage interdisciplinary teaching within the overall teaching load policy?

ACTION: Each of the above paragraphs poses issues and questions for the future of interdisciplinary teaching. The answers to these questions are fundamentally matters of educational policy, and are thus faculty matters. Many of the answers must come from within individual departments, but deans are critical participants in the discussion because they control resources. Therefore, action steps will be:

Divisional committees consider the issues and make recommendations to Associate Vice-Chancellor Bob Skloot by January 16, 1998. Based on campus-wide interviews of people currently doing interdisciplinary teaching, the greatest incentive for interdisciplinary teaching would be to simplify/reduce complexity and barriers. Recommendations should address ways to do this. See appendixes for more information and ideas generated from these interviews. Bob Skloot will compile the recommendations from the divisional committees and forward them to the deans.

Deans will then seek comments from department chairs and program directors. The goal will be to establish policies on interdisciplinary teaching by May 1, 1998.
Interdisciplinary Teaching
Questions for Consideration by Divisional Committees

Divisional committees will consider the issues presented, address the following questions, and make recommendations to Associate Vice Chancellor Bob Skloot by January 16, 1998.

Supporting Innovation: How can we provide "back-fill" to cover existing responsibilities? What are barriers to innovation at the departmental, school/college, and campus level? Recognizing that all new programs are likely to be supported through reallocation, what are strategies for reducing or removing these barriers at the various levels? What strategies will not only support innovative efforts, but sustain them?

Stabilizing resources: Is there an appropriate way to account for participation in interdisciplinary programs for the purpose of maintaining resources, without at the same time creating additional barriers for the creation of such programs?

Assessment: What are mechanisms to assess the value of interdisciplinary courses relative to disciplinary courses?

Accountability: What more flexible system of accounting for teaching might be devised to encourage interdisciplinary teaching within the overall teaching load policy?
APPENDIX

In the course of our interviews, numerous perspectives and ideas were shared. This appendix includes a summary which may prove useful to divisional committees as they address potential recommendations.

Interdisciplinary teaching examples involved

We interviewed the following people about these programs/courses:

Aaron Brower, Bill Cronon
Ann Burgess
Jean Heitz
Kevin McSweeney
Bezalel Haimen and Jean Bahr
Catalyn Allen, Susan Friedman,
Marianne Whateley
Sharon Dunwoody and
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CAMPUSS CURRICULA REVIEW

A campus wide review of curricula in general to identify existing courses that may be duplicative, repetitive, or related to others elsewhere could be considered. This may help identify potential interdisciplinary courses that would result in a better use of resources and valuable interdisciplinary topics. Perhaps this would be a role of divisional committees or perhaps it would be best to be campus-wide to include the connections that cross disciplines.

The Divisional Committees might consider how each new interdisciplinary course being developed/offered could answer the following:

- How does this course add value for students?
- Does the offering of this course detract from the offering and/or quality of other essential courses?
- Where do we want the field to go?
- Note: These questions might be addressed by divisional committees, although a course may cross divisions.

At a campus level, consider using a process to strategically identify potential gaps or opportunities broadly, in addition to encouraging individual course innovation. This would help develop emerging areas of knowledge for maximum gains.

As we strive to ensure we can provide teaching of the full range of necessary courses on campus, we should be judicious about starting up new courses, ensuring they are meeting a need or adding value in balance with the demands of providing necessary courses.

LEARNING FROM SUCCESSES

As various efforts are experimented with around campus, we can learn from each others’ successes and failures. Centrally, we can provide opportunities for this learning through chairs’ and faculty workshops, forums, informal sessions, and documenting and disseminating models.
TEACHING CREDITS: Some observations

Many faculty who teach interdisciplinary courses do so with full knowledge that they will get fewer or no teaching credits for their efforts. Engineering's Freshman Design Course is one example where no teaching credits are awarded. This seems to be offset by:

- the commitment of the faculty to the purpose of the course, and
- the college's demonstration of support for the efforts with flexibility, resources, and backup instructional support.

Almost without exception, everyone we interviewed participated in some way that counted against them. There is much to be learned about the power of this commitment. It appears that incentives are not needed; however, barriers of complexity need to be cleared. Most complexity seemed to center around strict interpretations of systems for teaching credits.

Flexibility can give space to foster energy and offset the complexity that is created by standard workload counting systems.

“Credits follow instructor” is not as simple as it sounds. With faculty workload expectations of two courses in each of two semesters (2 X 2), a half-course (.5) means they are either under expectations (1.5) or teaching an overload (2.5).

Note: It is our understanding that the 2 x 2 rule is not expected to be met by each individual, but intended to be a balance at the college or campus level. Yet, the 2 X 2 rule seems to be a significant concern at the individual faculty level. It appears that some departments monitor the guideline by individual. This needs to be verified.

Options for dealing with teaching credits:

Option A: Communicate clearly, especially to department chairs, that teaching workload requirements can be flexible as long as they are met at the college level. Help support variations that allow for these types of efforts. Workload relief might also come from committee assignments and/or research.

Option B: Have one instructor get credit for the first offering (semester/year) and the other for the next. This leaves the second person at risk of the course not being offered again or their partner not teaching it.

Option C: Allow both instructors full credit. This would mean that bottom line counts for a unit or the University would not be accurate. (If you counted credits to find out how many credits of teaching were taught at the department level, you would get an inflated number).

Option D: Allow “meets with” counting. This is where two courses are listed separately in two different departments and they meet together for an interdisciplinary approach. Each faculty member counts a full course. The two instructors teach the combination of the two groups of students who signed up for the two separate courses. In this case, it is a bit different than double counting in that students who would otherwise comprise two separate classes are being served.
Option E: Allow flexibility in teaching workload requirements for the development of interdisciplinary courses. Allow 1 ½ courses to be sufficient workload requirement for one or two semesters of the course being developed and delivered, and/or reduce committee assignments. After the course is developed and delivered, have only one faculty member teach it as is done in Women’s Studies.

Option F: Use an accounting system that recognizes more than teaching in traditional settings. The Medical School and Princeton are examples. This can, however, increase complexity and create its own new problems. Accounting can become more important than the aim.

Observations:

When people have a commitment to do something, incentives are not as important as clearing the barriers.

In colleges where the workload measures are most used and least flexible, interdisciplinary courses involved much more complexity.

Note: Divisions/colleges should collaborate on these policies and procedures so that they are consistent in cross-college courses.
STRUCTURES

We found a variety of structures for interdisciplinary teaching. They included:

* Informal collaboration of two or more faculty: Sustainable Land Management
* Virtual Departments: Geological Engineering, Biomedical Engineering
* Central structures with staff to coordinate: Biocore, Biology 151-152
* Cross-college program: Women's Studies, ILS, IES
* Non-department entity within a college: Engineering Professional Development
* One or two faculty coordinators, participation from additional 5-10 faculty: Ways of Knowing
* Faculty team organization, teaching, and student evaluation: Freshman Design Course in Engineering
* Residential learning communities such as Bradley and CRC

These various structures are not clearly defined. It is also unclear what factors seem to be most helpful or cause most complexity. Questions about budget, governance, tenure, and more vary among the structures. A separate study may prove useful to help identify elements and structures that are most effective.

Ideas and Options for Structures:

Clearly define the various structures and their similarities and differences as they relate to governance, budget, tenure, etc. Communicate these definitions across campus.

Document and share successes and failures. Provide opportunities for this centrally through workshops, etc.

Assign a “lead department” or “lead college/dean” and clarify decision-making authority. Minimize the types of decisions that require multiple players. Make decisions at broad levels that allow for operational decisions to be made independently. Example: Jointly agree on an annual budget with authority for flexibility as low as possible in the system. Only major decisions about major directions or policy should have to involve multiple deans.

Continue to develop and evaluate the success of residential learning communities. They have the great potential for increasing interdisciplinary learning opportunities among students and faculty. The structure itself removes many of the complexities by providing a place and coordination for dynamic interaction and learning.

Explore the Engineering Professional Development model for potential in other places. It seems to provide a comfortable home for non-department related courses.

If an interdisciplinary program becomes a core offering, provide resources to enable its operation without having to depend on overload and favors.
RECOGNITION

Teaching in these courses should not result in being penalized within your department at merit time. This can happen when a department considers its mission to not include external work. If interdisciplinary teaching is to be encouraged, then it should be recognized as a meaningful contribution at merit time. This involves having departments see themselves as contributors to a mission beyond the walls of their own discipline.

Simple recognition with letters, notes, plaques, thank-you events were expressed by several interviewees to be sufficient and, in some cases, more important than many of the traditional "rewards." They indicated that this would be an effective and very simple approach that is not being used very often currently.

The annual teaching awards could include exemplary interdisciplinary teaching efforts. This could be a separate award.

This Document:

Interviews were conducted and document developed by:

Maury Cotter, director, Office of Quality Improvement
Karen Walsh, College of Engineering

This study was requested and reviewed by Mary Anderson and Brent McCown of the University Committee and Betsy Draine and Bob Skloot of the Provost's office. Phil Certain and the L&S Associate Deans also reviewed and contributed to the document.