

**Report of the First in 2009 Coordinating Council
Sub-Committee on Interdisciplinarity
at Miami University**

Committee:

Jeff Sommers, Acting Associate Dean for Academic Affairs, Middletown, Chair

Cathy Almquist, Assistant Professor, Paper & Chemical Engineering

Mark Boardman, Director, Institute for Environmental Sciences

Richard Campbell, Director, Journalism

Mike Crowder, Professor, Chemistry

Gwendolyn Etter-Lewis, Interim Director, Black World Studies

Peg Faimon, Professor, Art, Assistant Director, Interactive Media Studies

Tim Greenlee, Associate Professor, Marketing

Jim Hickey, Professor, Botany

Bill Newell, Professor, School of Interdisciplinary Studies

Richard Quantz, Professor, Educational Leadership

Peggy Shaffer, Director, American Studies

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First in 2009 Subcommittee on Interdisciplinarity

The Initial Charge

Study the existing interdisciplinary research and teaching efforts in all divisions at Miami, and develop recommendations, as needed, for promoting quality interdisciplinary teaching and scholarship across the university. Process steps might include:

- Create an inventory of existing interdisciplinary efforts at Miami (programs, concentrations, majors, centers, etc.); explore the opportunities and barriers to cross-disciplinary research and learning (using surveys, focus sessions, or open fora)
- Investigate other institutions with interdisciplinary emphases (Duke, University of Michigan, Northwestern, etc.) to glean new ideas for overcoming barriers
- Develop a prioritized set of recommendations for advancing greater integrative and interdisciplinary learning in all academic divisions at Miami

I. General Comments

Our charge was extended at our first meeting with Provost Jeffrey Herbst when he expressed a strong interest in learning more about the informal ways that interdisciplinarity took place at Miami. As we began our work, we were aware that a parallel exploration of the role of the School of Interdisciplinary Studies (Western College Program) was underway. The public release of the report, its attendant discussion, and the Provost's recommendation regarding the future of WCP has somewhat complicated our committee's work. With strong opinions abounding and feelings running high on campus, our committee nonetheless continued to accumulate the data that have led to this final report. Our report represents our best effort to meet the charge of the committee *exclusive of* any consideration of WCP. Additionally, although the charge to the committee does not explicitly mention financial resources, it is inevitable that our research has led us to a consideration of such matters. Our recommendations do not dwell on financial issues, but they also do not avoid them, and we acknowledge that those recommendations most likely have financial implications.

Data collection and rationale

We began our work by familiarizing ourselves with the 1997 Report on Interdisciplinary Teaching produced by a committee commissioned by Provost Anne Hopkins and chaired by Professor Osama Ettouney. We read recent published considerations of interdisciplinarity (see Works Consulted) and examined reports on interdisciplinary teaching and research issued by Ohio State University (2004) and the University of

British Columbia (2005). We determined that we wished to use the 1997 report as a touchstone for our research. Our primary questions became

- To what extent do the barriers to interdisciplinary teaching outlined in the 1997 report still exist? To what extent do they apply to interdisciplinary research/scholarship/performance and to interdisciplinary service? What barriers have developed to interdisciplinary research/scholarship/performance and to interdisciplinary service not mentioned in the 1997 report?
- What additional barriers can be identified?
- To what extent have the recommendations made in the 1997 report been implemented? To what extent are they still relevant?
- What additional recommendations need to be developed to address the existing barriers?

The Ohio State Report notes that “interdisciplinary research and teaching are quite difficult to define in an academic setting, and without that definition, assessing whether there is something broken is that much more difficult” (p. 3), a point we found persuasive. Rather than attempting to impose a committee-derived definition on a large, complex campus, we decided to learn how practitioners of interdisciplinary work defined their own work. The committee members, while we did not impose a definition on others, were ourselves guided by a definition that has some national visibility as a consensus definition: “Interdisciplinary studies may be defined as a process of answering a question, solving a problem, or addressing a topic that is too broad or complex to be dealt with accurately by a single discipline or profession...interdisciplinary studies draws on disciplinary perspectives and integrates their insights through construction of a more comprehensive perspective” (Klein and Newell, p. 393).

We thus developed a brief email survey (see Appendix A) and sent it to the entire faculty on all three domestic campuses. We followed up by surveying those who had indicated a willingness to complete a more detailed survey (see Appendix A). Rather than supply a definition of interdisciplinarity, we encouraged respondents to supply their own and apply it to their conditions. We have learned a great deal about the informal ways in which faculty conduct work they describe as interdisciplinary as well as learning about the broad definition they apply to interdisciplinarity.

At the same time, we sought to learn more about the conditions for more formal interdisciplinary work, so we turned to recent program reviews for four interdisciplinary programs housed in the College of Arts and Sciences (American Studies, Black World Studies, International Studies, and Women’s Studies). We define the work of these programs as “formal interdisciplinary work” because the programs are institutionalized to the extent that they all, to one degree or another, are staffed by faculty and administrators, and offer core courses that embody a distinct theory and practice of interdisciplinary scholarship and teaching.

We also followed up our survey with a series of interviews. We spoke with individuals whose professional appointment at Miami involves a formal charge to carry out

interdisciplinary work. Our goal was to learn through their perceptions more about the situations and conditions described not only in the formal program reviews but also those suggested by our faculty survey. Our objective in these interviews was not to interrogate whether interdisciplinary work has an appropriate place at Miami, but rather to continue to learn more about the barriers that complicate the work that is already expected to take place. These concerns and opportunities resulted in various recommendations. Additionally, we asked what was working well in the implementation of interdisciplinary work/programs. For the most part these interviews resulted in a more "administrative view" of interdisciplinary work at Miami, in contrast to the survey, which resulted in more of an "individual" perspective.

II: Barriers to Interdisciplinary Work

A. 1997 Report on Interdisciplinary Teaching, Re-evaluated.

The 1997 report identified six major barriers to successful interdisciplinary work at Miami. Our research suggests that the climate for interdisciplinarity at Miami has improved to the extent that one of those barriers is no longer an issue:

- Disciplinary biases and perception of interdisciplinary teaching and courses as less rigorous and watered-down versions of the real thing. This perception influences ... decisions ... [discussed elsewhere in the report].

Several barriers, however, remain significant obstacles almost a decade later:

- The financial issue of reconciling centralized (departments) and decentralized (joint appointments and interdisciplinary programs) teaching. The way money works at the University encourages centralized teaching in departments. Our findings suggest that parallels exist to this obstacle for teaching in the areas of research and service as well.

- This financial issue, combined with territorial concerns on the part of departments that they will be penalized for a loss of SCH, FTE or subsidy, is a major barrier for more interdisciplinary teaching. This issue is evident in divisional, curricular, and course requirements and their discouraging of interdisciplinary teaching and courses from outside their departments. The 1997 Report identified the "inability to easily cross-list courses" as a specific problem. Today, this challenge still exists. Although the mechanisms have been set in place to cross-list courses, the implementation of this process favors departments in that departments receive the majority of seats, departments control the scheduling and faculty assignment to these courses, and departments receive all FTE credit for faculty teaching cross-listed courses. Additionally, problems now exist with DARS reports. One way DARS does not recognize interdisciplinary barriers is for students who double major across colleges, for example, journalism and business, or American studies and theater. The DARS system recognizes only their first major, not their second. This means they typically

have to figure out how to force add many of the courses in their second major for which there are major restrictions. In these cases, they are often treated as non-majors. Another area presenting challenge is the perception of team-teaching as a less-rigorous form of instruction. Another area presenting challenge is the view that team teaching requires less work/time than individual teaching. Some courses are in fact "divided" among faculty, for instance, three faculty each teaching only five weeks of a semester long course. This is in fact only one model of "team-teaching." In fact, true team teaching occurs when more than one faculty member is in the classroom at the same time during the entire semester. This type of teaching requires a great deal of coordination and preparation among the faculty. In many cases there can actually be more work involved in this type of teaching, not less.

- The need to staff disciplinary courses, especially those required for majors and minors continues to take precedence in a way that inhibits interdisciplinary teaching, notably in the area of thematic sequences. Many departments are reluctant to create courses specifically for a thematic sequence administered outside their department. While they are willing to open up courses in their majors or minors to such inter-departmental thematic sequences, they give priority to students majoring or minoring in their department which may leave only a few slots open for thematic sequence students.

- The ad hoc nature of arranging for joint appointments and team-taught teaching loads necessitates the constant reinvention of the rules. This situation persists because a systematic description of joint appointments still does not exist. Nor does the promotion and tenure process adequately measure the work that jointly appointed faculty do for interdisciplinary programs.

B. Survey Results: Questions about Barriers to Interdisciplinary Work

Three questions in our survey focused on the respondents' perceptions of barriers to their work. We report their responses below:

•Research.

Q17. What barriers to interdisciplinary research, scholarship, performance have you experienced at Miami? (N=110)

Q17A	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	15	13.64	15	13.64
2	13	11.82	28	25.45
3	13	11.82	41	37.27
4	1	0.91	42	38.18
5	8	7.27	50	45.45
6	6	5.45	56	50.91
7	44	40.00	100	90.91
8	10	9.09	110	100.00

Frequency Missing = 22

Coding Key

- 1) Lack of interest
- 2) Lack of promotion/tenure credit
- 3) Lack of time
- 4) Not valued by Miami University
- 5) Lack of Resources (Staffing/Funding)
- 6) Professional Barriers
- 7) No Barriers
- 8) Other

Conclusions: There were a few very long responses to this question from respondents who had specific issues with barriers that they have faced. It may be argued that P&T, time, not valued by Miami, and resources responses could be grouped into Miami-based barriers, and the combination of these responses was 32%. It is important to note though that many of these Miami-based barriers are not linked with Miami (the barriers are caused by things that Miami has no control over). The most surprising response (no barriers) was given by 44% of the respondents.

Interpretation: A closer examination of responses seems warranted, given the large number of respondents who report “No Barriers.” Q8 asks respondents to identify programs with which they are affiliated. There are 28 respondents who claimed affiliation to one of the formal, institutionalized, interdisciplinary programs (e.g. American Studies, Women's Studies, IES, BWS, Latin American Studies, etc.). We then examined these respondents' answers to Q17 to determine if they had reported “No Barriers” or some form of barrier. A breakdown of responses to Q17 depending on affiliation or lack of affiliation with a program produces these results:

Q17	Affiliates responding=25	Non-affiliated faculty responding=85
No barriers reported	9 (36%)	35 (41%)
Barriers reported	16 (64%)	48 (59%)

One inference we tentatively draw is that informal (i.e. work outside of interdisciplinary programs) interdisciplinary research encounters fewer barriers, as defined by faculty, than does formal (i.e. work as an affiliate of an interdisciplinary program) interdisciplinary research. We find it encouraging that 83% of the respondents described their interdisciplinary research as crossing departmental boundaries and that 35% of the research is so broad that it occurs outside the respondents' division. At the same time, we are cognizant that more obstacles are reported by those who work as affiliates of the programs.

•Teaching.

Q23. What barriers to interdisciplinary teaching have you experienced at Miami?
(N=102)

Q23A	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2	1.96	2	1.96
2	3	2.94	5	4.90
3	12	11.76	17	16.67
4	4	3.92	21	20.59
5	9	8.82	30	29.41
7	36	35.29	66	64.71
8	32	31.37	98	96.08
9	4	3.92	102	100.00

Frequency Missing = 30

Coding Key

- 1) Lack of interest
- 2) Lack of promotion/tenure credit
- 3) Lack of time
- 4) Not valued by Miami University
- 5) Lack of Resources (Staffing/Funding)
- 6) Opportunity to interaction (Combined with option #8)
- 7) No Barriers
- 8) Institutional barriers (Ex: How FTEs are counted, Opportunities to interact, etc.)
- 9) Don't know/Other

Conclusion: The largest categories were no barriers to interdisciplinary teaching (35%) and institutional barriers inhibited interdisciplinary teaching (31%).

Interpretation: A closer examination of responses seems warranted, given the large number of respondents who report "No Barriers." Q8 asks respondents to identify programs with which they are affiliated. There were 28 respondents who claimed affiliation to one of the formal, institutionalized, interdisciplinary programs (e.g. American Studies, Women's Studies, IES, BWS, Latin American Studies, etc.). We then examined these respondents' answers to Q23 to determine if they had reported "No Barriers" or some form of barrier. A breakdown of responses to Q23 depending on affiliation or lack of affiliation with a program produces these results:

Q23	Affiliates responding=26	Others responding=79
No barriers reported	8 (30.77%)	28 (35.44%)
Barriers reported	18 (69.23%)	51 (64.56%)

One inference we tentatively draw is that informal (i.e. work outside of interdisciplinary programs) interdisciplinary teaching encounters fewer barriers, as defined by faculty, than does formal (i.e. work as an affiliate of an interdisciplinary program)

interdisciplinary teaching. We conjecture that interdisciplinary teaching that takes place as an affiliate of a program is likely to be as part of a joint appointment or in a team-teaching model, kinds of interdisciplinary teaching less likely to occur in an informal manner. This might offer one explanation for why faculty affiliated with programs report more barriers to their interdisciplinary teaching. It is encouraging, however, to note that in the response to Q19, I engage in or have engaged in interdisciplinary teaching, 56% of the respondents answered “Often” or “Very often.”

•Service.

Q29. What barriers to interdisciplinary service have you experienced at Miami?
(N=126)

Q29A	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	25	19.84	25	19.84
2	4	3.17	29	23.02
3	8	6.35	37	29.37
4	8	6.35	45	35.71
5	2	1.59	47	37.30
6	4	3.17	51	40.48
7	4	3.17	55	43.65
9	71	56.35	126	100.00

Frequency Missing = 6

Coding Key

- 0) None
- 1) Interest (No respondents used this code)
- 2) Promotion/tenure credit
- 3) Time
- 4) Not valued
- 5) Resources
- 6) Professional barriers
- 7) Other
- 9) No response

Note: To facilitate the statistical analysis package, SAS, the “no response” category was coded. The frequency missing is an anomaly, blank lines at the end of the spreadsheet.

Conclusion: A majority of respondents did not answer this question. Of those answering, the “no barriers exist” response was the most frequent response. The ambiguous position of service at the university is the most likely explanation for the low response to the questions about service.

C. Program Reviews

We analyzed the Program Review and developed a list of weaknesses regarding formal interdisciplinary study at Miami, as identified in those reports:

- Current funding and staffing do not provide a stable enough institutional structure or position within the college and university for the CAS interdisciplinary programs.
- The value of interdisciplinary teaching, scholarship, and program development in the promotion and tenure process is not clearly articulated in departmental promotion and tenure documents.
- The departmental and divisional structures make it difficult to support and promote interdisciplinarity across those administrative boundaries
- The university's FTE model does not translate into viable data about interdisciplinary programs in CAS
- The course cross-listing mechanism does not adequately represent interdisciplinary programs. Departments are given the majority of seats and all FTE's are counted for the departments.
- CAS Interdisciplinary programs bear a heavy service burden for the university that is not adequately recognized or supported through staffing and funding
- There has been no formal discussion of the relationship between the First in 2009 diversity goals and their relationship to the mission of the interdisciplinary programs; specifically, in regards to the new MPF U.S. Cultures requirement and the connection between the CAS interdisciplinary programs and the Center for American and World Cultures.
- Program directors of the CAS interdisciplinary programs bear the sole burden of advocating and administering the program. They have inadequate support staff. The level of individual energy and commitment required to run interdisciplinary programs leads to burn out
- The CAS interdisciplinary programs are predominantly staffed by women and people of color, who already bear a heavy service demand; the majority of the program directors are associate professors; consequently, the commitment to program development can impede the steady progress towards promotion
- Program directors are undercompensated for the work they do in comparison to departmental chairs

D. Summary of Interviews

An overview of the interviews we conducted with current and former administrators involved in interdisciplinary work led to a summary of the barriers they observed to that work. (Note: This summary reflects the views of nine interview subjects; we have not included the commentary made by the Dean of WCP. As explained in our introduction, we wish to keep our examination of interdisciplinary work at Miami separate from the ongoing discussion of the future of the WCP.)

Barriers:

Themes emerge in the interviews as the interviewees discuss the challenges to formal interdisciplinary work:

- Departmental structures (especially problematic with team-teaching and promotion and tenure considerations)
- Joint appointment-related issues
- Relative lack of power on the part of programs and program directors
- Shortage of resources; difficulty in obtaining adequate resources
- Attitudinal problems: negative outlook toward interdisciplinary journals, less value given to interdisciplinary research, reluctance to leave one's own "silo," and misunderstanding of "unconventional" or "engaged" research that crosses boundaries between research and service or teaching
- Communications issues (between departments and programs and between programs and admissions office, for example; program directors are sometimes "out of the loop" that chairs are in; publicity for new ID programs within departments is weak)

III: Recommendations

Introduction: Past and Future

If we are to "develop a prioritized set of recommendations for advancing greater integrative and interdisciplinary learning in all academic divisions at Miami," as charged by the First in 2009 Coordinating Council, we find that we must simultaneously look backward and forward. As we look into the future, our analysis of four Interdisciplinary Program Reviews identifies as a strength of ID study at Miami, the "strong faculty who are at the cutting edge of their academic areas and show an extraordinary commitment to serving their respective programs." The results of a survey we administered to Miami faculty support this assertion.

The largest group of survey respondents consisted of faculty with 1-5 years of service at Miami, comprising 36% of those who participated (N=122). Of the respondents with fewer than 5 years at Miami, 27% tell us that their graduate training was "highly interdisciplinary" compared to 23% of those here at Miami for longer than 6 years. More tellingly, only 5% of those with 1-5 years of service report that their graduate training was "not interdisciplinary" while 17% of those with 6+ years service say that their graduate training was "not interdisciplinary." Furthermore, 25% of the survey respondents obtained their terminal degrees since 2000. Of that cohort of recent PhDs, 26% described their graduate programs as "highly interdisciplinary" in nature contrasted with only 3% who described their graduate work as "not interdisciplinary." The inference we draw is that if the 250 new colleagues who will join the faculty in the next few years continue the trends we see in our survey respondents, interest in interdisciplinary work will only continue to grow. Thus, we recognize that our recommendations must anticipate the needs of our future junior colleagues as they emerge from programs which emphasize interdisciplinary study to some degree.

At the same time, we are cognizant that we are the most recent of a series of committees charged with advancing interdisciplinary studies at Miami. Only nine years ago, Provost Anne Hopkins formed a committee to examine interdisciplinary teaching. That 1997 committee report provided an extensive list of recommendations: four

categories divided into twenty sub-categories, broken down into well over thirty specific recommendations. The ambition, scope, and sheer number of those recommendations are daunting to read, even now. As we look back, we draw as a lesson from that ambitious catalogue of recommendations that we may have a more positive impact on the future of interdisciplinary work not by being less ambitious but rather by focusing our recommendations. Thus, we have chosen to reduce the number of our recommendations, in order, we hope, to maximize their impact.

We offer three major recommendations that we deem to be top priority. (See Appendix B for a complete list of recommendations gleaned from our several primary sources: a faculty survey, an analysis of ID program reviews, and a series of interviews.)

•**A strategic plan for academics at Miami.** In the absence of an overall plan for academics at the University, any recommendations we would offer would inevitably be piece-meal and perhaps stopgap. What is needed is a grasp of the larger context within which interdisciplinarity would fit. In its 2003 Report on Strategic Planning, the University of California-Berkeley, states, “It has become clear our future development requires the guidance of a Strategic Academic Plan, to ensure our investments in both academic programs and physical improvements reflect a sound, coherent and ambitious vision of the Berkeley campus.” Other reports and commentaries on strategic planning emphasize the need to take action in planning for the future rather than be subject to socioeconomic forces such as declining governmental funding and changing student demographics. With a strategic plan in place, there would be no need for another iteration of this committee in five or ten years because basic decisions about the role and value of interdisciplinary work would have been made and a foundation would be set for implementing the changes necessary to realize the vision created for such work.

•**A new structure to oversee interdisciplinary work at Miami.** The purposes of this new structure would be to have an individual in place to oversee the wide range of interdisciplinary work at Miami, in both teaching and research, through the formally instituted programs and informally as undertaken by individual or small collaborative groups of faculty. This new structure would be designed to open new avenues of communication among and between faculty, departments, programs, and divisions and would foster faculty’s getting out of the “silos” of their specific disciplines. One such structure is the approach implemented at Duke University, which has created a Vice Provost for Interdisciplinary Studies. Duke’s website describes this position: “The Vice Provost for Interdisciplinary Studies works with faculty members and administrators from Duke’s nine schools to instigate and facilitate interdisciplinary research, collaboration, and instruction.” The Vice Provost is charged with overseeing sixty interdisciplinary centers and institutes as well as university-wide initiatives in innovation and entrepreneurship, greater integration of the arts into the academic mission. Additionally, the Vice Provost is charged with “collaborating with deans and department chairs to overcome obstacles to interdisciplinarity (including ... team-teaching credit and flexible scheduling).” We offer the Duke model as an example rather than a prescription. Our intent is that a new, flexible structure be developed that will meet the evolving needs of increasingly interdisciplinary faculty.

•A new system of rewards for interdisciplinary work.

Even while a strategic plan is being developed, we recommend that changes are needed in the system of rewards for interdisciplinary work. This will be vital to the success of future faculty. We make the following recommendations:

- Include sections in the promotion and tenure dossiers entitled “Interdisciplinary work,” to be listed in the teaching, research, and service segments of the dossiers. Not only would this change allow faculty to list their interdisciplinary accomplishments, but it would also ascribe value to those accomplishments simply by providing a space for them to be included.
- Explore more flexible definitions of teaching, research, and service to accommodate a faculty that increasingly engages in meaningful work that blurs traditional lines between teaching and scholarship or between scholarship and service, for example.
- Grant program directors a stronger voice and more active role in promotion and tenure decisions to support the interdisciplinary accomplishments of junior faculty.
- Consider more flexible models of tenure. In its 2005 report, *Facilitating Interdisciplinary Research* (National Academics Press), the National Academy of Sciences, National Academy of Engineering, and Institute of Medicine recommend that universities “should experiment with more innovative policies and structures” to facilitate interdisciplinary research (111). They outline innovations such as pooling faculty lines and lowering “administrative and funding walls” (111) between academic units.” Duke University echoes this call for flexibility in its approach to the promotion and tenure process. The Duke Faculty Handbook (Chapter 3, pp. 2-3) explains that candidates submit to unit heads “a brief written synopsis of his or her intellectual interest, including a description of any factors—interdisciplinary or otherwise—that the candidate believes should be taken into consideration in establishing said review committees.” The Handbook goes on to express the expectation that for candidates holding joint appointments or engaged in interdisciplinary work outside the principal department, other academic units will be expected to provide an evaluative statement for the dossier about that work. A targeted, benchmarking exercise to determine best practices at additional institutions for giving program directors a strong voice and more active role in promotion and tenure decisions seems to be in order. We offer these ideas as examples—not prescriptions for change—to illustrate the kind of thinking “outside the box” that we advocate.
- Establish a small fund for low-budget seed money for interdisciplinary projects. Again, we point to Duke University as a model in their Common Fund, which annually funds three proposal and occasional smaller grants to seed new interdisciplinary projects. We offer Duke as a model and suggest a scaled-down version of this approach be considered at Miami.

Appendix A Initial Email survey

I'm contacting you in my role as Chair of the First in 2009 Subcommittee on Interdisciplinarity. We have been asked to find out the extent of interest and current activity in interdisciplinary teaching and scholarship across the University, and to suggest policies that would reduce impediments to further interdisciplinary activity. We hope you will take a few moments to respond to the following two statements. Please email your response directly to me at <sommerjd@muohio.edu>.

*I engage or have engaged in interdisciplinary teaching (or at least in teaching that extends beyond my discipline or field).

Very often ____ Often ____ Sometimes ____ Rarely ____ Never ____

*I engage or have engaged in interdisciplinary research or scholarship (or at least in research/ scholarship that extends beyond my discipline or field).

Very often ____ Often ____ Sometimes ____ Rarely ____ Never ____

*I think of myself as someone interested in interdisciplinary teaching (or at least in teaching that extends beyond my discipline or field). Yes ____ No ____

*I think of myself as someone interested in interdisciplinary research or scholarship (or at least in teaching that extends beyond my discipline or field). Yes ____ No ____

*Regardless of how you responded to the above survey items, would you be willing to participate in a 10-15 minute more detailed electronic survey on the issues of interdisciplinarity to be sent out at the beginning of the spring semester? Yes ____ No ____

Thank you for your time!

Follow-Up Online Survey

1. Years at Miami:
2. Year when you obtained your highest degree:
3. Terminal degree: (e.g., Ph D Geology)
4. Degree-granting department: (e.g., Geophysics)
5. To what extent was your degree program interdisciplinary?
Highly
Moderately
Not
Partially

Slightly

6. Division of faculty appointment:
7. Department(s) of faculty appointment:
8. Affiliation with program(s):
9. Campus:
10. Ethnicity/racial background:
11. Gender:
12. Employment status:
13. I engage or have engaged in interdisciplinary research/scholarship/performance (or at least in research/scholarship/performance) that extends beyond my discipline or field):
 - Never
 - Often
 - Rarely
 - Sometimes
 - Very Often
14. Why would you or wouldn't you define your research/scholarship/performance as interdisciplinary?
15. If you answered "very often," "often," or "sometimes" above, what are the key disciplines you work within? Please list.
16. In what ways does your research/scholarship/performance embody interdisciplinarity? Give examples.
17. What barriers to interdisciplinary research, scholarship, performance have you experienced at Miami?
18. What could be improved at Miami to promote interdisciplinary research, scholarship, performance?
19. I engage or have engaged in interdisciplinary teaching (or at least in teaching that extends beyond my discipline or field).
 - Never
 - Often
 - Rarely
 - Sometimes
 - Very Often
20. Why would you or wouldn't you define your teaching as interdisciplinary?
21. If you answered "very often," "often," or "sometimes" above, what are the key disciplines you work within? Please list.
22. In what ways does your teaching embody interdisciplinarity? Give examples.
23. What barriers to interdisciplinary teaching have you experienced at Miami?
24. What could be improved at Miami to promote interdisciplinary teaching?
25. I engage or have engaged in interdisciplinary service (or at least in service that extends beyond my discipline or field).
 - Never
 - Often
 - Rarely
 - Sometimes
 - Very Often
26. Why would you or wouldn't you define your service as interdisciplinary?

27. If you answered "very often," "often," or "sometimes" above, what are the key disciplines you work within? Please list.
28. In what ways does your service embody interdisciplinarity? Give examples.
29. What barriers to interdisciplinary service have you experienced at Miami?
30. What could be improved at Miami to promote interdisciplinary service?

Appendix B Recommendations

•Summary of Interviewee Recommendations:

Because of the dimension and number of the barriers identified, interviewees tended to focus on one or two proposed solutions. The following list, therefore, is not a summary of recommendations, but a list of the ideas advanced in some detail by the interviewees.

- The need for a strategic plan for Miami's future academic priorities. This overarching suggestion was cited by more than one interviewee.
- Restructuring: to encourage faculty to step out of their "silos," moving programs out of Arts and Science into the Provost's Office or an Office of Interdisciplinary Programs, creating greater support for programs from upper administration.
- Better communication (for example, to make known how the different divisions view and work with interdisciplinary programs, joint appointments, and affiliates; to establish a dialogue between invested parties)
- Mentors outside the departments for joint appointees
- Incentives for departments to encourage them to think about program needs
- A different way to "count" research: for example, a six-faculty, six-department grant should be listed as part of all six department's annual activity as "participated in a \$624,000 grant")
- A hybrid departmental structure for programs in the long-term; in the short-term, joint promotion and tenure committees for joint appointees so that the programs would have more say in annual evaluations
- More resources (such as creating a system of incentives and rewards outside of departments)

•Summary of Program Review Report Recommendations*:

- Develop a flexible administrative structure that fosters the range of interdisciplinary practices at the university
- Recognize and systematize the unique responsibilities of faculty who work in interdisciplinary programs, specifically their dual responsibility to the program and to their home departments
- Implement appropriate rewards and incentives through the tenure and promotion process for core faculty in interdisciplinary programs
- Systematize more clearly the connections between interdisciplinary programs and other departments and divisions by adapting the FTE measurement model to accurately reflect program data, fixing the cross-listing mechanisms, supporting team teaching, and acknowledging program development as a scholarly activity
- Systematize and support the designation of affiliate status. Provide tangible incentives to home departments and faculty affiliates to be released to teach for programs
- Adequately support program directors and the work they do to build interdisciplinary programs

- Adequately fund and staff interdisciplinary programs commensurate with both their service to the Miami Plan for Liberal Education and their support of the First in 2009 goal to promote a diversity oriented curriculum and climate at Miami

*recommendations regarding the School for Interdisciplinary Studies have not been included here given the on-going parallel discussion about the status of the Western Program.

•*Survey Results: Recommendations*

Q18. What could be improved at Miami to promote interdisciplinary research, scholarship, performance?

Q18

Q18A	Number	Cumulative Percent	Cumulative Frequency	Percent
1	29	28.43	29	28.43
2	11	10.78	40	39.22
3	3	2.94	43	42.16
4	13	12.75	56	54.90
5	32	31.37	88	86.27
6	1	0.98	89	87.25
7	6	5.88	95	93.14
8	7	6.86	102	100.00

Number Missing = 30

Coding Key

- 1) Increase interest/opportunity
- 2) Revise promotion/tenure guidelines
- 3) Time
- 4) Miami University should value Interdisciplinarity more
- 5) More resources
- 6) Alter professional attitudes
- 7) Nothing
- 8) Not sure what needs to be done/No response

The open-end responses were coded into one of the above categories. 28% of the respondents indicated that there should be increased opportunities or interest to promote interdisciplinarity. 11% of the respondents indicated that there should be changes to P&T guidelines. 3% of the respondents indicated that more time should be allotted. 13% of the respondents indicated that Miami should value interdisciplinarity more. 31% of the respondents indicated that more resources should be provided to promote interdisciplinarity. 1% of the respondents indicated that professional attitudes should be adjusted. 6% of the respondents indicated that nothing should be done, and 7% of the respondents indicated not sure or did not answer the question.

Conclusion: More resources and increase interest/opportunity were the most common responses.

Q24. What could be improved at Miami to promote interdisciplinary teaching?

Q24A	Number	Cumulative Percent	Cumulative Frequency	Percent
1	25	28.09	25	28.09
2	1	1.12	26	29.21
4	5	5.62	31	34.83
5	23	25.84	54	60.67
7	4	4.49	58	65.17
8	20	22.47	78	87.64
9	6	6.74	84	94.38
10	5	5.62	89	100.00

Number Missing = 43

Coding Key

- 1) Increase interest/opportunity/reward
- 2) Revise promotion/tenure guidelines
- 3) Time (No respondents used this code)
- 4) Miami University should value interdisciplinarity more
- 5) More resources
- 6) Alter professional attitudes (No respondents used this code)
- 7) Nothing
- 8) Remove institutional barriers
- 9) Not sure what needs to be done
- 10) Why improve/Why is this important?

The open-end responses were coded into one of the above categories. 28% of the respondents indicated interdisciplinary teaching could be promoted with an increase in interest, opportunity and reward. 1% of the respondents indicated interdisciplinary teaching could be promoted by revising the promotion and tenure guidelines. 6% of the respondents indicated interdisciplinary teaching could be promoted by having the university place more value on the concept. 26% of the respondents indicated interdisciplinary teaching could be promoted with more resources. 4% of the respondents stating nothing could be done to promote interdisciplinary teaching. 22% of the respondents indicated institutional barriers should be removed as a means of promoting more interdisciplinary teaching. 7% of the respondents were not sure what needed to be done to promote interdisciplinary teaching. 6% of the respondents asked why does interdisciplinary teaching need improvement/why is it important?

Conclusion: The most commonly cited improvements include increase interest/interest/opportunity/reward, more resources and removal of institutional barriers.

Q30. What could be improved at Miami to promote interdisciplinary service?

Q30A	Number	Cumulative Percent	Cumulative Frequency	Percent
0	8	6.35	8	6.35
1	3	2.38	11	8.73
2	6	4.76	17	13.49
3	11	8.73	28	22.22
4	2	1.59	30	23.81
5	1	0.79	31	24.60
7	24	19.05	55	43.65
9	71	56.35	126	100.00

Number Missing = 6

Coding Key

- 0) Nothing
- 1) Promotion/tenure credit
- 2) Resources
- 3) Recognition/value
- 4) Opportunities
- 5) Require it
- 6) Other (No respondents used this code)
- 7) Unsure/Unable to Interpret/Code
- 9) No response

The open-end responses were coded into one of the above categories. 6% of the respondents indicated nothing could be done to promote interdisciplinary service. 2% of the respondents indicated promotion/tenure credit could promote interdisciplinary service. 5% of the respondents indicated increased resources could promote interdisciplinary service. 9% of the respondents indicated recognition/value could promote interdisciplinary service. 2% of the respondents indicated increased opportunities could promote interdisciplinary service. 1% of the respondents indicated requiring such service could promote interdisciplinary service. 19% of the respondents provided responses that could not be interpreted/coded. 56% of the respondents provided no response.

(Note: To facilitate the statistical analysis package, SAS, the “no response” category was coded. The frequency missing is an anomaly, blank lines at the end of the spreadsheet.) Conclusion: A majority of respondents did not answer this question. Of those answering, the “unsure/unable to interpret/code” response was the most frequent response. The most understandable response was “recognition/value”.

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