

DRAFT

2y2d Interdisciplinary Education and Research Focus Groups: Summary and Preliminary Recommendations

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Process: 8 focus groups encompassing about 58 faculty, 5 staff members, 2 deans, 4 vice-provosts, chancellors or associate deans, each meeting for 1.5 hr, representing 12 colleges and schools, UW Bothell, UW Libraries, UW Advancement, and UW Educational Outreach. Additional individual interviews (3) and survey of 14 UW Seattle faculty. UW Tacoma, approximately 20 faculty, plus 2 academic directors and one vice chancellor.

2y2d Themes: Collaboration, Bottom-up initiatives, Incubator of new ideas

1. “Bottom up” research initiatives, beginning with the faculty, are the key to a flourishing interdisciplinary culture.
2. Interdisciplinary work allows the university to be the incubator of new ideas, new domains.
3. Faculty need to anticipate emerging fields (borrowing from hockey, the goal should be to “skate to where the puck will be,” rather than to where it is now)
4. Collaborative work provides the best opportunity to address big social problems for both research and teaching.
5. Collaborations can be between faculty in the same disciplines, but different departments, as well as among faculty in different disciplines.
6. “Interdisciplinary” work can take several shapes;
 - a. Research reflecting two disciplines (or more), essentially combining perspectives from both fields
 - b. Trans-disciplinary research, which transforms both original fields.
 - c. May take very different forms in contexts of teaching and research.
 - d. Tensions and ambiguity around defining and “doing” interdisciplinarity are both strengths and challenges; requires strong intellectual leadership to do well.
7. Younger faculty are particularly interested in interdisciplinary research and education, but do not always find senior faculty supportive. (In contrast, UW Tacoma reports few problems, noting that faculty are hired in part because of their interest and training in interdisciplinarity, though some senior faculty feel as if newer faculty are too narrowly disciplinary.)
8. UW will change greatly in the next decade, as many of the “boomers” retire.

2y2d Future of Interdisciplinary Education and Research

1. Multiple interdisciplinaritys should be recognized and supported; no single definition is possible or even desirable.
2. Interdisciplinary work should build on departmental/discipline strengths and existing interdisciplinary strengths (e.g., Tacoma and Bothell).
 - a. Interdisciplinary work does not replace departments/disciplines.
 - b. The goal should be to create conditions for students and faculty in the disciplines to work across boundaries – rather than creating programs that are interdisciplinary. (in

contrast, at UW Tacoma and UW Bothell, and with other units already established with an interdisciplinary focus, this may be less true).

3. We need to nurture interdisciplinary work because it is the key to understanding a wide variety of challenges (in technology, environment, public health, etc).
4. Broader collaborations needed across UW (e.g., between social science and natural sciences (e.g., environment, global health, local health, etc). Cross-campus collaborations can be challenging, but offer additional opportunity that should not be overlooked.
5. Quality and nimbleness are central to success, reputation.
6. Need to take better advantage of our breadth, as it provides a competitive edge (on the smaller campuses, smaller size is also a competitive edge since it provides perhaps greater informal opportunity for faculty to be familiar with each other's work)
7. Need strong infrastructural and policy/practices support –across the university -- for interdisciplinary education and research (rather than having it just as essentially volunteer labor by faculty)

Vision: *Interdisciplinary education and research are:*

1. Collaborative, team-based problem solving research, crossing disciplines and departmental/college boundaries and often combining multiple methods and perspectives.
2. Best when they rest on a strong foundation of departments, disciplines, and/or discipline-based foundational knowledge.
3. Informed by the successes and products of existing high quality interdisciplinary graduate education and research programs, including faculty who are recruited to the University of Washington from such programs.
4. Big or small.
 - a. “Small bridge” collaborations (e.g., people in different units approach the same question from a different focus; or use a similar tool – such as lasers—to understand different kinds of issues. Collaboration practical, somewhat focused.
 - b. “Bigger bridge” collaborations, in which people pursue transformative “big ideas” conversations, research
5. Conducted with many different partners (across units at UW, or with community partners --- public/private/government)
6. Supported by cost-effective infrastructures but at times may be more costly than alternatives (e.g., fully-articulated team teaching)
7. Supported by bringing high quality graduate students to UW.
8. Supported by hiring faculty with an eye specifically to their ability and willingness to conduct interdisciplinary research and teaching, and a willingness to help define and build appropriate infrastructure, policies, practices, etc. (see #3 above).

2y2d Recommendations.

Place top priority on new investments for infrastructure that will benefit interdisciplinary education and research

1. Provide space (both physical, virtual) to facilitate collaborative research, teaching
 - a. Facilitate faculty office fluidity, to help collaborators come together
2. Create/enhance/maintain shared research services (e.g., nimble financial systems, grant tracking systems, other IT infrastructure)
 - a. Develop a mechanism to share best practices and standards between units regarding research infrastructure, processes
3. Share, collect information that can facilitate collaborations, including:

- a. Common calendars to facilitate room use, collaboration, conversations;
 - b. Research directories to provide information about who's doing what – of value both internally and externally);
 - c. List of current joint degrees, double majors (to identify trends, emerging areas)
 - d. Coordinate course scheduling sufficiently in advance so that faculty might develop linkages between courses to foster interdisciplinary work
4. Invest in appropriate marketing (to broad stakeholder constituencies) of interdisciplinarity generally, and interdisciplinary programs and units in particular.
 5. Support umbrella entities like the Simpson Center, while avoiding narrow interdisciplinary silos by building-in governance and other structures that involve shared leadership, accountability, rewards, and incentives.
 6. Acknowledge and support the critical relationship between interdisciplinarity and real-world community engagement, and look to existing interdisciplinary programs, units, and campuses at the UW and beyond for leadership on how to do this.

Create an environment that truly supports and enables interdisciplinary education and research.

1. Reduce barriers to interdisciplinary education and research
 - a. Review tenure and promotion procedures (which can punish junior faculty for collaborative, interdisciplinary work).
 - i. Re-think focus on single author, single-PI leadership. Adjust to changing collaborative research models.
 - ii. Create University, college, school and department tenure/promotion policies that affirm value of interdisciplinary research.
 - iii. Nurture a culture that supports interdisciplinary education and research. Encourage deans, chairs, and senior faculty to understand and promote interdisciplinary work. Consider developing an articulation of the value of such work and a recognition that at least under some conditions, high quality interdisciplinary work might require a longer period of time.
 - iv. Provide substantive mentorship to junior faculty; make expectations clear – make sure that junior faculty pursuing interdisciplinary work are doing work that departments understand, value.
 - v. Reduce the onerous aspects of joint appointments(e..g, currently, service work in both units, two evaluating bodies).
 - b. Provide some kind of meaningful recognition for interdisciplinary work by faculty (e.g., interdisciplinary teaching should really count, rather than being additional volunteer labor).
 - c. Clarify options for administrative homes and structures for interdisciplinary initiatives.
 - d. Set aside seed money to support interdisciplinary collaborations (for research or teaching)
 - e. Develop alternative models for allocating FTE effort so as to reduce disincentives for team-teaching, and provide positive new incentives.
2. Create structures that truly promote interdisciplinary/trans-disciplinary education and teaching.
 - a. Create teams that facilitate interaction, collaboration (e.g., Simpson Center Society of Scholars)
 - b. Incremental steps important – starting with teaching (where collaboration may be easier to start than in research)

- i. Create faculty exchange programs (cost neutral, in-house submersion, in which faculty in 2 units exchange teaching obligations for one quarter. Fungible notion of each faculty member's FTE).
 - ii. Cross list courses, encourage joint appointments, joint degree programs.
 - c. Review student learning outcomes
 - i. For undergraduates:
 - 1. Infuse UW general education with interdisciplinary breadth, options, and explicitly interdisciplinary student learning outcomes
 - 2. Facilitate student breadth via advising, broad curricular links
 - 3. Create capstones across campus, facilitate student team work. Facilitate double majors, especially in programs where it is now virtually impossible (right now, there are barriers to academic pursuits that are good for students' education in pursuing a science and education double major, for example)
 - 4. Identify and disseminate best practices related to student experiences in interdisciplinary programs.
 - d. Clearly distinguish between interdisciplinary professional programs and undergraduate ones, and adjust structures accordingly.

Provide funding that enhances nimbleness in interdisciplinary education and research--

- 1. Provide limited but valuable financial support for interdisciplinary education and research
 - a. Seed funding to help research groups get started, flourish. (Let interdisciplinary research teams emerge from the faculty, but then provide some funding to help them succeed, flourish.
 - b. Give faculty time to collaborate, start new interdisciplinary projects
- 2. Widen support for interdisciplinary education and research
 - a. Involve UW Advancement, to attract donors
 - b. Involve community partners (in industry, community) in research, education
- 3. Provide support for graduate students (research assistantships, fellowships) to provide support for faculty research, cultivate new interdisciplinary scholars.
 - a. Encourage training grants for graduate students; help with tuition shortfalls.
 - b. Make graduate fellowships a central goal in UW advancement efforts.

Develop criteria for investment and dis-investment

- 1. Identify best practices in interdisciplinary education and research. What constitutes quality? Draw on experiences of existing interdisciplinary programs and units at the UW and beyond to do this.
- 2. Assume that all new initiatives will have a "sunset" provision; continuance would need to be justified.