

Report of the Interdisciplinary Education Ad Hoc Committee

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Introduction

The Interdisciplinary Education Ad Hoc (IEAH) Committee was convened by Academic Senate Chair Michael Meranze in March 2020 to address current and future challenges facing interdisciplinary education at UCLA. The establishment of this committee was prompted, in part, by significant changes in state financial support and a new campus budget model.

The committee membership included faculty from interdisciplinary programs across campus. The committee held nine meetings and met with wide-ranging representatives from campus administration and interdisciplinary programs. Guests included:

Chris Erickson, Senior Associate Vice Provost and Director, International Institute

Cindy Fan, Vice Provost, International Studies and Global Engagement

Anthony Friscia, Director, UCLA Cluster Programs

Miguel Garcia-Garibay, Dean, Physical Sciences

Gregg Goldman, Vice Chancellor and Chief Financial Officer

Leigh Harris, Director of Curricular Initiatives, Undergraduate Education Initiatives

Darnell Hunt, Dean, Social Sciences

Tracy Johnson, Dean, Life Sciences

Brian Kite, Interim Dean, School of Theater, Film and Television

Hannah Landecker, Director, Institute for Society and Genetics

Kelsey Martin, Dean, School of Medicine

Gregory Payne, Director, Graduate Programs in Bioscience

Jeff Roth, Associate Vice Chancellor, Academic Planning and Budget

David Schaberg, Dean, Humanities

Eileen Strempel, Dean, School of Music

Ron Sugano, Assistant Vice Provost and CFO/CAO, International Institute

Brooke Wilkinson, Director of Academic Initiatives, Undergraduate Education Initiatives

Summary

The Interdisciplinary Education Ad Hoc (IEAH) Committee is at least the sixth committee established over the last 44 years with the charge of identifying and addressing the challenges faced by interdisciplinary education programs at UCLA. The most recent report of the Senate Task-force on interdisciplinary programs (2007) identified the following key challenges:

- 1. Lack of support funds
- 2. Lack of stable faculty
- 3. Inability to secure and plan teaching even one year in advance
- 4. Inability to conduct long-range planning for the intellectual development of the interdisciplinary program because there are often no secure faculty lines
- 5. The course buy-out model makes interdisciplinary programs too expensive
- 6. Lines of administrative authority and financial responsibility are often confusing (which Dean is in charge if the interdisciplinary program includes faculty from several divisions or from two or three different schools)
- 7. Lack of space for interdisciplinary program faculty and students to interact

The IEAHC was dismayed to find that these problems persist to varying degrees, depending on the program. However, the committee found that the new budget model, whereby resource allocation has an activity-based component (ex: teaching and research) and a priorities-based component gives the university a unique opportunity to implement lasting changes in support of interdisciplinary teaching, learning, and service. Unfortunately, the model also has the potential to leave interdisciplinary programs vulnerable to funding shortages.

Interdisciplinary education at UCLA has a strong history of providing intellectual vibrancy and innovation. Programs developed around interdisciplinary education provide opportunities for new collaborations and new programs that stimulate faculty and students. On many occasions, these interactions have resulted in new undergraduate and graduate programs, centers for interdisciplinary instruction (CIIs) and even new departments. This committee was impressed time and time again in its meetings with various Deans regarding both the history of interdisciplinary studies, as well as current activities and initiatives across departments and across schools. These programs are often initiated by highly motivated faculty, wishing to bring new interactions that are only possible when traditional departmental and school/college boundaries are crossed to create offerings that students find compelling.

Committee Findings

Interdisciplinary Structures

There are currently 13 graduate IDPs (excluding Biosciences) distributed as follows: Humanities (1), International Institute (3), Life Sciences (3), School of Medicine (2), Public Health (1), Social Sciences (3). The Graduate Program in Biosciences has 7 IDPs. These Bioscience programs draw extensively on faculty in both Life Sciences and the School of Medicine. There are 10 undergraduate IDPs as follows: Humanities (1), International Institute (3), Life Sciences (2), Music (1), Physical Sciences (1), Social Sciences (2). There are two Centers for Interdisciplinary Instruction (CIIs), the Institute for Society and Genetics and the Institute for the Environment and Sustainability. There are also currently 15 Free Standing Minors (FSMs) as follows: Center for Community Learning (1), Humanities (5), International Institute (2), Music (1), Life Sciences (1), Physical Sciences (1), Public Affairs (2), Public Health (1), School of Arts and Architecture (1).

The committee conducted an extensive assessment of 63 Academic Senate 8-Year Program Reviews for interdisciplinary programs and units and identified two themes that were common to these reviews:

- 1. Lack of long-term funding commitments makes planning difficult from year to year.
- 2. Free-Standing Minors critically suffer from a lack of staff support, sufficient space allocations, and dedicated faculty.

Meetings with administrators and faculty revealed a set of positive experiences, including exciting scholarship and external recognition/prestige, and a set of consistent concerns, which echoed the findings of previous reviews. Interdisciplinary units find it particularly challenging to thrive in the face of unstable funding sources; lack of space in which to meet and build community; and a lack of support staff to handle the vast, time-consuming administrative tasks required.

The history of instability for these programs is especially prevalent when the program's faculty are drawn from different units. In the cases the committee discussed, the resources for summer teaching, for example, were granted to the faculty member's home department, thereby depriving the IDP or Free-Standing Minor from critical revenue sources. Without stability, it is hard to predict the need for course offerings and the number of instructors, which yields additional stress to faculty as well as additional stress to students who cannot always access the courses they need to fulfill degree requirements.

It is important to note that despite these challenges, every faculty member and administrator the committee spoke with was highly supportive of interdisciplinary education. They expressed sheer delight at the intellectual community and academic innovation that is made possible when their programs run well. Many of them continue to pursue interdisciplinary teaching and service despite severe bureaucratic and financial challenges. The committee recognizes the crucial value of this work for the mission of a public university and we ask that the Administration prioritize such interdisciplinary endeavors.

Strategic Utilization of Interdisciplinary Structures

The committee's thorough review made it clear that interdisciplinary programs are vitally important intellectual resources on campus. They are the home to some of the most innovative teaching and research happening at UCLA. Intellectually, educationally, and academically, these successful programs offer faculty and students opportunities to research, teach, and learn creatively.

It appears that the new activity-based budget is likely to leave interdisciplinary programs threatened by revenue shortages which will impair stability and growth. This is of particular concern for IDPs and free-standing minors (FSMs) that do not have a documented and sustainable source of funding. A likely scenario is that these programs will be impaired in capturing resources within the new budget model.

Characteristics of Successful Interdisciplinary Units

Among the key attributes of a successful interdisciplinary unit, the most important is funding. Without dedicated funding streams, UCLA risks almost random survival of interdisciplinary units. Survival without dependable funding streams falls to committed but largely uncompensated faculty, supportive (or unsupportive) whims of colleges, schools or departments, word-of-mouth interest (or misunderstandings) among students, and a patchwork of inconsistent and unpredictable curricular activities. With the new budget model implementation, the time is ideal to restructure how to provide dependable financial resources to not only indicate that interdisciplinarity is here to stay in multiple dimensions and forms but also to grow and evolve such entities. As was described to the *ad hoc* committee, the current budget model has resulted in modest support of interdisciplinary programs (not quite zero, but reasonably close) in recent years. Under the new model, there is room for specific identification of mechanisms for support –either at the EVC discretionary level or to provide specific incentives and metrics at the departmental level.

Interdisciplinary scholarship promises to be the future of learning and innovation. The new budget model can incentivize interdisciplinary units unlinked with a (or any) department, school or college. The ever-increasing rise in students pursuing more than one major with one or more minor(s) demonstrates the demand for interdisciplinary learning. Calls for interdisciplinary proposals at local, state, and federal levels continue to emerge and some even require such diverse collaboration. The committee was impressed with the history of interdisciplinary studies (that created innovative programs, some of which evolved into departments) as well as current activities across departments and across schools.

The second key attribute of a successful interdisciplinary program is a highly motivated faculty, wishing to bring new interactions that are only possible when traditional departmental and school/college boundaries are crossed to create offerings that students find compelling. Even here, however, it is funding that will sustain these efforts and allow them to develop into programs. UCLA needs to reflect this strong demand for interdisciplinary units with a formal funding structure and other components that originated in academia for strictly disciplinary entities.

It's time to restructure the very basis for teaching and knowledge development at universities to embrace interdisciplinary units as the core instead of as add-ons.

The third commonality of successful interdisciplinary programs is the creative use of academic and staff personnel opportunities and administrative structures. Examples such as term chairs in the Food Studies Minor allow key faculty to buy-out courses from their home departments to develop and teach courses in the interdisciplinary program. Shared staff and admissions functions in the Graduate Programs in Biosciences and the International Institute create cost savings. Shared staff also, critically, develop expertise in the nuances of administering and supporting interdisciplinary units. In all cases, the importance of having documentation of financial and administrative commitments, including revenue for teaching, space, and administrative support is critical. Interdisciplinary units lend themselves to more chaos than traditional academic disciplines, because, by definition, they do not have "departmental" operations. Thus, administrative flexibility is of the essence. Administrative flexibility pertains to the allocation of space and staff as well as to their daily functioning. Successful units have these allocations tailored to the specific interdisciplinary units' needs, and are clearly delineated. Some may need to physically co-exist in the same space for optimal teaching and research. Others may do fine with being geographically dispersed. Interdisciplinary units with successful staff support develop boutique training to balance the differences in how disciplinary and interdisciplinary units operate. The development of common interdisciplinary staff resources would benefit both interdisciplinary units, and the departments they interface with. Such staffs' skills will transcend curricula, research, and promotion of faculty. The cultivation of an interdisciplinary staff will support the professional development of the staff, efficiency of interdisciplinary programs, recognition of interdisciplinary service, and fiscal responsibility of university resources.

Fourth, successful interdisciplinary programs foster strong, sustaining partnerships with deans and departments. Successful programs have had access to course release resources, and fostered strong partnerships with faculty home departments to approve course releases. Deans are often supportive of interdisciplinary scholarship, but face administrative barriers. UCLA needs to lead in developing protocols and models for incentivizing interdisciplinary teaching and research as well as establish a minimal funding base on par with other established units on campus including departments, schools, and colleges. Historically, engaging with interdisciplinary units could be viewed as diluting the effectiveness of the departmental mission. However, as research becomes an ever-more interdisciplinary and collaborative enterprise, departments that contribute to such efforts may reap rewards in terms of:

- faculty satisfaction in connecting with students that may not otherwise be in their 'siloed' classroom;
- 2. fertilization of cross-disciplinary research leading to collaborative research proposals, training grants etc.;
- 3. recognition as contributing to interdisciplinary work at the intellectual forefront during review processes.

Successful interdisciplinary programs partner with departments that recognize these clear benefits.

Development of New Interdisciplinary Programs

Guidelines for minimum resourcing should be developed for each type of program. These standard resources should be flexible in accommodating the needs of the various interdisciplinary programs. Each will have common elements identified above: students, staff, faculty, space, administrative and financial aspects. Each may require differing levels of commitment and support for the various categories. For example, all programs will need substantial staff support for administration of the program. Some programs will need to have a formal admissions process while others will have to coordinate students pursuing the program requirements (e.g. Graduate IDPs may have their own admissions process, while FSMs may have undergraduate students petition to join their FSM program). Each interdisciplinary unit needs at least one staff member designated as the formal liaison with the disciplinary units and who oversees their relations, complementarity, and resource sharing when applicable.

Interdisciplinary programs appear in many different configurations with varying degrees of formality. New combinations will likely emerge. Like with administration and space, flexibility is required but so is a common core of guidelines on the establishment and review of them. These guidelines will be dynamic and need to continually adapt to new structures and demands. New interdisciplinary units may not only develop but also combine, in part or whole, with other disciplinary and interdisciplinary units. As such, the creation and review of them will require a greater frequency, most likely, and be shorter than the established 8-year reviews of academic units. More frequent reviews are intended to provide the programs with more frequent opportunities for advocacy with the administration and to ensure that the programs remain healthy. It is not the intention to overburden interdisciplinary units with academic program reviews, and if the other recommendations in this report are implemented successfully then more frequent reviews may cease to be necessary.

Although information exists on defining and characterizing existing interdisciplinary units at UCLA, it presents as unwieldy. One idea is to create more of a visual topology in which the specific types of interdisciplinary units appear in relation to one another. Such topologies may appear in different forms with one illustrating the different types of interdisciplinary units and their required resources and others illustrating their enrollment sizes. For example, if an interdisciplinary unit emerged from another interdisciplinary unit, the topology can reflect their relationship as well as reveal what resources were extended or duplicated, if at all, in this evolution. Moreover, given the dynamic nature of interdisciplinary units described above, preconceived, possible paths of their evolution should be outlined. Description of these pathways would be accompanied by descriptions of what would be required to move from one state (e.g. IDP) to another (e.g department) with an emphasis on providing guidance as to what resources would be required (again, financial, space, etc.) for the transition from one type to another and what the process would be for that transition (academic senate review, etc.). Proposals for new interdisciplinary programs and units must sufficiently address:

A. Student issues, such as:

- a. How students are recruited into the program.
- b. How they enter the program (e.g. through a formal admissions process or through some other mechanism such as petitioning the program, etc.).

- c. Curriculum requirements including minimum course hours, any required courses, possible electives to meet requirements, etc.
- d. Other items needed to fulfil program requirements (e.g. undergraduate Capstone projects or graduate program requirements such as qualifying exams, advancement to candidacy, dissertation requirements, final oral exams, etc.).
- e. Financial support of students, which may range from modest support for lab fees for Capstone projects to full support for tuition, fees and stipends for graduate students.
- f. How students will be advised, guided, mentored in the program to meet program requirements (from faculty and staff).

B. Staff issues, such as:

- a. Identification of tasks needing staff support for the program (admissions, student advising, arranging instruction, tracking numbers of students in the program, graduations, subsequent positions, etc.)
- b. Number of staff FTE required to carry out administrative work for program
- c. Staff training required to support the program (how to support an FSM or IDP), and how this training will differ from departmental staff straining.
- d. Financial support for staff including identification and clear articulation of resources.

C. Faculty issues, such as:

- a. Recruitment and establishment of faculty identified with the program (formal affiliation, formal voting processes for faculty to participate in the program, etc.).
- Identification of faculty to teach various courses (and/or if there are minimum teaching or other requirements – such as student mentoring or supervision - for participation in the program).
- c. Address issues regarding teaching credit and how it will be recognized (especially for multi-listed courses) between home department and interdisciplinary program and articulate agreements made.
- d. Identify if there are any financial resources for faculty participating in the program (All interdisciplinary programs should have articulated faculty resources available).

D. Space

- a. Identification of space requirements including:
 - i. Space needed for instruction
 - ii. Space needed for research
 - iii. Space needed for staff
 - iv. Space needed for faculty and students
 - v. Identification of available space for program to use (if known)

E. Program Administration

- a. This should identify how the program will be administered such as:
 - i. By a program director –how that person will be appointed and what their responsibilities are.
 - ii. The Committee to Administer the IDP, its composition, and areas within its purview.
 - iii. How the program will interact with related departments, school(s) or college(s)

- b. How the program will carry out its various functions including:
 - i. Recruitment and admissions of students
 - ii. Recruitment and participation of faculty
 - iii. Curricular decisions (e.g. via a curriculum committee)
 - iv. Student advising and mentoring
 - v. Equity, Diversity and Inclusion activities

F. Financial Resources

- a. Identify financial needs such as support for staff, students, faculty, space and other unique requirements.
- b. Identify sources of support to meet these needs as mentioned above, this is fundamental to the sustained success of any interdepartmental program.
 - i. Supporting departments
 - ii. Philanthropic if available
 - iii. Training grants
 - iv. Graduate Division funds
 - v. Allocations from Funds Flow directly to the interdisciplinary program (from EVC)

Key Challenges for Interdisciplinary Units

Financial:

Interdisciplinary Majors and Minors are 'free-floating,' yet campus-endorsed, educational entities. The revenue generated through fees and tuition go to home departments of faculty. Most IDPs need to negotiate for money and faculty time with department chairs. There is no incentive beyond goodwill for IDP chairs to reach across boundaries and engage faculty in more siloed environments (Anderson, David Geffen School of Medicine, etc.), particularly at the undergraduate level. This poses a challenge especially for entry-level courses that might be less 'fun' and a lot more work to develop than presenting lectures that are at the center of interest of a particular faculty.

Procedural:

There are no directions available that would guide faculty and administrators in creating each type of interdisciplinary endeavor. Currently, much time and energy is wasted on re-discovering approaches, procedures and rules. Providing a path for the initial creation of an interdisciplinary unit and benchmarks for moving 'up the ladder' from smaller units to larger levels of organization would be highly beneficial in helping to remove these barriers.

Conclusions

At UCLA as with other UCs, faculty control the curriculum. Different disciplinary faculty already co-exist in singular disciplinary departments, schools and colleges, and the university curriculum should and does reflect these interdisciplinary structures. Yet, interdisciplinary faculty remain a small percentage of faculty. Interdisciplinary faculty struggle to teach discipline-specific courses that are not from their own discipline. Clear policies and protocols need to guide both faculty and the broader academic structures in

making interdisciplinarity an integral and not supplemental part of UCLA's core teaching and research. To accomplish integrating interdisciplinary units formally, all need to have at least partial FTEs allocated, encouraged teaching time from across campus entities, and changes to the promotion and advancement process to promote and recognize interdisciplinary teaching. Such incentives to teach need to be at least equivalent to current incentives to do interdisciplinary research. In fact, aside from space granted to original academic units such as departments, schools, and colleges for both research and teaching, interdisciplinary units need to have their own space for teaching.

Rather than looking backward at how such programs were/are currently funded (which seems to vary depending on how/when each unit was initially instantiated), the committee recommends that the university look forward with an eye to the new budget model. Revenue streams ought to track not just the department from which the faculty teach, but also the interdisciplinary unit, either as a fixed amount as a function of each student's tuition, or a ratio between the interdisciplinary unit and the home department.

Centers for Interdisciplinary Instruction (CIIs) seem to present a logical approach to addressing the issues faced by many interdisciplinary units. Incentivizing time commitment to interdisciplinary enterprises could come through the formation of organizational units such as CIIs in which contributions are formalized/recognized. The Center for Society and Genetics serves as an example. Formalized CIIs can be used to 'set the tone' and 'provide the meeting room' for bridging such cultures. CIIs can 'legitimize' requests for interdisciplinary instruction, e.g. across divisions. For example, why would a professor in the Business School agree to teach a Biology course? If the request comes from a recognized interdisciplinary center and 'thought leader,' it can carry more weight and promises a greater sense of recognition. Further, interdisciplinary work cuts across divisions and schools that have different staffing and compensation requirements. Again, CIIs can address some of these issues by providing a core of dedicated staff and faculty who can navigate the remaining challenges such as distributing compensation across divisions. CIIs, as compared to other non-departmental units, can offer FTEs and Joint appointments.

The new budget model might also provide the Executive Vice Chancellor/Provost with funds that could be used to support especially smaller interdisciplinary units that might not teach large courses. Unfortunately, at the moment, it is still unclear precisely how the EVC/P funds will be dispensed and what 'bargaining power' interdisciplinary units will have.

Recommendations

To ensure that interdisciplinary education and research have the support they need to thrive at UCLA, the committee submits the following recommendations:

To the Executive Vice Chancellor/Provost, Vice Chancellor for Academic Planning and Budget, the Undergraduate and Graduate Council, and the Legislative Assembly:

1. The campus should lift the moratorium on the creation of new Centers for Interdisciplinary Instruction (CIIs). The committee found that while not appropriate for all interdisciplinary activity, CIIs are the most stable and sustainable form of interdisciplinary unit. Unlike Interdepartmental Programs (IDPs) and Free Standing Minors (FSMs), CIIs can hold FTEs, which allows for stable faculty and enables long-term planning. In the cases where a program does not aim to become a CII, similar sustainable practices should apply.

To the Executive Vice Chancellor/Provost and Vice Chancellor for Academic Planning and Budget:

- 1. Articulate Interdisciplinary education as a key priority for the university, enabled by the new budget model.
- 2. The administration should establish predictable, documented revenue streams for all IDPs and FSMs. These must include stable specific teaching resources. The Vice Chancellor for Academic Planning and Budget should provide a report on these revenue streams to the Graduate and Undergraduate Council by June, 2023, when the new budget model will have been in effect for a complete academic year.
- 3. Sufficient and stable sources of funding must be established for all interdisciplinary programs to enable long-term planning. To facilitate this stability, a Vice Chancellor level position reporting directly to the Executive Vice Chancellor/Provost should be created and endowed with substantial resourcing for interdisciplinary programs. The job description, authorities, and funding model for this position should be developed in close coordination with the Undergraduate and Graduate Council and should consider the weaknesses identified in the construction of the recently disestablished Office of Interdisciplinary and Cross Campus Affairs.
- 4. The administration should also recognize and provide revenue from teaching performed within interdisciplinary units. Importantly, summer teaching revenues should be redirected to the programs that are offering the course and not to the instructors' home departments.
- 5. Direct the Development Office to designate dedicated staff to fundraise for interdisciplinary programs.

To the Council on Academic Personnel

6. Develop mechanisms to better recognize interdisciplinary service during the academic personnel review process.

To the Graduate and Undergraduate Council and the Council on Planning and Budget

7. Approvals for new IDPs and FSMs should articulate stable funding sources and a formalized commitment in this regard from the administration. Financial and administrative commitments from Deans should always be written and made explicit.

- 8. If an IDP, FSM, or CII is operating on spoken or informal commitments at the time of an Academic Program Review of the unit, the Review should not be closed until the commitment is made explicitly in writing, at the discretion of the Councils.
- 9. Recognize and encourage donor relations during Academic Program Reviews.
- 10. Consider establishing standards for initiating Appendix V actions for units which no longer have committed faculty or enrolled students.
- 11. Consider temporarily implementing an interdisciplinary unit review cycle that is shorter than the standard 8-year reviews to provide greater oversight and interaction with interdisciplinary units and their deans.
- 12. Develop a visual topology or flow chart in which the specific types of interdisciplinary units appear in relation to one another. Such typologies may appear in different forms with one illustrating the different types of interdisciplinary units and their required resources and others illustrating their enrollment sizes. The topology should also provide a roadmap for how and under what circumstances an interdisciplinary unit should consider developing into a different structure.