INSIDE
HIGHER ED

Best Practices in Incentivizing Interdisciplinary Program Development

February 2023

Across the past two decades, multi-disciplinary and interdisciplinary education has come to prominence in the United States. However, despite the value to be had for students engaged in interdisciplinary learning, many colleges and universities have struggled to overcome the administrative barriers to delivering instruction outside of established academic fields. In this brief, Hanover Research outlines some of the measures that can be taken to ensure the successful development of interdisciplinary programs.

KEY FINDINGS

Budget allocations alone may not be sufficient to incentivize faculty and traditional academic departments to develop new or interdisciplinary programs.

In general, institutions provide faculty with stipends or release time to incentivize the development of new programs. Such incentives are not only practical for the design and implementation of new offerings but are also critical "morale boosters" as they acknowledge the effort that is required to create programming in addition to regular responsibilities. Interdisciplinary programs in particular will usually require incentives beyond these. Specifically, the typical resources needed for the broad implementation of interdisciplinary programs include stipends and release time (for faculty) and space on campus, administrative support, and cluster hiring (for departments).

The development of interdisciplinary programs has proven to be challenging; many institutions have created task forces to overcome these challenges through specific policies and supports.

Interdisciplinary initiatives are complex and often fall outside of typical faculty responsibilities as well as outside the goals of traditional academic departments. Budget allocation is a critical component of developing interdisciplinary programs, as well as the availability of clearly outlined policies for the roles, responsibilities, and expectations of individual departments and faculty members. Some have created task forces or working groups to develop these guidelines with the goal of building an environment where interdisciplinary collaboration is encouraged and viewed as achievable by faculty members and department leadership.

NEW PROGRAM DEVELOPMENT INCENTIVES

Most universities have established offices or initiatives that facilitate the development of new academic programs and that provide incentives for faculty. Centralized academic units like the Office of the Provost or the Office of Research are usually responsible for the oversight and approval of new programs, while they incentivize faculty with monetary or other benefits, like release time or preferential scheduling.

> **Stipends or grants are the most commonly awarded incentives to encourage and support faculty in the development of new programs.**

While a stipend paid directly to faculty for a new course or program development is a good starting point, it is rarely sufficient to fuel the development of interdisciplinary programs. In these instances, universities may also provide support in the form of technology, facilities, and similar resources for faculty as well as incentives for the departments invovled.

A recently published White Paper by faculty at the University of Colorado shows the importance of stipends and credit allocations in support of interdisciplinary teaching. The current lack of these incentives was identified as a key obstacle for collaboration.

For example, Kennesaw State University reports that priorities of the Dean's office can incentivize departments to participate in the development of new programming. KSU began to restructure the organization of its interdisciplinary programming and favor joint appointments, which departments began to actively seek out.

> **Cluster hiring, that is, "hiring faculty into multiple departments or colleges around interdisciplinary topics," has become increasingly popular in the past few years and might also constitute an incentive for new programs.**

The Collaborative on Academic Careers in Higher Education (COACHE) has identified budget allocation and other material and non-material aspects that are critical to encourage the development of interdisciplinary programs.

A clear understanding of what **form(s) of interdisciplinary work** faculty and administrative leaders should pursue can help identify potential benefits, barriers, and disadvantages.

Budget allocations should encourage interdisciplinary work. COACHE does not recommend specific strategies but faculty incentives in the form of stipends are common practice. Additional funding may depend on the type of program offering (e.g., permanent center, event series, summer institute, etc.).

Make available **campus facilities** (e.g., spaces, buildings, labs) that are conducive to interdisciplinary work. A survey of faculty teaching in interdisciplinary programs at the College of William & Mary identifies "space as a high priority on their wish lists."

Departmental understanding as to how to **evaluate interdisciplinary work** has been one criterion for COACHE's benchmarking of best practices. This issue may not only be relevant to tenure-track faculty but also speaks to the value system in academia that has historically favored disciplinary boundaries.

Faculty need to know whether interdisciplinary work is rewarded in the **merit, promotion, and tenure process**. West Virginia University suggests, for example, to specify in promotion and tenure requirements how much of faculty work is to be team-based and how much is to be independent.

HR | HIGHER EDUCATION

Source: APLU

Interdisciplinary Program Structures

Over the last decade, universities have intensified their efforts to develop more interdisciplinary programming. In view of the fact that such programs require time and resources, while they also involve stakeholders across departments and possibly even schools and colleges, observers have pointed out the potentially most contentious issues that may emerge within this context:

- resource allocation including faculty lines, operating funds, and indirect cost distribution;
- tenure homes and joint appointments;
- conflicting goals with traditional colleges and departments;
- course development, course registration, and joint registration, and
- leadership and direction.

The ways in which these possible concerns are being addressed often depend on the organizational model that universities have adopted to manage resources, courses, and budgets.

The most common approaches to provide **steady interdisciplinary programming** on campus include the establishment of research centers, teaching programs, or joint appointments and programs.

Centers may focus on general teaching and learning strategies for interdisciplinary courses and programs (e.g., Boston University), offer interdisciplinary degrees from a range of academic disciplines (e.g., Kean University), or support research across disciplines on and off campus (e.g., UC Berkeley).

Joint appointments draw faculty from different disciplines who teach at two different departments or schools. For example, Duke University's Nicholas School of the Environment employs jointly appointed faculty. Such collaborations can be promoted by planning grants from the Office of the Vice Provost for Research.

Developing Interdisciplinary Program Supports

Given the complexity of planning, developing, and implementing interdisciplinary programs, a number of universities have created internal task forces to assist in the process, which in turn can make the development of a new or interdisciplinary program more appealing and achievable to faculty and academic departments.

Penn State University

A few years ago, Penn State identified the need to establish "a central budget from which to allocate funds to academic units willing to provide a 'home', administrative support and academic oversight to IDGPs" (Intercollege Graduate Degree Programs). The task force further recommends an "annual budget of $350K to fund up to 10 new intercollege programs on a continuing basis."

University of Missouri

In May 2018, the University of Missouri announced its effort to establish a College of Interdisciplinary and Graduate Studies. This decision followed a task force-led review of MU's programs. Faculty had concerns that interdisciplinary studies, "which lack full administrative and other support [...] would be deemed unnecessary or that they wouldn't be evaluated comprehensively."

University of Northern Iowa

An Interdisciplinary Task Force was created at UNI after the Faculty Senate "raised concerns about [the university's] capacity to support collaborative, cross-disciplinary curricula." The Task Force's 2020 report cited a series of administrative challenges, including budgets, assignment of faculty, and lack of secretarial staff as elements preventing the full functioning of their programs.

INTERDISCIPLINARY PROGRAM BUDGETING

Budget and Resource Allocation Models

The most common university budget models are incremental, formula-based, and responsibility center management:

Incremental	• Funding levels of previous year determine budget allocations of new fiscal year
Formula Based	• Budget allocations are based on pre-determined formulas or metrics (e.g., enrollment, credit hours)
Responsibility Center Management	• Each unit is financially responsible and held accountable for direct and indirect expenditures

Budget models for interdisciplinary programs may not always fall neatly into just one these categories but rather be characterized as a **hybrid** of centralized and decentralized structures.

Since interdisciplinary programming can take on many forms, universities have adopted a range of funding types and subsequently different ways to allocate resources. Critics have identified models that lack any central or institutionalized leadership, physical space, and "regular faculty" as unsustainable (Kennesaw):

Organization	Funding	Downside
Non-institutionalized interdisciplinary programs	Grant (External source or internal "seed money")	• Faculty usually need to find external funding to sustain program once initial fund is exhausted
Placement within traditional department	Departmental funds	• Low encouragement of interdisciplinarity • Little incentive to allocate resources for "non-departmental" goals

Program Evaluation for Budget Allocation

Some institutions use program evaluations to determine ongoing budget allocations for new programs. Data points may include "enrollments, course-level outcomes, retention rates, job-placement success, and licensure-exam-passage rates." (Lumina)

There is a divide within higher education as to whether or to what extent such outcomes should be used to determine the funding of an existing or new program, an approach that has already been implemented by state governments to inform funding decisions.

Proponents of an outcome-based reward system understand this to be a "powerful tool for supporting increased postsecondary student attainment" and an "incentive [...] to better performance."

Critics fear that this model may hinder interdisciplinary teaching and research as competition rather than collaboration is being promoted. "Poaching" has been described as not only potentially detrimental to individual departments but also as undermining a university's overall strategic goals.

Other observers urge that universities should reward "faculty for developing programs regardless of their success or failure." Moreover, tenure and promotion should be linked to the development and not the success of new programs.

University of Illinois

In fall 2017, the University of Illinois at Urbana-Champaign presented a "framework for budgeting system reform" which includes specific considerations for the University's interdisciplinary research units (IRU).
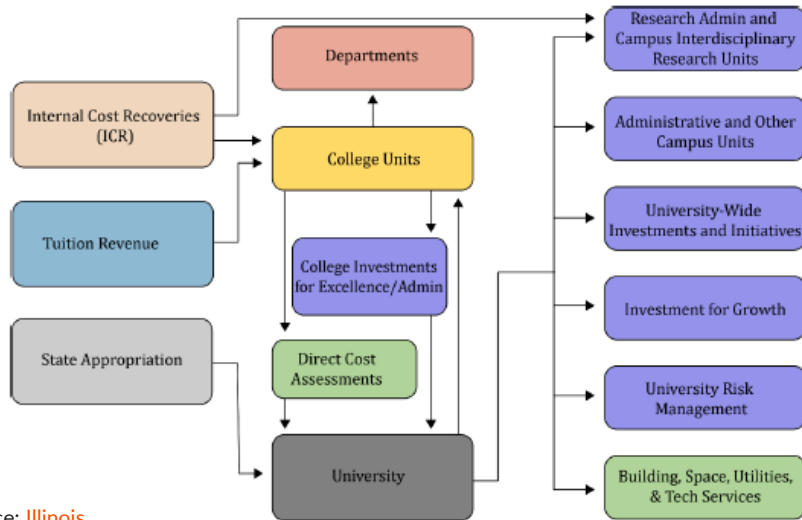
Source: Illinois

- The Office of Vice Chancellor for Research and the campus IRUs "are funded through a combination of campus-allocated funding, grant and contract funding, and internally generated resources."

- Some of Internal Cost Revenue "will flow to the campus Interdisciplinary Research Units." In FY 2018, IRUs received $44M out of the total budget of $1.167 billion.

- The framework stipulates that for grants managed by IRUs, "where the PI's home is in one of the colleges, the 55% portion retained centrally is separated into two parts. Approximately 28% flows to the IRU and 27% is retained centrally. For Tuition Remission, 75% flows to the college of enrollment of the Research Assistant working on the grant, and 25% is retained centrally."

Auburn University

Auburn University's Strategic Budgeting Initiative outlines that the University's resource allocation methodology "neither encourages nor discourages interdisciplinary research and teaching. Sponsored-program activity earns direct revenue, indirect cost recovery, and a share of the Division I state appropriation whether it focuses on a disciplinary research question or an interdisciplinary one."

However, "compelling interdisciplinary initiatives will also be eligible for strategic investment from the Mission Enhancement Fund."

University of Rhode Island (URI)

URI's Academic Strategic Plan highlights **space**, **technology**, **special teams**, and **graduate assistantships** as important factors to promote interdisciplinary work.

Specifically, the plan states to provide "incentives for the formation of interdisciplinary research teams around high-performance computer (HPC) to encourage broad URI community involvement in research." Moreover, strategy-linked actions need to ensure that "university-supported graduate assistantships […] are supportive of interdisciplinary programs."