

Re-Inventing Quality in Higher Education: Future of Interdisciplinary Programs

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Expected Learning Outcomes

- Identify strategies to break down interdisciplinary silos across the institution by overcoming barriers, building relationships, and organizing for interdisciplinary programs
- Use the models presented to reflect on their own institution's situation in planning for and delivering interdisciplinary programming

Interdisciplinary

Interdisciplinary = involving two or more academic, scientific, or artistic disciplines to create new methodology

A Venn diagram consisting of three overlapping green circles. The top circle is labeled 'Business'. The bottom-left circle is labeled 'Health-Care'. The bottom-right circle is labeled 'Education'. The circles overlap in the center and at the intersections of two circles.

Multi-disciplinary

Multi-disciplinary = non-integrative mixture of disciplines in that each discipline retains its methodologies and assumptions without change or development from other disciplines within the multidisciplinary relationship.

Interdisciplinary Learning

- 21st century imperative (AAC&U, Keck/PKAL)
- 4 drivers (National Academy of Sciences)
 - Inherent complexity of nature and society
 - Desire to explore problems and questions that are not confined to a single discipline
 - Need to solve societal problems
 - Students, especially undergraduates, are strongly attracted to interdisciplinary courses, especially those of societal relevance.

Growth in Interdisciplinary Programs

- National Center of Educational Statistics
 - 7,000 degrees awarded in 1973
 - 30,000 degrees awarded in 2005
- AAU
 - University interdisciplinary programs, centers, and institutes have grown in number, diversity, and complexity.

Growth reflects (societal) needs but also presents important challenges to university administrators

Benefits of Interdisciplinary Learning

- Think of 3 benefits of interdisciplinary learning
- Partner with someone near you
- Share your benefits with each other
- Share the benefits you have identified with our larger group

Benefits

- Interdisciplinary learning shares many features with service-learning, and other form of collaborative learning
 - Higher levels of student engagement
 - Deep forms of learning
 - Integrative thinking and problem solving

Barriers to Interdisciplinary Learning

- Think of 3 barriers to interdisciplinary learning
- Partner with someone near you
- Share your barriers with each other
- Share the barriers you have identified with our larger group

Barriers

- Disciplinary "bias"
 - Perception of interdisciplinary work as "soft" or without rigor
- Concern that grant agencies, publishers, and/or tenure committees may not understand/undervalue this work
- Unsupportive structures
 - Insufficient autonomy/joint faculty appointments
 - Budgetary practices, FTEs
 - Siloed and bureaucratic nature of educational institutions
 - Reward systems
 - Faculty training and socialization
 - Disciplines and departmental structures

Overcoming Barriers

- Small steps . . . rethink
- If committed to long-term . . . redesign
- Collaboration is the key underpinning of a successful and sustainable interdisciplinary program.

Creating a collaborative campus is an intentional and deliberative process. It does not happen by accident. . . and it will not occur until major organizational systems are intentionally redesigned. (Kezar & Lester, 2009)

Processes (Keck/PKAL) and Models

Process for Building and Sustaining Interdisciplinary Programs

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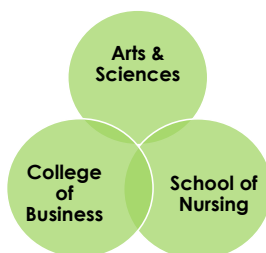
graph TD
    Mobilize["Mobilize (Plan)  
Define interdisciplinary vision/goals  
Know context  
Be experimental"]
    Institutionalize["Institutionalize (Sustain)  
Commit  
Review  
Persist"]
    Implement["Implement (Act)  
Pilot  
Evaluate  
Scale"]
    Community((Interdisciplinary Community  
Reflective  
Innovative  
Integrative))

    Mobilize -- "Uncommon Difficult" --> Institutionalize
    Institutionalize -- "Most Common Easier" --> Implement
    Implement -- "Less Common Harder" --> Mobilize
    Community --- Mobilize
    Community --- Institutionalize
    Community --- Implement
  
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Models

- Intersecting circles
- Provost Model
- Center/Institute Model

Intersecting Circles



Intersecting Circles

- Several disciplines that cross school or college lines
- "Lead" Dean with "collaborating" Deans
- Tuition Revenue is distributed based on business plan
 - Revenue follows expense (unit that offers cost)
 - Lead school collects all tuition and disperses to others
- Leadership and Administration
 - Director, coordinating committee – report to Graduate Dean
- Faculty Appointment
 - Appointment in "home" school

Provost Model

- Interdisciplinary programs report to provost
- Tuition Revenue comes from provost office & program expenses flow through provost office
- Leadership & Administration
 - Program Director – report to Graduate Dean
- Faculty Appointments
 - Appointment in "home" department within school/college

Center/Institute Model

- Funding from endowment, grants, tuition revenues, general funds
- Tuition Revenue follow expense
- Leadership & Administration
 - Director – report to Dean and Provost
- Faculty Appointments
 - Primary appointment to the Center or
 - Dual appointment between Center and College/School
 - Not a faculty "home" for Rank & Tenure

Executive Summary

- *Models and Strategies for Interdisciplinary Collaboration at Private Research Institutions* (University Leadership Council, 2010)
- Interdisciplinary programs are generally administered out of the office of the Provost
- Administrators are usually Associate Provosts in charge of Interdisciplinary programming or deans of the college
- Funding for interdisciplinary programs is primarily drawn from the budget for the office of the provost

Executive Summary – Continued

- No contact institutions offer faculty members incentives for teaching interdisciplinary courses
- The majority of institutions rely on volunteer faculty from the college of arts & sciences to teach interdisciplinary courses
- Interdisciplinary programs are almost entirely composed of cross-listed courses already offered across academic departments
- Interdisciplinary programs have no separate budget

Administrative Challenges: Overview

- Making the case
- Building internal and external alliances
- Strategies to address "loose coupling" in higher education
- Collaboration is a developmental process

Making the Case

- Need for Interdisciplinary Leadership
- Complex problems require multiple disciplines
- Institutional size and complexity is a strong asset
- Fit with institutional mission

Internal Alliances

- Get the right people on the bus
- Generative, cross disciplinary boundaries
- Task oriented
- Innovative, risk takers
- Administrative cover
- Find a champion

External Alliances

- You are not a prophet in your own land
- Get expertise/wisdom
- Leverage wise counsel
- Plan a strategy
- Re-group if necessary and try again

Breaking down silos

- Loose coupling in higher education is a challenge
- Stay centered on collaboration and efficiency
- Use proof of concept argument
- Traditional institutions need to become NIMBLE

Redesigning for Collaboration in HE

(Keezar, 2005)

- STAGE 1: Building Commitment to Collaboration
 - Networks, learning and values
- STAGE 2: Commitment to Collaboration
 - Sense of priority, executive support and campus network
- STAGE 3: Sustaining Collaboration
 - Integrating structures, rewards and formalizing the network

Organizing for Interdisciplinarity

- Communication
- Leadership
- Support
- Structure
- Community

Communication

- Listening tours
- Places for talking
- Assume creativity
- Planned serendipity

Leadership

- Celebrate successes
- Reward growth from failure
- Trust
- Partner with faculty and staff
- Relinquish control

Support

- Give time
- Local control
- Target funding
- Clear paths

Structure

- Catwalks and bridges
- Windows and walls
- Fellows
- Lateral movement

Community

- Build on institutional values
- Listen to students
- Partner with your external community
- Serve someone
