

Vision into Practice: An Emerging Theory of Change Model for Integrating Undergraduate Research into Departmental and Institutional Cultures

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For curricular transformation to be effective and sustainable, faculty invariably encounter significant challenges throughout the reform process. For example, curricular elements must be linked to student learning outcomes; faculty workload and reward systems for both tenured and non-tenured faculty must be assessed; and strong partnerships among faculty, students, and administrators must be established. Below you will find three scenarios that departments might face as they attempt to achieve “buy-in” to initiate a major curricular transformation.

In your discussion group, choose a scenario and consider how to develop an action plan to launch the transformation process, strategically thinking about how to take advantage of the strengths of the department as well as how to address any barriers that might exist. You should feel free to create your own scenario for discussion as well, perhaps modeling a situation based on your own experiences.

Case 1 – Focus on Faculty Dynamics

Our leadership team for the project is composed of six tenured faculty. We are a large department with several strong voices, and we are trying to ensure that everyone provides input. In the past, we have made the mistake of moving forward before everyone had a chance to process and comment on proposed changes. Given our size, we need to encourage active participation of all faculty and find ways to communicate outside of our usual “groups,” especially as we revise our student learning outcomes. We will also need to work on fostering buy-in and engagement among our part-time faculty who teach our introductory courses and among those faculty who are resistant to change.

Case 2 – Focus on Faculty Workload and Faculty & Departmental Autonomy

Our year 1 action plan focuses on integrating research experiences into our required introductory course through

the creation of multi-week laboratory modules. We envision having time to dive into the literature, talk in detail about experiments, and design novel assignments through which students could really begin to get a sense of what it is like to read, conduct, and understand the research process. Some faculty are concerned that such curricular revision would come at the expense of content. This is of particular concern because this course is required by several major degree programs across campus. Any changes to the course content or structure could impact these other programs. Faculty are also concerned about the workload to devise a lab modules and whether the institution would give faculty credit for the revised course. We also feel it is important to allow different instructors to maintain control of their own courses and provide the instructional experiences they feel will best achieve the end goal.

Case 3 – Focus on Departmental Leadership

Our institution has two faculty tracks: research-active tenured/tenure-track (TT) faculty and non-tenured teaching (NTT) faculty who serve primarily as instructors. Both have a review and promotion process. Research productivity is essential for TT faculty; NTT faculty are rewarded for teaching excellence and pedagogical leadership within the discipline. The curricular transformation project is aligned with our institution’s accreditation plan. The department was selected for participation in the project by a new academic support office created by the provost to focus on inquiry-based learning. Multiple administrators serve on the institutional leadership team for the project; our departmental leadership team consists of NTT faculty and laboratory coordinators. Formal departmental curricular change is generally a slow and deliberative process that requires the review and approval by all departmental faculty.

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About the Council on Undergraduate Research

The Council on Undergraduate Research (www.cur.org) supports faculty development for high-quality undergraduate student-faculty collaborative research and scholarship. More than 700 institutions and nearly 13,000 individuals belong to CUR. CUR believes that the best way to capture student interest and create enthusiasm for a discipline is through research in close collaboration with faculty members.

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