The Berkeley Undergraduate Discovery Experience

A Concept Note for UC Berkeley Faculty March 2017

The following concept note emerges out of discussions among the Vice Chancellor for Undergraduate Education, the Vice Chancellor for Research, the Council of College Deans, and the Office of Undergraduate Research and Scholarships. The intention of this document is to generate broad faculty discussion and feedback on this proposed initiative.

You are invited to faculty discussion forums on this idea - Forum #1 on March 22 from 10am-12noon in Sibley Auditorium and/or Forum #2 on March 29 from 2pm-4pm in Sibley Auditorium (these are duplicate events) - and you are welcome to share your feedback electronically through http://vcresearch.berkeley.edu/faculty-events-undergraduate-discovery-experiences. This document contains questions in italicized & bold text that are suggestive of what we might discuss in the forums.

Concept: Developing the capacity to inquire, discover, and create is the core purpose of an undergraduate education. The Berkeley Undergraduate Discovery Experience is a campus-wide initiative to engage and support more undergraduate students in scholarly and experiential learning. The broad term "Discovery Experience" intentionally references a wide range of immersive learning projects - from substantial research experiences and artistic production to entrepreneurial initiatives and community-engaged projects. All such efforts should challenge students to question, design, implement, and iterate toward a thoughtful and creative culminating product. Many of our undergraduates already partake in such experiences. We aspire for all of them to do so. Toward that goal, we seek your input on the Berkeley Discovery Experience idea, specifically how such experiences can be effectively defined, fostered, administered, and mentored.

Purpose: Our intent is to create a campus-wide platform through which undergraduate creativity can be channeled, challenged, supported, and expressed. The Discovery Experience has the potential to become the defining experience of a Berkeley undergraduate education, where the popular question "What is your major?" will be complemented by "What is your discovery project?" Some students will pursue the path of a traditional senior thesis, while others might seek the challenge of writing a novellae, directing a film, launching an entrepreneurial endeavor, or integrating community engagement with scholarship. Some experiences will be group-based while others individual. While new requirements might emerge at the departmental level, it's important to consider how some students will reach this goal outside of the major: e.g., in a minor or perhaps through a co-curricular experience. In the broadest sense, the challenge for the campus is to build upon existing programming and launch new programming that expands pathways through which students can foster their passions and complete a discovery project. How does your department currently create curricular and co-curricular opportunities for such experiences? Can we imagine departments defining such experiences for their majors/minors? How would we define expectations for projects pursued outside of departments/majors/minors? How might this initiative inspire curricular changes that both open opportunities for students to engage in discovery experiences AND help respond to other campus resource challenges?

Mentoring: Skilled, committed mentorship is important for undergraduate projects. While Berkeley faculty provide incredible resource in this regard, we see the Discovery Experience as an opportunity to think broadly and creatively about who can provide meaningful mentorship to our undergraduates

and how we ensure standards of quality across these interactions. Inclusion of postdocs, staff researchers, graduate students, alumni, and nearby organizations will be pivotal to meet the demand created by our nearly 30,000 undergraduates. Professional development opportunities, including a "mentorship certification program," should be available for all mentors, regardless of position. We need to establish standards of expectation, incentive systems, and ways to collectively honor commitment to mentoring undergraduates. What kinds of mentoring did you receive as an undergraduate that had the most impact on where you are today? In your department, what are the primary opportunities and obstacles for faculty to carry out substantial mentorship of undergraduates? Where do you see opportunities and obstacles for graduate students and postdoctoral scholars to engage in mentoring undergraduates? What kind of training / professional development would assist you in becoming a better mentor?

Administration: The intent of this planning effort is to stimulate ideas and creativity from the bottom up. Many current undergraduate requirements and co-curricular programs likely meet the standards we envision - for example: projects carried out as part of rigorous course-based undergraduate research (e.g. American Cultures Engaged Scholarship courses), some experiences within research apprentice programs (e.g., URAP or SPUR), some student leadership positions (e.g. Peter E. Haas Public Service Leaders), research fellowships (e.g., SURF or UC LEADS), or senior capstone experiences (e.g. senior studio courses in CED majors, required thesis in ISF, etc.) How can we build up infrastructure for expanding such experiences at Berkeley? One incentivization idea is to create a voluntary certification system for campus programs, perhaps modeled on the LEED energy efficiency system. In general, how do you envision effective incentivization for progressing toward such a goal? Where do you see a good balance of administrative centralization and decentralization for such an initiative?

<u>Undergrad Discovery Spaces:</u> "Collider spaces" and "maker-spaces" have a growing presence on campus and are places where undergraduates can go to work in small groups, co-create, and find guidance and networks (e.g. Sutardja Center for Entrepreneurship & Technology and Jacobs Institute.) Multiple conversations have been underway to consider how more spaces can be utilized in this manner (e.g. parts of Moffitt Library and academic service centers in residence halls.) *Where do you see opportunities for such spaces to blossom? What resources would be necessary to make this happen?*

Showcasing the Discovery Experience: The products of the Discovery Experiences should be documented, archived, and publicly presented by the students, likely in the context of their major, minor, or other interdisciplinary or co-curricular campus centers. Departments could develop guidelines on pursuing Discovery Experiences and how final products can be publicly presented e.g., poster sessions, conference presentations, exhibitions, readings or performances. One day annually could be designated as *Discovery Experience Celebration Day* when Berkeley opens its doors to community, alumni, and prospective employers, allowing our students to show the world what they have accomplished. *How can we best promote and organize the archiving and showcasing of undergraduate discovery experiences? What current campus platforms and practices support this direction?*

<u>Cal Discovery Sponsor Program</u>: In coordination with UDAR and relations staff across campus, a program should be established for alumni and foundations to sponsor Discovery Experiences. This support could be both financial and in terms of mentorship. Alumni constitute an incredible resource as we look to expand internship opportunities for undergraduates and think through how some of these experiences may, in themselves constitute a Discovery project.