

UC BERKELEY STRATEGIC PLANNING
SIGNATURE INITIATIVES WORKING GROUP
SPRING 2018 REPORT
FINAL VERSION - DECEMBER 2018

**APPENDIX A6: UC BERKELEY: LIGHTING THE WAY TO THE PUBLIC
RESEARCH UNIVERSITY OF THE FUTURE**

BRIEF SUMMARY:

Berkeley—in its 150th year—will devote itself to serving as an international model for the public research university of the future. This includes being the best we can be in all our endeavors; continuing to expand access and opportunity; creating new art, knowledge, and understanding of our society, planet, and universe; communicating that knowledge to the world; telling the story of the value of public institutions in a time when the meaning and value of “public” has become tarnished; and helping to develop policies that will sustain public research universities into the future.

EXECUTIVE SUMMARY:

For 150 years, UC Berkeley has set the standard for what it means to be a truly excellent public research university. It has also defined and sustained what Joan Didion called “California’s highest, most articulate idea of itself, the most coherent, perhaps the only coherent expression, of the California possibility.” But as both public institutions and universities of all kinds are increasingly under fire and the basic assumptions and agreements under which they have been supported and nurtured no longer appear valid, how does UC Berkeley “light the way” for our state and for public research universities across the nation and around the world to reinvent the public research university? How does it achieve the growth it needs to serve the needs of our state and still provide a quality experience for all its students? How does it model what it means to educate and serve one of the most diverse populations in the nation? How does it support and cultivate an atmosphere of creativity and appreciation for the creation of new knowledge and new understanding in an era where most of the public believes the answers to “everything” is found by searching the internet? How does it leverage technology to improve pedagogy, student success, and efficiency and expand access to Berkeley curricula beyond the borders of the campus?

This Signature Initiative is by its nature multi-disciplinary since its subject is essentially the entire campus and the public research university writ large. It is actually *about* the intersection of comprehensive excellence and the public mission: Berkeley has traditionally defined academic comprehensiveness as a critical component of excellence and service to the state and the greater good. How do we support the creativity and efforts of faculty and students in their endeavors to create new art, new ideas, new knowledge, in a world that rewards development of applications and wants success measured in products with a three-year return on investment? In today’s era of hyper-

specialization, how do we maintain a comprehensive, balanced program of research and teaching when research funding, student interest, and labor markets for different disciplines vary widely?

THE CHALLENGE

Initiatives developed under this rubric would come from individual colleges, schools, and departments and from a number of administrative units (including, but not limited to Student Affairs, Undergraduate Education, Equity and Inclusion, the Graduate Division, and State Government Relations). Research conducted under its rubric could emerge from many units, including the Goldman School of Public Policy, the Graduate School of Education, the Center for Studies in Higher Education, and the law school as well as social science departments such as Political Science, Economics, and Sociology.

This Signature Initiative is ours to own because of UC Berkeley’s history of leadership in this area—a history born of the vision of California’s founders and one that has spread to all of the UC campuses. Although many other states host remarkable public research universities, none has matched California in either scope or the consistency of our reputation for excellence. (For example, today California hosts six public members of the AAU; only six other states host more than one and none of these has more than two.) While each of UC’s campuses hosts remarkable programs and several others consistently rank among the nation’s best, Berkeley consistently ranks as the number one public university in both national and international surveys of academic excellence and research quality. California—largely as a result of the Master Plan for Higher Education, which was born at Berkeley—is consistently seen as the international model for how public research universities should be organized and supported.

METRICS AND MILESTONES: EXPECTED IMPACTS:

SMART METRIC (SPECIFIC/MEASURABLE/AMBITIOUS/RELEVANT/TIME-BOUND):

Lighting the Way to the Public Research University of the Future is clearly Ambitious, Relevant, and Timely. It will be important to identify Specific, Measurable goals and Timelines for the next ten years. Below are initial ideas. As a first step, we propose to convene a campus-wide discussion of the meaning of “the public good” itself as well as the values, and contributions of public institutions at this point in history.

MACRO LEVEL:

- A better, more relevant, more stable and sustainable Berkeley looks to the future and addresses the needs of students, the state, and society as efficiently and effectively as possible
- Berkeley provides opportunity for California’s diverse communities
- Berkeley’s diverse domains of inquiry are supported and work together to make Berkeley the state’s recognized leader in educating students, creating new knowledge, and building California’s economy and society
- Berkeley engages in critical self-analysis and learns from its mistakes as well as its successes

- Berkeley is universally recognized as the model for how to articulate, organize, govern, and conduct the work of a public research university
- Berkeley is the nation's clearest and most influential voice in making the case for the essential contributions of discovery, basic research, and innovation to our nation's success and well-being and the need for consistent and reliable public support for scientific research
- Berkeley creates the opportunities for faculty and students to develop new world-changing ideas, develop their creativity, and do research that changes our understanding of the universe.

In addition, each individual project would have metrics that fit the SMART rubric.

EXEMPLAR THEMES WITHIN THIS CHALLENGE:

We invite the UC Berkeley Community to submit ideas (at any stage of development). We also want to hear from faculty already working on research programs within the scope of this Signature Initiative. For any idea submitted, please limited it to 500 words at this stage. Ideas may be specific or broad, but should lend themselves to measurable and time-bound goals.

This initial list is taken from suggestions made to the working group; many of these need input from many constituents:

- 1) **Comprehensive academic excellence:** How should the research university evolve in a landscape of differential growth and opportunity? How do research universities plan for growth in ways that protect and nurture traditional disciplines while ensuring that emerging and cutting-edge domains of inquiry receive the resources they need?
- 2) **Diversity and inclusion:** Public universities should look like the communities and societies they serve and Berkeley should model this:
 - UC Berkeley should become an Hispanic Serving Institution (HSI) within ten years.
 - Berkeley should take on as a long-term challenge eliminating lack of equal access and success in STEM fields for students, faculty, and researchers from historically under-represented groups.
 - The makeup of UC Berkeley's faculty and staff should reflect the diverse population of California by integrating evidence-based practices on inclusive and equitable hiring, tenure, and promotion across departments.
 - Berkeley should reclaim and expand its position of leadership in providing access to higher education for students with disabilities.
- 3) **The Future of Higher Education:** Higher education exists today in a challenging world of social, economic, demographic, and technological change. Higher education was once seen as a universal good and the key to economic and personal success. Today, some question whether a college education is still worth it, while at the same time underserved communities strive for access to higher education in an increasingly competitive and inequitable environment. Costs have risen dramatically as governmental sources of support for both instruction and research have not kept up with growth. Berkeley can lead a public discussion of these questions, contributing research and data to inform public policy and public opinion.

- 4) **Establishing practices that position Berkeley as a model by committing to meet the basic needs of all of its students:**
 - Adequate financial support for graduate students to ensure they thrive academically and personally, and to keep the campus competitive with private and public peers.
 - Housing: adopt the goals of the Chancellor’s housing initiative and commit to meeting them.

- 5) **Lead a California discussion of the role of public higher education:** The Master Plan is more than 60 years old and many would say many of its central tenets are broken, others outdated. In concert with the California Legislature, the Office of the President, other higher education segments, public policy organizations, and business and community interests, Berkeley should initiate a planning process to create a new Master Plan to guide California public higher education for the next 50 years. This process should look carefully at the links between higher and primary and secondary education, with a goal to bring the benefits of higher education more equitably to a broad range of communities.

- 6) **Campaign to understand, revitalize, and celebrate the meaning of “Public” and the “Public Good” — including support for public institutions:** Research associated with this initiative should help clarify the relationship between education and opportunity for individuals and the role of education in creating strong economies and engaged communities. This would include research across many disciplines.

- 7) **Using technology to transform higher education:** Universities are generally far behind their students in the degree to which they have integrated technology into their operations. Berkeley should innovate and demonstrate the value of technology in all spheres of our work:
 - Expanding creative use of technology as a pedagogical tool in traditional classrooms.
 - Using technology to help students learn and to monitor their progress and success.
 - Leveraging technology to make better use of instructor time through flipped classrooms and similar approaches.
 - Expanding online learning to provide access to Berkeley curricula and degrees to more Californians (and to learners around the globe)—including high school and community college students preparing to become Berkeley students, our own alumni, adult learners in need of retraining to advance in their careers or change careers, and lifelong learners who seek enrichment and knowledge in a wide range of subjects.

- 8) **Majors, curricula, and academic concentrations in the 21st Century**
 - Realign the curriculum in order to empower students to be the next generation of change-makers.
 - Create and promote shared majors that incorporate STEM, Arts & Humanities/Social Sciences, and professional disciplines.
 - Include a discovery experience as part of every undergraduate student’s experience at Berkeley.
 - Global Citizenship: The research university of the twenty-first century must educate students for a global world, and address and engage both the benefits and risks of global networks of culture, technology, and society as they emerge. UC Berkeley is uniquely placed to enact a comprehensive program that would link the question of *global citizenship* (the spread of democracy, pursuit of social justice, stewardship of the environment) with the study of *global heritage* (history, culture, language, the material traces of the past) as building blocks to *innovation* (in technology, the arts, the world of

ideas). UC Berkeley's comprehensive academic excellence in all domains of inquiry lays an unparalleled foundation for such a program, but an experience abroad for all students is a crucial element in educating global citizens.

UCEAP and Berkeley Study Abroad Programs currently exist in thirty countries, and offer opportunities in many disciplines, yet currently, only 20% of our undergraduates gain an international experience through study or internships abroad, and very few graduate and professional students study or serve outside the borders of North America. UC Berkeley should work with Berkeley Study Abroad and UCEAP to ensure that every Berkeley student has an opportunity to study and/or work abroad, and to receive financial aid to do so when eligible. All undergraduate degree programs should promote such opportunities through the development and advertising of four-year and two-year plans that incorporate a semester or year-long study or internship abroad. Graduate and professional programs should similarly explore and promote internship opportunities in their fields. The target for this challenge is to increase the total percentage of students who study or serve outside our borders to 50% .

9) **Innovation and social entrepreneurship:**

- Berkeley should self-consciously review its history to identify how its social, cultural, and technological innovations have had an impact on society, and this knowledge should be incorporated in its web pages, its orientations for new students, its courses, and in its basic sense of itself.
- Berkeley should use modern data science and social science methods to evaluate its impact on the lives of its graduates and on the economy of the state of California. This research should include working with projects such as IRIS (Institute for Research on Innovation and Science) at the University of Michigan to provide "policy makers with credible data on the value of research to address pressing social science and policy questions."
- Berkeley should continue to expand its network of clinics, incubators, and accelerators in order to facilitate innovation by its faculty, students and staff
- Berkeley should focus on cultural and social innovations as much as technological innovations by making members of the Berkeley community aware of their importance, their power to make change, and the modes by which they are developed and implemented. Social entrepreneurship should be a signature feature of a Berkeley undergraduate, professional, or graduate degree.
- Berkeley should work to create large, interdisciplinary projects based upon the signature initiatives that will demonstrate its ability to think big and to go beyond single investigator studies.

10) **Promote the Arts & "Maker Culture."** California from its inception has been a "maker culture," focused on innovation, creativity, and a thriving arts community. From its founding as California's Land Grant institution, UC Berkeley has promoted the arts and culture. First in poetry, music, and architecture, and now in every creative field imaginable, UC Berkeley never accepted the division between the mental and the manual that undergirded other models of the research university. How do we create an undergraduate program and experience that honors this legacy? How do we support the faculty and graduate students in their creative activities, in a world which values commercialism over creativity?

11) **Basic Science and Initiatives to Understand Fundamental Processes** -- Berkeley should continue to be a leader in investigating basic processes such as the nature of matter and energy; the operation of chemical processes; the nature of life and its genomic, cellular, and ecological mechanisms; the operation of the brain and human intelligence, the operation of planetary processes such as geology, hydrology, and climate; and the nature of the solar system and the universe. Major initiatives in these areas should continue to be a hallmark of Berkeley's commitment to understanding fundamental processes.

12) **Advocacy for Public Support of Scientific Research.** In the years following World War II, a consensus developed in the United States that scientific research that led to innovation in a wide range of areas was essential to our national interest. While states continued to provide basic support for public education, the federal government accepted responsibility for funding high-quality basic research that fuels our understanding of the universe and leads to technological and social advancement. Over the past decade, support for this basic concept has eroded and many elected officials and taxpayers no longer see the need for, or relevance of, public investments in scientific research. Working with other research institutions, Berkeley should help lead the reinvigoration of our national commitment to support of science and innovation.

CAMPUS UNITS THAT MAY DRIVE THIS SIGNATURE INITIATIVE:

The entire university would contribute to this initiative. "Hubs" might include the College of Letters and Science, the Graduate School of Education, the Townsend Center for the Humanities, Arts + Design, The Center for Teaching and Learning, Berkeley Center for Studies in Higher Education, the Goldman School of Public Policy, and administrative units including Student Affairs, Equity and Inclusion, Undergraduate Education, Public Affairs, Government Relations, University Extension, Summer Sessions, and Study Abroad. We also would encourage the direct involvement of students not only in coursework and projects but through internships, clubs and organizations, and the undergraduate and graduate student governments. Staff also have a key role to play as they are often the front line in dealing not only with students but with external constituencies including the public and elected officials.

IMPLEMENTATION:

We recommend that UC Berkeley establish this initiative as a campus-wide effort involving all the myriad kinds of activity we are engaged in: teaching and learning; research; student life; public service; relationships with our sister campuses and with other higher education segments in California as well as public research universities around the country and the globe; engagement with key constituencies such as the Legislature, alumni, donors and the press; and relationships with our local community.