

The Regents of the University of California

ACADEMIC AND STUDENT AFFAIRS COMMITTEE

July 12, 2017

The Academic and Student Affairs Committee met on the above date at UCSF–Mission Bay Conference Center, San Francisco.

Members present: Regents De La Peña, Elliott, Lansing, Lozano, Mancia, Monge, Ortiz Oakley, Pérez, and Zettel; Ex officio members Kieffer and Napolitano; Advisory members Chalfant and Main; Chancellors Block, Christ, Wilcox, and Yang

In attendance: Regents Anguiano, Guber, and Park, Regent-designate Graves, Staff Advisor Valdry, Secretary and Chief of Staff Shaw, Provost Dorr, Vice Presidents Brown and Ellis, Interim Chancellor Hexter, Chief Counsel Friedlander, and Recording Secretary McCarthy

The meeting convened at 1:40 p.m. with Committee Chair Pérez presiding.

1. **APPROVAL OF MINUTES OF PREVIOUS MEETING**

Upon motion duly made and seconded, the minutes of the meeting of May 17, 2017 were approved.

2. **GRADUATE WELL-BEING SURVEY**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Provost Dorr reviewed results of a survey conducted by UCOP's Department of Institutional Research and Academic Planning in 2016 of UC graduate student well-being and the implications of these results for UC's efforts to ensure its graduate students thrive. The survey was developed in consultation with many stakeholders, including student representatives and the graduate deans. In November 2016, campus survey results were shared with graduate deans and systemwide results with the Academic Senate's Coordinating Committee on Graduate Affairs.

Vice President Ellis expressed the University's commitment to ensuring that students in its world-renowned graduate programs have an experience at UC with support that provides strong personal and professional development. More than 5,000 responses were received to UC's 2016 Graduate Student Well-Being Survey, a 40 percent response rate from the 13,000 surveys distributed. The majority of students were satisfied with their circumstances. However, significant numbers of student expressed concern about depression symptoms, mentoring, their financial situations, food insecurity, and career prospects. Mr. Ellis emphasized that one-third of responding graduate students indicated

they experienced a collection of symptoms that could be associated with depression, including 14 percent of respondents reporting a collection of symptoms that could be associated with severe depression. These figures could be compared with National College Health Assessment 2015 survey results in which 12 percent of graduate students were diagnosed with or treated for depression in the prior year. Respondents also identified their top priorities for assistance as support related to mental health, financial resources and management, and career development. UCOP would complete analyses of three other sections of the survey related to campus climate and belonging, social support, and growth mindset.

UC Student Association President Ralph Washington expressed concern about the survey's finding that over 35 percent of respondents reported experiencing symptoms of depression. He urged provision of mental health preventive services and addressing stressors such as food and financial insecurity, lack of career preparation services, and dissatisfaction with advisor relationships. Mr. Washington suggested establishing a systemwide annual reciprocal evaluation program for graduate students and their advisors. The survey revealed differences in responses among students of various backgrounds. While 25 percent of graduate students were dissatisfied with their relationships with their advisors, that rate was 33 percent among African American graduate students. Nearly half of all respondents felt financial confidence, while only 38 percent of African American students, 38 percent of Native American students, and 37 percent of Lesbian, Gay, Bisexual, Transsexual, and Queer (LGBTQ) students felt confident. African American and Latino/a students were also less likely to report feeling secure in their access to food and housing. Mr. Washington said these results reinforced the need for initiatives that focus on differential experiences of underrepresented minority (URM) students. One such program, a diversity mentorship program, was underway at UC Santa Barbara.

UC Santa Barbara Graduate Dean Carol Genetti discussed this diversity mentorship program and the experience of UC graduate students as a whole. She reminded the Committee that survey results indicated that two-thirds of UC's graduate students reported feeling well-grounded and productive, but acknowledged the need to address the fact that one-third of respondents reported symptoms that might be associated with depression. Prevention and support must be addressed holistically, as students' well-being was affected by a variety of factors. Analysis of the survey had served as an impetus for new programming and other improvements in a variety of areas across UC campuses.

Ms. Genetti cited UCSB programs designed to address these varied factors. Graduate students frequently discuss how to navigate their relationships with their advisors with UCSB's new graduate division Academic Counselor, who can help address problems before they reach a crisis. Chancellor Yang reduced rent for on-campus, single-student graduate housing by \$200 per month, which had a large impact on the graduate population. To address food insecurity, UCSB's financial crisis team currently could provide students with meal vouchers and a foodbank truck operated by students delivered boxes of fresh food to the graduate student housing complex. UCSB's Graduate Student

Resource Center included a full-time career counselor to advise students on careers beyond academia. In the past year, UCSB launched a comprehensive program to support diversity in graduate education called the Graduate Scholars Program, for first- and second-year Ph.D. students who self-identified as first-generation, URM, LGBTQ, veterans, disabled, or women in fields in which women constituted less than 20 percent of the student body. Ms. Genetti noted that finding funding to support these programs had been challenging and there was still unmet need.

Regent Lozano stated that she had not anticipated the extent of mental health concerns and food and housing insecurity brought to light by the survey. She asked if Provost Dorr believed that the University had the mechanisms to respond to these issues systemwide with the appropriate urgency and seriousness. Mr. Ellis commented that campus deans had shared best practices. Ms. Genetti noted that in recent years more resources had been devoted to Tier One mental health practitioners at the campus Student Health and Counseling Centers. She expressed her view that it would also be beneficial to increase resources for mental health preventive care services, such as the UCSB Academic Counselor. That position had been first added at UC Irvine, and then at UCSB and UCLA. The graduate deans at those three campuses had expressed the need for a second Academic Counselor because of demand. Regent Lozano noted that the disaggregated data from the survey pointed to areas of highest need where limited resources could be directed. Provost Dorr noted the importance of increasing capacity to provide services to different types of students. Staff Advisor Main commented that staff who advise students could help in this effort.

Regent Ortiz Oakley asked that survey data about graduate students' financial concerns be shared with the current working group on the total cost of attendance.

Regent Monge commented that when the University increases enrollment, it has a responsibility to ensure a corresponding increase in the level of student services. Given the upcoming increase in graduate enrollment, he asked what measures were being taken to ensure a parallel increase in graduate student services. Provost Dorr agreed, but noted that graduate students were a more differentiated population than undergraduates.

3. **ACCOUNTABILITY SUB-REPORT ON DIVERSITY: GRADUATE ACADEMIC STUDENT DIVERSITY OUTCOMES**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Provost Dorr commented that the annual accountability sub-report on diversity focused on diversity among UC's academic graduate students, particularly those in Ph.D. programs. This sub-report was based on data from the 2016 Accountability Report and showed that enrollment of domestic underrepresented racial ethnic minority and female students had increased over the past 15 years, more for domestic underrepresented minorities (URM) than for women, and more in some fields than others. The smallest URM increase was in engineering, from three percent to six percent, and the largest

increase in domestic URMs was in health sciences, from ten percent to 24 percent. The URM increases were accounted for largely by increases in Latino/a Ph.D. students. UC's percentages of URMs in each of five main disciplinary areas were greater than those of its peer institutions. Women's representation in Ph.D. programs ranged from 26 percent in engineering to 72 percent in health sciences. UC's percentages of women were slightly higher than Association of American Universities (AAU) peers in arts and humanities and life sciences, and lower in physical sciences, engineering, and computer science.

Provost Dorr reported that Ph.D. students' time to degree varied by discipline; domestic URMs and women complete their Ph.D.s in about the same time as non-URM and male colleagues. Time to degree for URM and female Ph.D. students is on a par with that of UC's peer AAU institutions. While UC had made progress in diversifying its Ph.D. students by race, ethnicity, and gender, more remained to be done. UC had invested in programs and practices to improve outreach to and preparation of potential diverse Ph.D. students and to support their success at UC.

Vice President Ellis noted the importance of UC's continued efforts to recruit outstanding graduate students from across all demographic groups as well as top international students. He commented on the synergy between seeking diverse Ph.D. students and diverse faculty. As teaching assistants and mentors to undergraduates, UC's Ph.D. students serve as peer role models. Recruitment by UC's peer institutions is fiercely competitive; potential students consider the reputation of competing institutions and the size and duration of financial aid packages. Admission of UC's Ph.D. students occurs through the academic departments.

Effective mentoring of Ph.D. students is crucial to their progress. Good mentoring practices were being identified and disseminated on UC campuses, including proactive departmental efforts to ensure a welcoming supportive climate. UC campuses had also moved toward more holistic doctoral preparation models with opportunities for students to learn about future careers outside of academia.

UCSF fourth-year biological sciences Ph.D. student Ibraheem Ali, who participated in UCSF's summer research training program for URM undergraduates, during which time he was financially supported by a National Science Foundation Research Experience for Undergraduates Grant, said his exposure to other URM students in that program was critical to his retention in the challenging research environment. He described his path to becoming a graduate student at UCSF and his research goals. He noted that while there is effective diversity training for faculty, some faculty who most need it lack incentives to attend. UCSF had attempted to address the high cost of San Francisco housing through its cost of living supplement program, a limited pool of below-market rate student housing, and increases in student stipends. Mr. Ali described his participation in efforts to support his fellow students and expressed his gratitude for the opportunity to study at UCSF.

Regent Ortiz Oakley asked to what specific targets the University was holding itself accountable. Mr. Ellis responded that UC, with the support of President Napolitano, had been in contact with the National Institutes of Health (NIH), which had concerns about

diversity in biomedical sciences faculty nationally. A detailed scholarly evaluation had been developed based on statistics, the pipeline of prospective faculty, simulations, and interviews. The pipeline had grown substantially over the past few decades, so that the current pipeline in biomedical sciences is ten percent URMs. The problem is the transition into faculty positions. The simulations had shown that by the year 2080, without constructive intervention, faculty composition would not have changed, even if the pipeline of URMs continued to grow. Simulations also showed that if two-thirds of U.S. medical schools hired one URM faculty a year for six years parity with the pipeline would be achieved. UC intended, at NIH's request, to convene a meeting to discuss the issues involved, such as inclusiveness in postdoctoral hiring, accelerating the transition to scholarly independence by shortening the postdoctoral period, and addressing the microclimates in departments. These discussions should help create a framework for accountability, at least in biomedical sciences, which could be applied to other disciplines. Regent Ortiz Oakley expressed his view that it would be difficult to hold the University accountable unless the Regents intentionally set a goal for increasing diversity. That goal could be aspirational, but it should be intentional and specific.

Provost Dorr agreed that there were not specific systemwide goals. Developing such goals would involve detailed work in each discipline and must be compliant with Proposition 209. Regent Ortiz Oakley commented that the Regents should determine whether a goal was compliant with Proposition 209. Foundational data contained in the Accountability Report was essential, as would be establishing goals, assigning responsibility for meeting the goals, methods for tracking progress, and consideration of responses if goals were not met.

Committee Chair Pérez said that he shared Regent Ortiz Oakley's concerns about the lack of specific goals regarding accountability for diversity. A timeline and process for an intentional approach should be developed and brought to the Committee for evaluation and then for recommendation to the Regents. Absent that, the Regents would have to develop their own goals, and they were not best situated for that task. He acknowledged that progress had been made, but expressed frustration at the slow pace of progress. He was skeptical about the effect of Proposition 209, as the rate of progress was not better before that proposition's passage. Provost Dorr agreed that the University could make better progress.

Committee Chair Pérez noted the participation of UC Berkeley, UCLA, Stanford, and California Institute of Technology in a National Science Foundation grant for increasing URMs in science, technology, engineering, and mathematics (STEM) fields. He asked what was learned from that participation and what other non-State funding might be available to UC to support that kind of effort in other areas.

Regent-designate Graves asked how the information presented would be used to make positive changes. Mr. Ellis responded that the University had a number of programs with promise such as the President's academic pipeline initiatives, which included the UC-Historically Black Colleges and Universities Program, from which an encouraging percentage of participants have become graduate students at UC. It was the responsibility

of academic departments to create a climate conducive to these students' success. Mr. Ellis expressed optimism about these efforts.

Regent Lozano suggested that reports such as this, which contained valuable information for the Regents, be accompanied by related action items. She added that the Provost's office would have the responsibility to track progress in clear areas of opportunity for improvement.

Chancellor Block commented that graduate admissions are less centralized than undergraduate admissions. He affirmed the chancellors' commitment to increasing diversity.

Chancellor Wilcox added that diversity goals could be embedded within academic departments, and might not be as explicit or aspirational as they could be.

4. **ESTABLISHMENT OF POLICY ON AUGMENTED REVIEW IN UNDERGRADUATE ADMISSIONS**

The President of the University endorsed the Assembly of the Academic Senate's recommendation that the Regents adopt the Policy on Augmented Review in Undergraduate Admissions, as shown in Attachment 1.

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Provost Dorr introduced this proposed Policy on Augmented Review developed by the Academic Senate and approved by both the systemwide Academic Council and the Assembly of the Academic Senate. Conditions for admission are established by the Academic Senate subject to approval of the Regents.

Faculty Representative Chalfant stated that this proposal began with the request of the President of the University that the Academic Senate develop a systemwide policy on letters of recommendation for freshman applicants to UC. That request was prompted by a pilot study at UC Berkeley concerning several changes in admissions procedures. One change involved inviting letters of recommendation from a group of applicants ranked as possible admits. The proposed policy was the outcome of ongoing discussions and involved more than letters of recommendation.

Mr. Chalfant reviewed UC's application procedures. UC applications to all campuses are submitted on a common form, then reviewed separately by each campus' professionally trained staff, who sometimes need additional information to make an admissions determination. The process of obtaining information not already in the applicant's file is called augmented review. The proposed policy was based on two concepts. First, if a reader concluded that more information was needed to make a case for admission, then the campus should ask for that information. Second, the campus should not ask for more information if the reader did not need it to make a recommendation. Augmented review

had been used by admitting units on some UC campuses for a number of years. The proposed policy would guide augmented review on all UC campuses, although it would not require such reviews, and would provide flexibility concerning the information requested and how it might be requested.

The proposed policy would allow for an augmented review when a professionally trained admissions reader, using guidelines the campus developed in advance, found that more information was needed. There would be several ways to obtain such information: ask the student directly, ask for a transcript of the student's first semester of senior year, or ask the student to submit letters of recommendation. Letters of recommendation would be only one way of obtaining information within augmented review. The choice would be left to the campus' admitting unit.

Mr. Chalfant addressed the commonly expressed concern that widespread use of letters of recommendation could favor applicants from the best-resourced high schools. Students from those high schools could find it easier to obtain letters of recommendation; those high schools could have more counselors per student or teachers less overwhelmed by other demands. Teachers and counselors at such schools could be more familiar with the type of letter that would have most influence with admissions staff. Mr. Chalfant affirmed the Academic Senate's sensitivity to such concerns. He reported that most campus admissions officers urged the Academic Senate to avoid making any policy that would interfere with established practices within augmented review, which they viewed favorably. A broad requirement for letters of recommendation would have less support. Admissions staff workloads were a factor, with UC receiving more than 200,000 applicants annually, and several campuses had almost 100,000 applicants.

Guided by Regents admissions policies and by the Academic Senate's Board of Admissions and Relations with Schools (BOARS), some campuses have used augmented review to request additional information when needed, and their experience had been very positive. Seeking letters of recommendation within an augmented review policy would limit the request for additional information to instances where it was needed. The proposed policy would formalize admissions practices and harmonize them across the system, while preserving campus flexibility.

Mr. Chalfant expressed the Academic Senate's ongoing commitment to transparency in its admissions procedures. BOARS would report on campus experiences under this policy as part of its annual report to the Regents on comprehensive review and at a minimum would monitor different groups' experiences under augmented review. The Senate anticipated that it would learn which types of requests work best. If certain types of information were commonly missing, BOARS would work with UCOP admissions staff to recommend changes to UC's basic application to prompt applicants to provide the information and avoid the need for augmented review.

Chair Kieffer asked how the Academic Senate determined which admissions matters were brought to the Regents. Mr. Chalfant responded that large changes in admission procedures were brought to the Board; smaller changes within the spirit of existing policy

would not be brought to the Regents. Chair Kieffer stated that it might be useful to have BOARS provide a presentation to the Committee regarding admissions policy, as Regents frequently received questions about admissions and it was important to communicate UC's admissions policy to the public.

Regent Ortiz Oakley agreed that when information was missing from an application, UC admissions staff should reach out to the applicant to gather the information needed to make an admissions decision. However, he asked what information needed to make an admissions decision would be obtained by a letter of recommendation. Committee Chair Pérez added his concern that some individuals who would have been admitted without a letter of recommendation could be put in a new pool of applicants who would need letters of recommendation. Mr. Chalfant responded that it would be up to BOARS and the campus admissions professionals to work out details of how much would be feasible to report about what was learned from letters of recommendation. He would expect that campuses in following their developed criteria would indicate what previously lacking information was obtained from a letter.

Associate Vice President Stephen Handel commented that six personal insight questions had been added to UC's application, for a total of eight from which applicants choose four to answer. The addition of these questions had been received positively by the campuses. In fact, UC Irvine had decided not to use augmented review, having concluded that it received sufficient information from the general application.

Chair of BOARS Henry Sanchez added that BOARS had been very involved with stakeholders involved in the admissions process. The proposed policy would provide greater breadth of tools for application readers.

Regent Ortiz Oakley expressed concern that populations that were more aware of what information would be valuable to admissions staff would be advantaged. He stated that he would support the proposal, but would continue to seek information from UC campuses with large populations of underrepresented, low-income, first-generation students being admitted without letters of recommendation. It would be important to establish a process through which campuses could learn best practices.

Regent Ortiz Oakley asked how the letters of recommendation would be evaluated and how readers would be trained in that regard. Mr. Handel responded that the readers were trained in comprehensive and holistic review, and were ranked as they review applications. Readers' suggestion of the need for additional information from an applicant would be reviewed by senior admissions staff who would also evaluate the application.

Regent Lansing asked why requesting a letter of recommendation might disadvantage underrepresented minority (URM) students. Mr. Chalfant responded that concerns had been expressed that URM and first-generation college students might not be familiar with how to obtain such a letter and their schools could lack sufficient personnel to write such letters. Regent Lansing expressed support for the proposed policy and shared her

experience that teachers and counselors of URM students were most willing and able to write such letters.

President Napolitano expressed support for the proposed policy and its nuanced approach.

Regent Monge asked if this policy would apply to transfer applicants, about the consequences of an applicant's failure to supply requested supplemental information, and main issues of contention during development of this proposal. Mr. Chalfant responded that this policy would apply only to freshman applicants. He anticipated that BOARS would keep track of response rates to requests for the three possible types of additional information. It would be important that applicants see these requests as positive and fair. Mr. Sanchez agreed that BOARS would track this information. He reported that some campuses may have had concerns about their autonomy in admissions decisions. Mr. Chalfant added that some advocated waiting until more information was available from UC Berkeley's pilot program.

Regent-designate Graves asked when an applicant would be notified about the request for additional information and how much time a student would have to comply. Mr. Chalfant said applicants would be notified as soon as possible when a reader and admissions staff decided more information was needed. Students would have as long as the campus considered applications to submit the requested information. Mr. Handel added that students were given as much time as possible to respond.

Committee Chair Pérez summarized that the proposed policy would be viewed positively so long as it would help the campuses better evaluate students who might otherwise not receive positive consideration for lack of information. However, it would be problematic if it created an impediment by adding a hurdle for a student who might have been accepted under the prior system.

Chancellor Christ noted the challenge for UC's campuses for which admission was most competitive of judging among the many excellent applicants on the borderline for admission, about whom it would be helpful to have additional information. Given the inequities in the K-12 system, concerns about possible bias applied also to applicants' personal statements, which could be coached, or Scholastic Aptitude Test (SAT) scores, which had been shown to have a socioeconomic bias. She expressed support for the proposed policy and congratulated BOARS on its thoughtful approach.

Regent Ortiz Oakley agreed with Chancellor Christ's comments and acknowledged the difficulty of admission decisions. He urged that an unbiased admission standard be brought forward and noted his support for discontinuing use of the SAT.

Regent Lansing cited her earlier experience as a mathematics and English teacher in an underserved community in Los Angeles. Her experience was that the teachers there were very qualified and pleased to write letters of recommendation for their students. She

expressed support for the proposed policy and her belief that letters of recommendation could be an important source of information about applicants.

Committee Chair Pérez expressed confidence that ongoing evaluation of the effect of this policy would consider questions of bias. As data become available, they should be brought back to the Committee.

Upon motion duly made and seconded, the Committee approved the Assembly of the Academic Senate's recommendation and voted to present it to the Board.

5. **UPDATE ON ACTIVITY-BASED COSTING PILOT STUDIES**

[Background material was provided to Regents in advance of the meeting, and a copy is on file in the Office of the Secretary and Chief of Staff.]

Provost Dorr introduced leaders of the three UC campuses, Riverside, Davis, and Merced, that participated in activity-based costing (ABC) pilot studies. Provost Dorr acknowledged Regent Anguiano, who led much of UC Riverside's pilot study during her service as UC Riverside's Vice Chancellor for Planning and Budget. Since the Budget Framework agreement was made, UC had acted vigorously to meet its terms. The University had agreed that UC Riverside would pilot ABC for three departments in its College of Humanities, Arts, and Social Sciences, and that two additional campuses would undertake a scoping study related to piloting ABC in at least three of their departments among their most popular disciplines, with the goal of implementing ABC in those three departments depending on the outcome of the scoping study. Those three campuses and the Office of the President agreed that UC had completed in good faith three substantive pilot studies of ABC-type data systems' ability to help inform academic leaders' choices about the portfolio of courses offered. The findings were currently being compiled for the final report. Provost Dorr explained that pilot studies were experimental by definition; they may or may not be the precursor to a full-blown project. They were an opportunity to try something and learn from it.

The three campuses each invested significantly in its pilot project. Each pilot project was crafted within the particular context of that campus' processes. Budget and system development work that UC Riverside had already done made ABC comparatively easy to pilot there. UC Davis and UC Merced completed scoping studies that showed that piloting an ABC system like that at UC Riverside would be cost-prohibitive, in large part because of difficulties integrating data across systems and developing a method for allocating indirect costs to courses. UC Davis and UC Merced took an alternative approach to the ABC pilot, focusing on obtaining necessary data on revenues and costs from one or a few systems. Even this was labor-intensive and required manual activity. UC Riverside's approach to the ABC pilot had also evolved over time as the campus learned more about ABC.

Chancellor Wilcox explained that UC Riverside's efforts in this area began in 2014, when it found itself with great aspirations, but a relatively frail physical and business

infrastructure. The campus began to craft an entirely new budget model with distributed responsibility, decision-making, and incentives. A cost-based system to align with that model had great appeal. The campus was also in the enviable position of having highly compatible data systems, which gave it the capacity to examine various domains. UCR's efforts were supported by the Bill and Melinda Gates Foundation, the National Association of College and University Business Officers, Deloitte, and others.

Chancellor Wilcox explained that ABC is used in manufacturing to determine the cost of providing a product based on a detailed assessment of the resources consumed in its production. While students should not be compared to production items, there may be some aspects about bringing precision to the discussion that have appeal. ABC would only be applicable to UC's formal instruction, not its research or public service. Like any model of this type, ABC was dependent upon underlying assumptions. While this could be seen as limiting its usefulness, Chancellor Wilcox said it also provided flexibility for campuses.

UC Riverside learned that the utility of this type of instrument varied based on a user's portfolio. Chancellor Wilcox had anticipated that UCR's department chairs would most benefit, but the pilot showed that provosts and deans could benefit more. The campus was still debating how often ABC would need to be done if it were implemented. The real benefit of ABC could be long-term, as a tool to assess investments in courses and curricula relative to outcomes, although that goal was aspirational. ABC had not caused any decisions to be made, but rather had helped administrators understand some campus dynamics in a new way.

UCR piloted ABC for its whole campus, far beyond its agreement under the Budget Framework to pilot ABC in three departments. The campus was considering the extent to which it would want to implement all or part of ABC, what kind of additional investments the campus might want to make, and what would be the return on those investments. UCR found itself much more informed about the dynamics of its own campus than it was before the pilot.

Interim Chancellor Hexter commented that UC Davis' interest in ABC stemmed from its own budget model and its 2020 Initiative. In the 2012-13 academic year UC Davis instituted a new budget model, a hybrid that allocated some revenue by formula and some by incremental decisions. While the model was primarily focused on allocating revenue to the deans, responsibility for staff and faculty salaries had been pushed out to the campus units, thus incentivizing department chairs to manage costs within their departments. He emphasized UC Davis' size and complexity, with more than 29,000 undergraduates and 7,000 graduate students taught across four colleges and six professional schools, 104 undergraduate majors, and nearly 100 graduate programs. Under its 2020 Initiative, UC Davis planned to increase its undergraduate population by 5,000 students over eight years and in preparation the campus had gained a good understanding of the differences in cost between various divisions by using a model called the Cost of Academic Activities. When ABC was discussed, UC Davis was

interested to determine if ABC could be a companion to that model, so it agreed to conduct a scoping study of ABC.

UC Davis learned a great deal from the scoping study. UCR's ABC pilot included direct costs, such as the cost of instructors and teaching assistants, course material and supplies, and indirect costs, such as department overhead and significant portions of common goods like the library, the registrar's office, and information and educational technology, to name only three of what would be a long list. An important difference between UC Davis' and UC Riverside's starting point was that UC Davis had very heterogeneous systems of data and budgets that would first need to be linked to fully implement an ABC model. UC Davis was not ultimately convinced that replicating UC Riverside's efforts would be worth the investment, which UC Davis estimated at \$3 million over a little more than two years. It was also unclear how the information gained would be used by the departments or if it would be used at all.

UC Davis developed a different model, a controlled ABC model for undergraduate and graduate courses in three departments: chemistry, psychology, and mechanical engineering. This constrained ABC model was limited to instructor and teaching assistant costs at the level of individual courses, comparing the costs to one revenue stream only, that portion of undergraduate tuition its budget model allocates based on student credit hours. A report included these data for all courses in the three departments for all three quarters of 2015-16, and the report was shared with department chairs, whose feedback was solicited.

While all departments found those data interesting, the department of mechanical engineering was most enthusiastic and would support further development of analytics of this nature. As UC Davis concluded its pilot and finalized its report, it reflected on ways ABC could help chairs and departments monitor the investments they make in their course offerings. Fiscal monitoring must have a counterpart in monitoring student success. This pilot permitted only after-the-fact analysis. UC Davis had developed, independent of this pilot, a forward-looking instructional planning and administrative application to streamline all aspects of academic scheduling, allow departments to input plans for course offerings, and manage the instructor and teaching assistant assignment processes. There was campus interest in additional insights that could be gained by further development of the cost component.

Interim Vice Chancellor Veronica Mendez commented that, as UC's newest campus, UC Merced was open to new ways of operating a research university. In that spirit, UC Merced volunteered to participate in the pilot study of ABC for four courses in three departments: computer science, chemistry, and psychology. The campus learned that an effective implementation of ABC depended on an integrated database of homogeneous data bits for all relevant information. UC Merced's data were not available in an integrated form that would allow systematic access. For its pilot study, therefore, the relevant data had to be integrated manually. Direct costs were defined as an average cost of salaries for instruction and compared to a gross credit-hours revenue estimate, with an added classroom utilization estimate. Finally, there was no way to connect the financial

analysis with the most important factor in any educational endeavor, student success in mastering the material presented. Who teaches a course and how it is taught can have a profound effect on student success and the students' academic experience.

Results of UC Merced's ABC pilot were shared with key campus academic leadership, and instructional and curriculum managers. Their responses were generally positive, in large part because ABC offered a tool for post facto analysis of resources committed to individual courses and articulation of the cost of instruction across the curriculum. However, it was less obvious how these data could be used in a predictive way. ABC could be used in analysis around increasing UC Merced's ladder-rank faculty, as the campus had hired a disproportionate share of instructors early on. ABC involved only instruction. As UC Merced continued its rapid growth trajectory in students, faculty, staff, and physical infrastructure, it had been critical to have a more comprehensive and predictive budget model to guide all aspects of resource allocation. To that end, UC Merced had developed a multi-year predictive financial model to project the cost of all these elements. The ABC pilot suggested that ABC could eventually become a sub-model within UC Merced's overall budget model. While it would not be feasible for UC Merced to expand the ABC approach, it intended to use some of the cost elements with some variation to align its temporary instructional budget expenses with specific course demand. UC Merced was also focusing its efforts on improving undergraduate outcomes, including prioritizing modes of instruction that resulted in the most student success.

Regent Ortiz Oakley noted the campuses' difficulties in integrating databases to determine costs, and that each campus had its own procedures. He noted the larger issue of the University's difficulty communicating the cost of a UC education to a variety of stakeholders. He asked how these efforts would advance the goal of understanding how funds would be best spent in pursuit of UC's missions.

Chancellor Wilcox expressed his view that ABC would not be able to provide that capability. ABC had potential to inform some decisions on campuses. He noted the challenge of separating faculty time spent on teaching and on research, particularly when UC's teaching was often based on research.

Interim Chancellor Hexter commented that measuring educational success had many aspects, and noted the importance of trusting department chairs, deans, and faculty to determine what should be taught and how. The University could then determine efficient ways to deliver that education.

Regent Ortiz Oakley stated that UC's ability to examine financial data across the system and its financial infrastructure would have to be addressed at some point to aid understanding of spending and help each campus make better use of funds.

Regent Anguiano asked what types of data a provost or dean could obtain from ABC. Chancellor Wilcox responded that administrators make many decisions regarding presentation of the curriculum, such as the size and number of sections, considering cost and student outcomes. Tracking instructional funding could allow more sophisticated

tracking of funding for UC's research and service missions. ABC could sometimes provide more precise data important for curriculum planning. ABC data can challenge existing educational assumptions, showing, for example, that humanities classes were not always less expensive and engineering classes not always more expensive.

Regent Lozano questioned the goal of this presentation. She noted that under the Budget Framework agreement the purpose of these ABC pilots was to allow campus leaders to use data to better plan enrollment, to determine which courses would be offered by understanding both the cost and the revenues, and to provide the campus with more public transparency about cost and budgeting. She noted that the campus experiences in ABC pilots were different and asked how these could be reconciled with the expectations of the Budget Framework agreement. The campus presentations showed that ABC could be of some use, but did not appear to be close to fulfilling the intent of the Budget Framework agreement. Regent Lozano said it would be important to articulate more clearly what ABC could provide to the Regents, the public, and the Legislature and the Department of Finance.

Committee Chair Pérez asked the campus leaders if their approach to the ABC pilots was informed by the expectations of the Budget Framework agreement. Chancellor Wilcox responded that UC Riverside had been involved in this effort long before the Budget Framework agreement. UC Riverside's pilot went well beyond the requirements of the Budget Framework agreement. Interim Chancellor Hexter commented that the Budget Framework agreement reflected the aspirations of those who drafted the agreement about the potential of ABC. At UC Davis, the charge was to conduct a scoping study and a pilot; the campus completed its charge in the intended spirit of the effort. UC Davis concluded that it would like to develop its own system with a cost element to assist its budgetary planning.

Regent Lozano said it would be important to articulate clearly UC's objectives around ABC, what system resources would be required to fully implement ABC, what was learned in these pilot studies, and how that could be applied at the campus level.

President Napolitano added that fulfilling the ABC pilot was one requirement for release of the \$50 million that had been sequestered from UC's State budget appropriation. At the time the Budget Framework agreement was developed, the Governor had been very interested in ABC out of a desire to identify a different cost structure for UC. At that time ABC had been tested only in a few departments at a small liberal arts college. UC's three pilot studies showed that ABC could provide some greater sophistication in measuring some kinds of cost, but with limitations. ABC did not fully incorporate indirect costs or research and its associated value, nor did it measure student outcomes. The pilot studies were intended to assess ABC and the cost to implement ABC across all departments systemwide.

President Napolitano summarized that UC Riverside's pilot showed that, with the advantage of a coordinated financial system, the campus was able to implement a version of ABC, although it had to be adjusted in the process. UC Merced and UC Davis

concluded that implementing ABC would require an extraordinary amount of overhead and time. The question was whether ABC was a tool with benefits that would outweigh its costs, and what alternatives were available to the University. President Napolitano said her focus would be to determine what better management tools UC could develop or implement that would provide greater control over costs. From the perspective of the Department of Finance, UC would need to demonstrate that it made more than a good faith effort to implement ABC on a limited basis and to study its usefulness. All three UC campuses involved had gone beyond the charge of the Budget Framework agreement: Riverside by implementing ABC in all its departments rather than just three, and Davis and Merced by going beyond the required scoping studies to complete pilot studies.

Committee Chair Pérez expressed concern that, since the pilot studies did not lead to the expectation expressed in the Budget Framework agreement, evaluation around release of the \$50 million could be precarious, given UC's inability in the past to provide clarity about the cost of a UC education. It would be important to determine how early to discuss this requirement with the Department of Finance.

Regent Anguiano commented that UC advertised an average cost of a UC education per student as \$20,000, which was based on a variety of assumptions. Major decisions were made at UC based on a variety of well-considered assumptions. The University received a specific amount of State funding and tuition, and the wide variety of its programs made the \$20,000 per student cost inaccurate. As part of their fiduciary duty to the financial sustainability of the University, the Regents need more accurate information about the cost of specific programs.

Faculty Representative Chalfant commented that academic decisions made by campus department chairs were based on how to deploy a fixed set of teaching full-time equivalents, teaching assistants, and lecturers to deliver the curriculum in the most efficient manner. Department chairs and deans have a great incentive to economize, as they could use the funds saved to further the curriculum. Each level of campus administration, including the chancellor, the provost, deans, and department chairs, makes decisions based on different data sets. He cautioned against thinking that obtaining an accurate cost would be possible if the correct model were found.

Regent De La Peña commented that this issue would be common to all universities and asked if UC could gain insight from another university or an outside consultant. He noted the disparity of financial systems across UC campuses.

Chancellor Christ advised that the question of how interdependent UC's three missions of education, research, and service were must be determined before a cost tool such as ABC could be effective.

Chancellor Wilcox stated that these ABC pilots were intended as experiments to see if the ABC tool was applicable, rather than implementation of a system. He added that other institutions seek advice from UC in this area.

Interim Chancellor Hexter commented that the variety even among the different colleges at UC Davis did not lend itself to top-down management and standardization, but was essential to the greatness of UC.

Provost Dorr summarized that three ABC pilot studies had been completed. ABC could be used to help determine which courses were expensive to offer and which courses generated revenue. This would not mean that expensive courses would be eliminated. Student outcomes would also be considered. These tools could be used to balance and consider the overall portfolio of course offerings. Provost Dorr affirmed that the main goals of the ABC pilot project had been met.

The meeting adjourned at 4:45 p.m.

Attest:

Secretary and Chief of Staff

Policy on Augmented Review in Undergraduate Admissions

Overview of the Augmented Review Process

The augmented review process is designed to provide additional review for a select pool of applicants who fall in the margins for admission, but whose initial application yields an incomplete picture of their qualifications, or presents extraordinary circumstances that invite further comment. Applicants, for example, might demonstrate special talents, potential, or accomplishments in specific areas that promise to contribute to the educational environment of the campus, but may require further explication. Or, the information provided on an application may fail to adequately explain the impact of what appear to be major disadvantages that the applicant has encountered. A range of potential selection criteria for Augmented Review are described in the “Criteria for Referral” section below. Consistent with the Guiding Principles¹ the faculty have articulated for undergraduate admissions, applicants referred for the Augmented Review process must demonstrate levels of academic preparation and personal qualities that indicate a reasonable chance for academic success given the available support services on the admitting campus.

Admissions readers and officers should use their professional judgment to identify potential candidates for Augmented Review during the initial review process. They should also select from among the candidates a pool of applicants from whom supplemental information items can be solicited to better inform an admissions decision. The Augmented Review pool should be limited in size to no more than 15 percent of all applicants. Candidates are invited to submit one or more of the following supplemental information items:

1. A questionnaire that requires paragraph length narrative responses and that allows Augmented Review candidates to provide additional details concerning their special talents and accomplishments, extraordinary circumstances, and school and home environment.
2. Seventh-semester high school grades, or equivalent most recent grades.
3. Up to two letters of recommendation, or other input from third parties, such as a teacher, counselor, coach, program coordinator, or anyone familiar with the candidate’s academic background and extracurricular skills/talents. Letters of recommendation should focus on both cognitive and psycho-social abilities of candidates.

Note: Letters of recommendation can be requested only for applicants selected for augmented review, and applicants considered for admission by exception, and/or applicants given a special review.²

1 The most recent version of the [“GUIDELINES FOR IMPLEMENTATION OF UNIVERSITY POLICY ON UNDERGRADUATE ADMISSIONS”](#) can be found on the Senate’s web site.

2 Students applying to a major, school, or college that already has a long-standing supplemental application requirement, may be required to submit a letter of recommendation, in addition to the general application for undergraduate admission. Such supplemental applications have also included questionnaires, transcripts, narrative statements, interviews, auditions, and/or portfolios, but only very rarely require letters of recommendation. Such programs typically focus on the creative arts, performance arts, and nursing.

Criteria for Referral to Augmented Review

If Augmented Review is to be used, admissions readers and officers should depend on their professional judgement to evaluate each applicant on a full range of selection criteria, using all of the application information available in the context of opportunity and demonstrated capacity to contribute to the campus. While the referral criteria for Augmented Review outlined below aim to cover likely circumstances that admissions readers and officers might encounter, they may not capture every possible applicant experience that might warrant an additional review. It is therefore imperative that admissions readers and officers use their professional judgement in these circumstances. The criteria for referring an applicant for Augmented Review include the following:

1. Evidence of focus on an area of special talent which may have limited a student's time to participate in a broader range of activities.
2. Evidence of character traits that imply a strong likelihood of making a significant contribution to campus life.
3. Evidence of significant academic achievement or the potential for academic achievement at the University in spite of extraordinary or compound disadvantage or learning difference, or physical disability or other unusual circumstances.
4. Evidence of significant improvement in the academic record accompanied by one or both of the following: (1) reasons for the initial poor performance; and (2) sustained and in-depth participation in educational outreach programs, which demonstrate the applicant's commitment to succeed academically within a challenging environment.
5. Evidence of relative lack of access to, counseling about, or support to take college preparatory, honors, Advanced Placement (AP) or International Baccalaureate (IB) classes or required college entrance examinations.

This policy will take effect for the 2018-19 admissions cycle.