

Office of the President

TO MEMBERS OF THE COMMITTEE ON LONG-RANGE PLANNING:

**DISCUSSION ITEM**

*For Meeting of July 15, 2009*

**UNIVERSITY OF CALIFORNIA ANNUAL ACCOUNTABILITY REPORT AND SUB-REPORT ON STUDENT SUCCESS**

In September 2008, the Board of Regents received a draft of the *University of California Annual Accountability Report*. Since that time, the report has been reviewed formally by the Academic Senate, the campus administration, and by numerous systemwide groups, and many changes have been incorporated into the annual accountability report based on those reviews. The report was finalized for the May 2009 Regents meeting but was deferred until this meeting. The complete report is now available online at:

<http://www.universityofcalifornia.edu/accountability/>

From the website, readers can browse and print the report, access technical information, and download the underlying data.

In addition, in accordance with the schedule for accountability sub-reports, the *Accountability Sub-Report on Student Success* is to be presented at this meeting.

These two reports will be presented together as part of this item. The presentation will begin with a brief overview of the annual accountability report and then take a closer look at the data on student success and what they can tell us about the University's progress preparing students to assume roles as the next generation of leaders for California and the nation.

***Figures for the combined presentation.*** To provide the committees with advance material prior to the presentation, a **number of figures are appended to this item**. Given time constraints, only a selected few will be used in the actual presentation which will focus on the principal issues and strategic challenges that the data reveal.

*Part I. Accountability Report Overview*

*University of California Annual Accountability Report, (May 2009)*. The Accountability Report incorporates many changes resulting from the review described above. These include:

- An entirely new section including brief (10-12-page) narratives created by each campus to describe their long-range goals and priorities, and the progress being made in achieving them. [ <http://www.universityofcalifornia.edu/accountability/profiles.html> ]
- A new introduction that highlights key trends and themes presented in the report.
- New universitywide indicators dealing, for example, with staff, health services and sciences, UC Extension, UC libraries, capital resources, and the University's progress meeting its sustainability goals.
- Greater use of comparative data that enable universitywide and campus data to be seen in a broader national context.

**Figures 1-3** provide an overview of the accountability framework and the calendar for the six annual Sub-Reports which will provide more detail about key aspects of the University and issues of major concern.

The remaining figures highlight five ways that the report is significant:

- First, it supplies data that support the claims the University routinely makes about the its successes and its contributions to California. **Figures 4 and 5** provide data that show UC's accessibility to low income families as well as its success in improving graduation rates. As a system, the University enrolls a higher percentage of Pell Grant recipients (33 percent) than any of its public or private comparison institutions. It has also improved its six-year graduation rates for entering freshmen from 80 percent for students entering in 1997 to 82 percent for students entering in 2002. What is even more striking is that the proportion graduating in four years has increased from 46 to 59 percent over the same time period.
- Second, the report offers a great deal of transparency with regard to the University's operations and academic profile. **Figure 6** shows UC's revenues by source in inflation-adjusted dollars and the extent to which they are restricted. **Figure 7** shows the decline in per-student expenditures for education in inflation-adjusted dollars. Since 1998, average inflation-adjusted expenditures for educating UC students have declined 23 percent. It also shows that the proportionate share borne by students has increased while the State share has declined. **Figure 8** is an example of one of the major features of the report – the ability to see the different profiles of each of the campuses. The report breaks out campus data for every indicator where there was available data. This figure shows the disciplinary mix varies across our campuses. The variation in campuses that is evident here is not at all atypical of the pattern that presents itself with so many indicators. It illustrates that while UC's campuses share a research mission, they are nonetheless highly distinctive and face different sets of challenges and opportunities going forward.

- Third, the report depicts the University's most fundamental challenges. It was designed to allow UC to identify areas and trends where the University is either not performing to the level that may be expected of it or areas where the trend in performance should be cause for concern. **Figure 9** shows that the average 2007-08 faculty salary at UC (\$109,333) was well below UC's four private comparison institutions (\$143,850) and slightly above the four public comparison institutions (\$102,240). UC's academic quality and competitiveness is directly related to its ability to recruit and retain world-class faculty. **Figure 10** shows that the cost of attending UC continues to grow. Since 2000, the total cost of attendance has increased by \$5,423 or 32.4 percent in inflation-adjusted dollars. Of this amount, \$2,777 is due to fee increases and \$2,646 due to increases in non-fee costs (room and board, books and supplies, etc.). **Figures 11 and 12** show that despite progress over the years, diversity at the senior management level in UC remains a challenge – only 17 percent are underrepresented minorities and only a third are women
- Fourth, the report establishes benchmarks that will help the University stay abreast of how it is doing compared to peer public and private research universities. **Figure 13** shows that the annual changes in federal research and development expenditures at UC have been tracking closely the changes nationally for all other institutions.
- Fifth and finally, the accountability framework is important because it can inform and then help to assess the impact of policy and budget decisions. In these regards, it is expected that the report will be particularly useful in assessing the impact of the current fiscal crisis and the budget actions and policy interventions that are made in its wake. Trend lines in virtually every measure will be watched closely in the coming years. The following three slides are illustrative as to why. For example, **Figure 14**, showing the distribution of students by parent income, can help us see the impact of changes to fee and financial aid policies. **Figure 15** allows the University to see if changes in enrollment levels, admissions policies, and/or eligibility criteria will bridge or widen the achievement gap. **Figure 16** shows what impact such decisions and changes in K-12 preparation will have on the profile of incoming UC students.

This is the first full edition of the UC Annual Accountability report. There will be on-going refinements as future reports and sub-reports are developed and staff will be seeking input from the Regents and other UC and external constituencies. [**Figure 17**]

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*Part II. Annual Accountability Sub-Report on Student Success*

This part of the presentation contributes to the series that the Committee on Long Range Planning has established in order to:

- review key areas of the accountability framework in more detail;
- discuss strategic choices that need to be made by UC in those areas;
- inform the Board's deliberations about important policy and budget questions; and
- achieve a richer understanding of UC as a system and of campus distinctiveness.

It highlights issues of student success that are illustrated in the accountability report, but also references additional efforts the University is undertaking to assess the quality of education received by students at the University. Due to time constraints and data limitations, this presentation will focus on *undergraduate* student success.

**Overview of student success.** The University of California aims to prepare students to assume roles as the next generation of leaders for California and the nation. Thus, student success is defined broadly to capture what students achieved academically in other terms while at the University, as well as what they accomplished after they graduate. One of the most complex and challenging issues involves assessing how much the University contributes towards these achievements, and how much has to do with a student's own innate abilities and other formative factors. As will be apparent, UC has only just begun to bring its data – most of them having to do with academic success – to bear on these complex but important issues.

More than 80 percent of all UC freshmen graduate in six years, compared to 74 percent at the 34 public research and 89 percent at the 26 private research universities that make up the elite American Association of Universities [Figure 19]. Differences in graduation rates between UC and other AAUs can be explained, in part, by the fact that UC attracts a somewhat different and more diverse student body than is typical of AAU public and private universities in general. Fully 37 percent of UC undergraduates are first-generation college-goers whose parents, lacking a college education, may only be able to offer limited assistance in advising their sons and daughters about how to navigate the course of their college careers. About half grew up in families where English was not the first or only language spoken at home. A third receive federal Pell Grants, which are reserved for low-income families earning less than \$45,000 a year. In addition, the University's entering freshman class is more diverse, racially and ethnically, when compared to peer public and private institutions. For example, 18 percent of all UC's undergraduates come from underrepresented groups, primarily African American and Chicano/Latino, compared with 13 percent for the AAU publics and 16 percent for the AAU privates. Nationally, students who come from wealthier families and whose parents are college-educated graduate from college in greater numbers than first-generation, low-income, minority, and non-native English speakers. Yet the University of California educates a higher proportion of the latter than many of its peers.

Also, unlike the private research universities which are able to restrict entry to applicants with the highest grade point averages and standardized test scores, UC is a public university with a

commitment to serve California's high school graduates. Under the terms of the California Master Plan for Higher Education, it offers a place to the top 12.5 percent of California high school graduates. In this regard, UC is very much California's public research university (more than 90 percent of its undergraduates are California residents). As such, it serves both the state and an increasingly diverse student body well by ensuring its constituents' success in achieving an undergraduate degree in a timely fashion.

*A deeper look at graduation rates.* **Figure 20** repeats the slide from the overall accountability presentation showing UC progress on graduation rates. The University has improved its six-year graduation rates for entering freshmen from 80 percent for students entering in 1997 to 82 percent for students entering in 2002. What is even more striking is that proportion graduating in four years has increased from 46 to 59 percent over the same time period.

**Figure 21** shows two things. First, it shows that six-year graduation rates vary by campus, from 90 percent at Berkeley to 67 percent at Riverside. Secondly, it shows the results of some additional data analysis efforts undertaken since the accountability report was finalized. Through data matching with other institutions, we are able to show that a number of students who left UC graduated at another institution. It shows that some of the students admitted to UC who previously have been treated as "drop outs" in fact ultimately completed their degree within six years at a different college or university.

What factors influence the variation in graduation rates among campuses? The following slides illustrate that the variation in graduation rates across the UC campuses has much to do with the variation in the characteristics of the students enrolled at each of the campuses. [**Figure 22**]

- High School Academic Performance Index (API). Students from high API schools tend to graduate in greater proportions than those from low API high schools. The proportion of freshmen from high API schools varies by campus. **Figures 23-24.**
- English Language Writing Requirement (ELWR). Graduation rates vary by the level of preparation students have before beginning their studies at UC. Students who do not satisfy the ELWR before attending UC are less likely to graduate. The proportion of students who still need to take an ELWR course varies dramatically by campus, from nearly 70 percent at Merced to less than 12 percent at UCLA and Berkeley. **Figures 25-26.**
- High School Grade Point Average (GPA) and SAT scores. The likelihood of graduation increases with higher GPA and higher SAT scores and averages of these characteristics vary by campus as well. **Figures 27-30.**
- First generation status. If neither parent graduated from college, students are less likely to graduate than if one or more parents went to college. **Figures 31-32.**
- Income. Students from families with higher incomes tend to graduate at higher rates than students in the low and lower middle income ranges. **Figures 33-34.**
- Gender and race/ethnicity. Women graduate at higher rates than men and underrepresented minority groups graduate at lower rates than others. Enrollment by gender and by race/ethnicity varies among the campuses. **Figures 35-38.** The combined effect of both these characteristics is shown in **Figure 39**. For example, only 67 percent

of African American male freshmen graduate while 87 percent of Asian American females graduate within six years.

***Community college transfers graduate at high rates at UC.*** Graduation rates for upper-division community college transfer students parallel those for entering freshmen: 52 percent of CCC transfers graduate in two years, 81 percent graduate in three years, and 86 percent graduate in four years. Again, the trend data are most striking for the two-year graduation rates – they have increased from 39 percent for transfer students entering in 1997 to 52 percent for students in 2006. Thus, over half of community college transfer students are sufficiently prepared when they transfer that they can complete their upper division major requirements in just two years. [Figures 40-41]

**Figures 42 and 43** show variation in graduation rates for the community college transfers by campus and by race/ethnicity. It is interesting to note that the four-year graduation rate for underrepresented community college transfers is higher than the six-year graduation rate for underrepresented freshmen shown above in Figure 20.

***Undergraduate Degree Production.*** Graduation rates are not uniform across all disciplines in a way that complicates institutional comparison. Simply put, universities tend to offer in very different proportions, degrees in arts and humanities, social science, and “STEM” (science, technology, engineering, and math) disciplines. The issue requires further exploration, but **Figures 44-46** show the distribution by discipline of degrees awarded at UC and at the public and private AAU institutions. UC awards a greater proportion of its baccalaureate degrees in the “STEM” (science, technology, engineering, and math) disciplines than either the public or the private AAUs. Given that these disciplines tend to both be more costly and have more requirements, UC’s high graduation rates look even better in comparison. Among UC campuses, Davis and San Diego award the greatest proportion of baccalaureate degrees in the STEM disciplines.

***Postgraduate outcomes.*** To date, the accountability framework has not developed many indicators on the success of our students after they have received a degree and moved on either to graduate school or to careers. However, we are able to look at a few indicators.

**Figures 48 and 49** are data from University of California Undergraduate Experience Survey (UCUES) that show the degree aspirations and post-graduation plans of UC senior in spring 2008. Only 21 percent plan to stop at a bachelor’s degree; 79 percent expect to get another degree at some point, with 37 percent planning to immediately go on to graduate or professional school. **Figure 50** backs up these self-reported plans with real data. By using national clearinghouse data, UC staff have found that a large proportion (approx. 30 to 40 percent) of recent UC graduates are enrolled in other colleges and universities, presumably working on their next degrees.

**Figures 51 and 52** are not intuitive, but provide valuable information. **Figure 51** is based on ten years of data on doctoral (Ph.D.) degrees awarded nationally. It shows that of the total Ph.D.s awarded in the nation, what number of those degree recipients obtained their B.A. or B.S. at a

UC campus. As expected, Berkeley and UCLA have large numbers of students going on to obtain Ph.D. degrees. **Figure 52** normalizes these figures by dividing them by the numbers of baccalaureate degrees awarded for a relevant ten-year period. It shows that Santa Cruz is second in the *proportion* of its graduates who go on to earn a Ph.D.

***Student Learning Outcomes.*** How to assess what students learn has become a matter for national public policy debate. The topic is at once politically loaded and methodologically complex and has been subjected to considerable scrutiny at UC most recently by a joint administrative-Senate task force on Educational Effectiveness. The University of California Undergraduate Experience Survey (UCUES) provides some insight into how students perceive the quality of their education at UC. The percentage of seniors who rated their analytical and critical thinking skills as “very good” or “excellent” is 72 percent compared to only 23 percent when they entered UC. Growth is also shown for writing – from 22 percent to 59 percent. The change is most dramatic for knowledge in a discipline – from 6 percent to 75 percent. **[Figure 54]**

***Student Success – next steps.*** The current budget crisis underscores the need – already acutely felt – for richer and more detailed data about the effect a University education has on its students. How will the actions that the University takes in response impact its ability to act as an engine of social mobility – recruiting students from relatively diverse backgrounds and supporting them along the way towards a successful career and a tangible contribution towards California’s progress? Without better data on graduates’ geographical and career destinations, we cannot know.

Will larger average class sizes and greater reliance in instruction on non-ladder rank faculty – two trends which seem inevitable – have a negative impact on what students learn, that is, on educational effectiveness? Without better measures for assessing learning outcomes, we simply cannot know; claims that we might make about diminished quality of instruction can only be asserted.

In light of these compelling needs, we are giving highest priority in the coming year to developing a deeper, broader, and richer set of indicators with which to gauge the University’s effectiveness in promoting student success in learning while at UC and in contributing to positive work/life outcomes after graduation **[Figure 55]**. Resources permitting, we expect to work in four related areas

- Surveying baccalaureate recipients to get at questions having to do with graduates’ career, geographical, and social mobility, their contributions to the state and the nation, and their perception of the role UC played in shaping and encouraging progress towards career and life goals.
- Data mining. Mining or applying more sophisticated analytical techniques to existing data in order to describe and explain student success at each UC campus.

- Communicating more effectively about extensive departmentally-based efforts to articulate and assess students' progress in achieving specific discipline-based learning goals.
- Continuing to evaluate standardized testing or other quantitative approaches to measuring student learning outcomes.

(Attachments)