

Questions and Follow-Up Responses

Eligibility and Admissions Study Group – Meeting #1

Design and Implementation of UC's Eligibility Requirements

Questions regarding testing:

Q1: What is the role of the SAT I and II in the Eligibility Index?

Since 1968, the University has stipulated the use of the SAT or ACT and three SAT II examinations as part of its eligibility requirement. The examination requirement was originally added to the eligibility requirement to balance the high school grade point average by providing a standardized measure of student academic preparation. It was not until 2001, however, that both the SAT I (or ACT) *and* the SAT II subject examination scores were incorporated into the Eligibility Index.

According to The College Board, the SAT I measures verbal and mathematical reasoning abilities; the SAT II examinations measure knowledge and skills in a specific subject and the student's ability to apply that knowledge. Recent validity studies have demonstrated that, taken together, the high school GPA, SAT II and SAT I are the most powerful predictors of success at UC. These and other studies have also demonstrated convincingly that the SAT I and II are highly correlated, and that of the two, the subject examination (SAT II) is the stronger predictor. The SAT I, however, does add some predictive value, and it (as well as the ACT) are tests students can utilize at other four-year colleges and universities.

In developing the most recent Eligibility Index, UC attempted to strike a good balance among these three indicators of students' academic achievement and skills attainment. While GPA is the best predictor and is, therefore, given the most weight in the Eligibility Index, the SAT II results measure achievement in discipline specific coursework. It is for this reason that the Academic Senate decided to double the weight given to the SAT II in the eligibility formula. While not as strong a predictor of UC college success as the SAT II subject exams, the SAT I does add a small, but statistically significant, increment to the prediction of first-year GPA.

Q2: Does each eligibility criterion (courses, grades, test scores) add some value in predicting future academic success at the University? How can we justify the use of each criterion?

Validity studies have demonstrated that a good balance of GPA, SAT II and SAT I is the most powerful predictor of success at UC. In developing the current Eligibility Index, faculty attempted to strike a balance among the many good indicators of students' academic achievement and skills attainment.

UC studies have consistently shown that the high school GPA is the best predictor of freshman grades at the University and is, therefore, given the most weight in the Eligibility Index. Virtually all of the extant literature on the relative value of grades and admissions test scores in predicting first-year performance also cites high school GPA as the best predictor.

Test scores, however, do contribute a statistically significant increment of prediction when added to a regression analysis combining grades and test scores. The effects of different combinations of predictor variables were studied in the full four-year sample of UC students (1996-99). When scores from the SAT I and SAT II were added to high school GPA in the prediction equation, the amount of variance in freshmen-year GPA increased from 15.4% for GPA alone to 22.3% utilizing all three measures.¹ However, the combination employing both the SAT I and SAT II was only marginally more predictive than a combination of just the high school GPA and SAT II composite, which explained 22.2% of the variance. In this model, the SAT I was not significant.

Standardized regression coefficients, also known as "beta weights," are another indicator of the relative strength of different predictor variables. In a standard regression formula, utilizing the same data as above, where the outcome variable freshman-year GPA was regressed against a combination of high school GPA, SAT I and SAT II, the standardized regression coefficient (beta weight) for high school GPA was .27 for the four-year sample, as opposed to .23 for the SAT II and .07 for the SAT I. In BOARS' view, the statistical analyses support the use of the SAT II subject examinations as predictors of student success at least equivalent to the SAT I examinations.

In their document, *The Use of Admissions Tests by the University of California* (2002), BOARS affirmed that admissions tests must serve a useful purpose in helping both to determine UC eligibility and to select applicants for admissions to campuses that cannot accommodate all UC-eligible applicants. In response to concerns raised about the SAT, the College Board has recently announced significant changes to the examination, effective in March 2005 for the class entering the University in Fall 2006. The new core examination will consist of three components: critical reading, mathematics and writing.

¹ Geiser, Saul with Roger Studley. (2001) *UC and the SAT: Predictive Validity and Differential Impact of SAT I and SAT II at the University of California*.
http://www.ucop.edu/sas/research/researchandplanning/pdf/sat_study.pdf

This latter component will be offered in lieu of the current SAT II Writing examination that, by itself, is a significant predictor of future success at the University. Given the impending changes to the examination, it would be premature to jettison the SAT I at this time.

At the July 2003 meeting, the UC Board of Regents approved the recommendation of the Board of Admissions and Relations with Schools and the Academic Assembly to adopt a new freshman admissions testing requirement. Beginning with the entering freshman class of 2006, the University will accept, on an interim basis, scores on the ACT with Writing and the new SAT examinations in satisfaction of the core test requirement. These interim approvals will be in effect for two years. BOARS will complete an in-depth review of the new admissions tests and their alignment with the testing principles no later than 2008. In the intervening years, BOARS will collect data on the new tests that will enable this evaluation. This recommendation is consistent with one of BOARS' recommendations from their January 2002 paper on admissions testing – that admissions tests and the University's testing requirement be evaluated on a regular basis.

Q3: Do test scores overpredict or underpredict student performance at UC?

In their 2002 paper, *UC and the SAT: Predictive Validity and Differential Impact of the SAT I and SAT II at the University of California*, Geiser and Studley addressed the phenomenon of over-prediction and under-prediction by the SAT in predicting first year student performance. A phenomenon long noted in the research literature on testing, over-prediction refers to the tendency of the SAT I to predict slightly higher freshman GPAs than students actually achieve (Ramist, et al., 1994; Bridgeman, et al., 2000). Studies have shown that the SAT I tends to overpredict freshman GPA for underrepresented minority students. Given this tendency, some have raised the concern that underrepresented students might be disadvantaged if SAT I scores were eliminated in college admissions. Data for the UC sample are presented below.

Like the SAT I, the SAT II achievement tests also exhibit a slight tendency to over-predict UCGPA for minority students, and there are only minor differences between the two tests in this respect – less than one-tenth of a UC freshman grade point for any racial/ethnic group. Moreover, when SAT I and SAT II scores are used in conjunction with HSGPA to predict freshman grades, as is the normal practice in admissions, these minor differences tend to become even smaller. At most, the difference in prediction is *four hundredths* of a grade point, or the difference between a predicted freshman GPA of 2.50 and 2.54. These data suggest that eliminating the SAT I in UC admissions in favor of achievement tests such as the SAT II would have little effect on predicted outcomes for students from any racial/ethnic group.

Over- and Under-Prediction of UCGPA
by HSGPA, SAT I and SAT II Scores
by Race/Ethnicity

Difference between predicted and actual UCGPA (in grade points)

	HSGPA	SAT I	SAT II *	HSGPA + SAT I	HSGPA + SAT II*
African American	+0.10	+0.06	+0.02	.00	-.03
American Indian	+0.02	+0.06	.00	+0.01	-.03
Asian American	+0.07	+0.07	+0.07	+0.08	+0.08
Chicano/Latino	+0.13	+0.04	+0.10	+0.04	+0.08
White	-.11	-.08	-.10	-.09	-.10

* Composite includes SAT II Writing and Mathematics plus Third Subject Test.

Source: UC Corporate Student System data on first-time freshmen entering UC from Fall 1996 through Fall 1999. N = 77,893.

Q4: Is there an SAT score so low that UC shouldn't take an ELC student? In other words, should UC institute a minimum SAT score for ELC eligibility?

The Guidelines on the Uses of College Board Test Scores and Related Data (College Board, 2002) instructs higher education institutions against using minimum test scores as a cut-off unless used in conjunction with other information such as secondary school performance *and* the cut-off score is properly validated. The Board further advises admissions offices to “view admissions test scores as contemporary and approximate indicators rather than as fixed and exact measures of student’s preparation for college-level work.”

Since the primary educational justification of using standardized test scores is to predict students’ success in college, it is useful to look at persistence data. UC persistence data indicates that students admitted and enrolling at UC with lower test scores generally persist at a rate only slightly below students with higher test scores. Of all students admitted for Fall 2002 with an SAT I total less than 1000 (N = 2,221) and who enrolled at one of the six selective campuses, the first-year persistence rate for 97 percent of these students was 80 percent or higher. This compares to a first-year persistence rate of between 90 percent and 96.4 percent for all first-year students at the six selective campuses.² Even at the 80 percent level, this persistence rate is on par with persistence data from sister AAU institutions which show 36 institutions reporting a one-year retention rate that ranges from 75.8% to 96.6%, with the average being 88.9%, for students who entered their university in Fall 2001.

Note that persistence data include students who left the University in good standing, and students who left UC for a variety of personal reasons including cost, change of mind (“fit”) and family reasons. Therefore, one should not assume that lack of persistence correlates directly with academic failure at UC.

² Materials distributed at the December 16, 2003 meeting.

Question regarding Visual and Performing Arts requirement:

Q5: What is the rationale for adding the Visual and Performing Arts requirement to UC's course requirements?

In 1999, at the recommendation of the faculty and President Atkinson, the Board of Regents approved one-year of visual and performing arts as a requirement in UC's college preparatory course pattern. Unlike other "a-g" requirements, the goal of the Visual and Performing Arts (VPA) requirement was not for students to achieve proficiency in a specific arts discipline, but rather for students to have a significant, meaningful arts experience – one with impact on the student's subsequent relationship with the arts.

The intention of the requirement, which the faculty have carefully grounded in the California State Board of Education-approved Visual and Performing Arts Content Standards, is for students to develop a breadth of knowledge in at least one area of the arts – visual or performing – so that students may apply their knowledge and experience to the creation of art and are better able to understand and appreciate artistic expression on the basis of that experience and knowledge.

The addition of the VPA requirement not only enhances the breadth of the student's preparation for UC but also, in conjunction with the California State University, brings UC and CSU course pattern requirements for freshmen into alignment. First year implementation (2003) of the Visual and Performing Arts went smoothly and there is no indication that students were unable to fulfill the requirement.

Question regarding Grade Point Average (GPA):

Q6: Do higher education institutions in other states give extra weight for either taking honors or Advanced Placement courses or specifically for grades earned in those courses?

In June 2003, the Office of the President surveyed a small number of comparison institutions regarding policies on consideration of honors-level course in admissions decisions. Thirteen out of the sample of 18 higher education institutions responded to the survey. Two of these institutions are private universities and eleven are public; all are AAU institutions. Survey responses indicate a wide variety of practices regarding the consideration of honors-level courses in admissions processes. Institutions do not have a homogenous approach to the way they treat honors courses. While approaches vary, most students do report weighted high school GPAs and most universities give additional weight to honors, Advanced Placement and International Baccalaureate courses.

Consideration of honors-level courses in High School Grade Point Average (HSGPA). The majority of the institutions surveyed (69%), including the two privates, do not recalculate a student's HSGPA. These nine institutions use the HSGPA reported on an applicant's transcript, implicitly accepting the decision of the school or district regarding weighting of honors-level courses. Although most high schools seem to give extra weight to honors-level course, these institutions respect decisions made at the local level and do not attempt to standardize information across schools or applicants. According to admissions staff, schools understand the relative rigor of courses offered and therefore are the most suited to define the relative weight that they should carry when evaluating students' performance.

The rest of the institutions (4) make an effort to standardize the information for all applicants, either by not weighting or by recalculating HSGPA. While the University of Michigan and the University of Washington do not weight applicants' HSGPA, Michigan State University and the California State University use a systematic process to recalculate applicant' high school grade point averages giving additional weight to honors-level courses. The University of California approach is even more standardized because UC certifies the courses used in making a GPA calculation and, in addition, applies strict rules that all campuses conform to when calculating a grade point average for UC eligibility.

The number of honors-level courses completed by students is also considered in the comprehensive review of applications, either qualitatively or quantitatively. All 12 institutions that admit a proportion of their classes based on comprehensive review consider the number of honors courses completed. They do so in light of the academic opportunities available to students and the number of honors courses offered at the applicant's school.

Two of the 12 institutions conducting comprehensive review gave quantitative consideration to honors-level courses. Although the specifics of those considerations vary, both institutions regard Advanced Placement and International Baccalaureate courses as more rigorous and assign more points to these courses.

Consideration of Advanced Placement and International Baccalaureate Examinations. According to admission staff, these examinations play only a minor role in selecting among applicants. Seven of the 12 institutions conducting comprehensive review give some consideration to exceptional self-reported test scores in admissions decisions as another indicator of academic performance and curriculum rigor. Since most official test scores are not available until after the application period, institutions use Advanced Placement and International Baccalaureate examinations mainly for placement decisions.

Questions regarding UC eligibility:

Q7: In determining eligibility, should UC take into account factors other than courses, grade point average and test scores?

UC's eligibility requirements provide specific information to prospective students on how they should prepare for the University. They establish clear academic standards for students with the promise of access for those who meet the standards. Admission to the University is available to every student in the state who meets the prescribed criteria. Students know in a clear and unambiguous way what it takes to be guaranteed a place at one of the UC campuses.

The eligibility requirements also signal to schools the importance of providing a strong academic curriculum. The eligibility criteria serve as a mechanism to set clear, consistent academic standards – sending a message to schools regarding the importance of academic preparation and how preparation is tied to both admission and future academic success at the University.

The current eligibility requirements – courses, grades, and examination results – provide a roadmap for academic preparation and future success at the University that any student with ambition might achieve. While UC might consider the addition of other criteria in an eligibility calculation, the advantages of the current criteria are that it is quantifiable, measurable and clearly understood.

Question regarding the CPEC Eligibility Study:

Q8: Can UC appeal the California Postsecondary Education Commission (CPEC) eligibility study outcomes if UC conclusion(s) are different than CPEC's? At the very least UC should push to understand differences, then agree or disagree with the outcomes and state why.

The University of California, the California State University, the California Department of Education and CPEC jointly conduct the statewide Eligibility Study. The final report reflects a coordinated data gathering and data analysis approach involving all segments. Differences among the segments regarding analysis and interpretation are thoroughly discussed prior to the release of the report. It has generally been the case that there is mutual agreement among the segments on the final report prior to sign-off by the principals of all segments. However, CPEC, as an independent agency, has final authority for the report.

Beginning with the release of the 2003 report in May 2004, if there are significant discrepancies between what the University believes is the eligibility rate and the outcomes of the CPEC study, aggressive follow-up by the University to determine the discrepancy will occur.

Q9: What is the process for making adjustments to UC eligibility formula? How is BOARS preparing for the outcomes of the next eligibility study?

In preparation for the May 2004 release of the California Postsecondary Commission (CPEC) report on the *Eligibility of California's 2003 High School Graduates for Admission to the State's Public Universities*, BOARS has designated a portion of every meeting during the 2003-2004 year to a discussion of the eligibility construct and to plan for the anticipated outcomes of the study.

The general outline for these discussions includes a primer on the background and history of the eligibility construct, a discussion of principles that should guide the development of new eligibility criteria, and the identification of a research agenda to inform further discussion. In addition, BOARS met with the California State University Admissions Advisory Council (November 2003) to discuss CSU planning for the study outcomes, and BOARS members are leading discussions in their local campus assemblies on topics related to eligibility, admission and policy alternatives.

It is expected that BOARS will provide policy recommendations to the Academic Assembly and The Board of Regents no later than the end of 2004.

General Questions:

Q10: How many and what proportion of students enroll at UC who are out-of-state residents or international students?

The table below provides data on the proportion of new freshmen who enrolled in 1997 and 2002 and who were California residents, out-of-state residents or international students. The proportion of out-of-state residents and international students has remained steady over this time period.

**Proportion of New Freshmen from California Schools
and from Out-of-State Schools**

	Fall 1997	Fall 2002
	Universitywide	Universitywide
	%	%
California School		
Public High School	80	81
Private High School	14	12
Subtotal	94	93
Other US	5	6
International	1	1
Total	100	100

Source: Student Academic Services Longitudinal Database:
Fall 2002 First Time Freshmen (including Advanced Standing Freshmen)
as compiled by Planning and Analysis

Q11: What happened to the highly-qualified UC-eligible students not admitted to Berkeley or UCLA?

According to the “No Show Study: College Destinations of UC Applicants Who Do Not Enroll at UC, 1997-2002” (Geiser and Caspary, 2003), the majority of top applicants (applicants in the top third of the UC applicant pool based on combined HSGPA, SAT I or ACT and SAT II scores) denied admission at Berkeley and UCLA remain within the UC system and enroll at other UC campuses. Furthermore, this pattern has held steady over time – from 55.8% in 1997 to 56.9% in 2002.

The overall UC enrollment rate masks, however, substantial variations across different racial and ethnic groups. Since SP-1 took effect in UC admissions in 1998, there has been a growing difference between underrepresented minorities and other students in the rate at which those denied admissions at Berkeley and UCLA choose to remain within the UC system, declining from 54.7% in 1997 to 41.5% in 2002.

For further information on this study, see Appendix C in the September 2003 Comprehensive Review report available online at:
<http://www.universityofcalifornia.edu/regents/regmeet/sept03/302attach.pdf>