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Chair of the Assembly of the Academic Senate
Faculty Representative to the Regents
University of California
1111 Franklin Street, 12th Floor
Oakland, California 94607-5200

September 29, 2021

**MICHAEL DRAKE, PRESIDENT
UNIVERSITY OF CALIFORNIA**

Re: Smarter Balanced Study Group Report and Recommendations

Dear President Drake:

In April 2021, you asked the Academic Senate to explore several questions around the Smarter Balanced assessment, to determine if the University could use some version of the assessment to add value to the UC freshman admissions process in an equitable manner.

The final report and recommendations of the Smarter Balanced Study Group (SBSG) are attached. As you can see, the SBSG recommends against the use of the Smarter Balanced assessment in the UC admissions process. The SBSG also offers several additional recommendations for supporting the University's goal to build a stronger and more equitable admissions process.

We look forward to working with you and the Office of Graduate, Undergraduate, and Equity Affairs to further study and implement these recommendations and to explore other strategies that support equitable access for a well-prepared and diverse cohort of students.

Please do not hesitate to contact me if you have additional questions.

Sincerely,

A handwritten signature in cursive script that reads "Robert Horwitz".

Robert Horwitz, Chair
Academic Council

Cc: Provost Brown
Vice President and Vice Provost Gullatt
SBSG Co-Chair Gauvain
SBSG Co-Chair Sorapure
Chief of Staff Kao
Chief Policy Advisor McAuliffe
Academic Council
Executive Director Baxter

Encl.

MEMORANDUM

TO: Academic Senate Chair Robert Horwitz
FROM: Mary Gauvain and Madeleine Sorapure, Co-Chairs, Smarter Balanced Study Group (SBSG)
DATE: September 28, 2021
SUBJECT: Exploration of the Use of the Smarter Balanced Assessment for UC Admissions

Dear Robert,

On behalf of the Smarter Balanced Study Group (SBSG), we submit a recommendation on the use of the Smarter Balanced assessment in freshman admissions at the University of California. We ask that you convey our cover letter and the SBSG report to UC President Drake by the October 1, 2021 deadline set by the President, and please forward a copy to Provost and EVP Brown and Vice President Gullatt. For your information, the SBSG report will be shared with BOARS at its October 1, 2021 meeting.

The SBSG was formed by the Academic Senate in May of 2021 on the request from President Drake to undertake an exploration of the Smarter Balanced assessment to determine if it can provide added value in the UC admissions process in an equitable manner. Specifically, the SBSG was asked to investigate the relation of student scores on the assessment to UC admission rates, both in general and for different populations of students, and the predictive utility of the assessment for first-year college outcomes (GPA, persistence to Year 2). We were also asked to assess the measures taken by SBAC to reduce biases and disparities at the item and instrument level.

Based on our analyses and deliberations, the SBSG believes that **the SB assessment is not appropriate as an admissions test, required or optional, for the UC**. The Smarter Balanced 11th grade test scores would add only modest incremental value beyond high school GPA in predicting college first-year grades, and would likely come at the same cost as the SAT. That is, like the SAT, the Smarter Balanced assessment mirrors many of the inequities in opportunities to learn across California schools that are pronounced by race and socioeconomic status. Moreover, converting SB from a low-stakes assessment as it is used currently into a high-stakes test that would impact college admissions decisions for individual students is likely to lead to the development of test preparation ventures for the assessment, an enterprise that exacerbates social inequities.

The SBSG recognizes that California has many high achieving high school students and that capacity levels set by State budget allocations keep the university from admitting all interested and deserving students in the State. The SBSG stresses that no single change in the admissions

process, including another assessment score, will enable the university to reach its equity goals in admissions. Instead, multiple strategies are needed. To this end, SBSG offers recommendations for (1) building a stronger partnership with K-12, (2) bolstering the holistic review process, (3) expanding and developing resources for students after they enroll at UC, (4) conducting ongoing research regarding the efficacy of the admissions process and student success, and (5) addressing capacity limitations.

In closing, we, the SBSG co-chairs, want to recognize the contributions of the SBSG members who devoted valuable expertise and much diligence to this effort. Their work was based on a deep commitment to the equity goals of the University. Their contributions were always thoughtful and professional, and their respect for each other and the university was evident throughout the process. Finally, we express gratitude to the expert guidance and support provided by Kari Stewart and Abigail Bates from the UC Office of the President.

Respectfully yours,



Mary Gauvain



Madeleine Sorapure

REPORT OF THE ACADEMIC SENATE SMARTER BALANCED STUDY GROUP

RECOMMENDATION

The Smarter Balanced Study Group recommends that the Smarter Balanced assessment should not be used in the UC admissions process.

INTRODUCTION

In May of 2020, the Board of Regents of the University of California voted to suspend the use of scores from the SAT/ACT standardized tests in the UC freshman application for admission until 2024. This decision, which is part of the ongoing effort by the university to advance educational opportunity and equity, was based on the view that these tests are biased because they systematically and unfairly reduce the likelihood that underrepresented and low-income high school students will be accepted to the university. The decision was followed by a proposal from then UC President Janet Napolitano to form a work group to determine the feasibility of creating or identifying a replacement standardized test for UC freshman applications that is fair to the student, useful in the admissions process, and ready to implement in the fall of 2025.

In fall of 2020, the Feasibility Study Steering Committee (<https://regents.universityofcalifornia.edu/regmeet/jan21/b2attach1.pdf>) and the Feasibility Study Work Group (<https://regents.universityofcalifornia.edu/regmeet/jan21/b2attach3.pdf>) were convened for this purpose. These groups completed their work in December 2020 with three conclusions: (1) it is not feasible for the university to develop its own test in the specified time frame, (2) modification of the SAT/ACT is not a viable option given long-standing concerns about the fairness of these tests, and (3) it may be feasible to leverage an existing test, under certain conditions, for use in UC freshman admissions. The groups suggested exploration of the state's Smarter Balanced (SB) assessment given that, among other things, it is already required of all California public school students in 11th grade, it aligns with the state's Common Core academic standards, and it is administered free of charge.

THE SMARTER BALANCED STUDY GROUP

In April of 2021, UC President Drake asked the Academic Senate to undertake an exploration of the Smarter Balanced assessment to determine if it can provide added value in the UC admissions process in an equitable manner. In response, the Academic

Senate created the Smarter Balanced Study Group (SBSG), composed of eight faculty members from across the UC system with expertise in educational testing and policy, co-chaired by Mary Gauvain, Chair of the UC Academic Senate, and Madeleine Sorapure, Vice Chair of the Senate Board of Admissions and Relations with Schools (BOARS), and staffed by two members of the UC President's office (Roster attached).

SBSG Charge. The President asked the SBSG to explore the following questions using the BOARS principles on admissions testing (<https://regents.universityofcalifornia.edu/regmeet/mar20/b4attach2.pdf>).

Q1. What is the current evidence that Smarter Balanced assessment scores, either alone or when paired with HSGPA, correlate with UC freshman admission rates (by campus, by ethnicity, first generation) as compared to SAT/ACT?

Q2. What is the current evidence that Smarter Balanced assessment scores, either alone or when paired with HSGPA, predict first-year college outcomes (GPA, persistence to year 2) for UC students as compared to SAT/ACT?

Q3. Could a higher Smarter Balanced assessment score improve the probability of admission of students from underrepresented groups and those who would be the first in their families to attend college? For example, what are the admission rates for students with lower HSGPA and higher Smarter Balanced assessment scores, disaggregated by campus, ethnicity and first-generation status?

Q4. What measures has the Smarter Balanced Assessment Consortium (SBAC) taken to minimize any bias and disparities, at the item and instrument levels, for students who are from underrepresented groups? Are those measures reasonable and sufficient?

Meetings. The SBSG met eight times, on Zoom, between June and September of 2021. SBSG conferred with representatives from the UCOP offices of Institutional Research and Academic Planning (IRAP) and Undergraduate Admissions, and it also reviewed relevant data and evidence provided by these offices. SBSG also met with representatives from the Smarter Balanced Assessment Consortium (SBAC), the nonprofit collaborative that developed and oversees the SB assessment, to discuss the nature of this assessment, SBAC's efforts to assess and reduce bias, the suitability of these assessments for UC admissions, and the potential to modify them to meet the university's goals. SBSG also met with admissions officers from UC Irvine and UCLA to discuss the holistic admissions process, learn about the application review and acceptance process this past year when SAT/ACT scores were not included in the

application, and discover their views on the applicability and utility of including the SB assessments in UC freshman applications. (Note, admissions officers from other campuses were also invited, but their schedules did not allow them to attend.) SBSG also devoted substantial time to the discussion of UC admissions goals and testing more broadly.

Overview of the Report. The report begins with a brief description of the current admissions situation at the UC. It then provides SBSG's responses to each of the four questions posed in the charge. Insights SBSG obtained from representatives from SBAC, IRAP, and the UC admissions offices are included throughout the report. The report concludes with the SBSG main recommendation, followed by several additional recommendations for the university regarding college preparation and admissions.

A BRIEF ACCOUNT OF THE CURRENT UC ADMISSIONS SITUATION

The number of students who apply to the UC has increased substantially over the last decade. In the fall 2021 admissions cycle, the first cycle following the removal of the SAT/ACT scores, the number of freshman applications reached an all-time high, with over 200,000 applications systemwide, compared to just over 172,000 in 2020 (<https://www.ucop.edu/institutional-research-academic-planning/files/factsheets/2021/table-1.1-freshman-applications-by-campus-and-residency.pdf>). Although there are likely many reasons for this increase, the absence of the SAT/ACT requirement in the application undoubtedly explains some of it. The COVID-19 pandemic also occurred during this period along with its wide-ranging effects on students' educational experience, including greater use of pass/no pass grading, which may have helped increase UC applications.

The number of admission offers was also at an all-time high this year, with over 130,000 admits and with 43% of the California admits from underrepresented groups. In 2020, UC admitted just over 119,000 students, and 42% of the California admits were from underrepresented groups (<https://www.ucop.edu/institutional-research-academic-planning/files/factsheets/2021/fall-2021-admission-table-2-1.pdf>). The number of low-income students admitted also increased by 10% since 2020 (<https://www.ucop.edu/institutional-research-academic-planning/files/factsheets/2021/fall-2021-admission-table-3.pdf>). The admissions process varied across the system, with each campus using high school Grade Point Average (HSGPA) and some combination of the 12 other factors used in the comprehensive review of applicants (<https://admission.universityofcalifornia.edu/counselors/freshman/comprehensive-review/>). The admissions officers from UC Irvine and UCLA reported that reading and

evaluating applications was difficult this past year, but, in their view, the main challenge was the large number of applications and not the absence of the SAT/ACT score.

What does the increase in applications tell us? As the data indicate, the university is in high demand. How we meet this demand going forward is a matter of great concern. California has many high achieving secondary students, and in recent years, UC has been asked to serve more and more of them. As one of three public institutions of higher learning in the State, UC has the responsibility to serve as many Californians as possible who meet our criteria for admission. However, present capacity levels of the institution, set by State budget allocations, mean that the university is unable to serve all the California high school students who merit admission. This reality makes it necessary to have an equitable admissions process that can identify students who are adequately prepared for and can benefit from the opportunities offered at the university. Equity is central to this effort, especially because educational attainment is one of the best predictors of lifetime earnings for individuals and college degree attainment remains the most effective means of ensuring social mobility. Also, as a state public institution, the UC is obliged to create a student body that is representative of the demographic profile of California.

Gaps in access to UC. The UC admission process must not only identify potential students among a large number of qualified high school students in an equitable way, it must do so in the context of persistent opportunity gaps in applicants' prior schooling contexts and experiences and achievement gaps in GPA and test scores among applicants. These gaps are, in part, evidenced by systematic differences by income and race/ethnicity on standardized measures of academic achievement (i.e., standardized test scores) and high school GPA (HSGPA). On average, students who are socioeconomically disadvantaged perform less well on achievement tests and HSGPA than their more advantaged peers. On average, African American, Hispanic/Latinx, American Indian, and Asian/Pacific Islander heritage students from poor family backgrounds tend to perform less well on the tests and HSGPA compared to students from other social groups. Finally, there are important intersections of race and income; students from different racial/ethnic backgrounds have a differential likelihood of being socioeconomically disadvantaged based on structured societal inequities.

The reasons for these performance disparities and opportunity gaps are clear and have been studied extensively (e.g., Carter & Welner, 2013; Desimone & Long, 2010; Michels & Dynarski, 2017). The educational experiences of disadvantaged students differ markedly from that of their more advantaged peers, and this difference is reflected in and maintained over the years of schooling. Educational settings in poor communities have fewer resources to support student learning and academic growth. It is not

surprising, then, that on average, students from less resourced schools tend to perform less well than their counterparts who attend better resourced schools. The cumulative effect of these differences, from kindergarten through high school, is profound and is reflected in performance on standardized tests and HSGPA. When institutions of higher learning rely heavily on these tests for admission, a student's performance directly affects the chances of being admitted, especially at institutions with highly competitive applicant pools.

In other words, although standardized test scores and HSGPA are presumed to signify an individual's academic skills and readiness for the university, these scores also reflect, to varying degrees, broader social and educational inequities in the school context. Furthermore, opportunity gaps are notably exacerbated by accumulated advantages over time experienced by high income and traditionally privileged students from dominant backgrounds. Thus, as disadvantages are created over time throughout the schooling process, so too are accumulated advantages. All in all, the idea that any academic achievement measure, even measures that are standardized and administered in a consistent manner across test takers, can circumvent the broader societal context in which academic opportunity and achievement are inextricably linked should be met with skepticism.

The Smarter Balanced assessment. The SB assessment is a standardized test based on the Common Core curriculum (a subset of the A-G course content for UC) given once per year to public school children in grades 3 to 8 and grade 11. It was developed and is overseen by the nonprofit Smarter Balanced Assessment Consortium (SBAC) that works in partnership with boards of education, schools, and classroom teachers in several states. Its purpose is to inform schools and teachers about how well their students are meeting the learning goals of the Common Core curriculum. Unlike high-stakes tests that have direct consequences for the test taker, the SB assessment is a low-stakes test because the information it yields is used as feedback to parents, students, teachers, schools, and school districts.

From the outset, the SBSG, like the preceding Feasibility Study Work Group, had several reservations about the appropriateness of this assessment for university admissions purposes.

First, as previously noted, the SB assessment measures how well classes or schools are performing relative to benchmarks in the Common Core standards. As a result, its use for UC admission would require a reframing (or expansion) of the assessment beyond a K-12 accountability tool, and, thus, it seems likely to us that it would distort the utility and validity of the assessment.

Second, the use of the SB assessment to help decide on an individual student's admission to the UC would transform it from a low-stakes to a high-stakes test, and problems associated with high-stakes testing would likely ensue. These problems include, but are not limited to, worries and anxieties by students about their test performance and efforts by schools, students, and families to optimize student performance through test preparation and other means. Test preparation and related efforts are time consuming and expensive, and because they exacerbate social inequities, they end up reducing the access of disadvantaged students to the university.

Finally, the SB assessment, like other standardized tests, reflects and reproduces inequalities and opportunity gaps in the K-12 system that, in turn, disadvantage students in lower-income and underrepresented groups. As noted above as well as in the Feasibility Study Steering Committee report and the Standardized Testing Task Force report, students at lower-resourced schools have unequal access to opportunities to learn which directly impacts their performance on standardized tests.

Now we turn to the four questions posed in the charge to the SBWG. We begin with Question 4 regarding bias in the SB assessment because it provides useful framing for our responses to the remaining questions.

[Q4] What measures has the Smarter Balanced Assessment Consortium (SBAC) taken to minimize any bias and disparities, at the item and instrument levels, for students who are from underrepresented groups? Are those measures reasonable and sufficient?

In answering this question, we follow the recommendation in the *Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, and National Council on Measurement in Education [AERA, APA, & NCME], 2014, p. 1) that “*all professional test developers, sponsors, publishers, and users should make reasonable efforts to satisfy and follow the Standards and should encourage others to do so*” (emphasis added).

The *Standards* provides a framework for evaluating if the SBAC took reasonable and sufficient steps to minimize bias and disparities in scores for students from underrepresented groups. The *Standards* will also be useful in understanding the responses to the other three questions which are related to predictive and incremental validity.

According to the *Standards*, scores on commercial measures and measures that contribute to making high stakes decisions, including college admissions, are expected to meet rigorous psychometric standards of validity, reliability, and fairness. The question of bias is specifically related to the issue of fairness, which is defined as “the validity of test score interpretations for intended use(s) for individuals from all relevant subgroups. A test that is fair minimizes the construct-irrelevant variance associated with individual characteristics and testing contexts that otherwise would compromise the validity of scores for some individuals” (AERA, APA, & NCME, 2014, p. 219). Thus, fairness contributes to the validity of the inferences derived from test scores because it ensures that test performance does not vary systemically based on an individual’s social or demographic characteristics. Reliability is “the degree to which scores are free of random errors of measurement for a given group” (AERA, APA, & NCME, 2014, p. 223). This psychometric dimension of a test indicates the extent to which an individual’s scores are similar over time and contexts and, therefore, consistently indicate the individual’s performance on the construct being measured, rather than the individual’s performance on a single assessment only or a score that is subject to other factors extraneous to the construct.

Thus, test scores that are not fair or reliable cannot yield valid inferences; in other words, they are not informative regarding an individual’s performance on whatever the measure purports to assess. Moreover, issues of fairness, reliability, and ultimately, validity (“the degree to which accumulated evidence and theory support a specific interpretation of test scores for a given use of a test” [AERA, APA, & NCME, 2014, p. 225]), do not come into play *after* one has a test score; rather, they must be addressed from the beginning of the test development process.

In its 2010 report, SBAC, citing the 1999 version of the *Standards*, indicated a commitment to developing a balanced assessment system that was “credible, fair, and technically sound” (SBAC, 2010, p. 2). To this end, in developing the SB assessments for California, the SBAC has taken steps to ensure equity at several stages in an evidence-centered design (ECD) approach. Across the design and planning, item writing and review, field testing, and operational reviews and interpretation stages, SBAC engages in various steps (SBAC, 2021a, 2021b, 2021c). These steps include the following:

- Recruiting multidisciplinary and diverse teams of educators and education leaders as well as experts in content, technology, accessibility and equity, psycholinguistics and English language learning, psychometrics, and students with disabilities to inform all aspects of the test design, development, and delivery process;

- Using multiple approaches to mitigate bias by recruiting facilitators, item writers, and item reviewers that represent a diversity of views and multidisciplinary expertise and providing standardized bias and sensitivity training to these individuals to decrease the probability that the items are biased. Additionally, all items are reviewed for content and adherence to the bias and sensitivity guidelines by a diverse group of educators;
- Conducting laboratory and field-based assessments with students, including groups of students who are underrepresented in higher education, to ensure that the tests are measuring construct-relevant materials;
- Further psychometric evaluation at the item level includes conducting differential item functioning (DIF) analyses for groups by gender, ethnicity-race, English learner status, disability status, and Title 1/non-Title 1 school status; and at the test level, includes examining the test scores for all students and for demographic subgroups to ensure that they are comparable across groups and high enough for use in high stakes decision making.

Using these various methods, any items that exhibit bias are removed from the item pool (SBAC, 2021a, 2021b). Thus, the process outlined by SBAC is in keeping with the *Standards (2014)* and *is reasonable and sufficient to minimize bias and disparities including with regard to underrepresented groups* (emphasis added).

However, the SBSG notes that these efforts are largely aimed at reducing bias at the item level and that additional efforts to reduce bias and disparities at the level of the test are limited. These test-level scores reflect the aforementioned opportunity and achievement gaps, and the same pattern of score differences present in the SAT and ACT manifest in the SB assessment, with similar predictive validity (Kurlander & Cohen, 2019). Thus, despite all of the processes SBAC has in place for developing their assessments, “large, persistent differences in performance exist between different racial and ethnic groups at the test level” (SBAC, 2021b, p. 8). This outcome is not surprising, as the SB assessments are assessing the same constructs (i.e., student achievement in core academic subjects) assessed by the SAT, ACT, and HSGPA, and the pattern of differences in the SB scores mirrors the patterns in all of these other assessments.

[Q1] What is the current evidence that Smarter Balanced assessment scores, either alone or when paired with GPA, correlate with UC freshman admission rates (by campus, by ethnicity, first generation) as compared to SAT/ACT?

To answer this question, we relied on *Analysis of Potential Use of Smarter Balanced Scores in Admissions and Placement at the University of California* by UCOP’s Institutional Research and Academic Planning (IRAP, in progress).

Descriptive data were provided to explore the 2016, 2017, and 2018 admissions years. Looking at the most recent year of data we note a clear pattern in admit rates by the four Smarter Balanced performance standards: Did Not Meet, Nearly Met, Met, and Exceeded. Students who met or exceeded the California 11th grade performance standards are more likely to be admitted to UC, when compared to students who nearly met or did not meet standards. This pattern is consistent across gender, race/ethnicity, first-generation status, income, LCFF school designation, and UC campuses.

When exploring admit rates by SB levels and HSGPA we note that the overall pattern of admit rates by SB levels holds across different GPA bands (i.e., <3.78; 3.78–4.08; and >4.08), but it is more pronounced at the lower GPA bands. That is, the difference in admit rates by SB levels appears to be more prominent among lower GPA students. This general pattern holds across gender and in most cases race/ethnicity. As expected, admit rates among lower GPA students (<3.78) are lower than among higher GPA students, and adjusting for GPA levels, those with higher SB scores are still more likely to be admitted than are those with lower SB scores. This is generally the case for all groups; however, we note some differences in magnitudes by race, that are more pronounced among lower GPA students. For students that are in the lower GPA band (<3.78) and whose SB scores exceeded standards, African American students have admit rates of 49%, Asian students 59%, White students at 39%, and Latinx students at 50%.

Exploring these relationships by campus, we note that most of the UC campuses admit very few students with GPAs less than 3.78; among those who do (i.e., Merced, Riverside, and Santa Cruz), this pattern also holds. Conditional on GPA, students with higher SB scores are more likely to be admitted. At higher GPA levels (>3.78), we still note that SB scores seem to be correlated with admit rates at several of the UC campuses (namely, Irvine, San Diego, Santa Barbara, and Santa Cruz).

Supplemental analyses by Kurlaender and Cohen (2021) predict UC admission on the basis of HSGPA (weighted and unweighted), with SBAC and SAT, respectively. These analyses reveal that both the SAT and SBAC increase the predictive power of admission status, above and beyond HSGPA to a moderate degree, but the difference between the contribution of the SBAC versus the SAT is negligible. Results are remarkably consistent by student subgroups and across all of the UC campuses (Kurlaender & Cohen, unpublished).

[Q2] What is the current evidence that Smarter Balanced assessment scores, either alone or when paired with GPA, predict first-year college outcomes (GPA, persistence to year 2) for UC students as compared to SAT/ACT?

We first discuss the results from the Kurlaender and Cohen (2019) study for GPA and IRAP's analysis mentioned above (IRAP, in progress). Then we turn to results for student persistence to year 2. Following an overall summary of these results, we make a conclusion regarding the question.

Evidence Regarding GPA. In terms of predicting first-year GPA at UC campuses (UCGPA), high school GPA (HSGPA), the SAT test (SAT), and the SB assessment are all quite similar in terms of raw scores, with the SAT doing best (correlation of .57), and HSGPA and SB scores being somewhat lower (.48 and .51, respectively). When Kurlaender and Cohen (2019) controlled statistically for the contribution of several related, and potentially confounding, factors (such as a high school quality index, parental SES), the values of the correlations are slightly higher and closer together among the three measures (HSGPA, .57; SB, .54; SAT, .58), which suggests the measures are tapping similar student information.

When HSGPA is combined with each of the other two measures (SAT, SB score), the correlations improve (concentrating now on the raw scores without the controls mentioned above). Adding the SB score to HSGPA increases the correlation to .58, an improvement of .10, while adding the SAT to HSGPA increases the correlation to .62, an improvement of .14. In terms of change in the percent of variance accounted for, SB score increases the explained variation from 23.0% to 33.6%, and SAT increases it to 38.4%.

Going beyond a combination of the HSGPA with *each* of the other measures, one can consider the correlation of UCGPA with *both* of them, and the increase is quite small, with SAT adding 4.8 percentage points to HSGPA+ SB score, while the SB score adds nothing to the combination of HSGPA+ SAT.

Examining the results when looking across race/ethnicity, socioeconomic disadvantage, and school quality, the results are much the same. There is a slight improvement in correlation for SAT (compared to SB score) in terms of school quality.

We also examined the effect of HSGPA, SAT, and SB scores on subgroup representation in the top 10% of the UC applicant pool. Looking first at student ethnicity, compared to HSGPA, both SB scores and SAT result in (a) increases for Asian/Pacific Islanders (from 37% to 55% and 61%, respectively), and decreases for White (35% to 31% and 29%, respectively), Hispanic/Latinx (22% to 9% and 5%, respectively), and African American (2% to 1% and .06%, respectively) students. This pattern tells us that using either test reduces the proportions of African American, Hispanic/Latinx, and White students in the top 10%, while it increases the proportion of Asian/Pacific Islander students. The same procedure can be carried out for socioeconomic disadvantage, and the results are similar. Compared to HSGPA, both SB scores and SAT result in fewer disadvantaged students in the top 10% (29% to 15% and 8%, respectively).

Finally, when similar analyses were conducted for UCGPA, as seen in IRAP’s analysis (IRAP, in progress), the overall results broadly reflect these results (though IRAP also included the ACT Composite test score).

Evidence Regarding Persistence to Year 2. In terms of persistence of students to year 2 of their studies, the overall results from the Kurlaender and Cohen (2019) study are largely consistent with those for UCGPA (IRAP, in progress). That is, the SB score does just about as well as the SAT, either alone, or when paired with HSGPA. The main point though is that none of these three measures is a strong predictor of year 2 persistence. However, this might be due to a “ceiling” effect — that is, 93% of UC students do indeed persist into second year, so there is not much variation that could be sensitive to *any* student measure.

These results indicate that all three measures (SAT, SB score, HSGPA) do about equally well in predicting first-year UCGPA. More specifically, the SB score does about as well as either HSGPA or SAT in predicting a student’s first-year GPA at the UC. When considered as additive to HSGPA, both SB scores and SAT add a moderate amount of information, and, again, about the same amount (i.e., the SB score does about as well as the SAT in increasing explanatory power). Looking at subgroups, in terms of representation in the predicted top 10% of the UC applicant pool, students with more socioeconomic disadvantage and students from underrepresented groups fare considerably better when using just HSGPA than when it is combined with either the score from SB score or SAT. In terms of persistence to year 2, the results are much the same, though somewhat less conclusive, as none of the measures predict even moderately.

Our conclusion regarding the specific question is that SB scores, either alone or when paired with HSGPA, predict first-year college outcomes (GPA, persistence to year 2) for UC students about equally as well as the SAT.

[Q3] Could a higher Smarter Balanced assessment score improve the probability of admission of students from underrepresented groups and those who would be the first in their families to attend college? For example, what are the admission rates for students with lower GPA and higher SB scores, disaggregated by campus, ethnicity and first-generation status?

The answer to this question is necessarily speculative for two reasons. First, since the UC has never considered SB scores in admissions decisions, the currently available data cannot tell us how those scores would be used in admission decisions. Second, existing data also cannot tell us how higher SB scores might affect the probability of

admission under an admissions process that does not use the SAT or ACT score. Although the cohort of applicants for Fall 2021 was evaluated without SAT or ACT scores, this cohort also did not take the SB assessment in 11th grade due to the COVID-19 pandemic.

Data from previous admissions cycles do tell us that students with higher SB scores are sometimes admitted despite having a HSGPA that is lower than most other admitted applicants. However, it is unclear why these students were more likely to be admitted. It is likely due, at least in part, to the strong correlation between SB scores and SAT scores and the role that SAT historically played in admissions. However, it could also be driven by other qualifications that cause students with high SB scores to receive higher evaluations, independent of their SAT scores.

If we assume that the positive correlation between the SB assessment and SAT is the primary explanation for the higher admit rates of students with higher SB scores among those with lower HSGPAs—and if we further assume that SB scores would be used in admissions decisions similarly to the way SAT scores were used in past years—then we can conclude that the use of SB scores in admissions would likely tend to benefit groups of students with historically higher average SAT scores. Specifically, while it would improve the probability of admission for some students from historically excluded groups and first-generation students, it would disproportionately benefit Asian/Pacific Islander students and students from higher-income families, while reducing admission rates of African American, Hispanic/Latinx, and low-income applicants.

To be sure, considerations discussed elsewhere in this report are also relevant to this question. In particular, there are some reasons to believe that the SB assessment (as compared to the SAT) might provide a better and more equitable tool for identifying students with lower HSGPAs but high potential to succeed academically. First, it is possible that, at least initially, SB scores would be less influenced by extracurricular coaching and test-preparation since the SB assessment is designed to test the Common Core State Standards taught in all California public schools (but this might be modified over time). Second, since all California public school students take the SB assessment in 11th grade, informational tools could be developed to encourage students with high scores to apply. Third, the availability of SB scores for all California public school students could make it easier for admissions committees to evaluate the scores in the local context of each student's high school. By contrast, it is harder to adjust SAT scores for local context because in lower-performing schools, only the very highest-scoring students submit applications to the UC.

As to the identification of the top 10% of students in the UC applicant pool, Kurlaender and Cohen (2019) find that when SB scores are combined with high school GPA to

predict first-year GPA among UC freshmen, lower-income applicants and those from historically excluded groups are somewhat more likely to be represented in the top 10% of the UC applicant pool when SB scores replace SAT scores in the prediction model. That said, predicting first-year UCGPA based on high school GPA alone yields the most diverse top 10% pool in terms of lower-income and historically excluded groups of students.

At the same time, there are reasons to doubt that use of the SB assessment would lead to improved admissions probabilities for students from historically excluded and disadvantaged groups. If used in the UC admissions process, the SB assessment would become a high-stakes test. For this reason alone, the distributions of scores – in particular by income, race, ethnicity and gender – are likely to become more similar to those seen in the SAT. For example, as discussed elsewhere in this report, the introduction of any new test in the UC admission process is likely to be followed by the development of test-preparation courses and coaching services in the private market, to the advantage of students with greater family resources.

In sum, there is no guarantee that use of the SB assessment in UC admissions would lead to higher admission rates of students from historically excluded groups and those who would be the first in their families to attend college. However, the question of how best to identify students with high potential for success but lower HSGPAs – especially those from disadvantaged backgrounds – is an important one that deserves further attention. Data from future cohorts of UC applicants would allow a formal analysis of how dropping the SAT from the admissions process affected the admission rates of students with higher SB scores but lower HSGPAs, including detailed breakdowns of this impact across campuses and student demographics. The committee strongly recommends that the UC continuously evaluate how the move to test-free admissions is affecting patterns of applications, admissions, and student success. This work could be done through a sub-committee of BOARS in coordination with IRAP.

CONCLUSIONS AND RECOMMENDATIONS

Based on our analyses and deliberations, the SBSG believes that the SB assessment is not appropriate as an admissions test, required or optional, for the UC. Data show that SB 11th grade test scores add only modest incremental value beyond HSGPA in predicting first-year grades, and would likely come at the same cost as the SAT. That is, similar to the SAT, the SB assessment captures the inequities in opportunities to learn across California schools that are pronounced by race and socioeconomic status. Moreover, converting SB from a low-stakes assessment intended to measure student achievement for school accountability into a high-stakes test that would impact college admissions decisions for individual students is likely to lead to the development of SB

test preparation ventures, similar to those currently in place for the SAT/ACT, that have been shown to magnify score differences among demographic groups. Such test preparation development could also undermine the purpose and current use of the assessment in K-12. More generally, we have strong reservations about the ability of any test of A-G course content to remediate educational inequities experienced by K-12 students or to attenuate the unequal opportunities for college preparation in under-resourced schools.

UC had an all-time high number of applications and a substantial increase in California freshman admits for the 2021-22 entering class. Although the impact of the global pandemic on college application choices is unclear, the elimination of standardized tests is likely a factor in UC receiving more applications overall, including from underrepresented and low-income students. We strongly recommend that UC continue to monitor comprehensive review in admissions across the campuses and their use of the 13 criteria, particularly academic achievement indicators (e.g., availability of weighted courses) in selecting students for admission.

The SBSG affirms that there is value in understanding the SB assessment and how well it helps prepare K-12 students for postsecondary school, particularly at UC. We envision a stronger partnership with K-12 schools, one that connects the UC more closely with the learning opportunities and academic support offered in CA high schools.

California has many high achieving high school students and in recent years UC has been asked to serve more and more of them. Capacity levels set by State budget allocations keep the university from admitting all of the interested and deserving students in the State. Therefore, it is necessary that the university use a fair and transparent method of determining who to admit to the UC. Going forward, SBSG stresses that it is important for the university and the community at large to understand that there is not one thing, such as a change in the admissions process, forms of support, or additional resources, that will enable us to reach our equity goals in UC admissions. Rather, multiple strategies are needed. To this end, we offer the following additional recommendations.

ADDITIONAL RECOMMENDATIONS

Build a Stronger Partnership with K-12. UC should continue to play a role in advancing educational equity in college preparation by forging a stronger academic partnership with K-12.

- Strengthen and expand high school programs that increase student access to and success in the UC A-G requirements. All K-12 students in the State should have adequate access to and support for completing the UC A-G requirements, which will also help expand the geographic diversity of UC undergraduates.
- Advocate for permanent legislative funding for Student Academic Preparation and Educational Partnerships (SAPEP).
- Collaborate with California high schools to monitor applications and admissions growth by high school to determine if the university is reaching students from underserved high schools.
- Encourage all California high schools to implement the SB interim assessments as a formative evaluation tool. These assessments, along with the current 11th grade summative assessment, provide important information to students on their preparation for college.
- Work with SBAC, California State Board of Education (SBE) and California high schools to expand the SB assessment item bank to include more challenging items in core subject areas and also help them improve and expand the performance tasks to be more useful for teachers and students regarding college preparation.
- Investigate the use of the SB assessment as one of multiple measures used for writing placement after students enroll at UC.

Bolster the Holistic Review Process. The UC application contains significant information about students' academic experiences. However, it is time consuming to extract and evaluate this information fairly in the context of opportunities at the student's high school. This process can be aided by the following.

- Encourage and provide adequate support and resources so that all nine campuses can use holistic review for freshman admissions.
- Develop local expertise among readers of the applications regarding the use of contextual information and provide annual anti-bias training for all readers.
- Work closely with BOARS in the continuing development and implementation of the holistic review process.

Expand and Develop Resources for Students After They Enroll at UC. There are benefits for students and savings for the campus when the university invests in resources to support student academic success after they enroll at the university.

- Fortify effective campus programs that support student success with sufficient resources and outreach to continue to help students advance to degree.
- Share information across the campuses about effective student support programs, including those within academic departments, and provide resources to campuses that want to develop these programs.
- Monitor these programs according to a common set of outcomes to ensure they are meeting student success goals.

Research the Efficacy of the Admissions Process and Student Success. There are many important research questions about admissions that the university will need to address in the coming years. This research should be both quantitative and qualitative, and conducted in collaboration with the Academic Senate. Research topics should include the following.

- A subcommittee of BOARS that includes content experts in the areas of admissions and racial equity, should engage in regular monitoring of the outcomes of test-free admission to determine the impact on admissions and student success, including freshman GPA, first-year persistence, probation rates, graduation, and time to degree. Potentially contributing factors for the initial cohorts need to be taken into account, including remote learning, allowance for credit/no credit grades, limited access to counselors/college advising, and students' use of institutional supports.
- Investigate how students are faring when they get to UC. The analyses need to take into account various factors considered critical to student success at UC, including the campus climate, types and extent of academic preparation before students enroll, student's utilization of campus learning resources, and how different academic programs guide and support students in their major area of study.
- Qualitative study of many aspects of the admissions process is critical, including historical analysis of how this process has contributed to the disenfranchisement of communities of color at the University and detailed study of why high achieving

students from underrepresented groups who are admitted to the UC choose to go elsewhere.

Capacity Limitations. A long-range concern is how the university can step up as a system to increase capacity and serve more California undergraduate students. To sustain the academic stature and excellence of the UC, this effort will require much more than teaching additional courses. Academic programs, especially those in high demand, need to be expanded and new programs need to be developed to address emerging research issues and meet pressing societal needs and student interests. These activities depend on the vision and effort of Senate faculty who are charged with overseeing and developing the academic programs of the university, which leads directly to the following recommendations.

- The UC needs more state funding to hire tenure-track faculty both to teach and to develop programs to match this new growth in the student body.
- More academic activities and resources outside the classroom that are appropriate and expected of an R1 institution need to be developed and supported.
- Additional resources and support for academic program development need to be provided to campuses that are poised for growth.

References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. American Educational Research Association.
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. American Educational Research Association.
- Carter, P. L., & Welner, K. G. (2013). *Closing the opportunity gap: What America must do to give every child an even chance*. New York, NY: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199982981.001.0001>
- Desimone, L. M., & Long, D. (2010). *Teacher effect and the achievement gap: Do teacher and teaching quality influence the achievement gap Between Black and White and high- low-SES students in the early grade?* Teacher College Record, 12, 3024–3073.

- Feasibility Study Steering Committee. (2020). *Recommendation of the Feasibility Study Steering Committee to UC President Drake*.
<https://regents.universityofcalifornia.edu/regmeet/jan21/b2attach7.pdf>
- Institutional Research and Academic Planning at UC Office of the President. (in progress). *Analysis of Potential Use of Smarter Balanced Scores in Admissions and Placement at the University of California*.
- Kurlaender, M., & Cohen, K. (2019). *Predicting college success: How do different high school assessments measure up?* Policy Analysis for California Education.
- Kurlaender, M., & Cohen, K. (unpublished). *Supplemental Analysis for Smarter Balanced Study Group*.
- Michelmores, K., & Dynarski, S. (2017). *The gap within the gap: Using longitudinal data to understand income differences in educational outcomes*. *AERA Open*, 3(1).
<https://doi.org/10.1177/2332858417692958>
- Standardized Testing Task Force (STTF; 2020). *Report of the UC Academic Council Standardized Testing Task Force (STTF)*.
<https://senate.universityofcalifornia.edu/files/committees/sttf/sttf-report.pdf>
- Smarter Balanced Assessment Consortium. (2010). *Theory of action: An excerpt from the Smarter Balanced Race to the Top application*.
<https://files.eric.ed.gov/fulltext/ED536956.pdf>
- Smarter Balanced Assessment Consortium. (2021a). *Equity and Smarter Balanced: Assessing fairness through test construction*.
- Smarter Balanced Assessment Consortium. (2021b). *Smarter Balance Assessment Consortium: Bias and sensitivity guidelines*.
<https://portal.smarterbalanced.org/library/en/bias-and-sensitivity-guidelines.pdf>
- Smarter Balanced Assessment Consortium. (2021c). *Usability, accessibility, and accommodations guidelines*.
<https://portal.smarterbalanced.org/library/en/usability-accessibility-and-accommodations-guidelines.pdf>

Attachment

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