GETTING DOWN TO FACTS II

Technical Report

College Readiness in the Era of Common Core

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About: The *Getting Down to Facts* project seeks to create a common evidence base for understanding the current state of California school systems and lay the foundation for substantive conversations about what education policies should be sustained and what might be improved to ensure increased opportunity and success for all students in California in the decades ahead. *Getting Down to Facts II* follows approximately a decade after the first Getting Down to Facts effort in 2007. This technical report is one of 36 in the set of *Getting Down to Facts II* studies that cover four main areas related to state education policy: student success, governance, personnel, and funding.

Stanford University

PACE Policy Analysis for California Education

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Introduction

Labor market demands for more educated and skilled workers, high college remediation rates, and lagging college completion rates have necessitated states' efforts to increase college degree attainment. Although states have approached this differently, they have been fueled by a clear goal of aligning high school curricula with college and work expectations (Glancy, Fulton, Anderson, Zinth, Millard, & Delander, 2014; Martinez & Klopott, 2005; Sambolt & Blumenthal, 2013). For over a decade, California has been at the forefront of these efforts to better align K-12 learning standards with the expectations of postsecondary institutions.

In 2004, California launched the Early Assessment Program (EAP), developed jointly by the California Department of Education (CDE), the State Board of Education, and the California State University (CSU), to help bridge the gap between preparation for college in high school and the knowledge and skills necessary for success in postsecondary education. A key aspect of the EAP was augmenting the state's 11th grade assessment by providing students (and schools)—on a voluntary basis—information about their level of college and career readiness prior to their senior year of high school. Several years later, California adopted the Common Core State Standards (CCSS) and the CCSS-aligned Smarter Balanced Assessment Consortium assessments to both improve college readiness of California's youth and better align K-12 educational standards with the demands of postsecondary schooling. The adoption of the Smarter Balanced Assessment also extended the earlier EAP system by making the 11th grade assessment of college readiness a feature of universal statewide testing rather than something voluntary.

Three years after the implementation of the Smarter Balanced Assessment, we can now begin to examine California's reform efforts. In this paper, we review student performance on these new assessments and then describe the early college outcomes for the 2014-2015 cohort of California 11th graders, the first cohort of Smarter Balanced Assessment takers. Specifically, we ask: How well are K-12 schools preparing students for the demands of college as measured by performance on the Smarter Balanced Assessments? What are the disparities in college readiness by key student characteristics (in particular, race/ethnicity and socioeconomically disadvantaged)? Are the current signals of college readiness on the Smarter Balanced Assessment predictive of student success in college? To answer these questions, we focus on the state's two large postsecondary systems of higher education: the California State University (CSU) and the California Community College (CCC) systems.[1]

Strengthening the Ties between K-12 and Postsecondary Schooling

Efforts to ensure a more seamless transition for young adults between high school and college, and between high school and the labor market, are motivated largely by the unfortunate reality that many college students do not have the academic skills necessary to meet the demands of college-level coursework. The leading explanation for the lack of college readiness is

[1] Due to data limitations we do not include the outcomes of students enrolled at a University of California campus; however, college readiness and college persistence are considerably less of a concern at UC than at the more broad or open access postsecondary systems in California.

simply that students' K-12 schooling experiences do not adequately prepare them for college. The accumulation of academic skills and preparation in high school is the single best predictor of college outcomes. Not surprisingly, students with higher levels of measured academic skills are more likely to succeed in college than their less able peers (Adelman, 1999; Adelman, 2006; Horn & Kojaku, 2001; Long, Iatarola, & Conger, 2008). These skills are, in large part, the result of prior schooling experiences. Students who attend low quality secondary schools or do not participate in a rigorous course of study may not receive the necessary grounding in core subjects such as English and math to engage successfully in college-level work.[2]

One explanation for inadequate preparation is that expectations and standards at the K-12 level are not consistent with what is required to be ready for college (Hoffman, Vargas, Venezia, & Miller 2007; Kirst & Usdan, 2007). Some argue that state performance standards have been detached from the expectations of postsecondary schooling and the workplace (Hoffman, Vargas, Venezia, & Miller, 2007). Moreover, the accountability regime under No Child Left Behind focused attention in K-12 on meeting basic competency—for example, on high school exit exams or on demonstrating Adequate Yearly Progress—perhaps at the expense of meeting the expectations of postsecondary schooling (Achieve, 2004; Strong American Schools, 2008). As a result, many students are misinformed about the skills necessary to succeed in college (Conley, 2005; Deil-Amen & Rosenbaum, 2002; Reynolds, Stewart, MacDonald, & Sischo, 2006; Rosenbaum, 2001; Venezia, Kirst, & Antonio, 2003).

Reform efforts across the nation suggest that this is dramatically changing. To address the discrepancy between students' K-12 academic preparation and the demands of postsecondary schooling, most states have implemented college readiness standards as part of their implementation of Common Core State Standards,[3] and/or are considering K-16 or Pre-K-20 initiatives (Blume & Zumeta, 2014; Callan, Finney, Kirst, Usdan, & Venezia, 2010). Efforts at improved alignment often involve ensuring that measures of success in K-12 reflect postsecondary readiness requirements. For example, about 20 states fully match high school graduation requirements with admission requirements for the state's public four-year colleges (Jimenez & Sargard, 2018; Zinth, 2007). Additionally, many states adopted standardized assessments aimed at measuring students' readiness for college and career (Achieve 2010; National Governors Association, 2009). The Common Core State Standards movement included both rigorous learning standards and standards-aligned assessments designed by The Partnership for Assessment of Readiness for College and Careers (PARCC) and Smarter Balanced Assessment Consortium (SBAC) to measure both progress in K-12 and readiness for

[2] Many researchers have attempted to address the complexity of estimating the impact of curricular intensity on future success by using a variety of approaches. When researchers control for as many observable characteristics as are available, they find a consistent positive association between curricular intensity and the following: student test scores (Attewell & Domina, 2008), high school graduation (Long, Iatarola & Conger, 2012; Schneider, Swanson & Riegle-Crumb, 1998), college entry (Long et al., 2012), type of college entry (Attewell & Domina, 2008; Long, Conger & Iatarola, 2009), college grades (Klopfenstein & Thomas, 2009), college graduation (Adelman, 2006; Attewell & Domina, 2008), and wages (Altonji, 1995; Rose & Betts, 2004).

[3] To date, 48 states and the District of Columbia have adopted either the Common Core State Standards or similarly rigorous academic content standards (Glancy et al., 2014). For additional information on the standards see www.corestandards.org.

postsecondary pursuits. Finally, numerous states have adopted SAT or ACT as their standard high school assessment (Kurlaender, Martorell, & Reed, 2016).

The Evolution of California's College and Career Readiness Standards

California has long worked to effectively communicate expectations of college readiness through high school assessments. The State is widely recognized as having one of the most innovative programs for assessing high school students' college readiness for postsecondary education through the Early Assessment Program (EAP). The EAP has long served as a model for the nation for how a postsecondary system could partner with K-12 to define college readiness metrics (Achieve, 2013). The EAP provides students (and their schools) with an indication of students' readiness for college-level work by augmenting the state's existing 11th grade high school test in English and mathematics with a voluntary set of 15 additional questions and a short essay. In 2008, legislation extended the EAP for use by California community colleges. With the adoption of Common Core State Standards (CCSS) and the aligned Smarter Balanced Assessment, the EAP was further enhanced. The college readiness signals provided to schools and students are now fully aligned with K-12 curricula based on CCSS. Furthermore, the once voluntary EAP is now universally administered as part of the regular Smarter Balanced Assessment, affirming the importance of providing all students with a signal about the expectations of the state's postsecondary systems.

The college readiness signals have several purposes. First, they provide an indication of students' suitability and preparation for college level work. Second, they are intended to motivate students (and schools) to take steps in 12th grade to better prepare themselves for college-level work. Finally, the signals directly affect students' course placement in the CSU and CCC systems. Results on these assessments serve as one way to demonstrate proficiency as required for placement in non-developmental, credit-bearing college courses at CSU and CCC. Specifically, through 2016-2017, students identified as "College Ready" on the EAP in math or ELA, or deemed proficient through other measures,[4] were exempt from having to take the remedial placement test in that subject and could enroll in college-level courses at CSUs. Students classified as "Conditionally Ready" in a subject could also enroll in college-level courses if they earn a grade of "C-" or higher in an approved course in 12th grade.[5] Beginning with the fall 2018 entering freshmen cohort, students unable to demonstrate college-level proficiency before entering CSU will no longer be required to enroll in non-credit bearing remedial coursework, but instead improve their proficiency while participating in stretch or support courses that will count towards degree completion. At CCC, these 11th grade assessments are one key measure—in conjunction with GPA and other internal college assessments—of demonstrating college readiness upon entry and avoiding developmental, non-credit bearing coursework.

The college-ready signals from the EAP are conveyed to students through a joint letter from CDE, CCC, and CSU informing them of their college readiness status. The college-ready signal

[4] In addition to the EAP, students may demonstrate proficiency through performance on the SAT, ACT, or AP exam scores.

[5] Approved courses are listed at http://www.cde.ca.gov/ta/tg/sa/eap15adminnotifyltr.asp.

is also included on the California Assessment of Student Performance and Progress (CAASPP) Student Score Report sent to parents of assessment takers to describe individual student performance on the Smarter Balanced Assessment (and other standardized assessments administered in California). Further, high school counselors, teachers, and administrators are encouraged to reiterate the importance of doing well on the Smarter Balanced Assessment and the significance of the college readiness signals. Such information has proven to have a modest positive effect on college readiness at CSU (Howell et al., 2010; Kurlaender, Howell, Grodsky, & Jackson, 2014).

Students' performance on the Smarter Balanced Assessment also play a factor in California's new accountability system. When aggregated, Smarter Balanced Assessment scale scores can describe school- or district-level average performance, changes in average performance from one year to the next, and gaps in achievement among different groups of students. In fall 2017, the California Department of Education launched the California School Dashboard as a tool for accountability and continuous improvement. The California School Dashboard meets the federal accountability requirements of the Every Student Succeeds Act (2015) and aligns with California's Local Control Funding Formula and Local Control Accountability Plans (CDE, 2017). The California School Dashboard incorporates numerous indicators: suspension rates, high school graduation rates, student performance on the Smarter Balanced Assessment for grades 3rd through 8th, college/career preparedness, progress of English learners (ELs) towards English proficiency, and in future years will include chronic absence rates. For high schools, the 11th Smarter Balanced Assessment achievement levels are included as a component of the college and career readiness indicator. School-level performance on the indicators is measured through a combination of current performance and change over time, each with five levels. The result is a five-by-five grid of 25 performance levels, where schools with both poor current performance and a lack of growth over time may be identified as needing improvement and schools where current performance is high and has remained high or grown over time are considered to have acceptable performance.

Importantly, the College/Career Indicator (CCI) included in the California School Dashboard is the primary indicator of school quality in college preparation for high schools. The CCI is first calculated at the student-level, where students are labeled as *Prepared*, *Approaching Prepared*, or *Not Prepared* for college and career based on their 11th grade ELA and Math Smarter Balanced Assessment scores, Career Technical Education pathway completion, Advanced Placement (AP) and International Baccalaureate (IB) exams, dual enrollment, and "A-G" course completion. A school-level indicator is then determined by considering the proportion of students in the graduating cohort that earned a *Prepared* status. For example, schools with less than 10 percent of their graduating cohort earning *Prepared* receive a *Very Low* school-level indicator and schools with greater than 70 percent of the graduating cohort receiving *Prepared* are considered *Very High* on the school-level indicator.[6]

[6] For more detailed information on the College/Career Indicator (CCI) see the description and Technical Guide available from the California Department of Education: https://www.cde.ca.gov/ta/ac/cm/cci.asp.

Given the state's explicit focus on improving students' preparation for college and careers through rigorous state standards, and the new Smarter Balanced Assessment to gauge those standards, it is important to ask how prepared our students are for college and how they are faring in their transitions to college. In this paper, we do this in two ways. First, we examine the indicator of college readiness as provided through the Smarter Balanced Assessment. Second, we track the early postsecondary outcomes of the first cohort of California 11th graders, 2014-15 Smarter Balanced Assessment takers, that enroll in college to determine the extent to which California's K-12 system is producing graduates who are in fact "college ready." We investigate college entry, college readiness, and early persistence and performance outcomes at the state's two largest postsecondary systems of higher education: the California Community College (CCC) and the California State University (CSU) systems. It is important to note that California, at present, does not have a formal state-supported infrastructure to track K-12 students into and through higher education and/or the labor market. Thus, K-12 is significantly handicapped in tracking the postsecondary outcomes they are preparing students for and postsecondary systems are limited (largely through application information) in the inputs they have about their students. In this paper, we leverage a unique partnership (funded by the Institute of Education Sciences of the U.S. Department of Education) between researchers at University of California Davis, the California Department of Education, the California Community College Chancellor's Office, and the California State University Chancellor's Office to track students' postsecondary outcomes in light of the State's college and career readiness focused reforms and the adoption of the Common Core State Standards.

Data and Methods

To examine college readiness since the adoption of the CCSS and the implementation of the CAASPP and Smarter Balanced Assessment, we use data from multiple sources, including the California Department of Education, the California Community Colleges Chancellor's Office, and the California State University Chancellor's Office. The data are provided under individual agreements with each segment for the purposes of understanding students' educational pathways through K-12 and into postsecondary schooling, in a general effort to strengthen alignment between K-12 postsecondary systems in California.[7] The data provided by CDE includes student-level scale scores and achievement levels on the spring 2015 Smarter Balanced Assessment administration for all 11th graders in the state, as well as individual-level demographic data (e.g., gender, race/ethnicity, socioeconomic status, English learner status, high school of attendance). Data provided by CCC and CSU includes application, enrollment, and performance information. For example, the CCC data includes campus of attendance, enrollment in basic skills (remedial/developmental) courses, credits earned, and college GPA by term. The CSU data includes the information on the campuses to which students apply as well as campus of official enrollment, high school GPA, proficiency/remediation status, and college GPA by term.

[7] See Phillips, Reber, & Rothstein, this volume, for an important discussion of the need for a more integrated and accessible student longitudinal data system.

Sample

Our primary analytic sample includes the census of California 11th grade students who took the Smarter Balanced Assessment in 2014-2015 and who subsequently enrolled during the first fall after high school graduation at one of the 114 California Community Colleges,[8] or applied and enrolled as first time freshmen, any time between summer 2016 and summer 2017, at one of the 23 campuses of the CSU system. Because the State of California does not have a unique student identifier that follows students from K-12 systems through their postsecondary education, we match individual-level data from the various data sources using students' last name, first name, date of birth, gender, and high school of origin. We begin the match process using all available information (i.e., full names, including punctuation and spacing, and the other three match variables). To improve the match rate, we then use several matching steps where we simplify or shorten student names (i.e., stripped of punctuation and spacing, or only the first three letters of the last name) or use fewer match variables (i.e., high school of origin was dropped since the high school of record for a student's 11th grade assessment may differ than the high school of record at the time of college application). The multiple step process resulted in a successful match of about 82 percent of CCC enrollees from California public high schools and 82 percent of CSU applicants from California public high schools.

Measures

In our analysis, we focus on several college outcomes, which vary slightly across CCC and CSU due to differences in available data elements. For CCC, outcomes include enrollment, performance, and persistence measures. Recognizing that many students who attend community college may attend only part-time, we measure enrollment in any units, as well as enrollment in at least 12 units, which is considered full-time enrollment. To measure college readiness at CCC we include enrollment in basic skills (developmental coursework). This is an important, albeit imperfect, measure of college readiness at CCC because California community colleges may differ in the assessments for determining need for developmental coursework, their placement procedures, enforcement of those procedures, and availability of basic skills coursework. Thus, for example, there may be students not enrolled in basic skills that either were not assessed, assessed differently, not required to follow suggested placement based on those assessments, or simply did not enroll in the suggested basic skills courses by choice or by availability. For performance at the CCC we report first term grade point average. We measure persistence at the CCC as students enrolling in any number of units in the term immediately following the first term of enrollment. For CSU outcomes we measure: application to at least one CSU campus; enrollment; exemption from remedial coursework in math and English respectively; first year cumulative grade point average (GPA); and persistence to year two.

The primary predictor of college outcomes that we investigate is achievement on the 11th grade Smarter Balanced Assessment. As described previously, California first implemented the

[8] This does not include students who may have taken community college courses as high school students, either as part of a dual enrollment program or on their own accord.

Smarter Balanced Assessment in Spring 2015.[9] The annual Smarter Balanced summative assessment, comprised of a computer-adaptive test and a performance task based on the CCSS for ELA and mathematics, is administered via computer to all students statewide in 3rd through 8th grade and 11th grade, with some exceptions.[10] Smarter Balanced Assessment scale scores fall into four achievement levels, *Standard Not Met*, *Standard Nearly Met*, *Standard Met*, and *Standard Exceeded*, the purpose of which is to describe students' progress towards mastery of the CCSS.[11] Moreover, the achievement level on the 11th grade math and English Smarter Balanced Assessment determines the college readiness signals. For each subject, students earning the achievement level of *Standard Exceeded* are identified as "College Ready" and students earning the achievement level of *Standard Met* are "Conditionally Ready" for college, which also directs students (and schools) to a set of 12th grade courses students can take to satisfy the conditionally ready signal. Finally, earning a *Standard Nearly Met* or *Standard Not Met* comes with a signal that students are not yet ready for college level work.

For our analysis of the first cohort of 11th grade Smarter Balanced Assessment test-takers, we collapse the achievement levels from the Smarter Balanced Assessment score to create a dichotomous PASS variable, where PASS includes achievement levels *Standard Met* and *Standard Exceeded* and NOT PASS includes *Standard Not Met* and *Standard Nearly Met* for ELA and math, respectively. With this dichotomous variable, we then have two groups: 1) students who are ready for college or able to become ready by taking specific courses and/or assessments prior to enrollment (PASS); and 2) students who are not considered college ready and have few options to demonstrate college readiness in high school (NOT PASS). Our rationale for collapsing the achievement levels to is twofold: first, the college readiness signals that are attached to those achievement levels; and second, the proficiency determination from CSU and CCC to exempt students from any additional remedial coursework. We then further collapse across both subject areas to make four mutually exclusive categories: pass both; pass ELA and not math; pass math and not ELA; and pass neither.

We include several other measures in our analysis that capture student characteristics and high school and college campus enrollment. Key individual characteristics include: race/ethnicity (five mutually exclusive categories: Asian/Pacific Islander, Black/African American, Latino/Hispanic, White, and Other); socioeconomically disadvantaged in high school (yes/no);[12]

[9] The Smarter Balanced Assessment includes three major components designed to improve teaching and learning: 1) an online library of formative assessments for use by teachers; 2) interim assessments for use by schools or districts to monitor student progress towards meeting standards; 3) a summative assessment administered annually to determine students' mastery of college and career readiness standards in ELA and math. See: https://www.cde.ca.gov/ta/tg/sa/.

[10] Students with disabilities who participate in the alternate assessments and English learners who are in their first 12 months of attending a school in the United States are not required to participate.

[11] The Smarter Balanced Assessment scale scores fall along a continuous vertical scale from approximately 2000 to 3000. The scale scores increase across grade levels and can be used to illustrate students' level of achievement and growth over time. The scale scores correspond to four achievement levels. For a table of scale scores and achievement levels, see: https://caaspp.cde.ca.gov/sb2017/ScaleScoreRanges.

[12] Students who meet the definition of socioeconomically disadvantaged (SED) either qualify for the free or reduced price school lunch program or do not have a parent who graduated from high school.

Limited English Proficient (yes/no); and high school GPA (for the CSU analysis). For early college outcomes of enrolled students, we adjust for campus differences (CSU and CCC) to account for the host of other experiences students have depending on the CSU or CCC campus they choose to enroll in, and which may also influence our outcomes of interest. Finally, where indicated, we include the high school of enrollment in 11th grade, given important differences in college outcomes that may be associated with different high school experiences (e.g. school culture, teacher quality, peers), and which are not captured by student test scores or by individual demographic characteristics.

Data Analysis

We first present descriptive statistics on the Smarter Balanced Assessment overall and for different subgroups. We look at college entry, readiness, persistence, and success outcomes at CSU and CCC for different Smarter Balanced Assessment achievement levels. Next, we present predicted values (based on a set of regressions) to investigate the relationship between Smarter Balanced Assessment achievement levels and college outcomes. We also include predicted values for different key subgroups (e.g., race/ethnicity, socioeconomically disadvantaged, and English learner status) in the Appendix. It is important to note that these analyses are entirely correlational, highlighting the association between these 11th grade assessments and early college outcomes, and should not be interpreted as causal.

Findings

College Readiness

We begin by describing results on the 11th grade Smarter Balanced Assessment. Table 1 details Smarter Balanced Assessment achievement levels for all students and by three key student characteristics: English Learner (EL), socioeconomically disadvantaged (SED), and the four dominant racial/ethnic categories (Asian/Pacific Islander; Black/African American; Latino, and White). Overall, 30 percent of California 11th graders are deemed ready for college level work in both mathematics and English Language Arts (ELA), another nearly 30 percent meet standards in ELA but not in math, only 2 percent meet standards in math but not ELA, and nearly 40 percent of 11th graders do not meet standards in either math or ELA. Among English Learners and SED students, 77 percent and 49 percent, respectively, do not meet either the math or ELA standards in 11th grade.

Table 1. Achievement Levels on the Smarter Balanced Assessment[13]

	All	English Learners		Socioeconomically Disadvantaged		Race/Ethnicity			
		No	Yes	No	Yes	Asian/ PI	Black	Latino	White
Neither Standard Met	.39	.33	.77	.25	.49	.19	.56	.49	.27
Standard Met, Math Only	.02	.02	.03	.02	.02	.04	.01	.01	.02
Standard Met, ELA Only	.29	.32	.13	.28	.30	.20	.29	.32	.30
Standard Met, Both	.30	.34	.06	.44	.19	.57	.14	.18	.41

There are important race gaps in achievement levels, with significantly higher rates of ELA and math college readiness among Asian/Pacific Islander and White students, when compared to African American and Latino students; 11th grade achievement levels for the four dominant racial/ethnic groups are presented in Figure 1. (Note: Given that only 2 percent of California 11th graders meet the standard in math but not in ELA, we do not highlight this group in the figures and presentation of findings.) Additionally, there are notable gaps between socioeconomically disadvantaged students and those from less disadvantaged backgrounds and between English learners and non-English learners. Only 19 percent of SED students met standards in both ELA and math, compared to 44 percent of non-SED students; just over 6 percent of English learners met both ELA and math standards, whereas nearly 34 percent of English fluent students met standards in both subject areas.

[13] Any differences between our summary statistics of achievement levels and those calculated and reported by the California Department of Education are attributed to sample differences. Our analytical sample includes students from traditional public high schools (School Ownership Codes of 65, 66, and 67) and with a unique combination of last name, first name, date of birth, gender, and high school of 11th grade assessment.

Figure 1. 11th Grade Smarter Balanced Assessment Achievement Levels by Race/Ethnicity

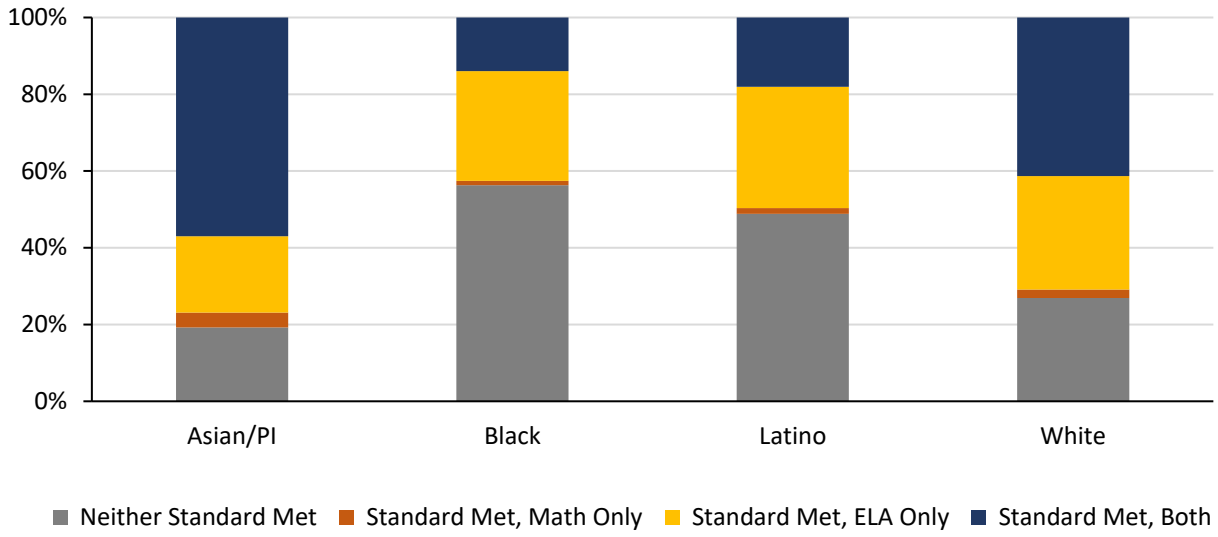
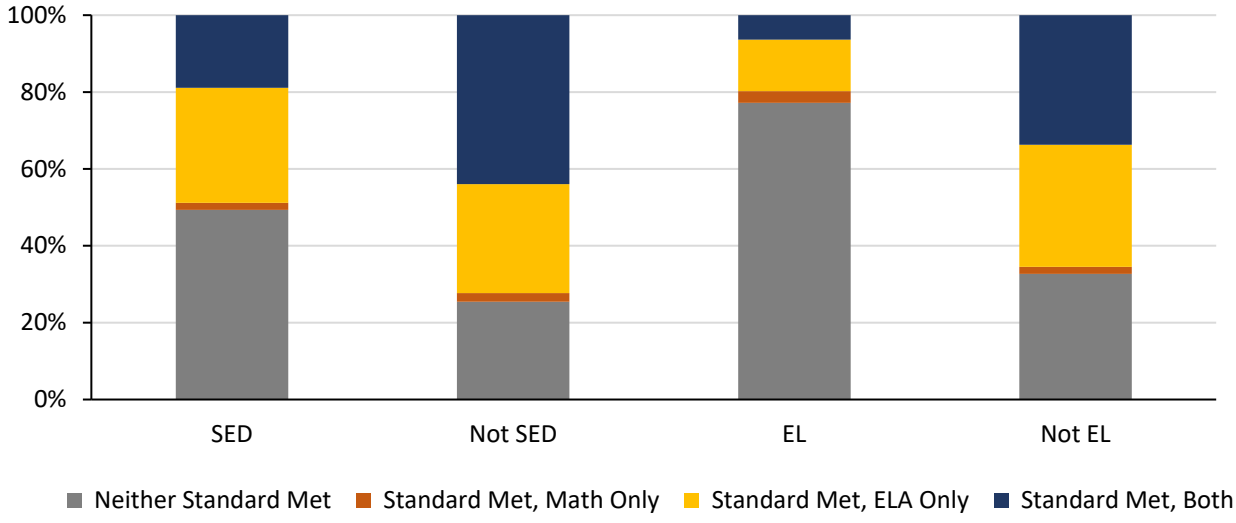


Figure 2. 11th Grade Smarter Balanced Assessment Achievement Levels by Socioeconomically Disadvantaged and English Learner Status



California's overall performance on the Smarter Balanced assessments is similar to the student performance of 11th graders in other states that are a part of the Smarter Balanced Assessment Consortium. In 2015, 56 percent of students in California met the 11th grade standards in ELA, compared to only 29 percent of students in math.[14] In the same year, 57 percent and 37 percent of students in Vermont[15] met the standards in ELA and math respectively; while

[14] https://caaspp.cde.ca.gov/sb2015
[15] http://education.vermont.gov/data-and-reporting/educational-performance/english-language-arts-and-math

in Oregon[16] 67 percent of students met ELA standards, compared to 30.5 percent who met math standards. And, in Hawaii, student scores mirror those in California, with 53 percent of students meeting ELA standards and 30 percent meeting standards in math.[17] Thus, student performance in California generally aligns with that of other Smarter Balanced Assessment states.

We provide descriptive statistics for enrollment (and application for the CSUs) in the CCC or CSU system for the census of 11th graders in the first Smarter Balanced cohort. For those who enroll, we also look at a rich set of early outcomes in the CCC and CSU including college readiness at entry, persistence, and performance. Table 2 and Table 3 include the descriptive statistics for CCC and CSU respectively. It is important to note that we can only evaluate college outcomes of CCC and CSU students (i.e., students that applied and subsequently enrolled at one of these state public institutions). As such, this is a select sample; that is, we cannot evaluate the full set of postsecondary outcomes of California students that may be enrolled at other institutions, whether that be the result of their 11th grade test scores, or some other factor (e.g., better preparation, more financial resources, motivation, etc.).

Early College Outcomes for California Community College Enrollees

In Table 2, we detail the outcomes of California's 11th graders who enroll in community college post-high school and present these outcomes by race/ethnicity, socioeconomically disadvantaged status, and English Learner status. Remarkably, over one-third of the census of 11th graders in that first Smarter Balanced cohort enroll in a community college; however, slightly less than half of these students (48 percent of enrolled students or 16 percent of all California public high school students) enroll in the minimum 12 units to be considered full-time students. High rates of part-time enrollment suggest that the majority of California Community College students are working full or part-time while simultaneously working towards their postsecondary degrees, or are supplementing their coursework at a four-year college with community college courses. Rates of enrollment are quite similar across racial/ethnic groups, with Latino enrollment the highest at 36 percent. Among CCC enrollees, a little over a third enroll in what are considered basic skills (or developmental) courses, with larger disparities by race/ethnicity; over 40 percent of Black or Latino students enroll in Basic Skills courses compared to only 23 percent of White and 30 percent of Asian students, respectively. The average first term GPA of community college students that enter post-high school is 2.3, with key differences by race/ethnicity, EL, and SED status. In particular, Black, Latino, English Learners, and socioeconomically disadvantaged students have lower persistence rates and a lower first term GPA than their respective counterparts. Finally, 86 percent of CCC students persist for a second term; persistence rates range from 80 percent to 90 percent across subgroups.

[16] https://www.oregon.gov/ode/educator-resources/assessment

[17] http://www.hawaiipublicschools.org/TeachingAndLearning/Testing/StateAssessment/Pages/home.aspx

Table 2. Descriptive Statistics of California Community College Analytic Sample

	Enrolled in any units	Enrolled in 6 units	Enrolled in 12 units	Enrolled in Basic Skills	First Term GPA	Persist to Next Term (any units)
All	.341	.303	.162	.361	2.298	.855
Race/Ethnicity						
Asian/PI	.303	.277	.168	.306	2.623	.899
Black/African Am	.325	.273	.127	.419	1.939	.795
Latino/Hispanic	.36	.317	.162	.433	2.137	.845
White	.329	.298	.169	.231	2.54	.869
English Learners						
No	.342	.305	.165	.335	2.325	.858
Yes	.331	.28	.133	.629	1.996	.814
Socioeconomically Disadvantaged						
No	.337	.304	.172	.285	2.485	.875
Yes	.345	.302	.154	.423	2.14	.838

Early College Outcomes for California State University Enrollees

In Table 3, we present descriptive statistics on the outcomes of all California 11th grade students who apply and subsequently enroll the California State University system. Application rates are highest among Asian/Pacific Islander students at 52 percent relative to all other racial/ethnic groups. Limited English proficient students apply at significantly lower rates (20 percent) as compared to non-EL students (39 percent), and students from socioeconomically disadvantaged backgrounds also have lower rates relative to non-SED students (a difference of about 6 percentage points). Patterns of enrollment reveal similar disparities by race/ethnicity, EL, and SED as in the application patterns.

Among CSU enrollees, about 70 percent of students are deemed college ready in math and 77 percent are college ready in English when they begin CSU. This measure of college readiness is inclusive of the different indicators CSU uses to determine whether a student is ready for college-level work without the need for additional developmental supports and is based on a student's performance on any of the following: 11th grade Smarter Balanced assessment score; SAT/ACT score threshold; AP exam score; performance in specific high school coursework such as International Baccalaureate or CSU's Expository Reading and Writing course;[18] or a passing score on CSU's placement exams if none of the above are met.[19]

[18] CSU developed an Expository Reading and Writing Course (ERWC), https://www.calstate.edu/eap/englishcourse/

[19] In 2017, CSU decided to end their practice of additional placement exams for students that do not meet proficiency through one of the other channels. In addition, CSU also ended any formal non-credit (remedial) coursework for students not demonstrating college readiness at entry, making all courses credit-bearing, with developmental need addressed through stretch courses or other structural supports. See: http://www.calstate.edu/eo/EO-1110.html.

Rates of college readiness among CSU students differ considerably by race/ethnicity: White and Asian/PI students enter CSU with a math college readiness rate over 80 percent, while Black and Latino students enter CSU with a math college readiness rate of 49 and 60 percent, respectively. We note similar disparities in English college readiness rates, albeit not as stark. Both EL and SED students have lower rates of math and English readiness when compared to their non-EL and SED counterparts. In terms of early college outcomes, overall, CSU students have an average first year GPA of nearly 3.0, which is higher for Asian/PI and White students than for Black and Latino students. Finally, we note relatively high second year persistence rates among CSU enrollees at 84 percent, with some differences by race/ethnicity, in particular, a substantially lower second year persistence rate for Black students at 78 percent.

Table 3. Descriptive Statistics of California State University Analytic Sample

	Applied to CSU	Enrolled in CSU	Proficient		First Year GPA	Persist To 2nd Year
			Math	English		
All	.364	.128	.705	.768	2.96	.838
Race/Ethnicity						
Asian/PI	.524	.171	.830	.812	3.07	.888
Black/African American	.342	.109	.490	.634	2.79	.780
Latino/Hispanic	.337	.122	.603	.690	2.86	.812
White	.339	.122	.843	.901	3.10	.863
English Learners						
No	.391	.139	.721	.792	2.97	.840
Yes	.196	.060	.479	.420	2.82	.804
Socioeconomically Disadvantaged						
No	.400	.139	.816	.870	3.06	.869
Yes	.336	.119	.603	.674	2.87	.810

Predicting Early College Outcomes

To examine how well the 11th grade assessments predict early college outcomes, we begin with cross tabulations between the four achievement levels and our outcomes at CCC and CSU, respectively. Tables 4 and 5 provide means for each outcome by the 11th grade Smarter Balanced achievement levels. From these cross-tabulations we note several important findings. First, students who meet both ELA and math achievement levels are less likely to enroll in community college; this is likely because these students may be enrolling at CSU or at one of the campuses of the University of California (or a private or out of state college). Second, students who meet performance standards are more likely to apply and enroll at CSU than those who do not. Third, students who meet achievement levels in math and ELA are less likely to enroll in a developmental basic skills course if enrolled at community college, and are more likely to be deemed college ready at CSU (though this is because college readiness at CSU is partially determined by students' achievement levels on the 11th grade Smarter Balanced assessment).

Finally, students who meet performance standards are more likely to persist and to have a higher GPA than those who do not.

Table 4. Descriptive Statistics by 11th grade Assessment Achievement Levels for CCC

	Enrolled in any units	Enrolled in 6 units	Enrolled in 12 units	Enrolled in Basic Skills	First Term GPA	Persist to Next Term (any units)
All	.341	.303	.162	.361	2.30	.855
SBAC Standard Levels						
Neither Standard Met	.366	.313	.147	.524	1.96	.813
Standard Met, Math only	.36	.335	.204	.262	2.61	.898
Standard Met, ELA only	.409	.371	.201	.317	2.36	.874
Standard Met, Both	.237	.218	.14	.097	2.83	.904

Table 5. Descriptive Statistics by 11th grade Assessment Achievement Levels for CSU

	Applied to CSU	Enrolled in CSU	Proficient		First Year GPA	Persist To 2nd Year
			Math	English		
All	.364	.128	.705	.768	2.96	.838
SBAC Standard Levels						
Neither Standard Met	.172	.051	.329	.246	2.70	.758
Standard Met, Math Only	.469	.173	.897	.507	2.89	.841
Standard Met, ELA Only	.387	.152	.513	.789	2.88	.809
Standard Met, Both	.601	.207	.955	.936	3.10	.885

Next we plot the predicted values of select postsecondary outcomes at CSU and CCC based on 11th grade achievement levels and other student characteristics.[20] For outcomes conditional on enrollment, we adjust for CCC/CSU campus differences and for enrolled units (CCC) and high school GPA (CSU). These variables are not included in the application and enrollment models due to data limitations. Predicted probabilities by key subgroups (race/ethnicity, socioeconomically disadvantaged, and English Learner status) are available in the Appendix.

Figure 3 illustrates CCC and CSU entry. Students who meet both ELA and math achievement levels are much less likely to enroll at community college than those who do not, a difference of about 15 percentage points, and community college enrollment—regardless of achievement level—is heavily part-time. Again, it is highly likely that enrollment rates are lower for higher achieving students because these students are more likely to enroll at the state's four-year institutions—CSU and the more selective University of California campuses. For CSU, over

[20] Full set of regressions are available from the authors.

60 percent of students that meet both the ELA and math standards apply, compared to only 17 percent of 11th grade students that do not meet either achievement level.

Figure 3. Application and Enrollment for CSU and CCC

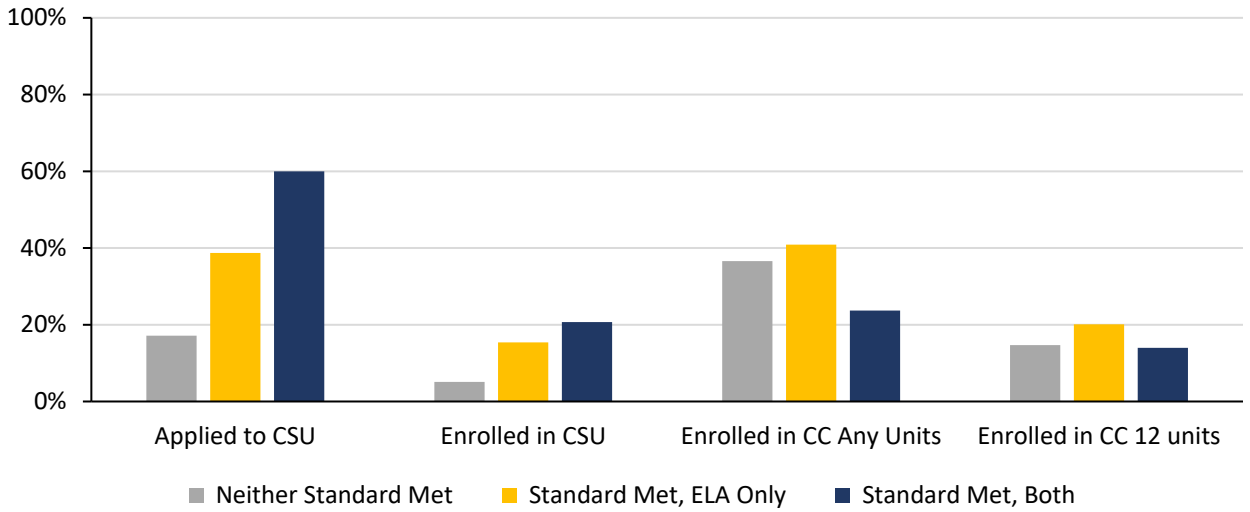
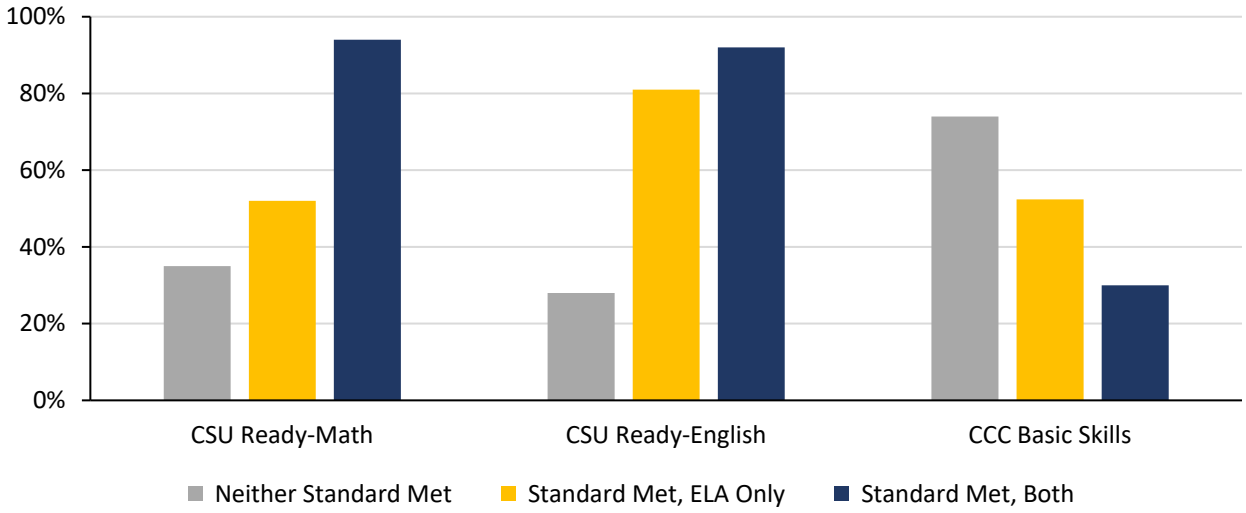


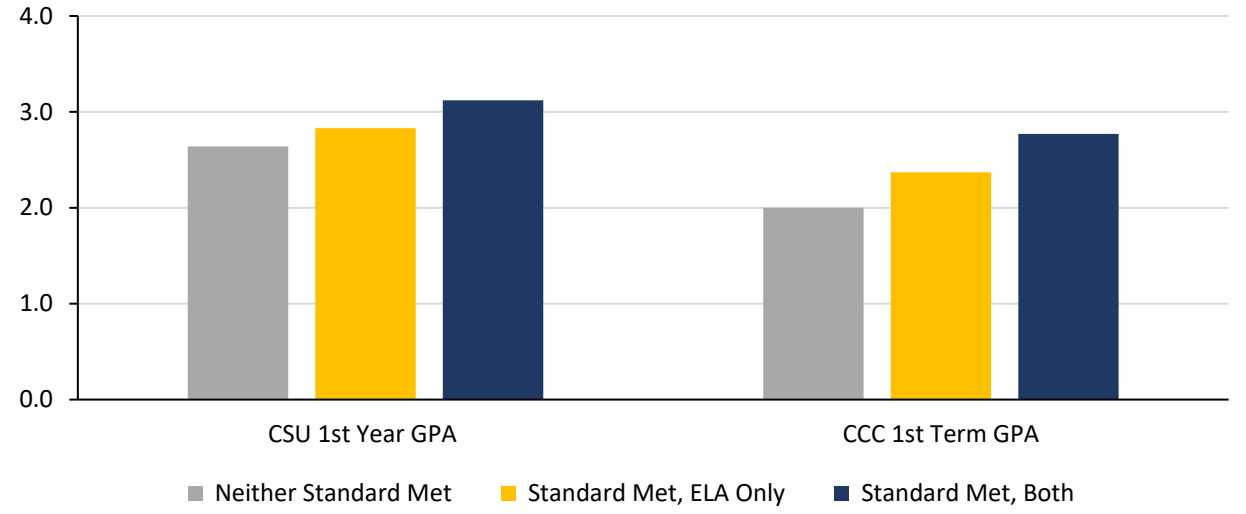
Figure 4 illustrates college readiness as determined by CCC and CSU, respectively. Community college students who do not meet achievement levels in 11th grade are much more likely to enroll in basic skills (developmental) courses than those who do not. It is worth noting that these basic skills course-taking rates are likely underreporting students' identified need (on the part of the colleges) for developmental coursework due to differences across campuses in assessment, placement, and enforcement of basic skills enrollment. CSU students that meet achievement level standards enter CSU deemed "college ready," thus, it is not surprising that rates for college readiness are high among those that met standards in both math and ELA. Students that do not meet performance standards in 11th grade need to demonstrate college readiness in other ways when entering CSU, which about 33 percent and 25 percent in math and English respectively need to do upon entry.

Figure 4. College Readiness for CSU and CCC



We note that achievement levels do predict performance in college, as measured by GPA (Figure 5). At both CCC and CSU, students that have met one or both achievement levels in 11th grade have higher overall grades their first year of college. In other work we test the predictive power of the 11th grade Smarter Balanced Assessment on first year grades at CSU and find that the 11th grade Smarter Balanced Assessment predicts early college outcomes—GPA and persistence to year two—about as well as the SAT (Kurlaender, Kramer, & Jackson, 2018).

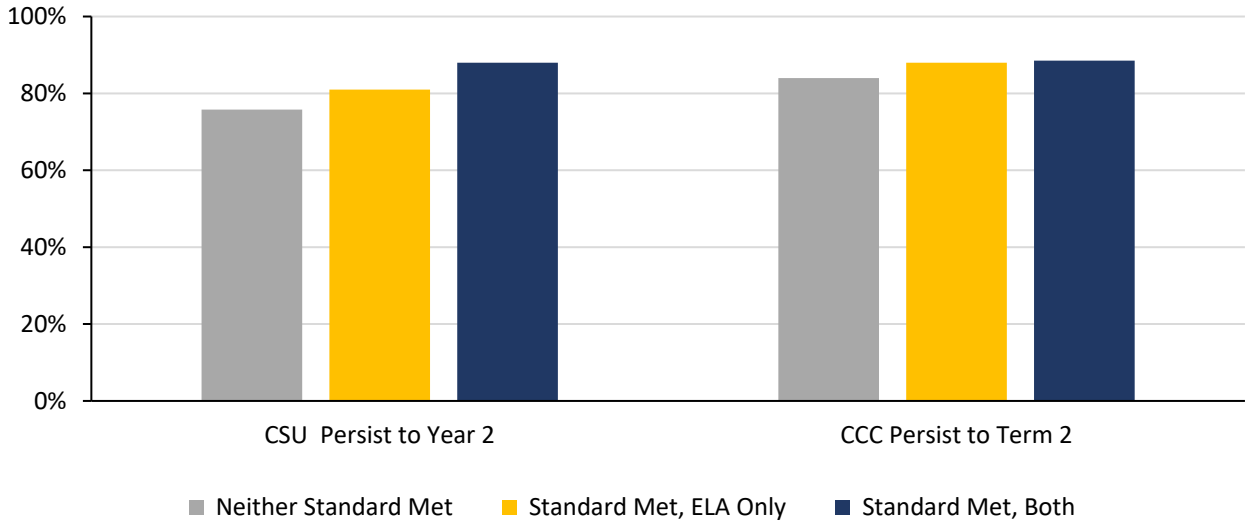
Figure 5. College GPA for CSU and CCC



Finally, we do not observe large differences in persistence to the second term among community college students or persistence to year two among CSU students as a function of 11th

grade achievement levels; persistence rates to year two at CSU are about 76-88 percent overall and to the next term at community college about 84-89 percent (Figure 6).

Figure 6. College Persistence for CSU and CCC



Differences by Demographic Groups

How do these relationships differ for different racial/ethnic and SED subgroups? Tables A1-A24 in the Appendix present the same predicted probabilities by each racial/ethnic subgroup, and by SED and EL categories for CSU and CCC outcomes, respectively. We observe that although there are important differences in the outcomes we measure (college application, enrollment, performance, and persistence) by race/ethnicity, the overall patterns in the associations between these outcomes and 11th grade performance levels are generally similar across groups. There are a few notable exceptions. For example, Asian/PI, Black, and Latino students are much more likely than White students to apply to CSU if they reach Smarter Balanced standards in both ELA and math, or just ELA (a difference of over 10 percentage points). Further, differences in CCC enrollment by achievement levels are considerably smaller for Latino students, relative to other racial/ethnic groups. In addition, 11th grade college readiness assessment indicators are not as predictive of first year GPA at CSU for Latino, and especially Black, students than they are for White or Asian students (though patterns for 2nd year persistence are similar by race/ethnicity). Achievement level differences are more predictive of avoiding basic skills courses in community college for Asian/PI, Latino and African American students, than for White students. This is important given prior work demonstrating that underrepresented minority students are more likely to be placed in developmental courses in California Community Colleges, conditional on prior test scores (Kurlaender & Larsen, 2013).

Patterns by SED reveal that 11th grade performance levels are more strongly associated with CSU application and enrollment for socioeconomically disadvantaged students than their

more advantaged peers. Importantly, we note that high school fixed effects matter more for SED students than non-SED students for nearly all of these outcomes, suggesting that high school quality differences may matter more for students from socioeconomically disadvantaged backgrounds than their more advantaged peers.

Conclusion

California adopted the Common Core State Standards (CCSS) and the aligned Smarter Balanced Assessment with the explicit purpose of improving college and career readiness. Our paper provides an important first look at how students under these new standards are faring in their postsecondary trajectories. We learn overall assessment levels of college preparation are low; that is, most students in 11th grade are not meeting college readiness standards. College readiness standards are also lower for particular groups: socioeconomically disadvantaged students, English Learners, and for certain racial/ethnic groups (in particular, Black and Latino students). By linking K-12 data to the state's two largest postsecondary systems, we find that 11th grade assessments of college readiness are important predictors of college entry and early college success.

Today, a college degree is more important than ever before for ensuring economic prosperity for individuals and for society at large. Given the importance of a college degree, and the high rate of college departure, California's policymakers and educators are working to strengthen the path to college. The adoption of the Common Core State Standards and the CAASPP offer the promise of a rigorous set of standards that are more closely aligned to the expectations of postsecondary environments, namely college, but also the workplace, which has been grossly understudied. The State's adoption of the Smarter Balanced Assessments are intended to test these more rigorous standards, and to further align K-12 and higher education by strengthening college readiness indicators. In this paper we begin to evaluate these efforts by describing how students in the first cohort to experience these reforms fare once they enter college.

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Appendix

Predicted Probabilities of CSU and CCC Outcomes by Student Subgroups

The tables in this Appendix present the predicted probabilities of our outcomes by key student demographic groups: race/ethnicity, English learners (EL) and socioeconomically disadvantaged (SED). A few notes regarding the regressions upon which these tables are based. For tables that present enrollment in a California Community College or application and enrollment at California State University, the regression models used to generate the predicted probabilities include no controls except for high school fixed effects where indicated. For tables of other outcomes in California Community Colleges, all models include campus fixed effects to control for the differences across CCC campuses, total units attempted in the first fall term, and high school fixed effects where indicated. For tables of other outcomes at the California State University system, the models include campus fixed effects to control for the differences across CSU campuses, a control for the mean high school GPA of the specific subgroup, and high school fixed effects where indicated.

We include high school fixed effects to account for the important variation in high schools—above and beyond what can be captured in student test scores, and much of which we can't directly measure (e.g. school culture, teacher quality, peers, etc.), but which likely contribute to differences in college outcomes. However, a caution in comparing the differences in R-squared for models that do and do not include high school fixed effects. Adding high school fixed effects adds nearly 1,500 variables to our regressions in the form of high school dummy variables. We would expect the addition of variables to greatly decrease the unexplained variance in the model. However, it is likely that this decrease in variance is due to an increased ability to curve fit as opposed to adding actual explanatory power to our models. A curve fitting interpretation is supported by the lack of corresponding decrease in the root mean squared error in the regressions (results from these additional goodness of fit measures are available on request).

Predicted Probabilities of Enrollment and Early College Outcomes in California Community Colleges

Table A1. Predicted Probabilities for Enrollment in Any Units at a CCC, by Race/Ethnicity

	All Students		Asian		Black		Hispanic		White	
Neither Standard Met	0.366	0.379	0.452	0.454	0.342	0.353	0.36	0.369	0.37	0.378
	(0.364,0.368)	(0.377, 0.382)	(0.443, 0.46)	(0.445, 0.462)	(0.334, 0.349)	(0.345, 0.361)	(0.357, 0.363)	(0.366, 0.372)	(0.364, 0.375)	(0.373, 0.384)
Standard Met, ELA Only	0.409	0.406	0.446	0.439	0.353	0.344	0.409	0.405	0.408	0.407
	(0.406, 0.412)	(0.404, 0.409)	(0.438, 0.455)	(0.430, 0.447)	(0.342, 0.365)	(0.332, 0.356)	(0.405, 0.412)	(0.401, 0.409)	(0.403, 0.413)	(0.401, 0.412)
Standard Met, Both	0.237	0.221	0.189	0.191	0.194	0.165	0.275	0.256	0.242	0.238
	(0.234, 0.239)	(0.218, 0.224)	(0.184, 0.194)	(0.185, 0.196)	(0.177, 0.211)	(0.147, 0.183)	(0.270, 0.280)	(0.251, 0.261)	(0.238,0.247)	(0.233, 0.242)
High School FE		Y		Y		Y		Y		Y
R-squared	0.021	0.06	0.076	0.127	0.012	0.092	0.009	0.059	0.024	0.072
N	379,281	379,281	52,799	52,799	22,395	22,395	192,994	192,994	98,531	98,531

Confidence Intervals in parentheses.

Table A2. Predicted Probabilities for Enrollment in Any Units at a CCC, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.345	0.355	0.171	0.179	0.32	0.327	0.154	0.164
	(0.342, 0.348)	(0.352, 0.358)	(0.168, 0.175)	(0.175, 0.182)	(0.315, 0.213)	(0.321, 0.332)	(0.152, 0.156)	(0.162, 0.166)
Standard Met, ELA Only	0.392	0.39	0.219	0.217	0.423	0.4	0.201	0.201
	(0.388, 0.396)	(0.386, 0.394)	(0.215, 0.222)	(0.214, 0.22)	(0.403, 0.443)	(0.379, 0.42)	(0.199, 0.204)	(0.199, 0.203)
Standard Met, Both	0.261	0.24	0.138	0.134	0.337	0.26	0.14	0.13
	(0.257, 0.266)	(0.235, 0.245)	(0.135, 0.141)	(0.131, 0.137)	(0.305, 0.368)	(0.227, 0.293)	(0.138, 0.142)	(0.127, 0.132)
High School FE		Y		Y		Y		Y
R-squared	0.009	0.057	0.008	0.04	0.005	0.096	0.005	0.039
N	205,227	205,227	174,054	174,054	33,446	33,446	345,835	345,835

Confidence Intervals in parentheses.

Table A3. Predicted Probabilities for Enrollment in At Least 6 Units at a CCC, by Race/Ethnicity

	All Students		Asian		Black		Hispanic		White	
Neither Standard Met	0.313	0.326	0.401	0.406	0.278	0.29	0.307	0.315	0.32	0.328
	(0.311, 0.315)	(0.324, 0.329)	(0.393, 0.409)	(0.397, 0.414)	(0.271, 0.286)	(0.282, 0.297)	(0.304, 0.31)	(0.312, 0.318)	(0.315, 0.325)	(0.323, 0.334)
Standard Met, ELA Only	0.371	0.37	0.414	0.409	0.312	0.303	0.37	0.367	0.373	0.372
	(0.369, 0.374)	(0.367, 0.372)	(0.406, 0.422)	(0.401, 0.417)	(0.300, 0.323)	(0.292, 0.314)	(0.366, 0.373)	(0.363, 0.371)	(0.368, 0.378)	(0.367, 0.377)
Standard Met, Both	0.218	0.202	0.174	0.174	0.171	0.142	0.251	0.234	0.226	0.221
	(0.216, 0.221)	(0.200, 0.205)	(0.169, 0.179)	(0.169, 0.179)	(0.155, 0.187)	(0.125, 0.158)	(0.246, 0.256)	(0.229, 0.239)	(0.221, 0.230)	(0.216, 0.226)
High School FE		Y		Y		Y		Y		Y
R-squared	0.016	0.057	0.065	0.117	0.009	0.09	0.008	0.06	0.019	0.066
N	379,281	379,281	52,799	52,799	22,395	22,395	192,994	192,994	98,531	98,531

Confidence Intervals in parentheses.

Table A4. Predicted Probabilities for Enrollment in At Least 6 Units at a CCC, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.294	0.302	0.355	0.363	0.266	0.272	0.324	0.338
	(0.291, 0.296)	(0.3, 0.305)	(0.351, 0.359)	(0.359, 0.368)	(0.261, 0.271)	(0.266, 0.277)	(0.322, 0.327)	(0.336, 0.341)
Standard Met, ELA Only	0.354	0.353	0.393	0.389	0.382	0.364	0.371	0.37
	(0.35, 0.357)	(0.349, 0.356)	(0.389, 0.397)	(0.385, ,0.393)	(0.363, 0.402)	(0.344, 0.383)	(0.369, 0.374)	(0.367, 0.372)
Standard Met, Both	0.237	0.217	0.209	0.206	0.322	0.251	0.218	0.204
	(0.232, 0.242)	(0.212, 0.222)	(0.205, 0.212)	(0.202, 0.209)	(0.292, 0.352)	(0.22, 0.283)	(0.215, 0.22)	(0.201, 0.206)
High School FE		Y		Y		Y		Y
R-squared	0.008	0.058	0.032	0.07	0.008	0.103	0.018	0.059
N	205,227	205,227	174,054	174,054	33,446	33,446	345,835	345,835

Confidence Intervals in parentheses.

Table A5. Predicted Probabilities for Enrollment in At Least 12 Units at a CCC, by Race/Ethnicity

	All Students		Asian		Black		Hispanic		White	
Neither Standard Met	0.147	0.156	0.203	0.21	0.12	0.125	0.142	0.146	0.159	0.164
	(0.146, 0.149)	(0.154, 0.158)	(0.196, 0.210)	(0.202, 0.217)	(0.114, 0.125)	(0.120, 0.131)	(0.140, 0.144)	(0.144, 0.149)	(0.154, 0.163)	(0.159, 0.168)
Standard Met, ELA Only	0.201	0.201	0.241	0.241	0.153	0.149	0.197	0.196	0.207	0.207
	(0.199, 0.204)	(0.199, 0.203)	(0.234, 0.248)	(0.234, 0.248)	(0.144, 0.161)	(0.141, 0.158)	(0.194, 0.2)	(0.193, 0.199)	(0.203, 0.211)	(0.202, 0.211)
Standard Met, Both	0.14	0.129	0.121	0.119	0.103	0.0866	0.152	0.143	0.147	0.144
	(0.138, 0.143)	(0.127, 0.131)	(0.117, 0.125)	(0.114, 0.123)	(0.0914, 0.116)	(0.0739, 0.0994)	(0.148, 0.156)	(0.139, 0.147)	(0.143, 0.151)	(0.140, 0.147)
High School FE		Y		Y		Y		Y		Y
R-squared	0.005	0.04	0.02	0.069	0.003	0.075	0.004	0.051	0.005	0.043
N	379,281	379,281	52,799	52,799	22,395	22,395	192,994	192,994	98,531	98,531

Confidence Intervals in parentheses.

Table A6. Predicted Probabilities for Enrollment in At Least 12 Units at a CCC, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.137	0.141	0.171	0.179	0.119	0.122	0.377	0.391
	(0.134, 0.139)	(0.139, 0.143)	(0.168, 0.175)	(0.175, 0.182)	(0.115, 0.123)	(0.118, 0.126)	(0.374, 0.379)	(0.388, 0.394)
Standard Met, ELA Only	0.187	0.188	0.219	0.217	0.207	0.198	0.409	0.406
	(0.184, 0.19)	(0.185, 0.19)	(0.215, 0.222)	(0.214, 0.22)	(0.192, 0.221)	(0.184,0.213)	(0.406, 0.412)	(0.404, 0.409)
Standard Met, Both	0.145	0.133	0.138	0.134	0.22	0.179	0.236	0.223
	(0.141, 0.149)	(0.13, 0.137)	(0.135, 0.141)	(0.131, 0.137)	(0.197, 0.243)	(0.155 ,0.202)	(0.233, 0.239)	(0.22,0.226)
High School FE		Y		Y		Y		Y
R-squared	0.004	0.048	0.008	0.04	0.014	0.099	0.024	0.063
N	205,227	205,227	174,054	174,054	33,446	33,446	345,835	345,835

Confidence Intervals in parentheses.

Table A7. Predicted Probabilities for Enrollment in Basic Skills at a CCC, by Race/Ethnicity

	All Students		Asian		Black		Hispanic		White	
Neither Standard Met	0.535	0.533	0.528	0.528	0.534	0.537	0.587	0.588	0.407	0.41
	[0.531, 0.538]	[0.529, 0.537]	[0.516, 0.539]	[0.516, 0.54]	[0.520, 0.548]	[0.523, 0.552]	[0.582, 0.592]	[0.583, 0.593]	[0.400, 0.415]	[0.403, 0.418]
Standard Met, ELA Only	0.319	0.317	0.314	0.307	0.327	0.325	0.365	0.363	0.232	0.23
	[0.315, 0.323]	[0.313, 0.321]	[0.302, 0.326]	[0.295, 0.318]	[0.308, 0.346]	[0.304, 0.345]	[0.359, 0.370]	[0.357, 0.368]	[0.225, 0.239]	[0.223, 0.237]
Standard Met, Both	0.093	0.100	0.087	0.093	0.111	0.11	0.13	0.133	0.0491	0.0481
	[0.088, 0.098]	[0.095, 0.105]	[0.075, 0.098]	[0.081, 0.104]	[0.0731, 0.148]	[0.0687, 0.151]	[0.121, 0.139]	[0.123, 0.142]	[0.0414, 0.0567]	[0.0403, 0.0559]
High School FE		Y		Y		Y		Y		Y
R-squared	0.223	0.247	0.230	0.294	0.183	0.302	0.209	0.237	0.211	0.253
N	129,335	129,335	15,984	15,984	7,279	7,279	69,549	69,549	32,445	32,445

Confidence Intervals in parentheses. All models include CCC campus fixed effects and control for the total units attempted in the first fall term.

Table A8. Predicted Probabilities for Enrollment in Basic Skills at a CCC, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.575	0.575	0.472	0.472	0.697	0.697	0.507	0.506
	[0.57, 0.580]	[0.571, 0.58]	[0.466, 0.477]	[0.466, 0.478]	[0.687, 0.706]	[0.687,0.707]	[0.503, 0.510]	[0.502, 0.510]
Standard Met, ELA Only	0.352	0.35	0.283	0.28	0.504	0.508	0.314	0.311
	[0.346, 0.358]	[0.344, 0.356]	[0.277, 0.288]	[0.275, 0.285]	[0.474, 0.533]	[0.477, 0.54]	[0.310, 0.318]	[0.307, 0.315]
Standard Met, Both	0.124	0.128	0.0708	0.0727	0.253	0.263	0.0901	0.0957
	[0.115, 0.133]	[0.119, 0.137]	[0.0646, 0.0770]	[0.0664, 0.0790]	[0.200, 0.306]	[0.206, 0.319]	[0.0849, 0.0953]	[0.0904, 0.101]
High School FE		Y		Y		Y		Y
R-squared	0.206	0.234	0.228	0.259	0.17	0.268	0.217	0.241
N	70,711	70,711	58,624	58,624	11,087	11,087	118,248	118,248

Confidence Intervals in parentheses. All models include CCC campus fixed effects and control for the total units attempted in the first fall term.

Table A9. Predicted First Term GPA at a CCC, by Race/Ethnicity

	All Students		Asian		Black		Hispanic		White	
Neither Standard Met	2.00	2.02	2.19	2.20	1.782	1.80	1.93	1.94	2.19	2.19
	[1.99, 2.01]	[2.01, 2.03]	[2.16, 2.22]	[2.17, 2.23]	[1.75, 1.82]	1.760, 1.837]	[1.920, 1.945]	[1.925, 1.951]	[2.172,2.216]	[2.167, 2.212]
Standard Met, ELA Only	2.37	2.37	2.53	2.55	2.19	2.17	2.28	2.27	2.51	2.51
	[2.35, 2.38]	[2.36, 2.38]	[2.50, 2.56]	[2.51, 2.58]	[2.14, 2.24]	[2.11, 2.22]	[2.26, 2.29]	[2.26, 2.29]	[2.49, 2.53]	[2.49, 2.53]
Standard Met, Both	2.77	2.74	2.95	2.94	2.50	2.46	2.60	2.59	2.88	2.88
	[2.76, 2.79]	[2.73, 2.76]	[2.92, 2.98]	[2.91, 2.97]	[2.40, 2.60]	[2.35, 2.57]	[2.58, 2.63]	[2.56, 2.61]	[2.86, 2.90]	[2.86, 2.91]
High School FE		Y		Y		Y		Y		Y
R-squared	0.118	0.150	0.15	0.22	0.11	0.269	0.087	0.122	0.116	0.169
N	122,318	122,318	15,400	15,400	6,609	6,609	65,426	65,426	31,031	31,031

Confidence Intervals in parentheses. All models include CCC campus fixed effects and control for the total units attempted in the first fall term.

Table A10. Predicted First-Term GPA at a CCC, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	1.93	1.94	2.12	2.13	1.94	1.95	2.02	2.03
	[1.92, 1.94]	[1.93, 1.95]	[2.10, 2.14]	[2.11,2.14]	[1.91, 1.97]	[1.92, 1.97]	[2.01, 2.03]	[2.02, 2.04]
Standard Met, ELA Only	2.27	2.27	2.47	2.48	2.27	2.24	2.37	2.37
	[2.25, 2.28]	[2.26, 2.29]	[2.46, 2.49]	[2.47, 2.5]	[2.19, 2.35]	[2.16, 2.32]	[2.36, 2.38]	[2.36, 2.38]
Standard Met, Both	2.63	2.61	2.87	2.86	2.93	2.83	2.77	2.75
	[2.61, 2.66]	[2.58, 2.63]	[2.86, 2.89]	[2.84, 2.88]	[2.8, 3.07]	[2.69, 2.98]	[2.76, 2.79]	[2.73, 2.76]
High School FE		Y		Y		Y		Y
R-squared	0.096	0.134	0.12	0.16	0.13	0.249	0.114	0.147
N	66,279	66,279	56,039	56,039	10,137	10,137	112,181	112,181

Confidence Intervals in parentheses. All models include CCC campus fixed effects and control for the total units attempted in the first fall term.

Table A11. Predicted Probabilities for Persistence to 2nd Term at a CCC, by Race/Ethnicity

	All Students		Asian		Black		Hispanic		White	
Neither Standard Met	0.841	0.842	0.880	0.877	0.808	0.809	0.84	0.84	0.845	0.845
	[0.839, 0.844]	[0.839, 0.845]	[0.872, 0.888]	[0.869, 0.885]	[0.796, 0.82]	[0.797, 0.821]	[0.837, 0.844]	[0.836, 0.843]	[0.839, 0.851]	[0.839, 0.851]
Standard Met, ELA Only	0.876	0.876	0.899	0.900	0.859	0.855	0.878	0.877	0.872	0.873
	[0.873, 0.880]	[0.873, 0.879]	[0.891, 0.907]	[0.89, 0.909]	[0.843, 0.875]	[0.838, 0.872]	[0.874, 0.882]	[0.873, 0.882]	[0.866, 0.878]	[0.867, 0.879]
Standard Met, Both	0.886	0.885	0.887	0.890	0.838	0.825	0.894	0.894	0.888	0.887
	[0.882, 0.89]	[0.88, 0.889]	[0.88, 0.895]	[0.883, 0.898]	[0.806, 0.869]	[0.790, 0.860]	[0.887, 0.901]	[0.886, 0.901]	[0.881, 0.894]	[0.880, 0.893]
High School FE		Y		Y		Y		Y		Y
R-squared	0.108	0.129	0.143	0.221	0.124	0.258	0.106	0.133	0.101	0.152
N	129,335	129,335	15,984	15,984	7,279	7,279	69,549	69,549	32,445	32,445

Confidence Intervals in parentheses. All models include CCC campus fixed effects and control for the total units attempted in the first fall term.

Table A12. Predicted Probabilities for Persistence to 2nd Term at a CCC, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.837	0.837	0.85	0.851	0.842	0.843	0.841	0.842
	[0.833, 0.840]	[0.833, 0.840]	[0.846, 0.855]	[0.846 ,0.855]	[0.834, 0.850]	[0.835, 0.851]	[0.838, 0.845]	[0.839, 0.845]
Standard Met, ELA Only	0.87	0.868	0.885	0.886	0.864	0.863	0.877	0.877
	[0.865, 0.874]	[0.864, 0.873]	[0.881, 0.889]	[0.881, 0.890]	[0.839, 0.889]	[0.836, 0.889]	[0.874, 0.88]	[0.874, 0.880]
Standard Met, Both	0.882	0.881	0.892	0.891	0.901	0.872	0.887	0.885
	[0.875, 0.889]	[0.874, 0.888]	[0.887, 0.897]	[0.886, 0.896]	[0.857, 0.945]	[0.824, 0.919]	[0.882, 0.891]	[0.881, 0.890]
High School FE		Y		Y		Y		Y
R-squared	0.113	0.142	0.101	0.136	0.113	0.21	0.108	0.13
N	70,711	70,711	58,624	58,624	11,087	11,087	118,248	118,248

Confidence Intervals in parentheses. All models include CCC campus fixed effects and control for the total units attempted in the first fall term.

Predicted Probabilities of Application, Enrollment and Early College Outcomes in California State University

Table A13. Predicted Probabilities for Application at a CSU, by Race/Ethnicity

	All Students		Asian/PI		Black		Hispanic		White	
Neither Standard Met	0.172	0.165	0.242	0.219	0.224	0.221	0.173	0.174	0.12	0.135
	[0.169, 0.174]	[0.163, 0.167]	[0.233, 0.252]	[0.209, 0.228]	[0.216, 0.232]	[0.213, 0.229]	[0.171, 0.176]	[0.171, 0.177]	[0.115, 0.126]	[0.129, 0.140]
Standard Met, ELA Only	0.387	0.389	0.481	0.47	0.447	0.45	0.418	0.418	0.288	0.296
	[0.385, 0.390]	[0.386, 0.391]	[0.472, 0.490]	[0.460, 0.479]	[0.436, 0.458]	[0.439, 0.461]	[0.415, 0.422]	[0.415, 0.422]	[0.283, 0.293]	[0.291, 0.301]
Standard Met, Both	0.601	0.609	0.647	0.659	0.63	0.635	0.655	0.653	0.523	0.509
	[0.598, 0.603]	[0.606, 0.612]	[0.641, 0.652]	[0.654, 0.665]	[0.614, 0.646]	[0.618, 0.651]	[0.650, 0.659]	[0.649, 0.658]	[0.519, 0.528]	[0.505, 0.513]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.1353	.2027	.0973	.1623	.1013	.2192	.1499	.2334	.1232	.1726
N	375,307	375,307	51,747	51,747	21,727	21,727	190,818	190,818	98,800	98,800
Confidence Intervals in parentheses										

Table A14. Predicted Probabilities for Application at a CSU, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.174	0.176	0.167	0.168	0.131	0.135	0.187	0.184
	[0.171, 0.176]	[0.173, 0.178]	[0.163, 0.171]	[0.163, 0.172]	[0.128, 0.135]	[0.131, 0.138]	[0.184, 0.190]	[0.181, 0.187]
Standard Met, ELA Only	0.412	0.413	0.354	0.36	0.372	0.359	0.388	0.387
	[0.409, 0.416]	[0.409, 0.416]	[0.350, 0.358]	[0.355, 0.364]	[0.363, 0.381]	[0.351, 0.368]	[0.385, 0.391]	[0.384, 0.390]
Standard Met, Both	0.655	0.65	0.572	0.568	0.599	0.583	0.601	0.606
	[0.650, 0.659]	[0.645, 0.654]	[0.568, 0.575]	[0.565, 0.571]	[0.586, 0.612]	[0.570, 0.596]	[0.598, 0.604]	[0.603, 0.609]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.1527	.2445	.1138	.1586	.1175	.2373	.1197	.1895
N	209,583	209,583	165,719	165,719	51,598	51,598	323,709	323,709
Confidence Intervals in parentheses								

Table A15. Predicted Probabilities for Enrollment at a CSU, by Race/Ethnicity

	All Students		Asian/PI		Black		Hispanic		White	
Neither Standard Met	0.051	0.047	0.086	0.064	0.059	0.06	0.05	0.051	0.04	0.041
	[0.049, 0.053]	[0.045, 0.048]	[0.079, 0.094]	[0.057, 0.072]	[0.053, 0.064]	[0.054, 0.065]	[0.048, 0.052]	[0.049, 0.053]	[0.036, 0.043]	[0.037, 0.045]
Standard Met, ELA Only	0.152	0.15	0.198	0.18	0.163	0.161	0.164	0.163	0.114	0.114
	[0.150, 0.154]	[0.148, 0.152]	[0.190, 0.205]	[0.173, 0.188]	[0.155, 0.171]	[0.153, 0.169]	[0.161, 0.167]	[0.161, 0.166]	[0.110, 0.118]	[0.111, 0.118]
Standard Met, Both	0.207	0.215	0.194	0.207	0.211	0.211	0.246	0.245	0.185	0.185
	[0.205, 0.209]	[0.213, 0.217]	[0.190, 0.198]	[0.203, 0.212]	[0.200, 0.222]	[0.199, 0.223]	[0.242, 0.249]	[0.242, 0.249]	[0.182, 0.189]	[0.181, 0.188]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.0388	.0667	.0127	.0709	.0380	.1133	.0549	.0872	.0323	.0614
N	375,307	375,307	51,747	51,747	21,727	21,727	190,818	190,818	98,800	98,800
Confidence Intervals in parentheses										

Table A16. Predicted Probabilities for Enrollment at a CSU, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.051	0.052	0.051	0.047	0.034	0.035	0.057	0.054
	[0.049, 0.053]	[0.050, 0.054]	[0.048, 0.055]	[0.043, 0.050]	[0.032, 0.037]	[0.033, 0.037]	[0.055, 0.059]	[0.052, 0.056]
Standard Met, ELA Only	0.162	0.162	0.139	0.135	0.138	0.134	0.153	0.15
	[0.160, 0.165]	[0.159, 0.164]	[0.136, 0.142]	[0.132, 0.138]	[0.132, 0.144]	[0.128, 0.140]	[0.151, 0.155]	[0.148, 0.152]
Standard Met, Both	0.232	0.231	0.193	0.198	0.191	0.192	0.208	0.214
	[0.229, 0.235]	[0.228, 0.234]	[0.191, 0.196]	[0.196, 0.201]	[0.183, 0.199]	[0.183, 0.200]	[0.206, 0.210]	[0.212, 0.216]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.0503	.0839	.0270	.0551	.0460	.1039	.0319	.0619
N	209,583	209,583	165,719	165,719	51,598	51,598	323,709	323,709
Confidence Intervals in parentheses								

Table A17. Predicted Probabilities for Proficiency in Math at a CSU, by Race/Ethnicity

	All Students		Asian/PI		Black		Hispanic		White	
Neither Standard Met	0.353	0.378	0.424	0.456	0.242	0.266	0.304	0.318	0.536	0.537
	[0.344, 0.362]	[0.369, 0.386]	[0.403, 0.445]	[0.434, 0.479]	[0.212, 0.272]	[0.231, 0.301]	[0.293, 0.316]	[0.305, 0.330]	[0.517, 0.555]	[0.517, 0.557]
Standard Met, ELA Only	0.524	0.538	0.618	0.637	0.401	0.41	0.467	0.473	0.652	0.665
	[0.519, 0.530]	[0.532, 0.543]	[0.604, 0.632]	[0.623, 0.651]	[0.376, 0.427]	[0.382, 0.437]	[0.459, 0.475]	[0.465, 0.481]	[0.642, 0.663]	[0.654, 0.676]
Standard Met, Both	0.939	0.922	0.96	0.948	0.898	0.866	0.913	0.899	0.965	0.96
	[0.934, 0.944]	[0.917, 0.927]	[0.951, 0.968]	[0.940, 0.956]	[0.865, 0.931]	[0.827, 0.905]	[0.904, 0.922]	[0.890, 0.908]	[0.958, 0.972]	[0.953, 0.968]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.3576	.4047	.3401	.4480	.3516	.5619	.3311	.3894	.2808	.3648
N	48,700	48,700	8,947	8,947	2,418	2,418	23,592	23,592	12,243	12,243
Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.										

Table A18. Predicted Probabilities for Proficiency in Math at a CSU, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.297	0.312	0.466	0.48	0.255	0.274	0.372	0.394
	[0.286, 0.307]	[0.301, 0.324]	[0.452, 0.480]	[0.466, 0.495]	[0.233, 0.276]	[0.250, 0.299]	[0.363, 0.382]	[0.384, 0.403]
Standard Met, ELA Only	0.458	0.466	0.619	0.634	0.394	0.406	0.532	0.547
	[0.450, 0.466]	[0.458, 0.474]	[0.611, 0.627]	[0.626, 0.642]	[0.368, 0.419]	[0.378, 0.435]	[0.527, 0.538]	[0.541, 0.552]
Standard Met, Both	0.919	0.903	0.959	0.95	0.913	0.879	0.94	0.925
	[0.911, 0.927]	[0.894, 0.911]	[0.954, 0.965]	[0.945, 0.956]	[0.881, 0.946]	[0.840, 0.917]	[0.935, 0.945]	[0.920, 0.930]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.3467	.4017	.3104	.3765	.3703	.5611	.3473	.3947
N	25,361	25,361	23,338	23,338	3,195	3,195	45,505	45,505
Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.								

Table A19. Predicted Probabilities for Proficiency in English at a CSU, by Race/Ethnicity

	All Students		Asian/PI		Black		Hispanic		White	
Neither Standard Met	0.276	0.293	0.3	0.317	0.231	0.252	0.208	0.218	0.527	0.532
	[0.268, 0.284]	[0.285, 0.301]	[0.278, 0.322]	[0.294, 0.341]	[0.203, 0.259]	[0.218, 0.285]	[0.197, 0.219]	[0.207, 0.229]	[0.510, 0.543]	[0.515, 0.549]
Standard Met, ELA Only	0.805	0.81	0.811	0.811	0.771	0.778	0.772	0.775	0.88	0.879
	[0.800, 0.810]	[0.805, 0.815]	[0.797, 0.825]	[0.797, 0.826]	[0.748, 0.795]	[0.751, 0.804]	[0.765, 0.780]	[0.767, 0.782]	[0.871, 0.890]	[0.869, 0.888]
Standard Met, Both	0.915	0.907	0.916	0.911	0.895	0.867	0.882	0.874	0.968	0.968
	[0.911, 0.920]	[0.902, 0.911]	[0.907, 0.924]	[0.903, 0.920]	[0.865, 0.926]	[0.829, 0.904]	[0.874, 0.890]	[0.865, 0.882]	[0.962, 0.974]	[0.962, 0.974]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.3588	.4129	.3313	.4324	.3929	.5559	.3672	.4359	.2283	.3273
N	48,700	48,700	8,947	8,947	2,418	2,418	23,592	23,592	12,243	12,243

Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.

Table A20. Predicted Probabilities for Proficiency in English at a CSU, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.196	0.206	0.437	0.443	0.137	0.134	0.305	0.32
	[0.186, 0.207]	[0.195, 0.216]	[0.425, 0.450]	[0.430, 0.456]	[0.116, 0.158]	[0.111, 0.157]	[0.296, 0.313]	[0.311, 0.329]
Standard Met, ELA Only	0.765	0.766	0.855	0.857	0.688	0.694	0.811	0.817
	[0.757, 0.772]	[0.759, 0.773]	[0.847, 0.862]	[0.850, 0.864]	[0.663, 0.712]	[0.667, 0.721]	[0.806, 0.816]	[0.811, 0.822]
Standard Met, Both	0.876	0.869	0.952	0.95	0.721	0.718	0.922	0.915
	[0.868, 0.884]	[0.861, 0.877]	[0.947, 0.957]	[0.945, 0.955]	[0.690, 0.753]	[0.681, 0.754]	[0.918, 0.927]	[0.910, 0.919]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.3710	.4367	.2686	.3433	.4013	.6003	.3308	.3866
N	25,361	25,361	23,338	23,338	3,195	3,195	45,505	45,505

Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.

Table A21. Predicted First Year GPA at a CSU, by Race/Ethnicity

	All Students		Asian/PI		Black		Hispanic		White	
Neither Standard Met	2.64	2.69	2.68	2.75	2.55	2.57	2.63	2.66	2.74	2.76
	[2.63, 2.66]	[2.68, 2.71]	[2.63, 2.72]	[2.70, 2.79]	[2.50, 2.60]	[2.51, 2.64]	[2.61, 2.65]	[2.64, 2.68]	[2.71, 2.78]	[2.72, 2.79]
Standard Met, ELA Only	2.83	2.86	2.86	2.92	2.78	2.79	2.8	2.8	2.91	2.93
	[2.82, 2.84]	[2.85, 2.87]	[2.84, 2.89]	[2.89, 2.95]	[2.74, 2.83]	[2.74, 2.84]	[2.78, 2.81]	[2.79, 2.82]	[2.89, 2.94]	[2.91, 2.95]
Standard Met, Both	3.12	3.08	3.17	3.15	2.97	2.92	3	2.98	3.2	3.19
	[3.11, 3.12]	[3.08, 3.09]	[3.16, 3.19]	[3.13, 3.16]	[2.91, 3.02]	[2.86, 2.99]	[2.99, 3.02]	[2.96, 2.99]	[3.19, 3.21]	[3.18, 3.20]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.2001	.2954	.2165	.3822	.1883	.4778	.1601	.2651	.2395	.3598
N	39,980	39,980	7,826	7,826	1,850	1,850	18,737	18,737	10,344	10,344
Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.										

Table A22. Predicted First Year GPA at a CSU, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	2.63	2.66	2.68	2.71	2.65	2.69	2.65	2.69
	[2.61, 2.64]	[2.64, 2.68]	[2.65, 2.71]	[2.68, 2.73]	[2.61, 2.68]	[2.65, 2.74]	[2.63, 2.66]	[2.67, 2.71]
Standard Met, ELA Only	2.8	2.81	2.87	2.9	2.83	2.84	2.82	2.86
	[2.78, 2.81]	[2.80, 2.83]	[2.85, 2.88]	[2.88, 2.91]	[2.79, 2.87]	[2.79, 2.89]	[2.81, 2.83]	[2.85, 2.87]
Standard Met, Both	3.02	2.99	3.17	3.16	3.04	2.96	3.12	3.09
	[3.01, 3.04]	[2.98, 3.00]	[3.16, 3.18]	[3.15, 3.17]	[2.99, 3.09]	[2.90, 3.02]	[3.11, 3.13]	[3.08, 3.09]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.1673	.2771	.2262	.3350	.1523	.4773	.2027	.2989
N	20,089	20,089	19,890	19,890	2,507	2,507	37,473	37,473
Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.								

Table A23. Predicted Probabilities for Persistence to 2nd Year at a CSU, by Race/Ethnicity

	All Students		Asian/PI Students		Black Students		Hispanic Students		White Students	
Neither Standard Met	0.761	0.783	0.802	0.83	0.714	0.75	0.748	0.762	0.805	0.81
	[0.753, 0.770]	[0.775, 0.792]	[0.781, 0.824]	[0.807, 0.853]	[0.683, 0.744]	[0.715, 0.785]	[0.737, 0.759]	[0.750, 0.774]	[0.784, 0.826]	[0.788, 0.832]
Standard Met, ELA Only	0.812	0.821	0.856	0.866	0.788	0.788	0.8	0.804	0.829	0.836
	[0.806, 0.817]	[0.815, 0.826]	[0.842, 0.870]	[0.852, 0.881]	[0.763, 0.814]	[0.761, 0.816]	[0.793, 0.808]	[0.796, 0.812]	[0.817, 0.841]	[0.823, 0.848]
Standard Met, Both	0.881	0.868	0.911	0.904	0.85	0.812	0.861	0.849	0.886	0.882
	[0.876, 0.886]	[0.863, 0.873]	[0.903, 0.920]	[0.896, 0.913]	[0.817, 0.883]	[0.773, 0.851]	[0.853, 0.869]	[0.840, 0.858]	[0.878, 0.893]	[0.874, 0.890]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.0524	.1101	.0476	.1803	.0517	.3650	.0517	.1323	.0522	.1604
N	47,944	47,944	8,854	8,854	2,368	2,368	23,197	23,197	12,057	12,057
Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.										

Table A24. Predicted Probabilities for Persistence to 2nd Year at a CSU, by English Learner and Socioeconomic Status

	SED		Not SED		EL		Not EL	
Neither Standard Met	0.741	0.759	0.804	0.819	0.754	0.769	0.762	0.782
	[0.730, 0.751]	[0.748, 0.770]	[0.790, 0.818]	[0.804, 0.834]	[0.732, 0.775]	[0.745, 0.793]	[0.753, 0.771]	[0.772, 0.791]
Standard Met, ELA Only	0.797	0.803	0.834	0.842	0.789	0.802	0.813	0.823
	[0.789, 0.804]	[0.795, 0.810]	[0.826, 0.842]	[0.833, 0.850]	[0.764, 0.814]	[0.774, 0.831]	[0.808, 0.819]	[0.817, 0.829]
Standard Met, Both	0.861	0.845	0.896	0.89	0.884	0.844	0.881	0.87
	[0.852, 0.869]	[0.836, 0.853]	[0.890, 0.902]	[0.884, 0.896]	[0.852, 0.915]	[0.806, 0.882]	[0.876, 0.886]	[0.865, 0.875]
High School FE	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	.0520	.1314	.0474	.1241	.0579	.3373	.0527	.1117
N	24,941	24,941	23,002	23,002	3,142	3,142	44,802	44,802
Confidence Intervals in parentheses. All models include the CSU campus fixed effects and high school GPA.								