



DELIVERING OPPORTUNITIES

SAT[®] Suite of Assessments Results 2018-19

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Introduction

This is the second in a series of reports examining how well College Board has delivered opportunities through the SAT® Suite. The first report examined research based on data from the first full academic year of implementing the SAT Suite in 2016-17; this report examines use of the SAT Suite in academic year 2018-19, which includes the first student cohort that has taken an SAT Suite assessment in each of the past four years, beginning with the PSAT™ 8/9, which was introduced in 2015.

We've expanded the opportunities and outcomes examined from the first report. This report focuses on how effective the following opportunities were delivered to students:

Section 1: Getting More Students Ready for College and Careers

Section 2: The Impact of Offering SAT During the School Day

Section 3: Strengthening Readiness Skills with Personalized Practice

Section 4: Helping Students Plan for Careers

Section 5: Connecting Students to Scholarships and Recognition Programs

Section 6: Breaking Down Financial Barriers

Section 7: Connecting the SAT Suite to Advanced Placement®

Section 8: State and District Policy Implications of the Use of the SAT Suite

An Open Letter During These Difficult Times

In our first report, in 2018, we laid out the results of the first full implementation of the SAT Suite, 2016-17. Some results surprised us, some pleased us, some disappointed us, and others told us we must dig deeper into the research to better understand what works and what else needs to be done.

In this report, we present the results of our efforts to deliver opportunities to students in 2018-19, four years after the introduction of the SAT Suite. After reading this report, we are sure you will agree that much progress has been made, and there is much more work we must do.

The COVID-19 pandemic is deepening the longstanding inequities that College Board was founded to combat. Vulnerable students are at heightened risk of missing the opportunities they have earned, and our society is at risk of losing valuable talent we will inevitably need in the years to come. This report explains how to deliver opportunity to more students, an effort that calls for our fullest devotion.

In this time of worry, sadness, and isolation, this report shows that there are promising strategies students can use both in and out of school to help them take advantage of the opportunities they so richly deserve. Let us all work together to make this happen.

With thanks and determination,



David Coleman
CEO, College Board



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SECTION 1

Getting More Students Ready for College and Careers

Overview of the SAT Suite of Assessments

The SAT Suite of Assessments measures what students from 8th–12th grades are learning in school, and what they need to succeed in college or career training programs. The knowledge and skills measured are what research shows are essential for college and career readiness. Each assessment measures achievement in language, reading, math, and direct writing in an optional essay test (SAT only). The assessments for younger students measure the same domains as the SAT, but at grade-appropriate levels.

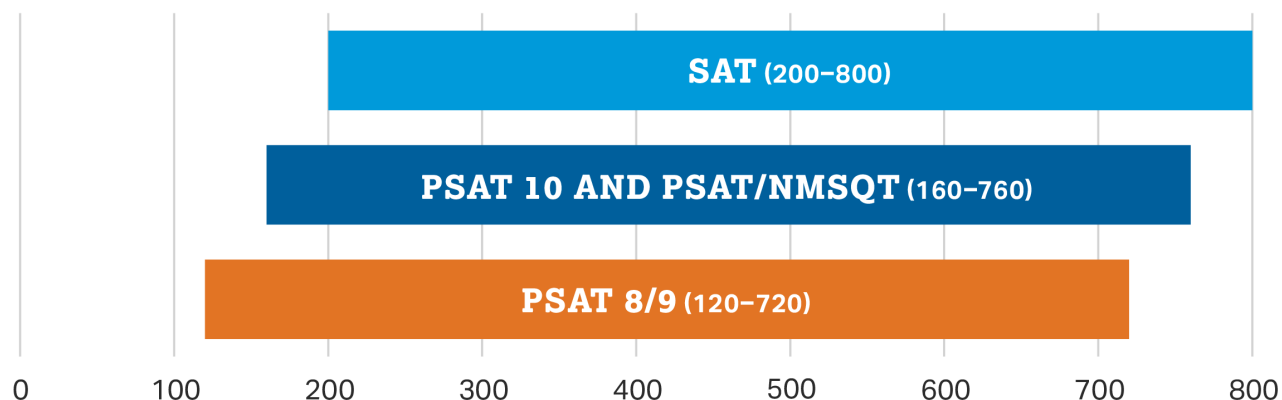
- **PSAT 8/9:** The SAT Suite of Assessments begins with the PSAT™ 8/9, which sets a baseline for college and career readiness. Offered to 8th and 9th graders, it provides early insight through detailed feedback aligned with other assessments in the suite. The PSAT 8/9 was introduced in fall 2015.
- **PSAT/NMSQT and PSAT 10:** The PSAT/NMSQT® is offered to 10th and 11th graders in the fall; the PSAT™ 10 is offered to 10th graders in the spring. These assessments serve as check-ins on progress and pinpoint areas for further study as students progress through high school. The PSAT/NMSQT was first administered in fall 2015 and the PSAT 10 in spring 2016.
- **SAT:** The SAT measures student readiness for college/career in 11th and 12th grades as students complete high school. The test is taken by over 3 million students every year and accepted by all colleges and universities. The new SAT was first administered in March 2016.

Here is a detailed summary of specifications for the SAT Suite of Assessments: collegereadiness.collegeboard.org/pdf/testspecifications-redesigned-sat-1.pdf.

Common Score Scale

The SAT Suite of Assessments is designed so students, parents, and teachers can easily identify academic strengths and weaknesses, monitor growth, and make timely interventions. To do this, we put the suite on a common-score scale (Figure 1.1) and provide in-depth descriptions of the skills associated with the scores students receive.

FIGURE 1.1 SAT Suite Score Scale



This means a student who took the PSAT/NMSQT and received a Math section score of 500 would be expected to also get a 500 on the SAT or the PSAT 8/9 if they had taken either of those tests that day. In other words, a score of 500 represents the same level of academic achievement on all three assessments.

The total, section, test, and cross-test scores have been vertically scaled so we can measure growth from test to test. That makes it easy to measure student growth year by year. If a student takes the PSAT/NMSQT this spring and receives a 500 Math section score, and then takes the SAT next fall and earns a 550 Math section score, that student will have improved 50 points.

SAT Benchmark and Grade-Level Benchmarks

Each assessment in the SAT Suite has metrics, called the college and career readiness benchmarks. The SAT benchmarks indicate whether students are likely to need remediation when they enter college. A college-ready student meets or exceeds *both* section-level benchmarks, indicating that they are likely ready to take entry-level, college credit courses:

- The SAT Math benchmark is the section score associated with a 75% chance of earning a C or higher in first-semester, credit-bearing, college-level courses in algebra, statistics, precalculus, or calculus.
- The SAT Evidence-Based Reading and Writing (ERW) benchmark is the section score associated with a 75% chance of earning a C or higher in first-semester, credit-bearing, college-level courses in history, literature, social science, or writing.

Benchmark scores for PSAT-related assessments are based on expected growth toward the SAT benchmarks at each grade. SAT benchmarks indicate likelihood of success in college; grade-level benchmarks indicate whether a student is on track to meet or exceed the SAT benchmarks, adjusted for the appropriate grade. The benchmarks reflect typical annual growth from year to year, from 8th–12th grades (Table 1.1).

TABLE 1.1 SAT Suite of Assessments College and Career Readiness Benchmarks

Assessment—Grade Level	Evidence-Based Reading and Writing (ERW) Benchmark	Math Benchmark
SAT	480	530
Grade 11	460	510
Grade 10	430	480
Grade 9	410	450
Grade 8	390	430

SAT Suite of Assessments Program Results

The SAT Suite was introduced in 2015-16, so we now have several years of data to explore, from both cross-sectional and longitudinal perspectives. The former compares groups of students at the same or relative points in time, while the latter tracks the same set of students across time.

For example, we can look at performance across the suite in the 2018-19 school year or examine Grade 11 performance from the 2015-16 through 2018-19 school years. This offers a high-level summary of performance. However, it's impossible to infer whether shifts in performance are due to changes in the underlying ability of students or reflect shifts in the test-taking population.

The class of 2019 was the first with access to the full SAT Suite, so we are now able to track the cohort across time. While this offers a high-level summary of performance, it comes with challenges. Making sense of some of the patterns requires in-depth contextual understanding of circumstances that shape which testing opportunities are available to students (e.g., statewide or districtwide contracts where all students take an assessment compared to locations where the decision to test is left to students or families).

We will begin our analysis of early trends in SAT Suite participation and performance by looking at the *2019 SAT Suite of Assessment Annual Report*, which presents data on students in the class of 2019 who took the new SAT during high school, as well as takers of PSAT-related assessments during the 2018-19 school year. Table 1.2 shows the number of students tested, average test scores, and percentages of test takers who met or exceeded the benchmarks, by assessment and grade-level.

TABLE 1.2 2018-19 SAT Suite of Assessments Participation and Performance

Assessment/Grade		Test takers	Mean Score			Met Benchmarks			
			Total	ERW	Math	Both	ERW	Math	None
SAT	Class of 2019	2,220,087	1059	531	528	45%	68%	48%	30%
PSAT/NMSQT or PSAT 10	Grade 11	1,747,071	1013	512	501	43%	69%	45%	30%
	Grade 10	2,278,505	932	470	462	40%	63%	42%	35%
PSAT 8/9	Grade 9	1,040,124	874	440	434	41%	60%	44%	37%
	Grade 8	690,084	815	409	406	35%	55%	38%	41%

First, it is important to note that participation varies considerably by grade. Institutional and consumer behavior shapes participation in these grade levels, and student motivation, preparation, and aspirations may differ considerably across grade levels. For example, scores may be higher when the population is largely self-selected (i.e., only those who want to sign up and take the test on a weekend) compared to where all students are tested on a school day under district or state contracts (i.e., where the state or district pays for and administers the assessment to all their students). As a result of these differences in populations, it's generally not advised to compare district or state outcomes. However, even at the Total Group level shown in Table 1.2, there is reason to suspect that respective test populations aren't necessarily comparable given the differences in participation, so caution in interpretation is warranted. For example, grades 8–10 are disproportionately reflective of state and district census testing, and international students are less represented in PSAT-related assessments than in the SAT.

With these limitations in mind, the cross-sectional view of performance in Table 1.2 shows that the average score steadily rises from 815 for PSAT 8/9 test takers in the eighth grade to 1059 for SAT test takers in the class of 2019, with a similar upward trend in mean scores across sections. As expected, college readiness rates also generally trend upwards, with 35% of eighth-grade PSAT 8/9 test takers on track compared to 45% of SAT test takers in the class of 2019.

This is encouraging, but these data also show that our work is far from complete. To meet our goal of all students being ready for college- and career-training programs, we need to see all these rates increase. The biggest concern here is that 30% of SAT test takers in the graduating class didn't meet either benchmark, indicating they will likely need remediation when they enter college- or career-training programs. This is unacceptable.

If we view a cross section of grade-level outcomes across time, we again must be cautious in not overinterpreting outcomes due to differences in the test-taking populations. However, districts and states can use the outcomes to inform policy decisions.

We begin with PSAT-related testing. Prior to the introduction of the SAT Suite of Assessments in 2015-16, a small number of schools and districts administered the Readistep assessment, which was piloted in 2008-9 to eighth and ninth graders. Readistep was in many ways a precursor to PSAT 8/9, as it was a tool to provide early

insight into college readiness and linked the skills taught in middle school with those necessary for college readiness. However, the results weren't on a common scale with the PSAT/NMSQT or SAT—nor were any of the assessments aligned to allow for direct comparisons across assessments. Thus, it wasn't always clear to students or educators how the outcomes from Readistep could be leveraged to help students improve. After its initial pilot phase, Readistep participation grew from just over 208,000 in fall 2010 to over 379,000 in fall 2014—the vast majority of whom were eighth graders.

The PSAT 8/9, on the other hand, was designed simultaneously with the new PSAT/NMSQT, the PSAT 10, and the SAT so that all scores are on a common scale. Thus, it was much easier for students and educators to assess results, diagnose strengths and weaknesses, and develop strategies to improve performance. In its first year, nearly 359,000 eighth graders (Table 1.3) and 498,000 ninth graders (Table 1.5) took the PSAT 8/9. Most, but not all, of the initial PSAT 8/9 participation was from Readistep schools. But we also found that schools that previously administered PSAT/NMSQT to ninth graders transitioned to the more grade-appropriate PSAT 8/9 offering. It should be noted that schools can administer the PSAT 8/9 in fall or spring, and some administer in both windows to measure growth during the school year. For the purpose of these analyses, test takers are counted only once in a school year, and only their more recent scores and demographic information are analyzed.

The number of eighth graders taking PSAT 8/9 quickly grew—nearly doubling from 359,000 in 2015-16 to over 690,000 in 2018-19 (Table 1.3). When describing the demographic background of PSAT 8/9 test takers, note that substantially less information is collected on the Student Descriptive Questionnaire. Further, a disproportionate number of PSAT 8/9 test takers participate under districtwide or statewide contracts, which tend to provide student information through bulk registration processes. In those settings, student information is contained on a preprinted label and, in many instances, students may not provide any additional demographic information.

One thing that jumps out from Table 1.3 is that race/ethnicity information is missing from roughly one in five eighth graders taking the PSAT 8/9. That information tends to be more complete over time, as we can use information collected through PSAT/NMSQT, PSAT 10, SAT, Subject Tests™, and AP® testing. However, given that eighth graders are less likely to have taken one of those additional tests, we are limited to what was provided by the student, district, or state at the time of PSAT 8/9 testing.

The second trend that stands out—if we assume the missing race/ethnicity data are somewhat evenly distributed across subgroups—is that eighth graders who take the PSAT 8/9 are far more likely to come from traditionally underrepresented backgrounds than the students taking the assessments in higher grades.

TABLE 1.3 Eighth Grade PSAT 8/9 Participation, by School Year

	2015-16		2016-17		2017-18		2018-19	
	Number	%	Number	%	Number	%	Number	%
All Test Takers	358,855		510,129		599,765		690,084	
American Indian	3,543	1%	4,474	1%	7,316	1%	7,975	1%
Asian	17,288	5%	25,439	5%	32,391	5%	32,906	5%
Black	43,641	12%	55,168	11%	76,430	13%	81,457	12%
Hispanic	108,610	30%	155,822	31%	192,722	32%	187,867	27%
Other Pacific Islander	1,143	0%	1,258	0%	1,617	0%	1,822	0%
White	98,954	28%	134,090	26%	179,859	30%	210,965	31%
Two or More Races	9,011	3%	20,656	4%	20,071	3%	20,332	3%
No Response	76,665	21%	113,222	22%	89,359	15%	146,760	21%

Due to the rapid growth of the testing population and the amount of race/ethnicity information that was gathered, we are limited in what can be inferred from average scores and benchmark attainment across school years for the Total Group (Table 1.4). However, we once again see a troubling result: only one-third of eighth grade PSAT 8/9 test takers are on track for college and career readiness.

TABLE 1.4 Eighth Grade PSAT 8/9 Performance, by School Year

	Mean Total Score				Met Both Benchmarks			
	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
All Test Takers	808	818	812	815	32%	33%	34%	35%
American Indian	756	764	751	769	19%	19%	18%	23%
Asian	927	940	937	944	62%	64%	64%	65%
Black	752	763	750	745	17%	18%	18%	17%
Hispanic	765	777	767	769	21%	22%	22%	23%
Other Pacific Islander	772	788	762	773	23%	24%	21%	25%
White	872	879	873	877	48%	49%	49%	50%
Two or More Races	833	857	844	851	37%	41%	41%	42%
No Response	790	797	795	793	28%	28%	30%	30%

There are many similarities and some important differences in participation and performance trends for ninth grade PSAT 8/9 test takers (Table 1.5). Participation more than doubled, growing from nearly 498,000 in 2015-16 to over 1.04 million in 2018-19. Much of this shift reflects the migration of ninth graders from PSAT/NMSQT to PSAT 8/9 as awareness of this new grade-appropriate assessment increased. Race/ethnicity information is more complete for ninth graders, but there was a slight uptick in no responses in 2018-19.

TABLE 1.5 Ninth Grade PSAT 8/9 Participation, by School Year

	2015-16		2016-17		2017-18		2018-19	
	Number	%	Number	%	Number	%	Number	%
All Test Takers	497,641		749,470		930,334		1,040,124	
American Indian	5,230	1%	6,341	1%	11,120	1%	12,722	1%
Asian	30,744	6%	41,875	6%	52,440	6%	56,383	5%
Black	65,387	13%	94,539	13%	120,270	13%	116,022	11%
Hispanic	128,026	26%	211,438	28%	268,420	29%	286,730	28%
Other Pacific Islander	1,517	0%	1,810	0%	2,241	0%	2,548	0%
White	206,205	41%	280,552	37%	357,520	38%	363,430	35%
Two or More Races	16,712	3%	39,977	5%	38,050	4%	36,327	3%
No Response	43,820	9%	72,938	10%	80,273	9%	165,962	16%

As noted, we should be cautious about overinterpreting performance trends given the significant changes in the test population. A slightly higher percentage of ninth grade PSAT 8/9 test takers are on track for college and career readiness, with roughly 40% meeting or exceeding both grade-level section benchmarks since 2015-16 (Table 1.6). This probably reflects differences in the respective test-taking populations, differences in motivation (e.g., students taking the assessment more seriously once in high school), and at least in part—albeit immeasurable—a reflection of student growth between eighth and ninth grades.

TABLE 1.6 Ninth Grade PSAT 8/9 Performance, by School Year

	Mean Total Score				Met Both Benchmarks			
	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
All Test Takers	868	874	871	874	38%	40%	39%	41%
American Indian	785	787	776	790	19%	20%	17%	21%
Asian	978	998	999	1006	63%	68%	67%	69%
Black	779	788	778	787	17%	19%	17%	20%
Hispanic	811	823	814	820	24%	27%	25%	28%
Other Pacific Islander	810	813	803	816	24%	25%	23%	28%
White	925	936	934	942	51%	55%	54%	57%
Two or More Races	884	901	899	915	40%	45%	44%	49%
No Response	830	813	835	830	30%	26%	31%	32%

As with PSAT 8/9, schools can administer 10th graders the PSAT/NMSQT in the fall, the PSAT 10 in the spring, or make both available (e.g., a student might choose to test in the fall and then test under a state contract in the spring). The 10th-grade participation in the PSAT/NMSQT has been very strong for the past 20 years, as College Board partnered with states and school districts through the “early participation program” in order to

broaden access and connect more students with colleges and practice tools, and to give them insights into their college readiness earlier. Participation for 10th graders has increased slightly since 2015-16, and there was a small uptick in the number of students who didn't respond to the race/ethnicity question in the 2019-19 school year (Table 1.7).

TABLE 1.7 10th Grade PSAT/NMSQT or PSAT 10 Participation, by School Year

	2015-16		2016-17		2017-18		2018-19	
	Number	%	Number	%	Number	%	Number	%
All Test Takers	2,127,816		2,209,759		2,240,289		2,278,505	
American Indian	16,833	1%	16,465	1%	29,613	1%	25,221	1%
Asian	151,672	7%	159,611	7%	165,031	7%	164,766	7%
Black	263,511	12%	263,299	12%	250,124	11%	242,704	11%
Hispanic	548,379	26%	605,724	27%	611,432	27%	620,104	27%
Other Pacific Islander	5,993	0%	5,449	0%	6,604	0%	6,493	0%
White	896,978	42%	914,716	41%	897,209	40%	878,379	39%
Two or More Races	68,636	3%	92,581	4%	94,511	4%	92,009	4%
No Response	175,814	8%	151,914	7%	185,765	8%	248,829	11%

The percentage of 10th grade PSAT/NMSQT or PSAT 10 test takers who were on track for college and career readiness has remained relatively stable since 2015-16 and doesn't differ substantially from that observed in ninth grade PSAT 8/9 test takers (Table 1.8). Though we continue to see this as a call to action, the pattern isn't surprising, since 10th grade participation is largely a function of census testing, in which all students are expected to participate in the assessment.

TABLE 1.8 10th Grade PSAT/NMSQT or PSAT 10 Performance, by School Year

	Mean Total Score				Met Both Benchmarks			
	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
All Test Takers	932	936	932	932	38%	40%	38%	40%
American Indian	854	843	812	821	21%	20%	13%	16%
Asian	1059	1067	1066	1080	65%	67%	66%	70%
Black	834	839	837	836	16%	17%	17%	19%
Hispanic	863	869	866	865	23%	24%	23%	25%
Other Pacific Islander	873	868	857	864	25%	23%	22%	24%
White	993	999	997	999	52%	55%	53%	54%
Two or More Races	959	961	968	976	43%	44%	45%	48%
No Response	874	859	850	852	26%	24%	22%	24%

While the PSAT/NMSQT is administered in as many schools to 11th graders as it is to 10th graders, roughly 500,000 fewer 11th graders participate. This is mostly a reflection of a shift from census testing (majority of 10th grade test takers) to voluntary test taking (majority of 11th grade test takers). We have nearly complete information on the racial/ethnic background of 11th grade test takers, as many of them had multiple touch points through which they or their district or state provided information. After taking that into account, there is a noticeable increase in the percentage of test takers reported as White and a smaller increase in the percentage of Asians, which is offset by a very small decrease in the percentage of Black students as shown in the table below.

TABLE 1.9 11th Grade PSAT/NMSQT Participation, by School Year

	2015-16		2016-17		2017-18		2018-19	
	Number	%	Number	%	Number	%	Number	%
All Test Takers	1,780,618		1,784,169		1,798,274		1,747,071	
American Indian	10,282	1%	10,227	1%	14,374	1%	12,470	1%
Asian	142,207	8%	151,020	8%	153,236	8%	151,155	9%
Black	195,845	11%	192,486	11%	188,521	10%	177,583	10%
Hispanic	430,514	24%	453,039	25%	465,335	26%	472,020	27%
Other Pacific Islander	4,774	0%	4,342	0%	4,770	0%	4,405	0%
White	863,330	48%	844,748	47%	831,624	46%	784,940	45%
Two or More Races	61,916	3%	73,327	4%	75,728	4%	72,894	4%
No Response	71,750	4%	54,980	3%	64,686	4%	71,604	4%

The percentage of 11th grade PSAT/NMSQT test takers on track for college and career training readiness jumps noticeably compared to 10th grade test takers (Table 1.10). This is likely a reflection of the increased motivation and preparation of students at this grade level, as their results are used to initially qualify for National Merit Scholarship recognition. Once again, however, over half of the test takers are still not meeting one or both benchmarks in the 11th grade. More distressing is that the college readiness rates of underrepresented minorities remain substantially flat across the four years.

TABLE 1.10 11th Grade PSAT/NMSQT Performance, by School Year

	Mean Total Score				Met Both Benchmarks			
	2015-16	2016-17	2017-18	2018-19	2015-16	2016-17	2017-18	2018-19
All Test Takers	1009	1018	1014	1013	42%	45%	44%	43%
American Indian	916	911	866	871	23%	24%	16%	17%
Asian	1130	1148	1148	1158	65%	69%	69%	70%
Black	885	894	890	889	17%	19%	18%	19%
Hispanic	925	932	928	926	24%	27%	26%	26%
Other Pacific Islander	938	941	921	917	28%	29%	25%	23%
White	1064	1075	1074	1074	53%	58%	56%	56%
Two or More Races	1039	1045	1053	1060	47%	50%	50%	52%
No Response	930	925	900	893	27%	28%	23%	23%

The current SAT was introduced in March 2016, so the class of 2017 was the first graduating class for which we report SAT results. Over 1.7 million students in the class of 2017 took the new SAT during high school (Table 1.11). In addition, nearly 125,000 students in that graduating class took the old SAT through January of their junior year and didn't take the new SAT. These students weren't included in the 2017 *SAT Suite of Assessment Annual Report*.

Participation grew to over 2.2 million students in the class of 2019, due in large part to the continued expansion of SAT School Day. For example, the class of 2018 was Colorado and Illinois's first cohort with statewide administration of SAT School Day, while West Virginia's first statewide administration was for the class of 2019. In addition, many more students in the class of 2019 took part in SAT School Day through new district contracts, as well as individual schools (which first became available in spring 2018). In fact, 43% of SAT test takers in the class of 2019 took the test on a school day, up from 36% for the class of 2018.

TABLE 1.11 SAT Participation by Graduating Class

	2017		2018		2019	
	Number	%	Number	%	Number	%
All Test Takers	1,715,481		2,136,539		2,220,087	
American Indian	7,782	0%	10,946	1%	12,917	1%
Asian	158,031	9%	217,971	10%	228,527	10%
Black	225,860	13%	263,318	12%	271,178	12%
Hispanic	408,067	24%	499,442	23%	554,665	25%
Other Pacific Islander	4,131	0%	5,620	0%	5,430	0%
White	760,362	44%	930,825	44%	947,842	43%
Two or More Races	57,049	3%	77,078	4%	87,178	4%
No Response	94,199	5%	131,339	6%	112,350	5%

As a result of the continued expansion of the population through SAT School Day and the transition to the current SAT, it's hard to interpret performance trends. Since the program is still new and the test-taking population hasn't stabilized, it's difficult to know the degree to which year-over-year changes are a function of differences in ability or in who participated. In general, the SAT test-taking population is the most motivated and prepared group of students, as most of them intend to submit their results for admission and scholarship consideration (Table 1.12).

TABLE 1.12 SAT Performance by Graduating Class

	Mean Total Score			Met Both Benchmarks		
	2017	2018	2019	2017	2018	2019
All Test Takers	1060	1068	1059	46%	47%	45%
American Indian	963	949	912	27%	24%	18%
Asian	1181	1223	1223	70%	75%	75%
Black	941	946	933	20%	21%	20%
Hispanic	990	990	978	31%	31%	29%
Other Pacific Islander	986	986	964	32%	31%	27%
White	1118	1123	1114	59%	59%	57%
Two or More Races	1103	1101	1095	54%	52%	51%
No Response	961	954	959	27%	26%	28%

As we examine the results of students taking the SAT Suite over the past four years, we see in the most recent year (2019) college readiness rates improve only 10%. That is, of the eighth-grade students who took the PSAT8/9 in 2018-19, only 35% met the grade-level benchmarks, suggesting that they are on track to be college ready. Of the students who took the SAT and graduated in 2019, only 45% met both benchmarks. We need to see both percentages increase significantly over the next few years, so the majority of students are ready for college-level work when they graduate from high school.

Now we'll examine college readiness and growth longitudinally by following the class of 2019 from freshman through senior year. While this doesn't reflect a true "growth cohort" due to gains and losses of students during each grade of high school, it is as close to a true growth cohort as is possible. Table 1.13 summarizes the participation trends, beginning with ninth-grade PSAT 8/9, followed by 10th-grade testing across PSAT/NMSQT in the fall and/or PSAT 10 in the spring, followed by the PSAT/NMSQT in 11th grade, and finally the new SAT between March 2016 and the end of their senior year.

TABLE 1.13 Class of 2019 SAT Suite Participation, by School Year

	PSAT 8/9		PSAT/NMSQT or PSAT 10		PSAT/NMSQT		SAT Cohort	
	2015-16		2016-17		2017-18		2019	
	Number	%	Number	%	Number	%	Number	%
All Test Takers	497,641		2,209,759		1,798,274		2,220,087	
American Indian	5,230	1%	16,465	1%	14,374	1%	12,917	1%
Asian	30,744	6%	159,611	7%	153,236	8%	228,527	10%
Black	65,387	13%	263,299	12%	188,521	10%	271,178	12%
Hispanic	128,026	26%	605,724	27%	465,335	26%	554,665	25%
Other Pacific Islander	1,517	0%	5,449	0%	4,770	0%	5,430	0%
White	206,205	41%	914,716	41%	831,624	46%	947,842	43%
Two or More Races	16,712	3%	92,581	4%	75,728	4%	87,178	4%
No Response	43,820	9%	151,914	7%	64,686	4%	112,350	5%

When we examine the performance of this cohort, we see a steady upward trend in average scores as well as an increase in the number of students meeting or exceeding both section benchmarks (Table 1.14).

TABLE 1.14 Class of 2019 SAT Suite Performance, by School Year

	Mean Total Score				Met Both Benchmarks			
	2015-16	2016-17	2017-18	2019	2015-16	2016-17	2017-18	2019
	PSAT 8/9	PSAT/NMSQT or PSAT 10	PSAT/NMSQT	SAT Cohort	PSAT 8/9	PSAT/NMSQT or PSAT 10	PSAT/NMSQT	SAT Cohort
All Test Takers	868	936	1014	1059	38%	40%	44%	45%
American Indian	785	843	866	912	19%	20%	16%	18%
Asian	978	1067	1148	1223	63%	67%	69%	75%
Black	779	839	890	933	17%	17%	18%	20%
Hispanic	811	869	928	978	24%	24%	26%	29%
Other Pacific Islander	810	868	921	964	24%	23%	25%	27%
White	925	999	1074	1114	51%	55%	56%	57%
Two or More Races	884	961	1053	1095	40%	44%	50%	51%
No Response	830	859	900	959	30%	24%	23%	28%

While these results seem promising, they could be skewed by changes in the testing population from year to year (i.e., loss of some students, gain of new students) as mentioned earlier.

Now we will explore the results from a slightly different angle and examine the growth cohort(s) comprising the class of 2019 who have the same PSAT-related test-taking experiences leading up to the SAT.

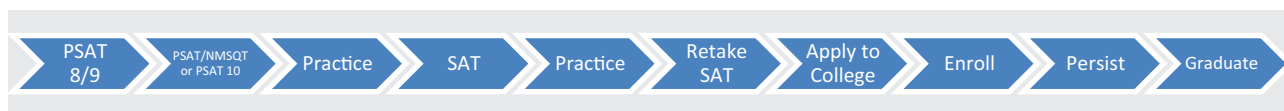
Test-Taking Patterns

Let's first review the role the SAT Suite plays in a much broader view of student lives. The goal is to provide early and ongoing insight into college readiness that can help teachers adapt instruction, place students in classes they are ready to take, and strengthen college readiness skills. Prior to the introduction of SAT School Day and the redesigned SAT Suite of Assessments, many students and their parents didn't have meaningful insight into college readiness until their senior year of high school, when they first took the SAT—often far too late to significantly change their trajectory.

What is the ideal pathway to college and career training readiness? In its ideal form, the "happy path" (Figure 1.2) establishes a student's college readiness baseline in eighth and/or ninth grade, and provides feedback on strengths and weakness that can be used to diagnose learning gaps, develop remediation strategies, and help them decide what courses to take, as well as prepare them for the next step in the path. PSAT/NMSQT and PSAT 10 in 10th and/or 11th grade allows the student to check in on their progress and can also be linked to Official SAT Practice through Khan Academy® for free, personalized practice. This puts students in a great position to take the SAT by the end of their junior year, which gives them sufficient time to incorporate feedback from their first SAT into a personalized practice plan so they can strengthen their college readiness knowledge and skills and improve when retaking the SAT in the fall of their senior year.

But our work is not done. Our goal is to expand student access into all types of postsecondary opportunities, whether it's two-year, four-year, or trade/technical schools, so our concern for the student extends far beyond when they've taken their last SAT. In fact, while we may first connect with students in eighth grade, we continue to monitor them as they apply, enroll, persist, and graduate from college.

FIGURE 1.2 The Happy Path

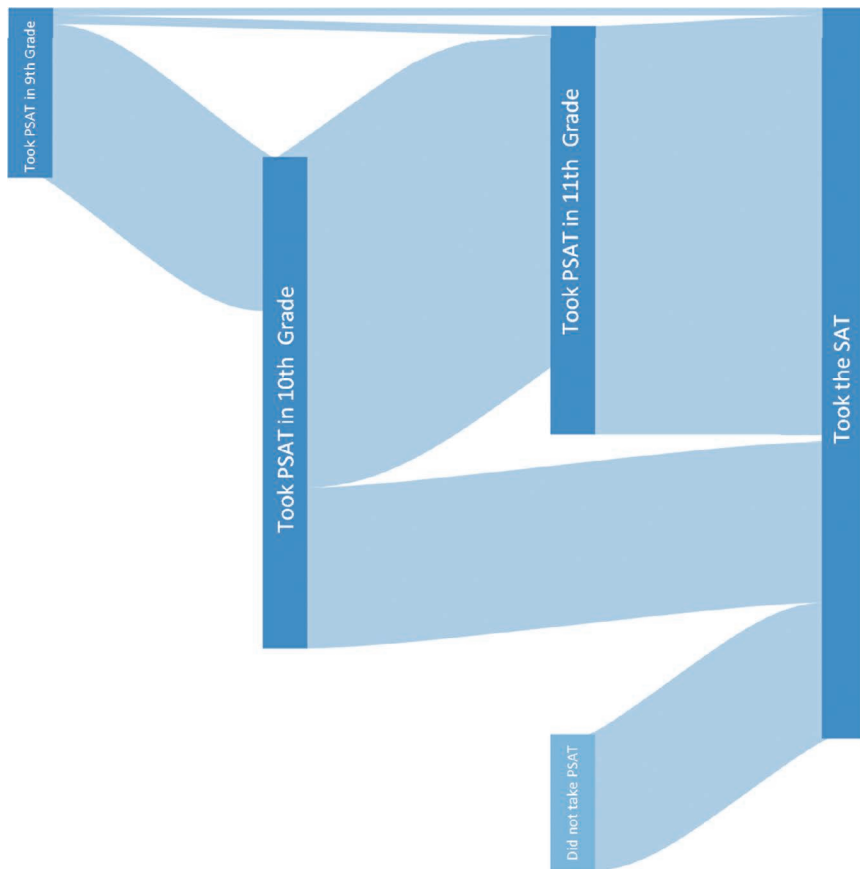


To that end, we now examine the test-taking paths of SAT test takers in the class of 2019. As noted, that class was the first to have access to the full SAT Suite, starting with PSAT 8/9, when they were in ninth grade in the 2015-16 school year. Before we dig into the results, it will be helpful to describe the various testing paths taken by the class of 2019 SAT test takers.

Overall, 81% of SAT test takers in the class of 2019 took a PSAT-related assessment (Figure 1.3). Nearly 517,000 (23%) took either the PSAT 8/9 or PSAT/NMSQT as ninth graders in the 2015-16 school year. Most of those students went on to take a PSAT-related assessment in 10th grade, but that was only one-third of the 1.49 million SAT test takers in the class of 2019 (67%) who took the PSAT/NMSQT or PSAT 10 in 10th grade.

Roughly two-thirds of those who tested in 10th grade went on to take PSAT/NMSQT in 11th grade, while one-third next took the SAT. Altogether, 1.3 million SAT test takers in the class of 2019 (58%) took the PSAT/NMSQT in 11th grade (1.0 million who'd taken PSAT-related assessment in 10th grade, 28,000 who'd last taken a PSAT-related assessment in ninth grade, and 267,000 who had no prior PSAT-related experience before 11th grade). Last, 413,000 SAT test takers in the class of 2019 hadn't completed a PSAT-related assessment before taking the SAT.

FIGURE 1.3 PSAT-Taking History of SAT Test Takers, Class of 2019



Another way to illustrate the various test-taking paths—and differences across subgroups—is summarized in Table 1.15. For example, 29% of all SAT test takers in the class of 2019 took PSAT-related assessments in the 10th and 11th grades (but not 9th grade). This ranged from a low of 19% among American Indian SAT test takers to a high of 31% of Hispanic students and students indicating two or more races. Overall, 19% of SAT test takers in the class of 2019 had no PSAT-related experience, ranging from a low of 13% among Hispanic students and students indicating two or more races, to a high of 28% of Asian SAT test takers (which might reflect lack of access to PSAT-related assessments for students outside of the United States).

One final, important point the results in the table reveal is that students take different combinations of assessments to monitor their college readiness. While we could focus on the students who took PSAT-related assessments in 9th, 10th, and 11th grades, that is only 15%–18% of any given subgroup and is arguably not generalizable to all the subgroups.

TABLE 1.15 SAT Suite Pathways, Class of 2019, Total Group SAT Test Takers by Race/Ethnicity

PSAT-related History:	Total Group	American Indian	Asian	Black	Hispanic	Other Pacific Islander	Two or more races	White
Took in 10th and 11th	29%	19%	30%	24%	31%	24%	31%	30%
Did not take	19%	21%	28%	19%	13%	26%	13%	14%
Took only in 10th	17%	19%	12%	22%	20%	16%	18%	17%
Took in 9th, 10th, and 11th	16%	16%	15%	17%	18%	15%	18%	17%
Took only in 11th	12%	13%	10%	10%	11%	12%	13%	14%
Took in 9th and 10th	5%	9%	2%	6%	4%	4%	5%	6%
Took in 9th and 11th	1%	2%	1%	1%	1%	1%	2%	1%
Took only in 9th	1%	2%	1%	2%	1%	1%	1%	1%

The pathway groups' average SAT performance varies considerably (Table 1.16), and the differences start with the initial assessment. It's important to remember that there is nothing causal in these results. Students who take PSAT-related assessments in 9th, 10th, and 11th grade don't perform higher than most students *because* they participated in all grades. In fact, that group performed much higher than other ninth-grade PSAT-related test takers. They may have initially been a higher ability group and their subsequent testing might suggest that they are a particularly motivated group.

Students who take PSAT/NMSQT in the 11th grade tend to score higher than students who either don't take PSAT-related assessments or only take them prior to 11th grade.

TABLE 1.16 SAT Suite Pathways and Performance, Class of 2019, Total Group SAT Test Takers

PSAT-related history:	SAT Takers	Mean Total Score			
		9th	10th	11th	SAT
Took in 10th and 11th	638,629	29%	996	1050	1109
Took in 9th, 10th, and 11th	364,152	16%	928	990	1038
Took only in 11th	266,533	12%		1008	1068
Took in 9th and 11th	27,584	1%	901	1003	1061
Did not take	413,105	19%			1012
Took only in 10th	384,956	17%		921	1007
Took in 9th and 10th	102,700	5%	870	920	997
Took only in 9th	22,428	1%	856		973
SAT test takers	2,220,087				1059

As shown in Table 1.17, performance differences across race/ethnicity are evident early and persist over time.

TABLE 1.17 SAT Suite Pathways and Performance, Class of 2019, SAT Test Takers by Race/Ethnicity¹

<i>American Indian</i>			Mean Total Score			
PSAT-related history	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	2,517	19%		879	908	952
Took only in 11th	1,621	13%			891	935
Took in 9th and 11th	227	2%	812		888	921
Took in 9th, 10th, and 11th	2,007	16%	808	852	872	915
Took only in 10th	2,463	19%		842		898
Did not take	2,674	21%				889
Took in 9th and 10th	1,163	9%	791	828		882
Took only in 9th	245	2%	793			874
SAT test takers	12,917					912

<i>Asian</i>			Mean Total Score			
PSAT-related history	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	69,698	30%		1105	1183	1261
Took in 9th, 10th, and 11th	34,716	15%	1032	1110	1180	1252
Took in 9th and 11th	2,279	1%	1023		1170	1252
Did not take	64,857	28%				1214
Took only in 11th	23,699	10%			1106	1200
Took only in 9th	1,521	1%	980			1179
Took in 9th and 10th	5,398	2%	954	1022		1146
Took only in 10th	26,359	12%		1006		1141
SAT test takers	228,527					1223

¹ Some racial/ethnic groups are not separately reported due to small sample sizes even though they are included in the total statistics reported.

<i>Black</i>			Mean Total Score			
PSAT-related history	SAT Test Takers		9th	10th	11th	SAT
Took in 9th, 10th, and 11th	46,309	17%	830	881	911	966
Took in 10th and 11th	64,519	24%		877	909	963
Took only in 11th	27,432	10%			879	931
Took in 9th and 11th	3,858	1%	795		868	918
Took only in 10th	58,426	22%		839		912
Did not take	50,791	19%				906
Took in 9th and 10th	15,699	6%	796	839		900
Took only in 9th	4,144	2%	773			864
SAT test takers	271,178					933

<i>Hispanic</i>			Mean Total Score			
PSAT-related history	SAT Test Takers		9th	10th	11th	SAT
Took in 9th, 10th, and 11th	102,005	18%	866	923	965	1015
Took in 10th and 11th	173,751	31%		911	953	1002
Took only in 11th	60,670	11%			930	980
Took in 9th and 11th	7,339	1%	837		923	973
Took in 9th and 10th	20,477	4%	835	881		955
Took only in 10th	110,486	20%		871		945
Did not take	74,412	13%				926
Took only in 9th	5,525	1%	809			910
SAT test takers	554,665					978

<i>White</i>			Mean Total Score			
PSAT-related history	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	288,917	30%		1048	1108	1169
Took in 9th, 10th, and 11th	157,882	17%	976	1041	1092	1153
Took in 9th and 11th	11,852	1%	954		1066	1129
Took only in 11th	133,148	14%			1057	1118
Took only in 10th	158,366	17%		976		1069
Took only in 9th	8,783	1%	913			1043
Did not take	135,744	14%				1040
Took in 9th and 10th	53,150	6%	901	951		1030
SAT test takers	947,842					1114

Female SAT test takers were slightly more likely than male SAT test takers to have more recent PSAT-related experience (Table 1.18), but males have higher average performance, regardless of testing path. There is a two-point difference in mean score by gender in ninth grade among those who test in 9th, 10th, and 11th grade, and the difference is 14 points on the SAT.

TABLE 1.18 SAT Suite Pathways and Performance, Class of 2019, By Gender

<i>Female</i>			Mean Total Score			
PSAT-related history:	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	343,472	30%		993	1044	1100
Took in 9th, 10th, and 11th	191,738	17%	928	990	1034	1089
Took in 9th and 11th	14,470	1%	903		1001	1056
Took only in 11th	141,908	12%			999	1055
Did not take	200,554	17%				1005
Took only in 10th	201,409	17%		923		1005
Took in 9th and 10th	51,833	4%	876	925		997
Took only in 9th	11,382	1%	859			972
SAT test takers	1,156,766					1053

<i>Male</i>			Mean Total Score			
PSAT-related history:	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	295,155	28%		1000	1057	1119
Took in 9th, 10th, and 11th	172,414	16%	930	992	1042	1103
Took only in 11th	124,625	12%			1019	1083
Took in 9th and 11th	13,114	1%	899		1005	1066
Did not take	210,832	20%				1020
Took only in 10th	183,546	17%		919		1010
Took in 9th and 10th	50,867	5%	866	915		998
Took only in 9th	11,046	1%	854			974
SAT test takers	1,061,599					1066

SAT test takers from households with higher levels of education (Table 1.19) tend to start off with higher performance and show greater growth by the time they take the SAT.

**TABLE 1.19 SAT Suite Pathways and Performance, Class of 2019,
by Highest Level of Parent Education**

<i>No High School Diploma</i>			Mean Total Score			
PSAT-related history:	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	59,003	30%		863	899	945
Took in 9th, 10th, and 11th	32,481	16%	813	865	897	941
Took only in 11th	21,174	11%			875	922
Did not take	30,443	15%				912
Took only in 10th	41,682	21%		842		910
Took in 9th and 11th	2,401	1%	783		855	899
Took in 9th and 10th	9,251	5%	792	836		893
Took only in 9th	2,129	1%	787			878
SAT test takers	198,564					926

<i>High School Diploma</i>			Mean Total Score			
PSAT-related history:	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	165,965	27%		925	967	1017
Took in 9th, 10th, and 11th	98,957	16%	864	918	954	1004
Took only in 11th	73,277	12%			948	1000
Took in 9th and 11th	7,645	1%	843		924	973
Took only in 10th	121,624	20%		890		967
Did not take	98,450	16%				967
Took in 9th and 10th	35,954	6%	839	882		948
Took only in 9th	6,302	1%	834			937
SAT test takers	608,174					989

<i>Associate Degree</i>			Mean Total Score			
PSAT-related history:	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	44,360	28%		959	1005	1058
Took in 9th, 10th, and 11th	25,811	16%	896	950	990	1044
Took only in 11th	21,690	14%			985	1039
Took in 9th and 11th	1,883	1%	871		958	1018
Took only in 10th	31,191	20%		922		1004
Took in 9th and 10th	9,238	6%	871	918		991
Did not take	23,871	15%				988
Took only in 9th	1,477	1%	866			978
SAT test takers	159,521					1027

<i>Bachelor's Degree</i>			Mean Total Score			
PSAT-related history:	SAT Test Takers		9th	10th	11th	SAT
Took in 10th and 11th	196,245	32%		1033	1093	1156
Took in 9th, 10th, and 11th	112,310	18%	964	1030	1083	1146
Took in 9th and 11th	7,893	1%	944		1060	1124
Took only in 11th	80,547	13%			1054	1118
Did not take	94,197	15%				1088
Took only in 10th	97,274	16%		975		1076
Took only in 9th	4,813	1%	924			1071
Took in 9th and 10th	27,432	4%	916	971		1061
SAT test takers	620,711					1121

Graduate Degree	PSAT-related history:	SAT Test Takers		Mean Total Score			
				9th	10th	11th	SAT
	Took in 10th and 11th	157,375	34%		1101	1172	1241
	Took in 9th, 10th, and 11th	86,520	19%	1023	1097	1159	1226
	Took in 9th and 11th	6,398	1%	1004		1136	1206
	Took only in 11th	57,786	13%			1112	1184
	Did not take	75,323	16%				1146
	Took only in 9th	3,399	1%	966			1135
	Took only in 10th	58,884	13%		1003		1116
	Took in 9th and 10th	15,550	3%	947	1007		1110
	SAT test takers	461,235					1194

College Board has developed several resources to help students and educators understand average or expected growth between assessments and/or grade levels. The SAT Suite benchmarks are one example—they reflect typical average growth year to year. They show that the average annual growth is 20–30 points per section, per grade.

Additionally, school-level growth tables² were released in the College Board K–12 reporting portal for educators to use to estimate and monitor student progress toward college readiness. Conditional growth estimates³ can help educators understand the range of expected growth for students who have a given score on a test (e.g., 11th grade PSAT/NMSQT) when they take a future test (e.g., the SAT) within the SAT Suite.

As shown above, students who take PSAT/NMSQT in 11th grade tend to score higher on the SAT than students who either don't take PSAT-related assessments or only take them prior to 11th grade. A common question from students and counselors is how much a score will change between the fall of junior year and when they take the SAT (which, if on the happy path, is ideally before the end of junior year)? College Board annually updates summary statistics in conjunction with the fall release of SAT Suite of Assessment Annual Report to provide an up-to-date descriptive summary by score band (Table 1.20).

These results show that score change varies considerably. Those who initially score in the highest bands of the PSAT/NMSQT as 11th graders see the smallest average gains. Conversely, those who initially score in the lowest band see the highest average gains. For all students in the class of 2019 who took PSAT/NMSQT in fall of 11th grade followed by an SAT in spring, the average gain was 49 points, ranging from a low of 35 for those initially scoring between 1400–1520, to a high of 277 for those initially scoring between 320–490. Only a small percentage of test takers see significant declines, and 13% score within 10 points of their initial 11th grade PSAT/NMSQT score. One in five 11th grade PSAT/NMSQT test takers had gains of greater than 100 points: 10% grew 110–130 points and 11% improved by 140 points or more.

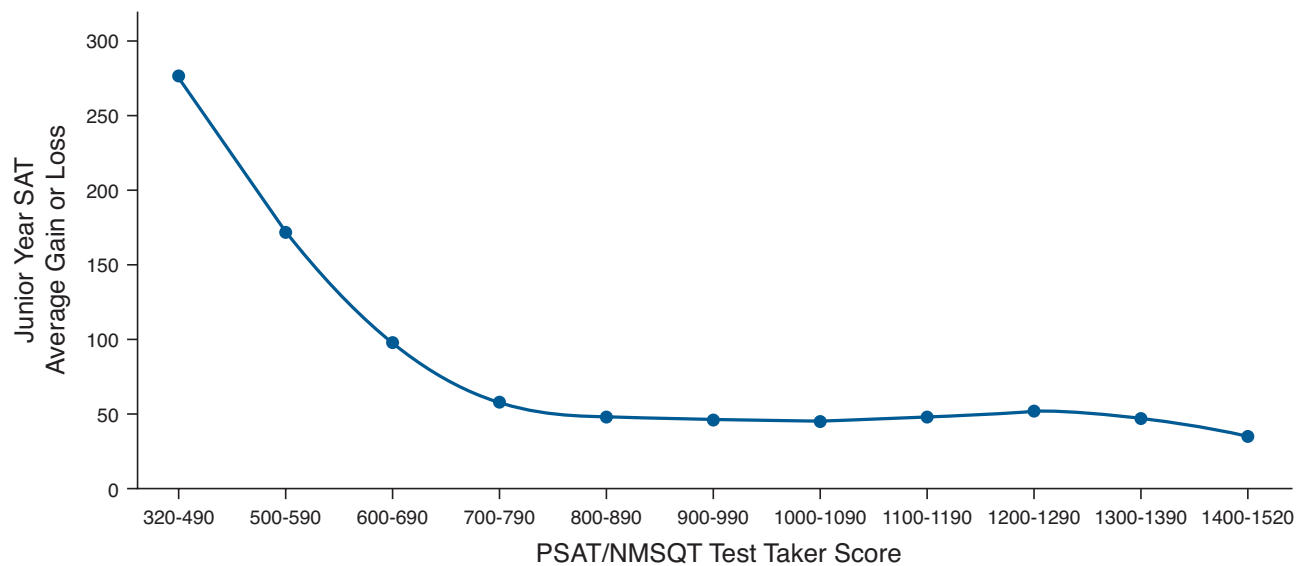
² collegereadiness.collegeboard.org/pdf/sat-suite-growth-estimates.pdf

³ collegereadiness.collegeboard.org/pdf/student-level-sat-suite-growth-estimates.pdf

TABLE 1.20 Percentage of PSAT/NMSQT Test Takers with Junior-Year SAT Score Gain or Loss, Class of 2019

Junior-Year PSAT/NMSQT Score	-140 & below	-110 to -130	-80 to -100	-50 to -70	-20 to -40	-10 to +10	+20 to +40	+50 to +70	+80 to +100	+110 to +130	+140 & above	Average Gain or Loss
1400-1520	1%	1%	2%	4%	9%	15%	22%	23%	16%	6%	1%	35
1300-1390	1%	1%	2%	4%	9%	14%	18%	18%	16%	10%	8%	47
1200-1290	1%	1%	2%	4%	8%	13%	17%	18%	15%	11%	11%	52
1100-1190	1%	1%	2%	5%	9%	14%	17%	17%	14%	10%	11%	48
1000-1090	1%	1%	2%	5%	9%	14%	18%	17%	14%	9%	10%	45
900-990	1%	1%	3%	6%	9%	13%	16%	16%	14%	9%	11%	46
800-890	1%	2%	4%	6%	10%	13%	15%	15%	13%	10%	13%	48
700-790	1%	1%	3%	5%	9%	13%	15%	15%	13%	9%	16%	58
600-690	0%	0%	1%	2%	4%	7%	12%	16%	16%	14%	28%	98
500-590	0%	0%	0%	1%	1%	3%	3%	6%	8%	13%	64%	172
320-490	-	-	0%	0%	1%	2%	1%	3%	4%	5%	84%	277
Total	1%	1%	2%	5%	9%	13%	17%	17%	14%	10%	11%	49

FIGURE 1.4 Average Junior-Year Gain or Loss



SAT Retaking

All students, regardless of background, can take steps to strengthen their skills, improve their scores, and increase their likelihood of going to college and earning a degree. It has long been observed that students who retake the SAT tend to get a higher score the second time, since they likely took additional courses and may have strengthened their skills through practice. Using Regression Discontinuity, researchers isolated the causal impact⁴ and found that retaking the SAT increased college-relevant scores (also known as ‘superscores,’ where the highest of multiple scores are used by college admissions officers) and resulted in a sizable increase in the number of students enrolling in four-year colleges.

The key findings of this study were that retaking the SAT can lead to:

70–120-point score increase for bottom 50th percentile students

20–33 percentage point increase in 4-yr college enrollment

10% closure of 4-year college enrollment gap by race/ethnicity

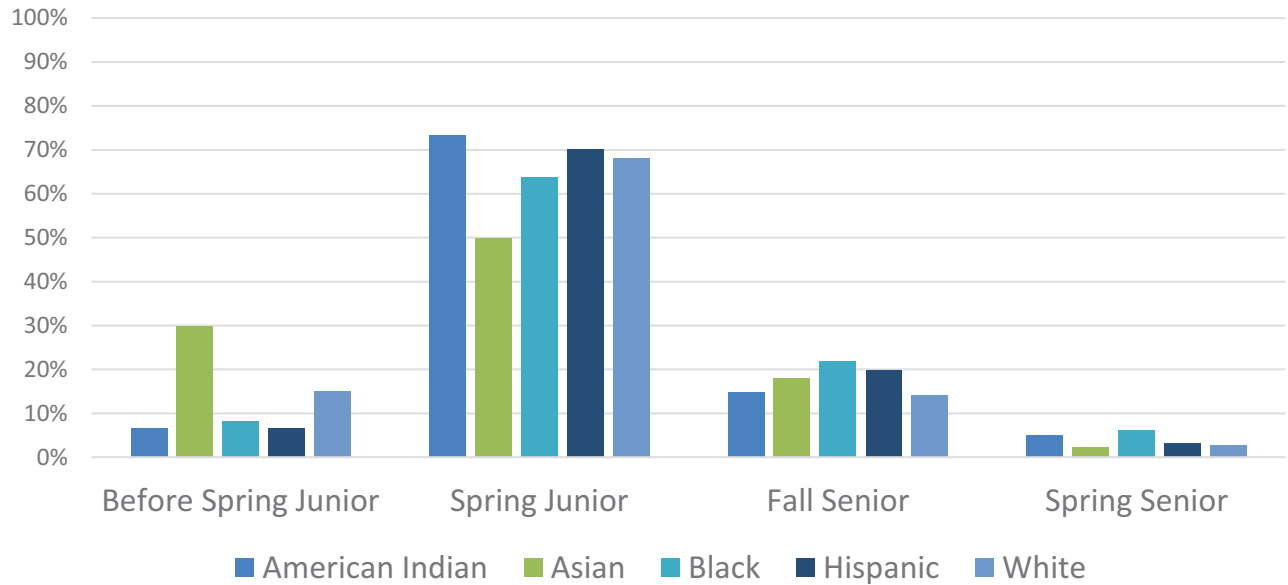
20% closure of 4-year college enrollment gap by income

As described in the “happy path” above, for a student to have a chance to practice and improve through retesting, they must take their first SAT by the end of junior year. As described in Section 2, substantial progress has been made in leading students—particularly underrepresented students—into the SAT pipeline by the end of junior year through SAT School Day. But Black and Hispanic students are still slightly more likely than students in other subgroups to take their first SAT in the fall of their senior year—leaving little to no time for retesting (Figure 1.5). Asian students, on the other hand, are far more likely to have tested prior to spring of their junior year—leaving ample time for retesting.



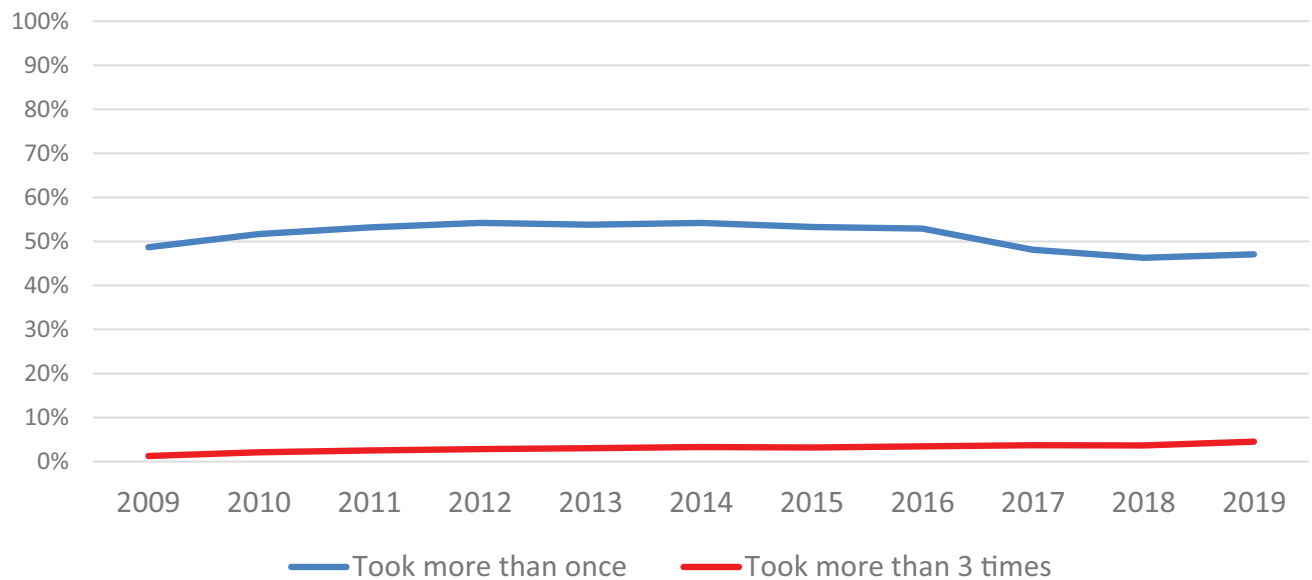
⁴ Joshua Goodman, Oded Gurantz & Jonathan Smith, 2020. “Take Two! SAT Retaking and College Enrollment Gaps,” *American Economic Journal: Economic Policy*, vol 12(2), pages 115-158.

FIGURE 1.5 Percentage of Class of 2019 by Timing of First SAT, by Race/Ethnicity



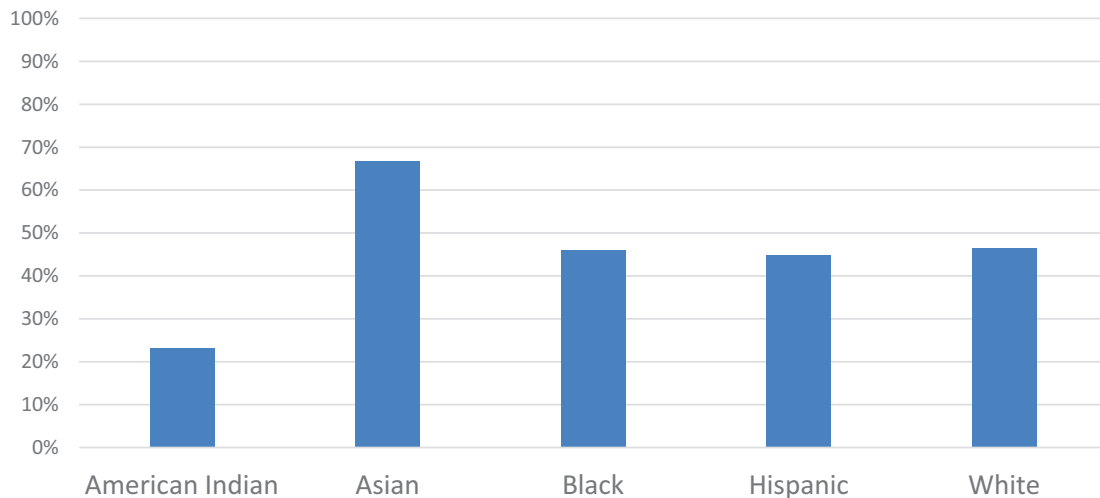
Roughly half of the SAT test takers in a graduating class take only one SAT (Figure 1.6). The percentage taking more than one SAT (i.e., retest) rose slightly, to a peak of 54%, in the classes of 2012 and 2014, before falling to 46% in the class of 2018. Contrary to popular belief, only a small portion of SAT test takers complete more than three tests, though the percentage rose from 1.2% of SAT test takers in the class of 2009 to 4.5% of the class of 2019.

FIGURE 1.6 Percentage of SAT Test Takers by Number of SATs Taken, by Graduating Class



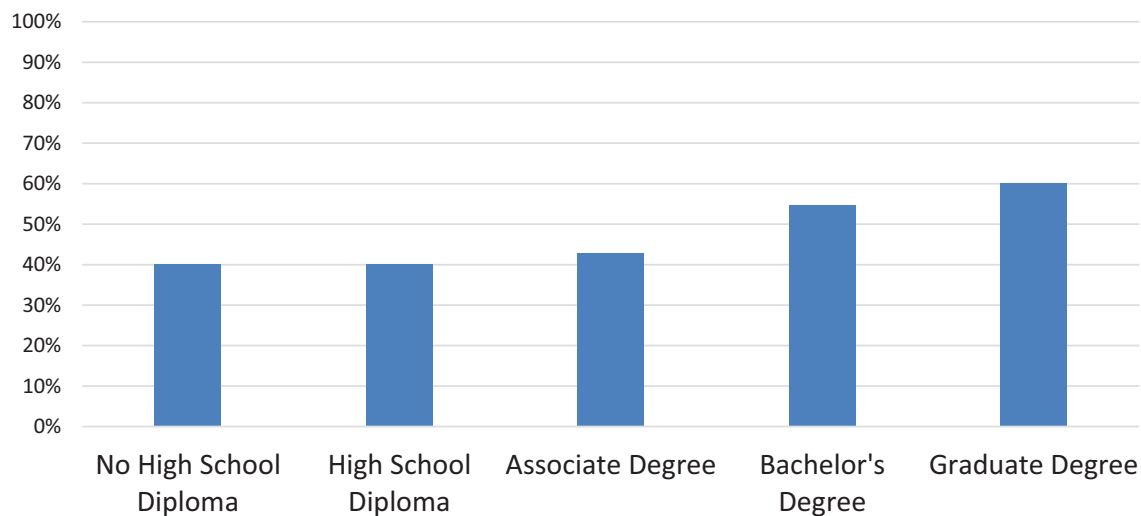
Just as the timing of the first SAT varies by race/ethnicity (Figure 1.5), so does the percentage of those who retest (Figure 1.7). Asian SAT test takers in the class of 2019 were far more likely than those in other subgroups to take more than one SAT (67%), while American Indian SAT test takers were least like to do so (23%).

FIGURE 1.7 Percentage of SAT Test Takers Who Took More Than One SAT, Class of 2019, by Race/Ethnicity



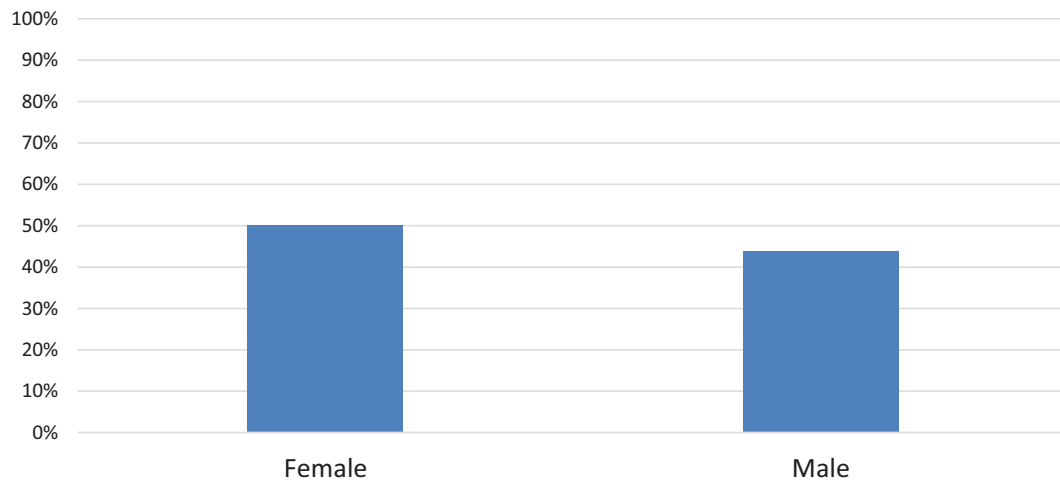
As shown in Figure 1.8, SAT test takers in the class of 2019 who reported having one or more parents with a graduate degree were most likely to retest (60%), followed closely by SAT test takers who reported the highest level of parent education as a bachelor's degree (55%). SAT test takers from first-generation, college-going households were least likely to repeat (40%).

FIGURE 1.8 Percentage of SAT Test Takers Who Took More Than One SAT, Class of 2019, by Highest Level of Parent Education



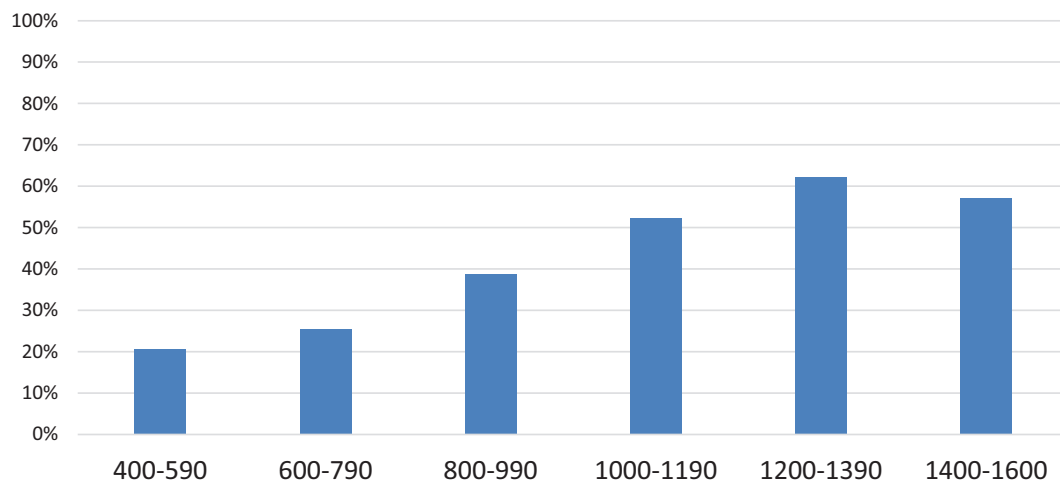
There was an appreciable gender difference: females were more likely to take more than one SAT (50% vs. 44%; Figure 1.9).

FIGURE 1.9 Percentage of SAT Test Takers Who Took More Than One SAT, Class of 2019, by Gender



Finally, retesting varies by initial score band (Figure 1.10). SAT test takers in the class of 2019 who initially scored between 1200 and 1390 were most likely to take more than one SAT (62%), followed closely by students in the highest score band (57%). Only 21% of SAT test takers initially scoring between 400 and 590 took more than one SAT, a slightly lower rate than those who first scored between 600 and 790 (25%).

FIGURE 1.10 Percentage of SAT Test Takers Who Took More Than One SAT, Class of 2019, by Initial Score Band



Just as students and counselors frequently ask about expected growth between PSAT/NMSQT and the SAT, they ask about expected growth between the first and second SAT. The amount of time between the first and second SAT varies widely, from *less than one week*—if a student completed an SAT School Day test and took their second SAT on the weekend—to nearly *four years*—if a student took an SAT in August of freshman year and then June of senior year. Thus, we tend to restrict SAT growth analyses to the most common timespan for retesting: Spring of junior year to fall of senior year. We also limit analyses to students who took one SAT during the spring of junior year and look at their first SAT during the fall of senior year.

Student-level conditional growth estimates⁵ described above can similarly be used to project expected growth for this window. In conjunction with the fall release of the *SAT Suite of Assessment Annual Report*, College Board updates a descriptive summary of score change between spring of junior and fall of senior year by initial score band (Table 1.21). The average gain is 17 points, with 17% scoring within 10 points of the initial score, and 48% scoring within 40 points of the initial score. Score change ranges from a gain of 316 point by students who initially score between 400 and 490 to a loss of 13 points by students who initially score above 1500. Figure 1.10 and Table 1.21 show that while the students in the highest initial score bands are the most likely to repeat, they see the least average gain.

TABLE 1.21 Percentage of SAT Test Takers with Senior-Year SAT Score Gain or Loss, Class of 2019

Spring Junior-Year Score Range	-140 & below	-110 to -130	-80 to -100	-50 to -70	-20 to -40	-10 to 10	+20 to +40	+50 to +70	+80 to +100	+110 to +130	+140 & above	Average Gain or Loss in Fall Senior Year
1500-1600	2%	3%	6%	13%	21%	25%	22%	8%	1%	-	-	-13
1400-1490	2%	3%	6%	12%	17%	20%	19%	12%	6%	2%	0%	-3
1300-1390	1%	2%	6%	11%	16%	18%	17%	13%	8%	4%	2%	7
1200-1290	2%	2%	5%	10%	16%	19%	17%	13%	8%	4%	3%	11
1100-1190	2%	2%	5%	9%	15%	19%	18%	14%	9%	4%	4%	13
1000-1090	2%	2%	5%	9%	14%	18%	18%	14%	9%	5%	4%	15
900-990	2%	3%	5%	9%	13%	16%	17%	14%	10%	6%	5%	18
800-890	2%	2%	5%	9%	13%	15%	16%	14%	10%	7%	8%	25
700-790	1%	2%	4%	7%	11%	15%	16%	15%	11%	7%	10%	38
600-690	1%	1%	1%	3%	6%	10%	15%	17%	15%	11%	21%	80
500-590	1%	1%	1%	2%	3%	6%	8%	9%	9%	12%	50%	139
400-490	-	-	1%	0%	0%	6%	4%	3%	3%	0%	83%	316
Total	2%	2%	5%	9%	14%	17%	17%	14%	9%	5%	5%	17

While this may seem at odds with the regression discontinuity research described above, there is one critical difference here. This research used the “superscore” as the outcome measure, which recomputes the total score based on the highest section scores to date. This means, by definition, that the superscore can never go down. The analysis in Table 1.21, on the other hand, looks at the difference between the reported total score at Time 1 versus Time 2. If we apply the superscore logic to the class of 2019 retesting between spring of junior year and fall of senior year, we see that average score change increases to a gain of 46 points, with 33% of students seeing 0–10 point gains, 26% experiencing 20–40 point gains, and 19% seeing 50–70 point gains as shown in the table below.

⁵ collegereadiness.collegeboard.org/pdf/student-level-sat-suite-growth-estimates.pdf

TABLE 1.22 Percentage of SAT Test Takers by Superscore Gain, Class of 2019

Spring Junior-Year Score Range	0 to 10	+20 to +40	+50 to +70	+80 to +100	+110 to +130	+140 & above	Average Gain in Fall Senior Year
1400-1490	41%	29%	19%	8%	3%	0%	31
1300-1390	37%	27%	18%	10%	5%	3%	38
1200-1290	36%	27%	19%	10%	5%	3%	40
1100-1190	34%	28%	19%	10%	5%	4%	41
1000-1090	33%	27%	20%	11%	5%	4%	43
900-990	31%	25%	20%	12%	6%	5%	48
800-890	30%	23%	19%	13%	8%	8%	54
700-790	25%	22%	20%	14%	8%	11%	63
600-690	10%	17%	20%	17%	13%	22%	94
500-590	9%	8%	9%	10%	13%	51%	149
400-490	6%	4%	4%	2%	1%	83%	318
Total	33%	26%	19%	11%	6%	5%	46

College and Career Readiness in U.S. Public Schools

For much of the past decade, SAT participation by race/ethnicity in U.S. public schools has been fairly consistent—Asian students are much more likely to have taken the SAT during high school, American Indian students are much less likely to have taken the SAT during high school, and other groups have showed about the same participation rates over time (Figure 1.11).

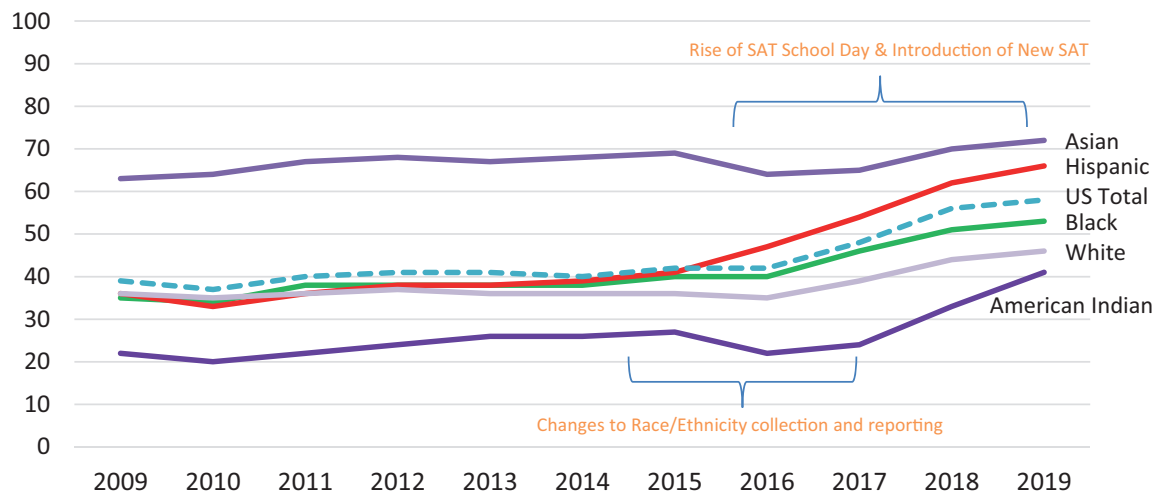
As SAT School Day expanded in the past few years, participation rates have changed significantly. The rate across U.S. public high school graduates has increased from roughly 40% on the old SAT to 58% in the class of 2019. Hispanic and Black students now participate at *much higher* rates than White students (66%, 53%, and 46%, respectively, in the class of 2019).

It's important to note that the collection and reporting of race/ethnicity changed during this time, so some caution in comparing data is warranted. Beginning in the 2015-16 school year, collection and reporting of race/ethnicity was updated to reflect U.S. Department of Education guidelines.⁶ While all SAT test takers in the class of 2015⁷ saw the old format, students in the class of 2016 who took the SAT on or after June 2015 saw the new format. There wasn't sufficient information from WICHE to project enrollment and/or graduates for this new reporting category, so we are unable to estimate participation rates for those students.

⁶ research.collegeboard.org/about-us/changes-to-race-ethnicity-reporting

⁷ Western Interstate Commission for Higher Education, *Knocking at the College Door: Projections of High School Graduates, 2016*, wiche.edu/knocking.

FIGURE 1.11 Percentage of U.S. Public High School Graduates Who Took the SAT, by Graduating Cohort



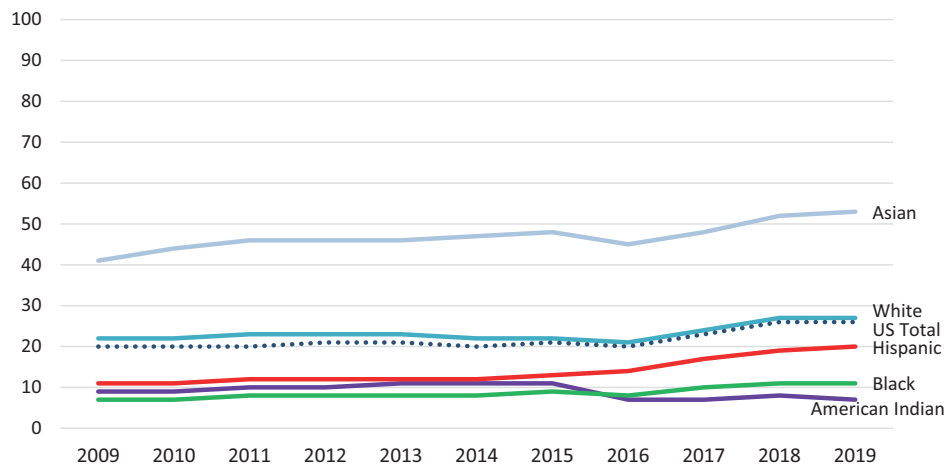
If we apply this same logic to the performance information, a more troubling picture of college and career readiness in the nation’s public schools emerges. Before presenting those results, it’s important to note that college- and career-ready estimates for the SAT program have historically been framed from the perspective of test takers. In other words, the denominator is *all* SAT test takers. For example, 2.22 million students in the class of 2019 took an SAT, of whom 45% met or exceeded both section benchmarks and were thus college and career ready.

That renders state comparisons meaningless, given the disparate participation rates between states with statewide SAT School Day contracts where participation is at or around 100%, and participation in states with statewide ACT contracts, where a small percentage of graduates might take the SAT. There is an inverse relationship between participation rate and benchmark attainment rate when the latter is a function of the test-taking population.

Perhaps more troubling is a simplistic focus on this traditional measure of benchmark attainment. If given a directive to improve the traditional benchmark attainment rate, the easiest, fastest, and cheapest way is to exclude weaker students. The hard, generally slow, and more expensive work is to expand the pool to make sure all students have access, and that all students and educators have the tools to succeed.

To this end, we can look at benchmark attainment as a function of the overall number of public high school graduates—which can’t easily be manipulated. Figure 1.11 showed that in the class of 2019, 58% of U.S. public high school graduates took an SAT and, as shown in Figure 1.12, only 26% of U.S. public high school graduates demonstrated college readiness. Underrepresented students, who made such astounding progress in participation (Figure 1.11), continue to lag in college readiness and only modest gains are seen in the past few graduating classes, as shown in Figure 1.12.

FIGURE 1.12 Percentage of U.S. Public High School Graduates Who Are College Ready⁸, by Cohort



Implications

Measuring growth in scores is complex and ripe for misinterpretation. Most of the analyses above are purely descriptive and don't control for variables that may or may not impact performance. While this analysis suggests the SAT Suite is preparing more students for college and career training programs, there are many challenges ahead:

- Fewer than half of students who take the SAT meet the benchmarks, with results for several race/ethnicities falling even shorter.
- 30% of SAT test takers in the class of 2019 didn't meet either SAT section benchmark, indicating they will likely need remediation when they enter college or career training programs.
- Performance differences across race/ethnicity are evident early and persist throughout high school.

While we see promising signs, we still have much work to do.

⁸ Reflects 75% probability of a GPA of C or higher in related first-semester, credit-bearing college courses on the new SAT (ERW \geq 480 and Math \geq 530) or old SAT (CR+WR \geq 860 and Math \geq 500).

SECTION 2

The Impact of Offering the SAT During the School Day

The emerging consensus in the research literature is that making college entrance exams (CEEs) free and universally available helps students realize their college potential. Four studies independently address the issue of universal college entrance exam taking and the consequences these policies have for students. The key findings are:

- As many as **20%** of students eligible for selective colleges weren't **taking a CEE** before universal testing began¹
- 4-year **college going increased** after universal CEEs^{1,2,3}
- Universal CEEs shifted college enrollment to institutions with **higher BA completion rates**⁴
- Students from **underrepresented backgrounds**—low income, rural—**benefited most**^{1,2}

And here are a few more important lessons from all that research:

First, it's a myth that students who weren't taking CEEs before universal access lacked college readiness. As many as one in five students with CEE scores that would make them eligible for selective colleges were *not* taking a CEE prior to its universality. In some states, these estimates are even higher.

Second, four-year college going increases after the introduction of universal CEEs. In some states, the increases were as high as 10%.

Third, universal implementation shifts *where* students attend college, with enrollment increasing at institutions with higher BA completion rates.

Fourth, traditionally underserved students benefit the most from universal CEE policies.



1 Hyman, J. (2017) *ACT for All: The Effect of Mandatory College Entrance Exams on Postsecondary Attainment and Choice*. *Education Finance and Policy* 12 (3): 281–311.

2 Hurwitz, M., Smith, J., Niu, S., and Howell, J. (2015) *The Maine Question: How Is 4-Year College Enrollment Affected by Mandatory College Entrance Exams?* *Educational Evaluation and Policy Analysis* 37 (1): 138–59.

3 Klasik, D. (2013) *The ACT of Enrollment: The College Enrollment Effects of State-Required College Entrance Exam Testing*. *Educational Researcher* 42 (3): 151–60.

4 Goodman, S. (2016) *Learning from the Test: Raising Selective College Enrollment by Providing Information*. *Review of Economics and Statistics* 98 (4): 671–84

These include lower-income students and students from rural areas. As an example, in Maine, roughly one out of 10 students induced to take the SAT as a result of its universality ended up enrolling at four-year colleges.

SAT School Day

College Board introduced SAT School Day in 2011 to districts and states, giving them the opportunity to administer the SAT to juniors and seniors on a weekday. By paying for the SAT, states and districts removed financial and logistical barriers, offering *all* students access. Since that time, SAT School Day participation has increased dramatically across the country.

Beginning in spring 2018, all U.S. schools have been able to order SAT School Day for any number of students and without a contract. This means that the entire SAT Suite of Assessments—including the PSAT/NMSQT, PSAT 10, and PSAT 8/9—is available for schools and districts to order online, all in one place, to administer at the same time during the school day.

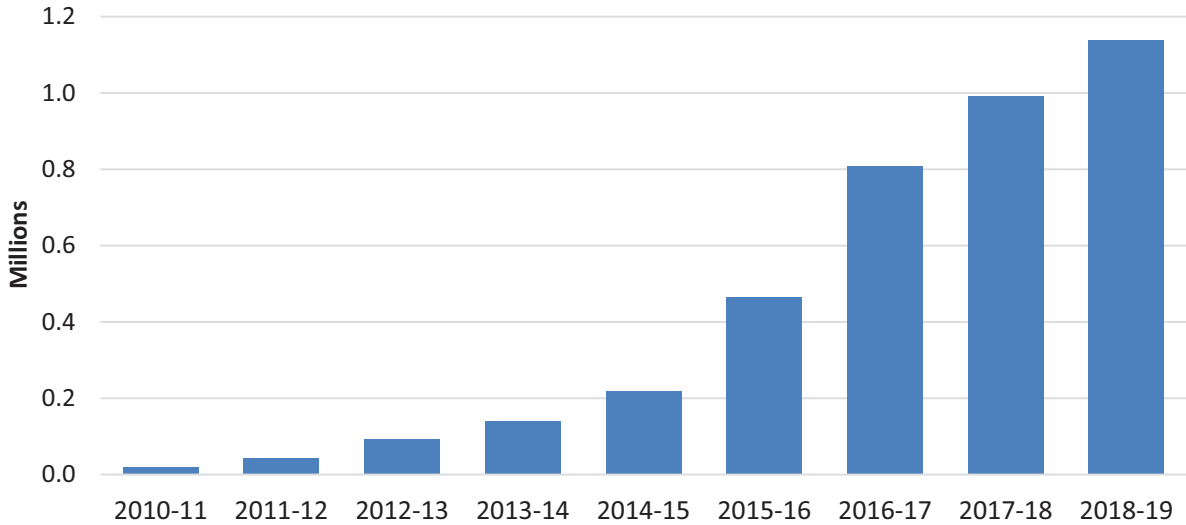
Schools, districts, and states participating in the SAT School Day program report the following benefits:

- **Expanded access:** When students take the SAT during the school day, they don't have to juggle weekend responsibilities or find transportation. Income eligible 11th- and 12th-grade students also receive SAT fee waivers, unlimited free SAT score sends, and college application fee waivers, so they can retake the SAT and apply to colleges—all for free. More and more students who had ruled out college consider it once they see their scores.
- **Earlier access:** Historically, a disproportionate number of low-income and underrepresented minority students took their first SAT late in fall of senior year. As a result of SAT School Day, these students are more likely to test in spring of junior year, which provides them more time to practice and improve before applying to college in their senior year.
- **Increased comfort:** Students have less stress when they test in a familiar setting with people they know. In fact, in post-testing surveys, students cite “testing at their own school” as the most positive impact on their testing experience.
- **Increased confidence:** Official SAT Practice on Khan Academy provides every student with a practice plan built just for them, along with integrated coaching tools for teachers so they can view progress and support their students.

States, Districts, and Schools Participating in School Day

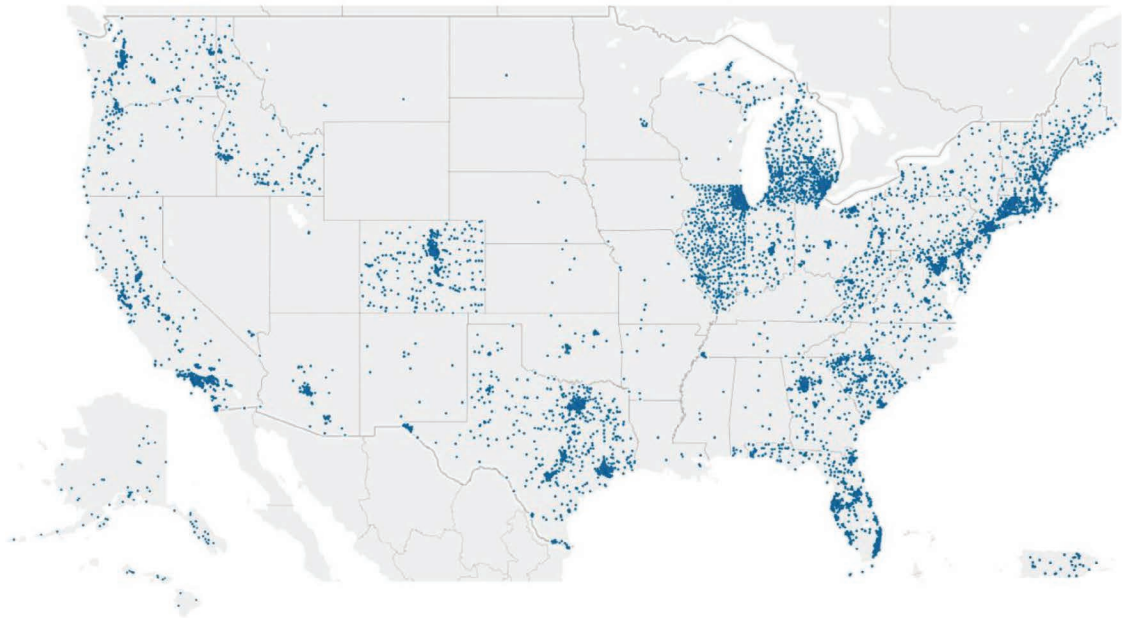
In 2011, just over 20,000 students participated in SAT School Day (Figure 2.1). In the 2018-19 school year over 1.1 million students took the SAT during a school day. Over 3.7 million students in more than 3,000 school districts and 9,000 schools participated in SAT School Day through spring 2019.

FIGURE 2.1 Number of Students Participating in SAT School Day, by School Year



In 2018-19, 10 states (Colorado, Connecticut, Delaware, Idaho, Illinois, Maine, Michigan, New Hampshire, Rhode Island, and West Virginia) and the District of Columbia covered the cost of the SAT for all their public school students and offered the SAT during a school day. That’s in addition to participation by some of the nation’s largest districts, like Baltimore City Public Schools in Maryland, Broward County School District in Florida, Cleveland Metropolitan School District in Ohio, Houston Independent School District in Texas, Tulsa Public Schools in Oklahoma, and New York City, as well as individual schools across the country (Figure 2.2).

FIGURE 2.2 Schools Participating in SAT School Day between 2010-11 and 2018-19



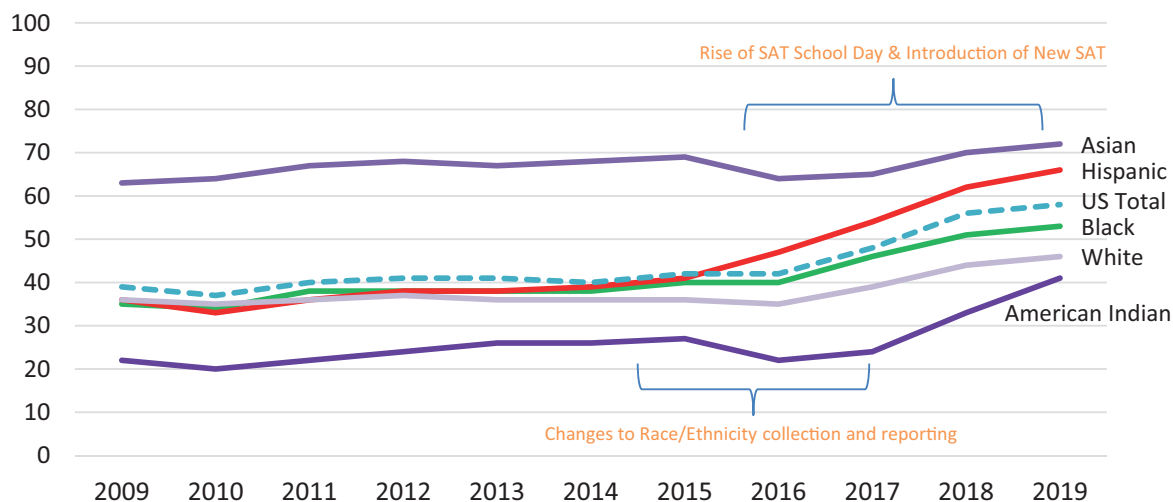
SAT School Day Changed Who Takes the SAT

For much of the past decade, participation rates by race/ethnicity in U.S. public schools were fairly steady and consistent—Asian students were much more likely to have taken the SAT during high school, American Indian students were much less likely to have taken the SAT during high school, and the participation rates of other groups didn't differ markedly from one another (Figure 2.3).

As SAT School Day expanded in the past few years, participation rates have changed significantly. The overall participation rate across U.S. public high school graduates has increased from roughly 40% on the old SAT to 58% in the class of 2019. Hispanic and Black students now participate at *much higher* rates than White students (66%, 53%, and 46%, respectively, in the class of 2019).

The collection and reporting of race/ethnicity changed during this time, so some caution in comparing data over time is warranted. Beginning in the 2015-16 school year collection and reporting of race/ethnicity was updated to reflect U.S. Department of Education guidelines.⁵ While all SAT test takers in the class of 2015 saw the old question format, only those in the class of 2016 who registered during or after June 2015 saw the new format. Nearly all SAT test takers in the class of 2018 saw the new format. One notable impact of this transition was students migrating from a single race/ethnicity category under the old format to “Two or More Races” in the new format, which explains the slight dip in participation rates around 2016 for some groups.⁶ To project enrollment and/or graduates for this new reporting category; thus, we are unable to estimate participation rates for these students.

FIGURE 2.3 Percentage of U.S. Public High School Graduates Who Took the SAT, by Graduating Cohort



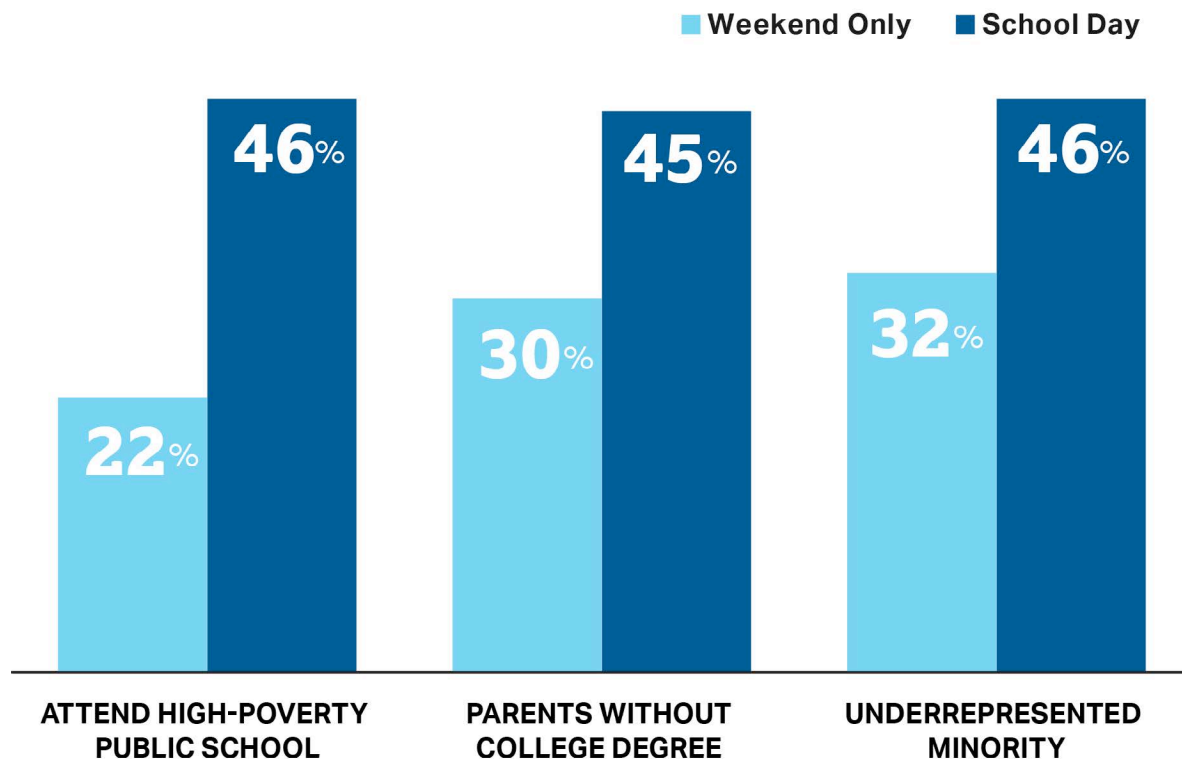
⁵ research.collegeboard.org/about-us/changes-to-race-ethnicity-reporting

⁶ Western Interstate Commission for Higher Education, Knocking at the College Door: Projections of High School Graduates, 2016, wiche.edu/knocking.

That this trend can be attributed to SAT School Day is confirmed when we compare the demographic characteristics of School Day SAT test takers against those who test only on the weekend. As shown in Figure 2.4, School Day test takers are more likely to:

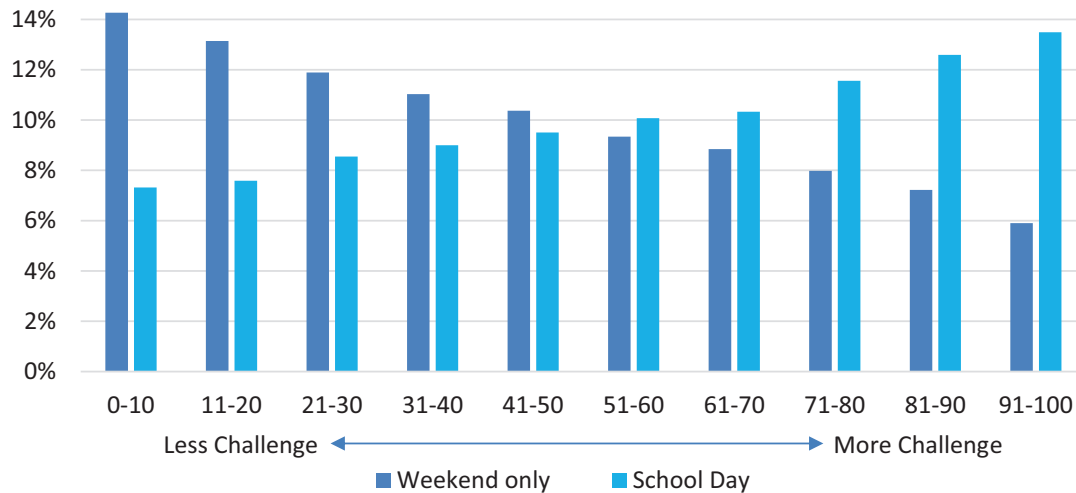
- Attend high-poverty public schools, where more than 50% of students qualify for free or reduced-price lunch;
- Have parents without high school diplomas or college degrees, and;
- Identify as an underrepresented minority (i.e., American Indian/Alaska Native, Black/African American, Hispanic/Latino, or Native Hawaiian/Other Pacific Islander).

FIGURE 2.4 Characteristics of School Day versus Weekend Only SAT Test Takers, Class of 2019



Similarly, School Day test takers are more likely to come from neighborhoods with greater socioeconomic challenge while those testing only on the weekend are more likely to come from better-resourced neighborhoods (Figure 2.5). Among School Day participants in the class of 2019, 13% of those who participated in School Day came from the *most* challenged neighborhoods compared to less than 6% of SAT test takers who participated solely during the weekend. Conversely, 14% of weekend SAT test takers came from the *least* challenged neighborhoods compared to just over 7% of School Day participants.

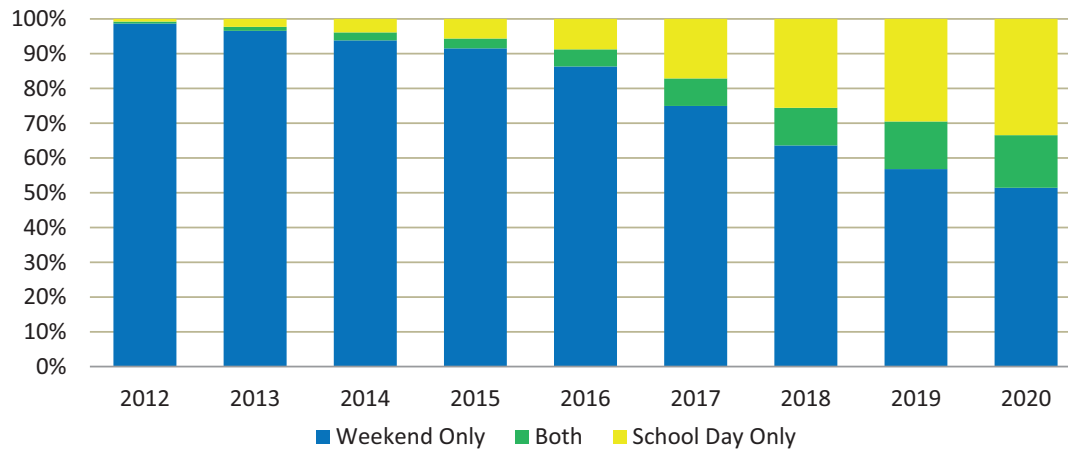
FIGURE 2.5 Percentage of SAT Test Takers by Testing History by Neighborhood Challenge, Class of 2019



SAT School Day Changed How and When Students Take the SAT

Not surprisingly, we can see SAT School Day’s influence on graduating classes (Figure 2.6). Nearly 960,000 students (43%) in the class of 2019 took the SAT on a school day, up from almost 780,000 (36%) in the class of 2018, and roughly 460,000 (27%) in the class of 2017. Nearly 1.1 million or 49% of SAT test takers in the class of 2020 participated in SAT School Day.

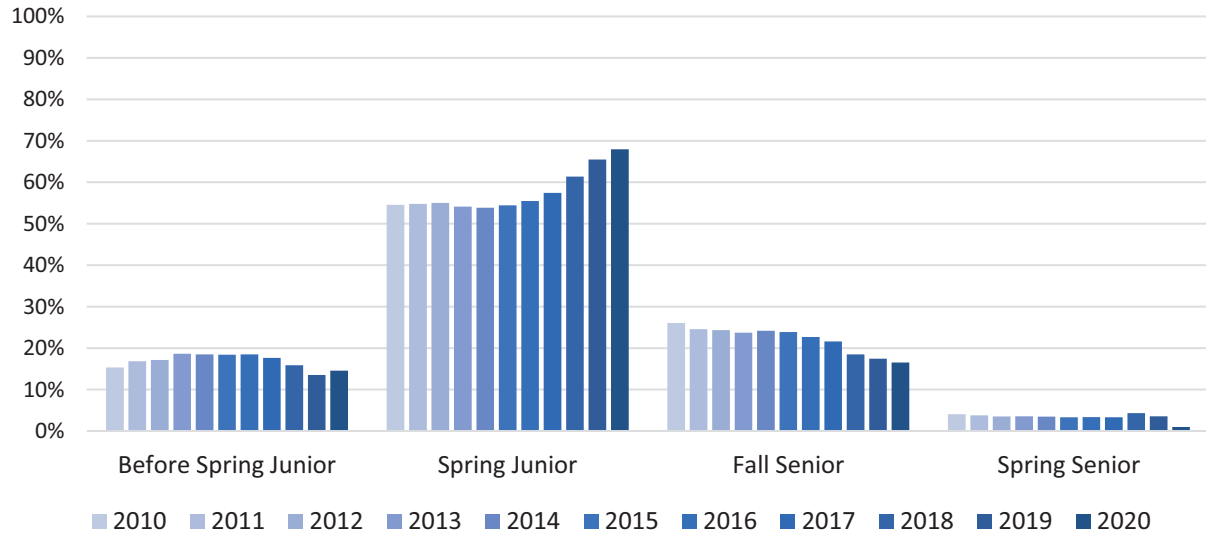
FIGURE 2.6 Percentage of SAT Cohort by Administration Type, by Graduating Cohort



One of the goals of SAT School Day was to pull lower-income and underrepresented students into the college-going pipeline earlier because data showed that many of them first took the SAT in the late fall of their senior year—often too late for students to improve their scores. More-resourced students historically begin testing by the end of their junior year, which gives them ample time to practice and improve.

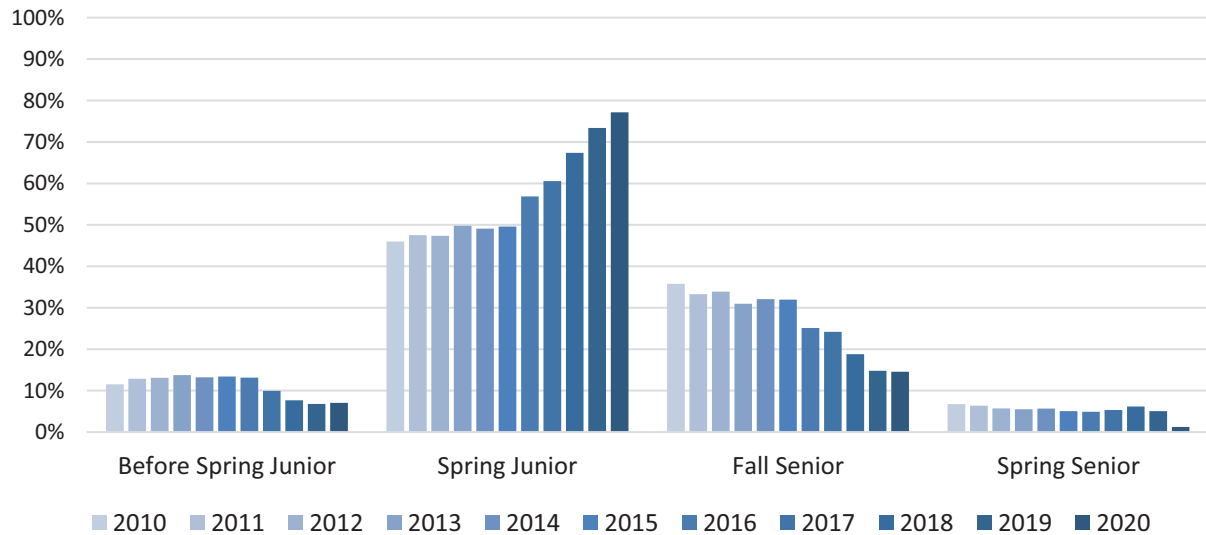
With the expansion of SAT School Day, the percentage of the cohort first testing in fall of senior year declined steadily, from 26% in the class of 2010 to 17% in the class of 2020 as shown in Figure 2.7. During this time, the percentage first testing in spring of junior year rose from 55% to 68%.

FIGURE 2.7 Percentage of SAT Cohort by Timing of First SAT, by Graduating Cohort



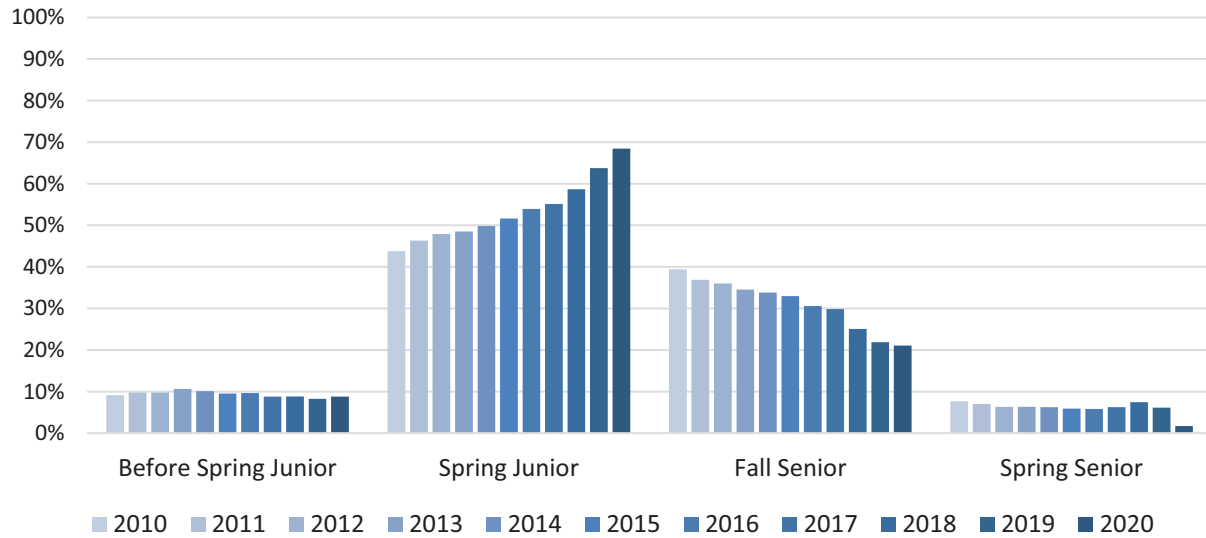
This trend is especially striking for underrepresented students. The percentage of American Indian SAT test takers first testing in fall of senior year declined steadily from 36% in the class of 2010 to 15% in the classes of 2019 and 2020, while the percentage first testing in spring of junior year rose from 46% to 77%, as shown in Figure 2.8.

FIGURE 2.8 Percentage of American Indian SAT Cohort by Timing of First SAT, by Graduating Cohort



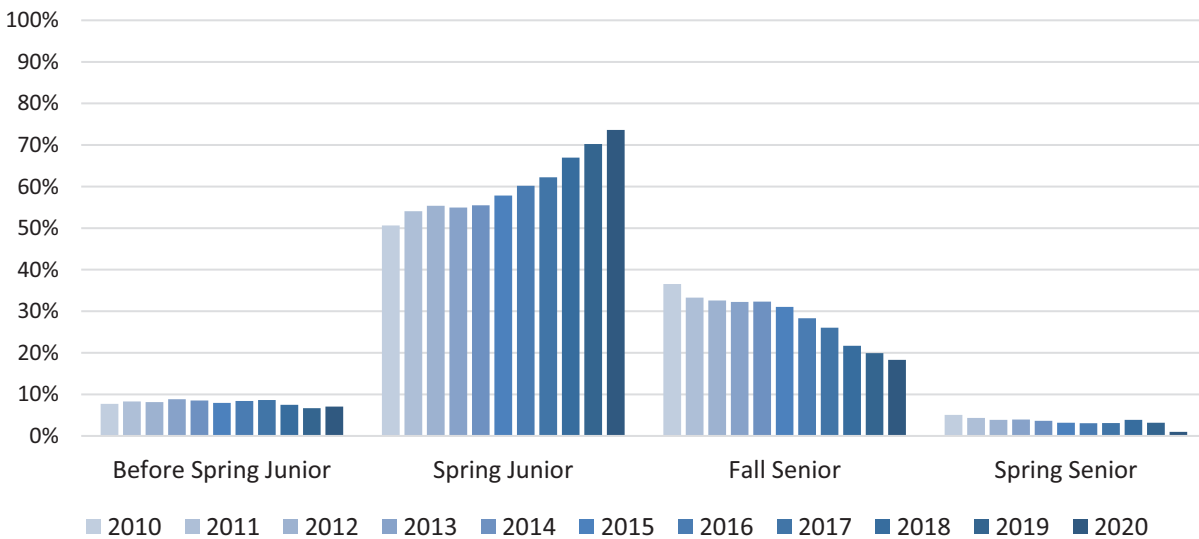
Similarly, the percentage of Black SAT test takers first testing in fall of senior year declined steadily, from 39% in the class of 2010 to 21% in the class of 2020, while the percentage first testing in spring of junior year rose from 44% to 68% (Figure 2.9).

FIGURE 2.9 Percentage of Black SAT Cohort by Timing of First SAT, by Graduating Cohort



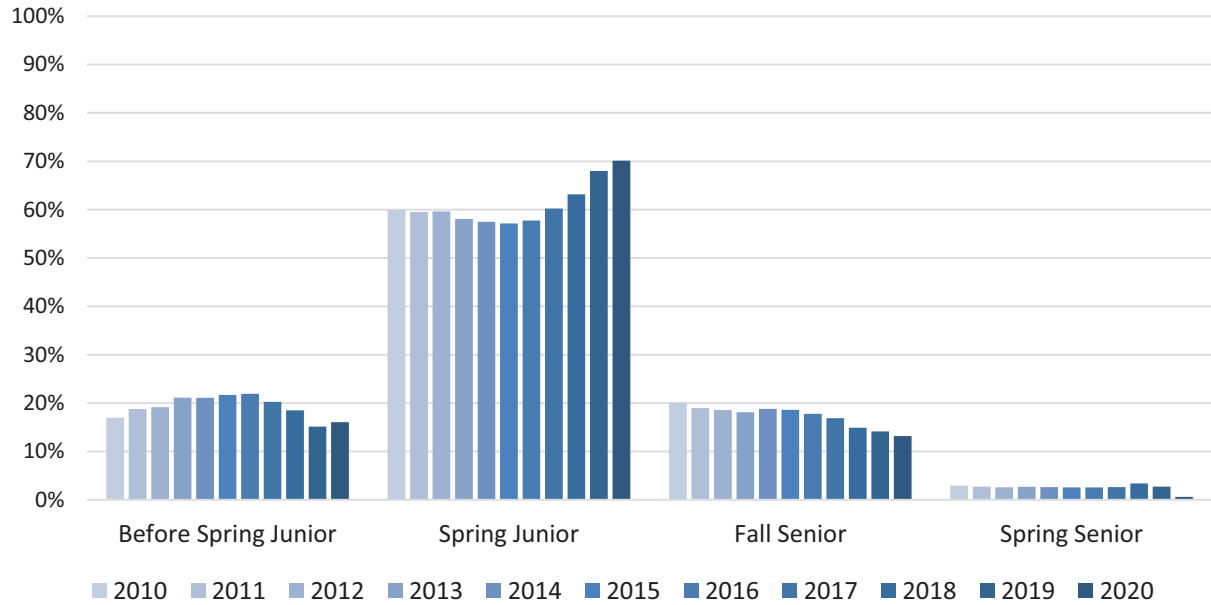
Among Hispanic SAT test takers, the percentage first testing in fall of senior year declined steadily, from 37% in the class of 2010 to 18% in the class of 2020, while the percentage first testing in spring of junior year rose from 51% to 74% (Figure 2.10).

FIGURE 2.10 Percentage of Hispanic SAT Cohort by Timing of First SAT, by Graduating Cohort



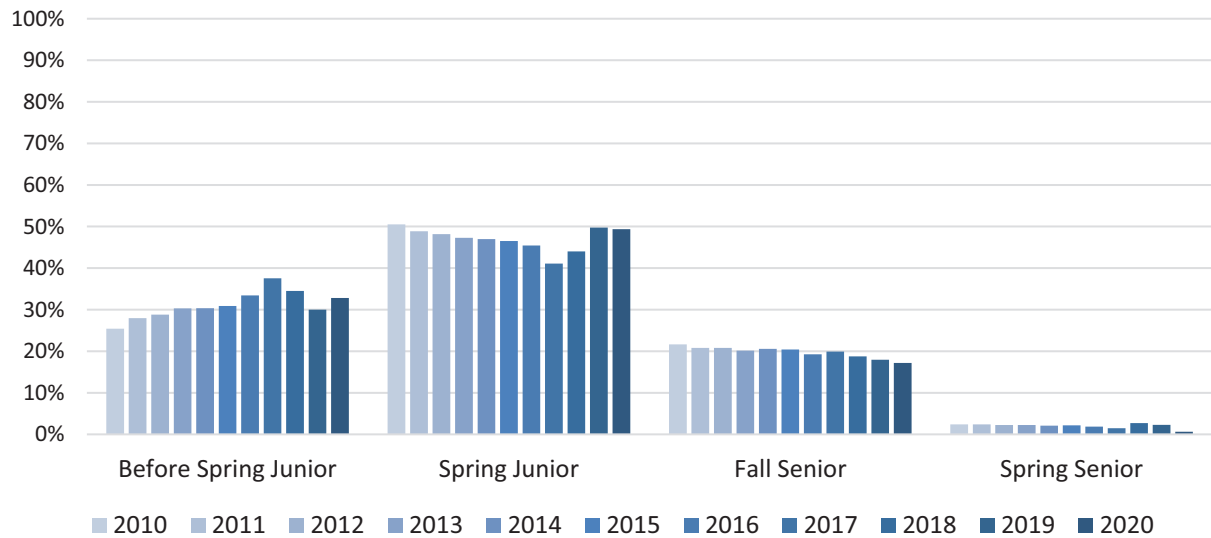
The trend is less pronounced—but still evident—among White SAT test takers. The percentage first testing in fall of senior year declined steadily from 20% in the class of 2010 to 13% in the class of 2020, while the percentage first testing in spring of junior year rose from 60% to 70% (Figure 2.11).

FIGURE 2.11 Percentage of White SAT Cohort by Timing of First SAT, by Graduating Cohort



Asian SAT test takers have historically started testing earlier than other groups, with a much larger proportion of each cohort testing before spring of junior year. However, small shifts are still evident in recent years. The percentage first testing in fall of senior year declined from 22% in the class of 2010 to 17% in the class of 2020 (Figure 2.12).

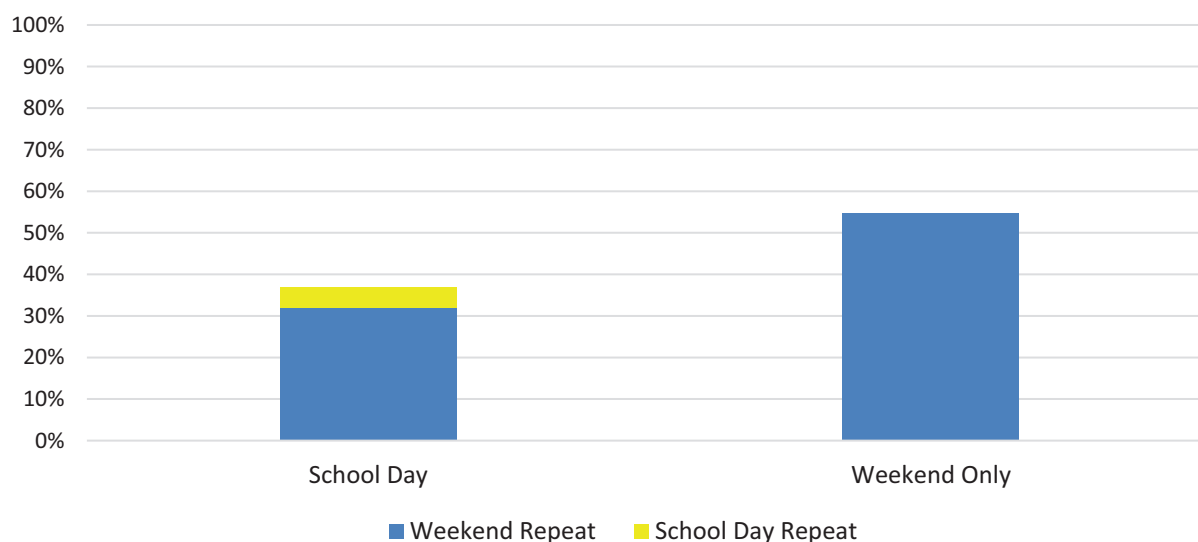
FIGURE 2.12 Percentage of Asian SAT Cohort by Timing of First SAT, by Graduating Cohort



SAT Retaking Among School Day Test Takers

Recent research shows that retaking the SAT increases scores, increases college enrollment, and can help close gaps in enrollment.⁷ School Day SAT test takers are less likely to repeat the SAT than those who test only on the weekend (Figure 2.13). In the class of 2019, 37% of those who participated in SAT School Day took more than one SAT during high school, compared to 55% of those who tested solely on the weekend. Of the School Day test takers, 32% completed the SAT during both weekend and weekday testing, while 5% participated in more than one School Day test (the most common sequence being spring of junior year and fall of senior year, although there has been an uptick in late senior year retesting since spring 2018).

FIGURE 2.13 Percentage of SAT Test Takers in Class of 2019 Who Took More Than One SAT, by Testing History

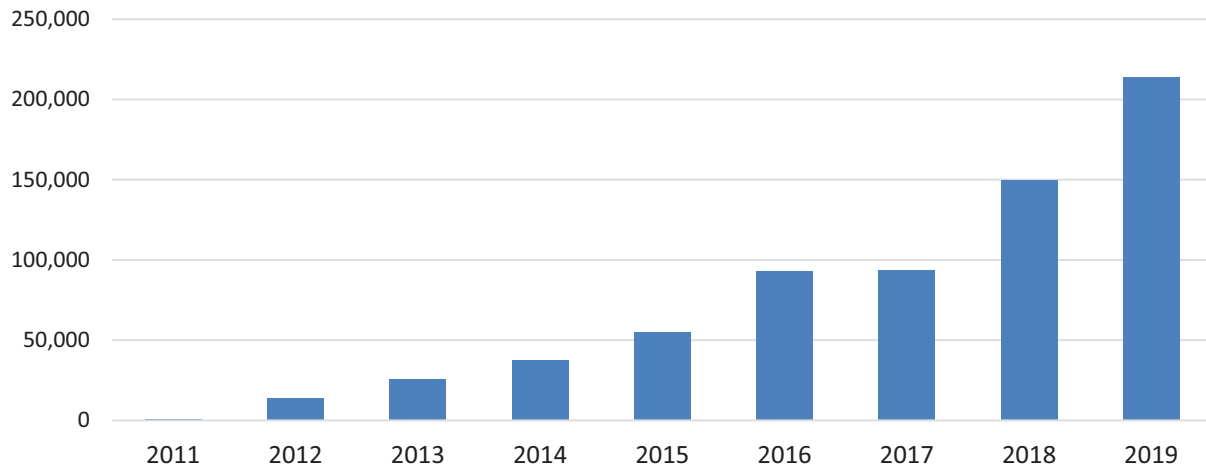


Expanding Opportunity by Offering Spring and Fall SAT School Day

Spring SAT School Day is widely known, with nearly one million students participating in spring 2019. But barriers to getting into the college-bound pipeline aren't limited to spring, which is why College Board offers SAT School Day in October—when many schools administer the PSAT/NMSQT. After the initial pilot in fall 2011, participation in fall SAT School Day rose from just over 14,000 in 2012 to nearly 214,000 in 2019 (Figure 2.14).

⁷ Joshua Goodman, Oded Gurantz & Jonathan Smith, 2020. "Take Two! SAT Retaking and College Enrollment Gaps," *American Economic Journal: Economic Policy*, vol 12(2), pages 115-158

FIGURE 2.14 Number of Students Participating in October SAT School Day, by School Year



Districts such as Orange County Public Schools in Florida and Long Beach Unified School District in California make SAT School Day available to students both in spring of their junior year and fall of their senior year to ensure that they have the opportunity to practice, improve, and show their best work as they apply for college admission and scholarship opportunities.

Looking to improve postsecondary outcomes and promote college-going culture, the School District of Osceola County in Florida has also adopted the SAT for seniors in the fall. Having implemented the SAT Suite of Assessments for students through junior year (PSAT 8/9 for freshmen, PSAT/NMSQT for sophomores and juniors, and SAT in spring of junior year), Osceola sees the opportunity for a senior SAT administration as outcome driven.

Since it serves many first-generation and low-income students, Osceola knows access alone doesn't equal opportunity. More than an assessment, the SAT Suite offers a first step toward postsecondary opportunities for Osceola students. To support its students, Osceola has implemented districtwide preparation and practice efforts through Official SAT Practice on Khan Academy, including: teacher-guided practice in the classroom, extracurricular opportunities for practice, encouragement to practice independently, district-level efforts to embed practice into the curriculum, and the establishment of peer-to-peer "Khan ambassadors."

To further encourage development from junior to senior year, Osceola promotes friendly competitions on Khan Academy and rewards students who work hard over the summer. These efforts help Osceola students achieve scores required by Florida's graduation requirements, while getting more students into the college-going pipeline. According to Osceola superintendent, Debra Pace, "High school graduation is a critical step, but it's not the last step."

State/District SAT School Day Policy Recommendations

Given the clear benefits to retaking a college entrance exam, policymakers should consider ways to encourage students to do so, and thereby close the college-going gaps. For example, policymakers could work with their state department of education and local districts to fund SAT retake opportunities, particularly for low-income and underrepresented minority students who would benefit the most.

There are several options for policymakers:

- **Fund a statewide retake opportunity.** Ten states (Colorado, Connecticut, Delaware, Idaho, Illinois, Maine, Michigan, New Hampshire, Rhode Island, West Virginia) plus Washington D.C. administer the SAT to all high school juniors. Several states (Oklahoma, Ohio, Tennessee) allow districts to choose whether all students take either the ACT or the SAT. *Policymakers in these states should consider funding a college entrance exam retake opportunity.* For example, in Tennessee, the Student Assessment Transparency Act (2016) requires each student taking a college entrance exam as a junior to have the opportunity to retake it one additional time. Almost 75% of the state's high school class of 2018 took advantage of that opportunity, and 40% of students improved their ACT scores, resulting in more than 2,000 additional students becoming eligible for the state's HOPE lottery scholarship.
- **Fund retaking for current SAT School Day districts statewide.** Across the country, individual districts have recognized the value of providing all students the opportunity to take the SAT during the school day and are funding this. Providing SAT School Day districts an SAT retake opportunity is a simple and cost-effective way to increase college-going rates.
- **Help fee waiver eligible students register for free SAT retakes.** Students eligible for SAT fee waivers are eligible to retake it for free up to two additional times, but few students know this. Policymakers can help close the college-going gaps by clearly communicating to districts, schools, parents, and students the opportunities for fee waiver eligible students to retake the SAT.

Implications

There has been substantial progress in bringing historically underrepresented students into the college pipeline through SAT School Day and in removing barriers so that more of these students complete an SAT in spring of junior year—as their more-resourced peers have long done. Pulling students into the pipeline earlier helps connect them to colleges earlier in the admission cycle and gives them more time to practice and improve before applying to college in senior year.

However, as shown above, School Day students are less likely to retake the SAT—a step that has been shown to increase scores, increase four-year college enrollment, and help close racial and socioeconomic gaps in enrollment. In addition to partnering with schools, districts, and states to make SAT School Day available in both spring of junior year and fall of senior year, College Board has increased outreach to income-eligible students to increase awareness of the many fee waiver benefits available to them, as well as to help them better understand the advantages of retesting for both admissions and scholarship opportunities.

SECTION 3

Strengthening Readiness Skills with Personalized Practice

For decades, wealthy families have paid test preparation companies and private tutors to improve their children's scores on tests like the SAT, but most families can't afford such services. When the redesign of the SAT was announced in 2014, College Board initiated a partnership with Khan Academy, a leader in online education, to combat this inequity. Official SAT Practice is the most comprehensive SAT practice available, and it's personalized and free to all. Over the last five years, we've invested heavily to ensure that all students, regardless of family resources, can practice the skills they'll need to succeed on the SAT and in college.

First offered in June 2015, Official SAT Practice (OSP) on Khan Academy creates a plan for each student that includes thousands of interactive questions with instant feedback, video lessons, eight full-length practice tests, and more. Students can link their College Board and Khan Academy accounts. Using the student's SAT Suite of Assessments data, Official SAT Practice on Khan Academy can identify the student's skill levels and make personalized practice recommendations. If students choose not to link accounts, they can get the same personalization by taking some diagnostic quizzes or a full-length practice exam on OSP.

In this section, we highlight the results of students from the high school graduating class of 2019 who linked their College Board and Khan Academy accounts,¹ received a personalized study plan, and used OSP to prepare for the SAT.

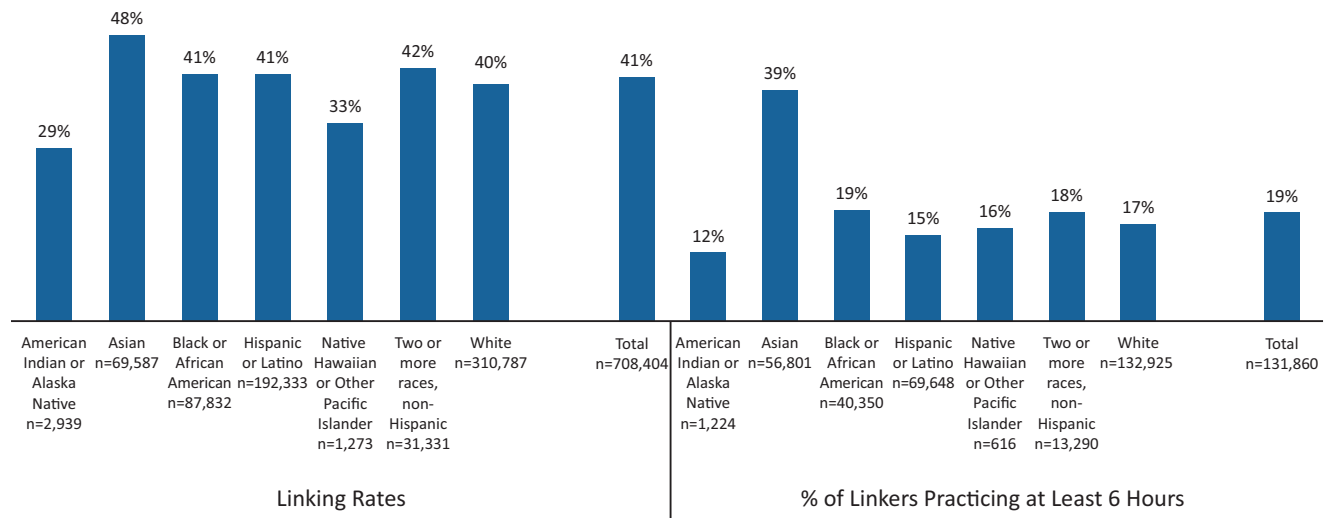
Delivering Opportunities 2018 reported on OSP usage for the 2017 graduating class and the associations between time on OSP and score increases from PSAT/NMSQT to the last SAT taken. In this report, we look at the 2019 graduating class. The first section has three parts: (1) linking and practice information for the 2019 graduating class, (2) best practices on OSP, and (3) an overview of a subset analysis focused on associations between OSP best practices and SAT scores for students in the 2019 cohort who practiced after their PSAT/NMSQT and before their first SAT. With this update, we dig deeper into our previous claims about who is using OSP, how they're using it, and how particular approaches to SAT practice using OSP are associated with SAT scores. For more details on the subset analysis, please refer to the *Official SAT Practice Technical Report*, jointly authored by Khan Academy and College Board, and released in August 2020.

¹ Note that some students may have used Khan Academy to prepare for the SAT without linking their accounts, so we are unable to look at their results.

Linking and Practice for Students in the 2019 Cohort

Use of OSP continues to increase—although there are differences by race and by level of parental education. In 2017, over 250,000 students who took the PSAT/NMSQT and SAT linked their accounts; in the class of 2019, the number jumped to over half-a-million. Figure 3.1 shows the linking and practice rates for students who took the PSAT 10 or PSAT/NMSQT in addition to an SAT by ethnicity.

FIGURE 3.1 Linking Rates and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice by Race/Ethnicity



Of the 1.7 million students in the 2019 cohort who took a PSAT 10 or PSAT/NMSQT plus the SAT, 41% linked their College Board and Khan Academy accounts and 19% spent at least six hours on Khan Academy—time enough to take two full-length practice tests. Asian students linked and practiced for at least six hours at higher rates than their peers, while rates across all other racial/ethnic groups were similar.

FIGURE 3.2 Linking Rates and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice by Highest Level of Parental Education

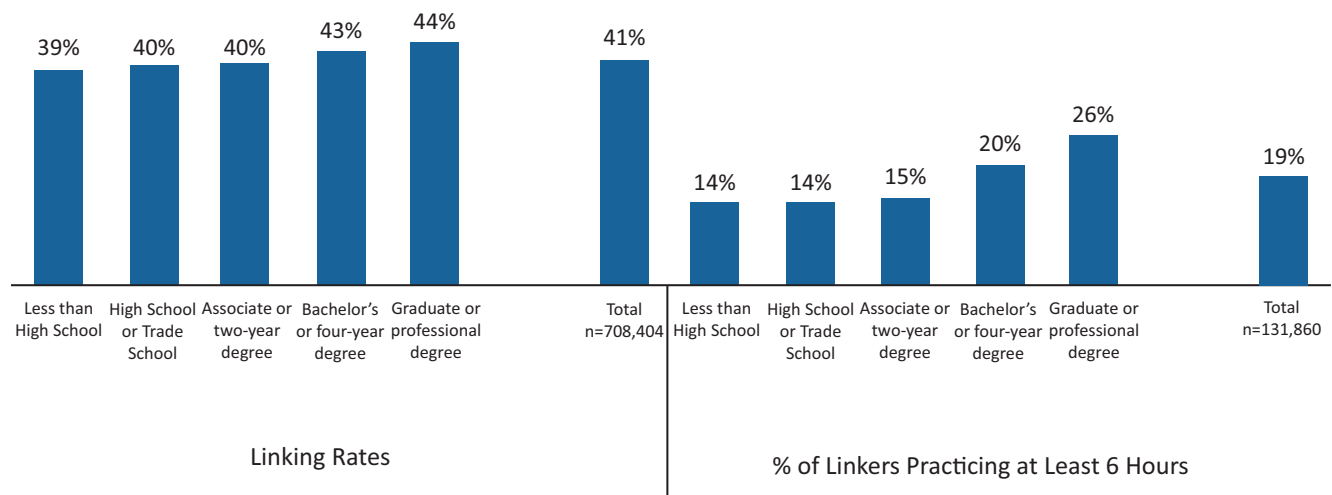


Figure 3.2 shows the linking and practice rates for students who took the PSAT 10 or PSAT/NMSQT in addition to an SAT by highest level of parental education. Linking rates increased slightly with levels of parental education, as did practice rates—the group with the highest percentage of students who practiced at least six hours were those with parents with graduate or professional degrees.

We are continually learning more about how students are spending their time on OSP. In the section that follows, we describe OSP usage, beyond time spent, and model how incorporating best practices is associated with SAT outcomes.

Defining “Best Practices” on OSP

OSP offers a rich array of features to help students prepare for the SAT. Given this and the varied needs of individuals, there is no single “best” or ideal way to use it. However, there are several best practices that will help students get the most out of their time on OSP by helping them understand what the test will be like, which skills they should focus on to improve, and when they are making progress. In this section, we focus on three best practices:

- **Follow OSP skill recommendations.** The personalized study plan aims to identify the skills a student would benefit most from practicing because they are important for college readiness and are tested relatively frequently on the SAT. While there are plenty of reasons students might also need or want to practice skills not in their personalized recommendation queue, progressing in the recommended skills helps students use their OSP time efficiently by focusing on skills they most need to improve. We define best practice here as students completing 10 (or more) practice tasks across the majority of skills recommended to them.
- **Complete a full-length practice test.** Research has repeatedly shown that practice tests are an effective way to improve performance and are often more effective than other non-testing learning conditions, such as restudying or exclusive practice (see Adesope et al., 2017 for a recent meta-analysis). We define this best practice as students completing at least one full-length practice test after the PSAT/NMSQT and before the first SAT.
- **Leveling up skills.** Students with linked accounts begin their path through OSP content at an initial skill level based on their previous PSAT/NMSQT performance. As students progress through OSP material, they can achieve new levels in the skills practiced, from level 1 to 4 (level up). There are 69 different skills, and not all students will level up on skills in the same way. For example, students may practice very broadly across many skills, without spending enough time on one skill to “level up.” However, overall leveling up in at least some skills provides a general signal that students are consistently advancing in a domain tested on the SAT and is a marker for learning progress through OSP. We define this best practice as students leveling up 15 or more skills (out of the 69 total skills) on OSP.

There are several other strategies that may also be helpful, such as following a practice schedule, reviewing incorrect answers on practice tests, and even asking an adult to monitor practice sessions. We will continue to investigate these strategies as we learn more about what helps students make the most of their time on OSP.

Practice Between PSAT/NMSQT and First SAT

The following provides high-level findings from the *Official SAT Practice Technical Report*,² jointly authored by Khan Academy and College Board. It focuses only on students in the class of 2019 who took the PSAT/NMSQT in October of their junior year, took a subsequent SAT, and linked their Khan Academy and College Board accounts. By focusing on these students, we can control for recent prior achievement and narrowly focus on the relationship between OSP activity and SAT scores. We will first describe the sample in terms of student attributes, examine the relationship between practice time and SAT scores, and then illustrate the relationship between practice times, use of best practices, and SAT scores.

Of the 1.3 million students in the 2019 graduating cohort who took the PSAT/NMSQT in October 2017 and a subsequent SAT, 545,640 linked their College Board and Khan Academy accounts. This is 25% of the SAT test takers and 42% of the students who could have used OSP, based on their PSAT/NMSQT data. Table 3.1 further describes the linked sample as a share of SAT test takers, and of SAT test takers with an 11th-grade PSAT/NMSQT assessment. The rates of linking by demographic are similar to the demographic patterns of SAT test takers, with females linking at somewhat higher rates than males.

TABLE 3.1 Linking Rates by Student Attribute and 11th Grade PSAT/NMSQT Quartile for Graduating Class of 2019

		2019 Cohort		
Group	Subgroup	SAT Takers	SAT takers who took 11th grade PSAT	SAT takers who took 11th grade PSAT and Linked to OSP
Total		2,220,087	1,291,916	545,640
Gender	Female	1,156,766 (52%)	688,964 (53%)	317,945 (58%)
	Male	1,061,599 (48%)	602,950 (47%)	227,695 (42%)
Race/Eth	American Indian/Alaska Native	12,917 (1%)	6,281 (<1%)	2,023 (<1%)
	Asian	228,527 (10%)	130,048 (10%)	57,447 (11%)
	Black/African American	271,178 (12%)	141,028 (11%)	61,156 (11%)
	Hispanic/Latino	554,665 (25%)	342,518 (27%)	148,937 (27%)
	Native Hawaiian/Other Pacific Islander	5,430 (<1%)	2,840 (<1%)	979 (<1%)
	White	947,842 (43%)	590,062 (46%)	242,060 (44%)
	Two or More Races	87,178 (4%)	54,756 (4%)	24,260 (4%)
No Response	112,350 (5%)	24,383 (2%)	8,778 (2%)	
Parent Ed	No High School Diploma	198,564 (9%)	114,348 (9%)	47,426 (9%)
	High School Diploma	608,174 (27%)	344,070 (27%)	144,708 (27%)
	Associate Degree	159,521 (7%)	93,408 (7%)	39,918 (7%)
	Bachelor's degree	620,711 (28%)	396,185 (31%)	170,419 (31%)
	Graduate degree	461,235 (21%)	307,582 (24%)	131,530 (24%)
No Response	171,882 (8%)	36,323 (3%)	11,639 (2%)	
11th Grade PSAT Quartile	Q1 [320-910]		376,567 (29%)	129,284 (24%)
	Q2 [920-1050]		325,054 (25%)	141,192 (26%)
	Q3 [1060-1180]		286,044 (22%)	134,971 (25%)
	Q4 [1190-1520]		304,251 (24%)	140,193 (26%)

2. The Use of Khan Academy Official SAT Practice and SAT Achievement: An Observational Study (2020) is a Khan Academy® and College Board joint analysis of Official SAT Practice usage by more than half a million class of 2019 students between their PSAT/NMSQT and their first SAT. The study was conducted in order to associate these students' use of Official SAT Practice with their SAT performance.

Practice Rates Between PSAT/NMSQT and First SAT

Figure 3.3 below shows that, of those students who took both assessments and linked, 71% greater than 0 minutes on OSP. Of the 545,640 students who linked their accounts, only 55% attempted at least one problem (the others could have spent their time reading articles, watching videos, or navigating the site). Like on many free online learning platforms with large usage, a relatively small percentage of students spent six or more hours on OSP (10% of all linkers)^{3,4}. However, for students who completed at least one problem, the six-plus hours usage group rises to 18%. Considering best practices, we see that as the time required to complete the problems increases, smaller percentages of students engage in these behaviors that take more time (e.g., completing a full-length practice exam vs. completing 10 recommended tasks).

FIGURE 3.3 OSP Usage for All Linked Students and Linked Students with At Least One Problem

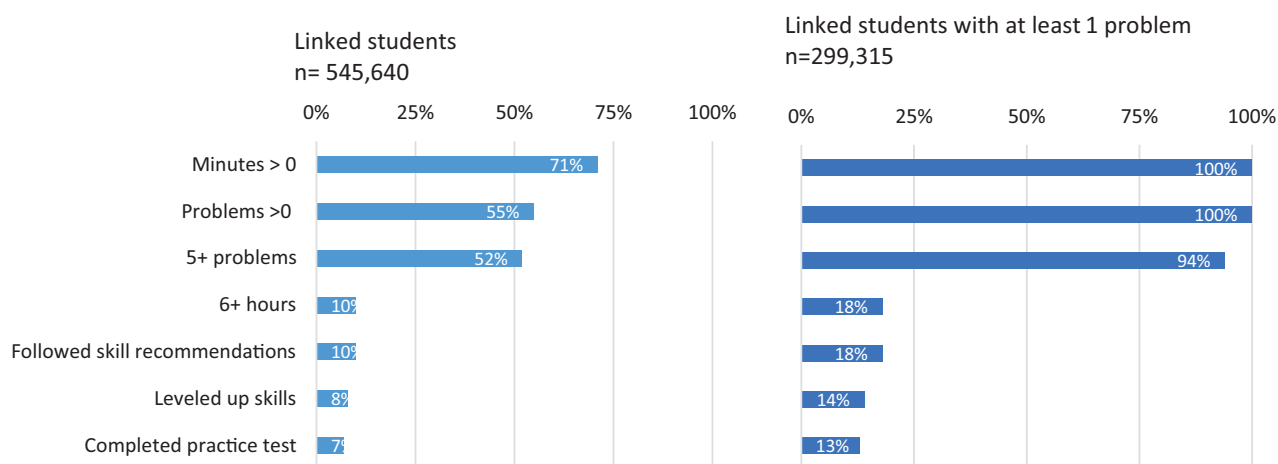


Table 3.2 illustrates OSP usage by subgroup. There are a larger percentage of students with higher PSAT/NMSQT scores or with higher parental education who engage in best practices.

3. Gütl, C., Rizzardini, R. H., Chang, V., & Morales, M. (2014). Attrition in MOOC: Lessons learned from drop-out students. In: International workshop on learning technology for education in cloud (pp. 37–48).

4. Kizilcec, R. F., & Halawa, S. (2015). Attrition and achievement gaps in online learning. In Proceedings of the Second (2015) ACM Conference on Learning@ Scale (pp. 57–66).

TABLE 3.2 OSP Usage by Subgroup for Linked Students Completing at Least One Problem

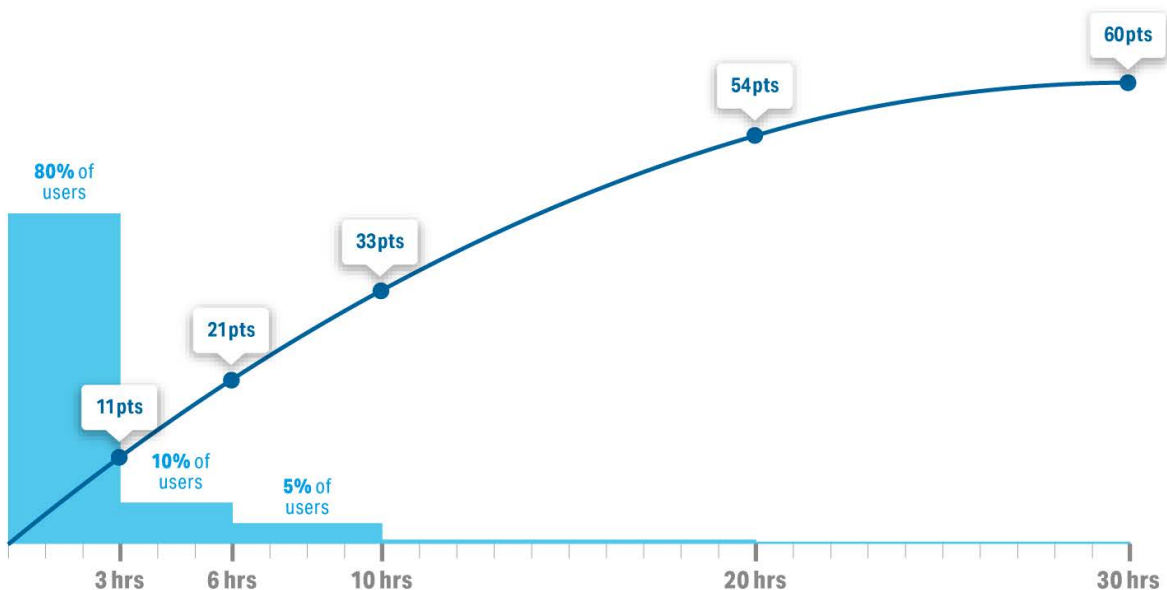
Group	Subgroup	N	Percent	Median hours	6+ hours	Leveled Up Skills	Completed a Practice Test	Followed Skill Recommendations
Total		299315	100%	1.8	18%	14%	13%	18%
Gender	Female		41%	1.9	18%	14%	13%	18%
	Male		59%	1.8	17%	14%	13%	18%
Race/ Ethnicity	American Indian/Alaska Native		0%	1.5	13%	6%	10%	14%
	Asian		11%	2.7	28%	20%	17%	24%
	Black/African American		11%	2	20%	10%	11%	15%
	Hispanic/Latino		26%	1.7	16%	10%	10%	15%
	Native Hawaiian/Other Pacific Islander		0%	1.5	15%	8%	9%	17%
	White		44%	1.7	16%	15%	14%	19%
	Two or More Races		5%	1.8	18%	15%	14%	20%
	No Response		2%	2	21%	15%	13%	21%
	Parental Education	No High School Diploma		9%	1.7	16%	9%	10%
High School Diploma			14%	1.6	15%	10%	10%	15%
Associate Degree			20%	1.7	15%	11%	11%	15%
Bachelor's degree			31%	1.8	18%	15%	14%	19%
Graduate degree			24%	2.1	22%	19%	16%	22%
No Response			2%	1.6	16%	10%	10%	16%
11th Grade PSAT/NMSQT Quartile	Q1 [320-910]		22%	1.6	14%	5%	8%	13%
	Q2 [920-1050]		26%	1.6	15%	9%	10%	15%
	Q3 [1060-1180]		25%	1.8	18%	15%	13%	18%
	Q4 [1190-1520]		27%	2.2	23%	24%	19%	25%

Association Between Official SAT Practice and First SAT Score Using Statistical Models to Control for Specific Variables

There is positive association between time spent on Official SAT Practice and composite SAT scores. Figure 3.4 below shows the *additional* points on the composite SAT score (in blue) associated with OSP time in hours, as a result of regression models controlling for student gender, race/ethnicity, PSAT/NMSQT score, and parental education. In this

figure, the mean SAT score for a student who linked but spent no time practicing was 1099, compared to a mean SAT score of 1053 for students who didn't link their Khan Academy and College Board accounts. The SAT score associated with spending six hours on practice was 1120, a 21-point improvement compared to students who linked but didn't practice. Only 10% of students in the model spent more than six hours on OSP. Figure 3.4 also displays the percentage of students leading up to each hour indicator, using the blue line.

FIGURE 3.4 Additional SAT Points Associated with Hours of Practice, Including Percentage of Sample



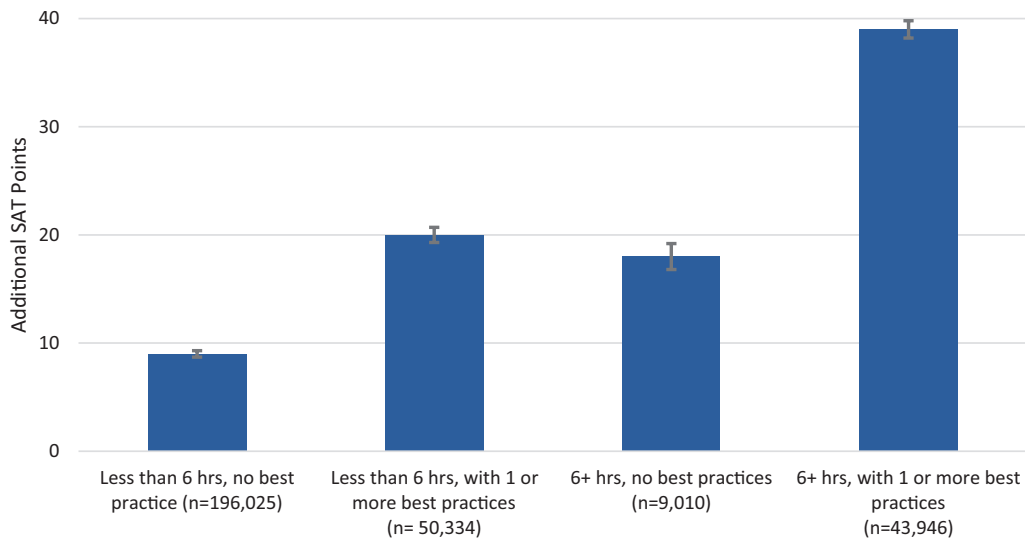
Note: The percentages in the figure do not add up to 100 due to rounding.

The Association Between Best Practices and SAT Scores

Spending time on OSP is associated with better SAT outcomes, but how that time is spent also matters. Using the best practices defined above, we wanted to know if students who follow them get better outcomes on the SAT than students who do not.

Figure 3.5 shows the additional SAT points associated with each of four categories: students who spent less than six hours on OSP but didn't do a best practice behavior; students who spent less than six hours and did at least one best practice; students who spent *at least* six hours but didn't do a best practice; and students who spent *at least* six hours on OSP and did at least one best practice. The additional SAT points are in comparison to students who linked to OSP but didn't spend any time practicing during the PSAT/NMSQT and first SAT interval. Students who spent at least six hours on OSP and did a best practice scored an average of 39 points higher on the SAT than students who didn't spend any time on OSP.

FIGURE 3.5 Association Between OSP Usage and Composite SAT Achievement, Controlling for Student Attributes and PSAT/NMSQT Scores



Note: The "I" at the top of the bar graphs represents the standard error of estimate.

Implications

Analyses of the high school class of 2019 show a positive association between practice on OSP and SAT outcomes, with six hours of practice being associated with an additional 21 points on the SAT, regardless of demographics. High levels of practice are rare: only 10% of students spent six hours or more on OSP.

How students use the platform matters. Students who practice six or more hours—along with best practices—achieve higher scores.

While the benefits hold true across student demographics and performance, students who have higher PSAT/NMSQT scores and higher parental education are more likely to use best practices.

While these results are promising, we need more evidence and field-based research to ensure that when best practices are used more broadly the associations will be as strong.

Research will help increase our understanding of student progress, differences in adoption of best practice behaviors, and how supports such as school day implementation, educator tools, and innovations like virtual tutoring can help keep all students engaged and on track.

Strengthening Practice

We understand that not all students on OSP are maximizing their practice time and so we've forged partnerships with school districts, including some of the most diverse districts in the country, to encourage more students from all backgrounds to take advantage of OSP. We've created a scholarship⁵ to incentivize practice on Khan Academy and a few other key steps on the path to college. And we've trained near-peer advisors and tutors in college access organizations to support students using Khan Academy.

We will be vigilant and deliberate with our refinements to ensure all students can follow these best practices. We hope that sharing and continuing this research on best practices of OSP use can make a difference for millions of students.

5. More information on the College Board Opportunity Scholarship can be found at opportunity.collegeboard.org/

SECTION 4

Helping Students Plan for Careers

Higher education remains a crucial pathway to economic mobility and career success.¹ According to Georgetown University's Center for Education and the Workforce: "Whereas two out of three entry-level jobs in the industrial economy demanded a high school diploma or less, now two out of three jobs demand at least some education or training beyond high school."² McKinsey & Company found that, "individuals with a high school degree or less are four times more likely to be in a highly automatable role than individuals with a bachelor's degree or higher—and as much as 14 times more vulnerable than someone with a graduate degree."³ That's why ensuring individuals have the right education to prepare them for the workforce is a priority for states.

College Board believes the best way to help students get a quality postsecondary education is to give them personalized career advice early, help them understand their potential pathways to success, and connect their interests to steps they can take while in high school.

In 2018, College Board partnered with Roadtrip Nation® to develop Career Finder™, which helps students make informed academic and career decisions. It lets them explore careers that match their interests and hear from people in diverse industries through its video archive. It also allows students to pin careers that interest them to a personalized dashboard and get ideas for small steps they can take to learn more about these careers. Launched in May 2019, the new premium version adds key features, including:

- Integration of College Board assessment data so students can see the matches between their achievement and the skills needed for the occupations that interest them;
- Students can see what jobs are in demand right now in their geographical area, along with information on salaries;
- Students can save and share the career plans they create;
- An Expense Calculator helps students estimate future living expenses and relate salary information to those expenses.

Career Finder has been used by 195,000 students. The occupation of highest interest to these students is registered nurse, with surgeons and pediatricians following closely. That is no surprise—the U.S. Bureau of Labor Statistics⁴ forecasts a boom in healthcare-related jobs in the next 10 years that will create hundreds of thousands of new positions. To help students meet the demands of this growing industry, we plan to directly connect student performance on our assessments to the requirements of the nursing profession and then extend that to related occupations.

1 <https://research.collegeboard.org/pdf/education-pays-2019-full-report.pdf>

2 <https://cew.georgetown.edu/cew-reports/3pathways/>

3 <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-in-america-people-and-places-today-and-tomorrow?cid=other-soc-lkn-mgi-mgi-oth-1907>

4 <https://www.bls.gov/ooh/healthcare/registered-nurses.htm>

Preparing individuals to fill the jobs of the future will require systemic changes and strong partnerships across education, business, legislatures, researchers, and community-based organizations. College Board is committed to helping students pursue higher levels of education and to help our nation to meet its workforce demands.

Connecting the SAT Suite of Assessments to Career Readiness

As student debt rises and jobs go unfilled, we know the value of a college education is being questioned in the debate over “college vs. career.” To meet future economic needs and address the growing skills gap, states are adding accountability measures for career readiness for students and mandating career planning as early as middle school. They are doing this as the skills needed to enter the workforce are evolving and the path to success is becoming increasingly harder to navigate. To help students find their path—be it a four-year or two-year college or workforce training programs—we must first help them understand their academic readiness for a given career or postsecondary program.

As a first step, College Board partnered with the Human Resources Research Organization (HumRRO) to link scores on each of the PSAT-related assessments to skills required in occupations in the Department of Labor’s Occupational Information Network (O*NET). The O*NET database includes knowledge, skills, and abilities (KSAs) important to various occupations. By mapping PSAT tests to an occupation’s KSAs, we’re able to connect a student’s score to a subset of KSAs important in specific occupations.

Next, we took the PSAT-O*NET mapping and connected it to Career Finder. A premium version of that matches a student’s PSAT or SAT score to O*NET occupational information, which helps students understand their academic readiness for careers that interest them. Through Career Finder, we’re then able to provide personalized recommendations for high school courses.

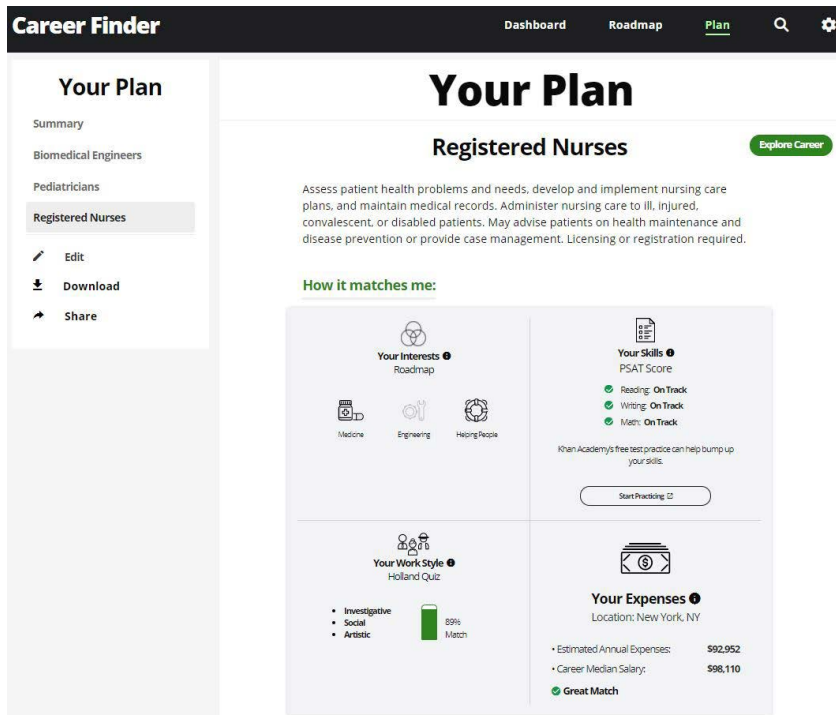
A report detailing our work with HumRRO can be found at:

research.collegeboard.org/pdf/connecting-sat-suite-to-career-readiness.pdf

How Students Are Using Career Finder

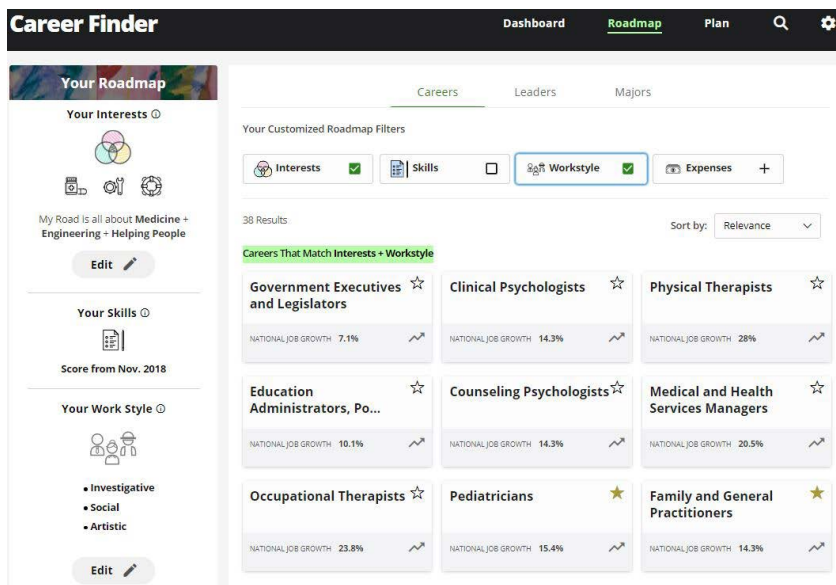
Career Finder is an updated version of a product formerly known as Roadmap to Careers. It starts with a student answering a few questions on their interests and preferences. They are then shown career recommendations based on those responses. They can explore each career in depth and add that information to a plan on their personalized dashboard.

FIGURE 4.1 Career Finder Personalized Dashboard



About 91% of users have completed the interest road map, with about 27% discovering at least one career that interests them enough to add it to their plan. About 11,000 career plans have been created by Career Finder students, with nearly 50,000 careers added to their career plans.

FIGURE 4.2 Career Finder Exploration Dashboard



Top Careers Saved

At the end of February 2020, “registered nurse” was the top career saved by students, followed closely by surgeon and pediatrician. Registered nurse was saved 4,855 times, equaling the total number of saves of the bottom 647 careers.

The top five saved careers (out of 967) represent over 10% of the total saves, and the top 50 represent about 52% of the total saves.

Five of the top 10 saved careers are healthcare related, and just fewer than 4% of all careers saved by students were nursing jobs.

TABLE 4.1 Top Careers Saved by Students

Rank	ONET SOC Code	Title	Times Saved
1	29-1141.00	Registered Nurses	4,855
2	29-1067.00	Surgeons	4,801
3	29-1065.00	Pediatricians, General	4,747
4	23-1011.00	Lawyers	4,234
5	11-2021.00	Marketing Managers	3,985
6	27-3043.05	Poets, Lyricists and Creative Writers	3,816
7	29-1123.00	Physical Therapists	3,265
8	19-3031.03	Counseling Psychologists	3,043
9	17-2011.00	Aerospace Engineers	2,901
10	33-3021.03	Criminal Investigators and Special Agents	2,880
11	17-2031.00	Biomedical Engineers	2,773
12	27-2012.02	Directors- Stage, Motion Pictures, Television, and Radio	2,639
13	27-1024.00	Graphic Designers	2,575
14	29-1131.00	Veterinarians	2,561
15	11-9151.00	Social and Community Service Managers	2,456

TABLE 4.2. Ranked Careers Recommended to Students Based on Interest Road Map

ONET Code	Title
29-1067.00	Surgeons
29-1141.00	Registered Nurses
29-1065.00	Pediatricians, General
23-1011.00	Lawyers
27-3043.05	Poets, Lyricists and Creative Writers
25-2031.00	Secondary School Teachers, Except Special and Career/Technical Education
17-2011.00	Aerospace Engineers
33-3021.03	Criminal Investigators and Special Agents
19-3031.03	Counseling Psychologists
29-1131.00	Veterinarians
27-1024.00	Graphic Designers
11-2021.00	Marketing Managers
27-4021.00	Photographers
27-2011.00	Actors

Career Finder Survey Results

Administration

Beginning in May 2019, we conducted a survey on the use of Career Finder. After students saved at least one career, they were asked about their thoughts and feelings related to career planning. (Data was collected to the end of January 2020.) In addition to demographic information, questions were written to cover several constructs identified as important short-term outcomes from using the Career Finder tool. Here is an operational definition for each construct measured in the survey:

- **Possible Selves:** This includes an individual's ideas of what they might become, what they would like to become, and what they are afraid of becoming. The theory is that a student's conception of what they might become (both desired and feared) is both an incentive for what they might do and a way to evaluate what they are now doing (Markus & Nurius, 1986). Three survey items were created to measure possible selves (e.g., *As a result of Career Finder, I feel what I'm doing in school is important because it will help me to become what I want to be as an adult*).
- **Interest:** This is designed to assess a student's interest in college/college majors and careers and is similar to the concept of future intent (Martin et al., 2011). Five survey items were created to measure this (e.g., *As a result of Career Finder, I am interested in learning more about my college or career-related interests*).

- **Confidence/self-efficacy:** Self-efficacy refers to perceptions students hold about their abilities to succeed at a specific task. Individuals tend to be motivated to engage in activities in which they feel confident and avoid those in which they don't (Bandura, 1986). Research demonstrates that the measurement of self-efficacy is more precise if items are specifically written to a particular task (Pajares, 1996). Thus, we wrote three survey items specifically measuring self-efficacy for career-related confidence (e.g., *Compared to other high school students, I feel confident I will find a career I'm interested in*).
- **Goal setting:** We used the SMART goal framework (Specific, Measurable, Actionable, Realistic, and Time Bound) to create items measuring goal-setting behaviors. Five survey items were created, each measuring one component of the SMART framework (e.g., *As a result of Career Finder, I know the actions I need to take in order to accomplish my career goals*).

Students were also asked to estimate how much time they would spend on Career Finder, as well as open-ended questions asking them to describe the tool.

Demographic Findings

Out of a possible 195,000 users, 15,030 completed the survey. Of those, approximately 62% were female, 22% were male, and 16% didn't answer the gender question. Students came from a variety of racial/ethnic backgrounds. The majority were in their junior year of high school (35.2%), substantially more than those in their freshman (7.7%), sophomore (17.9%), or senior years (21.9%). See Table 4.3 below for the demographics summary.

Frequency refers to the number of students in each category, followed by the percentage of the sample (n=15,030), regardless of whether they responded to the question. Valid Percent is the percentage in each category from only those students who responded to this question (n=12,547). Finally, Cumulative Percent is defined as the total percentage of the sample accounted for up to that row. For example, the Cumulative Percent in the Black or African American row is 25.7%. This is the sum of the Valid Percent for that group (13.9%), plus Asian (11.2%), and American Indian or Alaska Native (0.6%), which equals 25.7%.

TABLE 4.3. Race/Ethnicity for Career Finder Survey Respondents

Category	Frequency	Percent	Valid Percent	Cumulative Percent
American Indian or Alaska Native	76	0.5	0.6	0.6
Asian (including Indian subcontinent and Philippines origin)	1,409	9.4	11.2	11.8
Black or African American (including Africa and Afro-Caribbean origin)	1,739	11.6	13.9	25.7
Hispanic or Latino	2,450	16.3	19.5	45.2
Native Hawaiian or Other Pacific Islander	27	0.2	0.2	45.4
White (including Middle Eastern origin)	5,503	36.6	43.9	89.3
Two or More Races	1,343	8.9	10.7	100
Total	12,547	83.5	100	
Missing	2,483	16.5		
Total	15,030	100		

TABLE 4.4. Grade Level of Career Finder Survey Respondents

Grade Level	Frequency	Percent	Valid Percent	Cumulative Percent
9	1,159	7.7	9.3	9.3
10	2,690	17.9	21.6	31
11	5,289	35.2	42.5	73.5
12	3,293	21.9	26.5	100
Total	12,431	82.7	100	
Missing System	2,599	17.3		
Total	15,030	100		

Survey Results

The results suggest students:

- Have a strong interest in learning more about different college- and-career-related goals and majors and in understanding what training programs and employers might be a good fit for them (Interest Average=4.5617 on a 5-point scale).
- Have positive opinions about who they might be in the future (Possible Selves Average=4.3014 on a 5-point scale).
- Show a high degree of confidence about their career (Confidence Average=3.8847 on a 5-point scale).
- Are less likely to have set deadlines or have determined the steps toward their next career-focused goal, though overall they indicated that their career goals were realistic (Goal Setting Average=3.6062 on a 5-point scale).

It should be noted that students used the Career Finder tool for a relatively short time prior to taking the survey. Thus, it's reasonable to hypothesize that the tool sparked initial interest in careers and ideas about who they might become in the future, but students didn't use the tool long enough to create specific goals. Table 4.5 shows the constructs measured by the Career Finder Survey and the descriptive statistics for each.

TABLE 4.5. Descriptive Statistics for Constructs Measured by the Career Finder Survey

Descriptive Statistics, by scale					
Scale	N	Minimum	Maximum	Mean	Std. Deviation
Possible Selves Avg	11,188	1	5	4.3014	0.59942
Interest Avg	10,578	1	5	4.5617	0.52661
Confidence Avg	10,389	1	5	3.8847	0.87008
Goal Setting Avg	9,866	1	5	3.6062	0.78563
Total N (listwise)	9,783				

We also disaggregated results across constructs by gender, grade, and race/ethnicity. That suggests there wasn't a meaningful variability in terms of gender, grade, or race/ethnicity. The differences in the means were small.

Overall, students reported high levels of interest in college/college majors and career-related interests, as well as positive perceptions of who they might become. By comparison, their self-reported scores in goal setting were significantly lower, though given their limited time in Career Finder they may not have had time to fully explore specific career- and college-related goals. When we explored results by gender, grade, and race/ethnicity, the differences were small and not substantively meaningful.

For more detailed information about this survey, please visit research.collegeboard.org/pdf/career-finder-survey.pdf

Next Steps

At the end of the survey, we asked students to describe Career Finder in a few words. Many of said it was helpful, useful, easy to use, efficient, informative, and insightful. One student wrote:

“I would describe it as a tool that can really help you open your eyes to other job and college major opportunities. Just in a few minutes, you can find so many jobs, majors, and tips for things that you were interested in.”

Based on the feedback in this section, we are prioritizing a search and filter feature that will make it easier for students who have careers that interest them to access them directly for further exploration.

We are also designing other ways to gather feedback. We plan to better understand the relationship between career exploration through College Board assessments and postsecondary enrollment. We are also redesigning our survey to include a few questions that will be presented to students before they begin exploring careers and will shift the current survey to later in the experience, after students have had a chance to create a career plan. That way, we can examine pre-post changes in their career-planning journey.

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SECTION 5

Connecting Students to Scholarships and Recognition Programs

When students take the PSAT/NMSQT, PSAT 10, or SAT, they are offered four potential pathways to scholarships: The National Merit Scholarship, SAT Suite Scholarship Partners, College Board Opportunity Scholarships, and Recognition Programs.

The PSAT/NMSQT is the qualifying assessment for the **National Merit Scholarship**, which has been offered since 1971. The National Merit® Scholarship Corporation uses the PSAT/NMSQT as an initial screen of entrants.

Since 2015, when students take either the PSAT/NMSQT, PSAT 10, and/or SAT, they are given the option to sign up for Student Search Service®, a free, voluntary program that connects students with information about educational and financial aid opportunities from eligible colleges and universities, scholarships, and other educational programs. Students who opt in allow our **scholarship partner organizations** to find eligible students and invite them to apply for scholarships and mentoring programs. By partnering with these organizations, College Board helps students and educators see what opportunities are available. These relationships help our partners reach out to students and diversify their applicant pools.

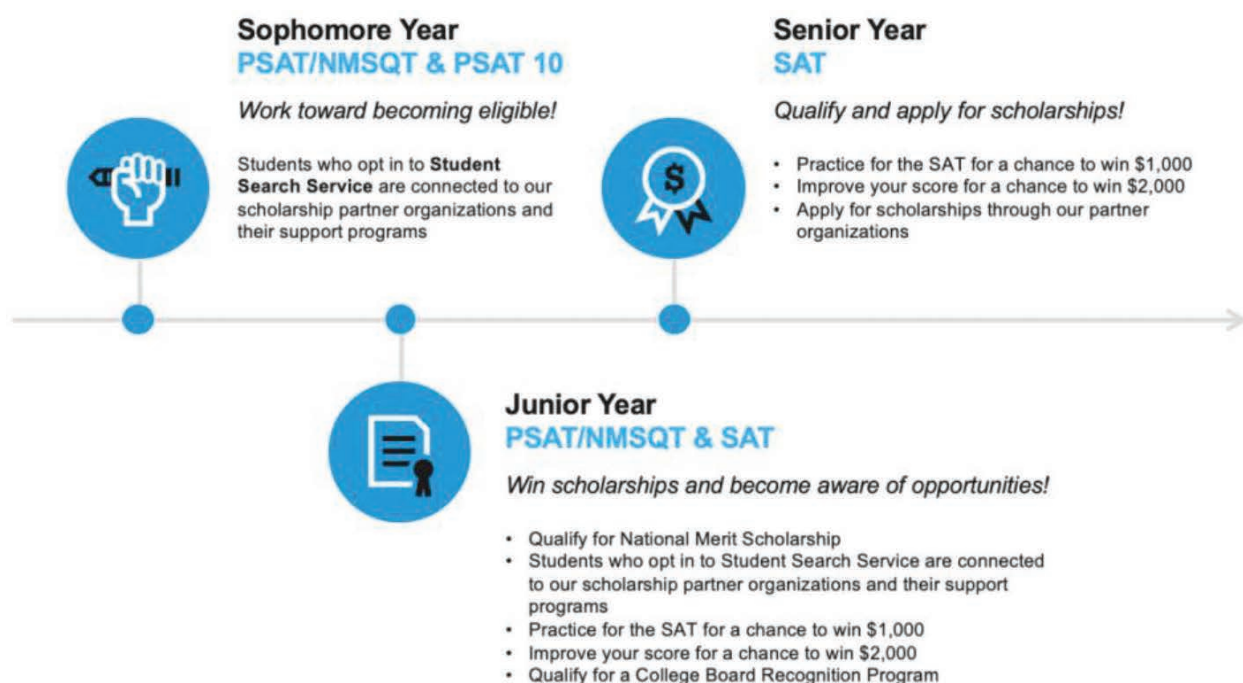
Launched in 2018, the **College Board Opportunity Scholarships** guides juniors and seniors through the college planning process and offers them a chance to earn money for college for each step they complete. It's open to all students and doesn't require an essay or application. There is no GPA or SAT score requirement. Starting in their junior year of high school, all students can earn chances for scholarships from \$500 to \$2,000 when they make and add to their college lists, practice for the SAT, improve their scores, complete the FAFSA®, and apply to two or more colleges. The more steps students complete, the more chances they have to earn a scholarship. Students who complete all six steps become eligible for a \$40,000 scholarship. At least half of all these scholarships—\$2.5 million each year—are awarded to students whose families earn less than \$60,000 per year.

The **College Board Recognition Programs** (CBRP) award academically exceptional, underrepresented students who identify as African American, Latinx, Indigenous, and/or attend school in a rural area. These programs recognize top-performing students based on their 11th grade PSAT/NMSQT scores and high school grade-point-average (GPA). While the programs don't provide a financial reward, they provide opportunities and benefits that are intended to help students with their college application and enrollment

decisions. College Board sends a letter to students congratulating them and inviting them to participate in the program and, if they earn an award, encourages them to include that recognition on college, scholarship, internship, and job applications. Opting in to Student Search Service isn't a requirement, but students who win recognition and opt in to Student Search Service are actively recruited by colleges that prioritize student body diversity, both racial and socioeconomic. Colleges also reach out to recognition winners through Student Search Service and often offer academic scholarships.

This section looks at the opportunities offered through these four pathways to scholarships.

FIGURE 5.1 Pathways to Scholarships



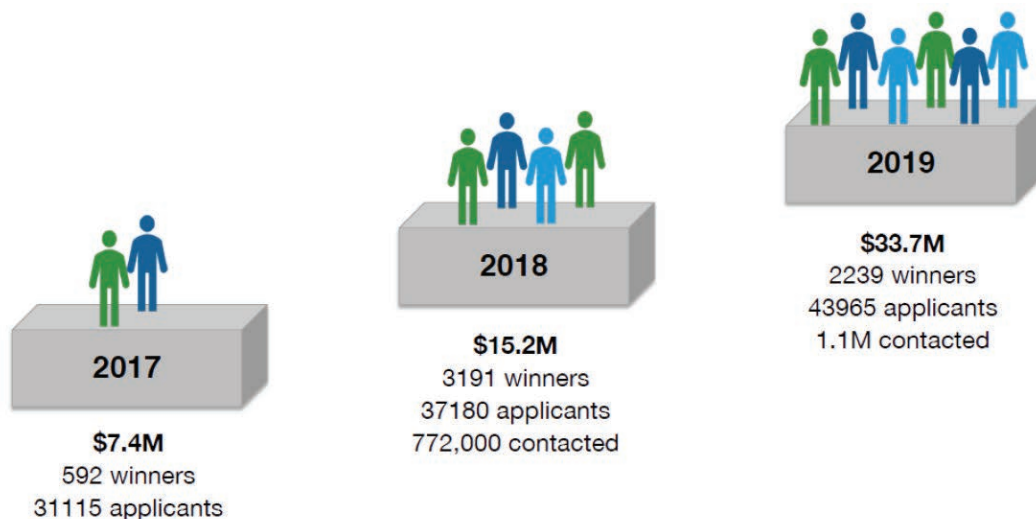
National Merit Scholarship Corporation

The PSAT/NMSQT is the qualifying test for entry into the programs administered by the National Merit Scholarship Corporation, academic competitions for recognition and scholarships. National Merit Scholarship Corporation uses PSAT/NMSQT information to identify and contact students who qualify for recognition. Some of the recognized students who meet additional requirements may advance in the competition and be considered for National Merit Scholarships. In 2017-18, NMSC awarded \$40.4 million to students.

SAT Suite Scholarship Partners

Through our partnerships, we not only aim to connect our students to scholarships and mentoring programs, but we also continue to increase the number of scholarships available to them. We've done this by growing our number of partners since 2015. This has more than doubled the money awarded to students year over year, as shown in Figure 5.2 below.

FIGURE 5.2 Scholarship Opportunity Growth Overtime



2019 Scholarship Partnership Results

In 2019, we collected data from 15 of 19 of our scholarship partners who used the PSAT/NMSQT or PSAT 10 assessments in their scholarship programs. (Results from four partners weren't available.) Below are the results using data from the SAT Suite for the 2018-19 scholarship award year. (Note that one of our partners, the Hispanic Scholarship Fund, reports data for both their scholarship and the Gates Scholarship.)

Table 5.1 shows growth of the College Board applicant pool in relation to the organization's total applicant pool, the subsequent scholarships allotted to College Board for 2019 only, and the award breakdown by partner for 2019. Note: The National Merit Scholarship award amount is from the 2017-18 academic cycle.

TABLE 5.1: 2019 College Board Examinees and Awards Represented in Scholarship Awards

Scholarship Partner	# Examinees in Applicant Pool	% Examinees in Applicant Pool	# Examinees Received Award	% Examinees Received Award	Total \$ Awarded in 2019
National Merit Scholarship**	*	*	*	*	\$40,400,000
American Indian Graduate Center	*	*	*	*	*
Asian Pacific Islander American Scholars	2,182	24%	154	7%	\$392,500
Boettcher Foundation	*	*	*	*	*
Children of Fallen Patriots	*	*	*	*	*
Cobell Scholarship	177	9%	79	45%	\$181,136
Coca-Cola Scholars Foundation	279	0%	0	0%	\$0
Daniels Fund	116	6%	12	10%	\$18,500
George Snow Scholarship Fund	554	64%	49	9%	\$376,069
Greenhouse Scholars	0	0%	0	0%	\$0
Hispanic Scholarship Fund & Gates Scholarship	18,950	24%	583	3%	\$1,891,144
Horatio Alger Association	108	2%	33	31%	\$435,000
Jack Kent Cooke Foundation	1,612	31%	19	1%	\$167,086
Jackie Robinson Foundation	204	5%	2	0%	\$35,842
Marine Corps Scholarship Foundation	*	*	*	*	*
Ron Brown Scholar Program	349	27%	4	1%	\$4,000
TheDream.US	1,158	16%	266	23%	\$8,772,000
United Negro College Fund	18,031	18%	314	2%	\$4,513,688
Washington State Opportunity Scholarship	2,330	51%	751	32%	\$16,877,500
Total	46,050		2,266		\$74,064,465

*Denotes missing data, data not received, or data not available because the organization has not yet been through a full outreach cycle using SAT Suite information.

**The most recently available data for the National Merit Scholarship are from the 2017-18 school year.

College Board Opportunity Scholarships

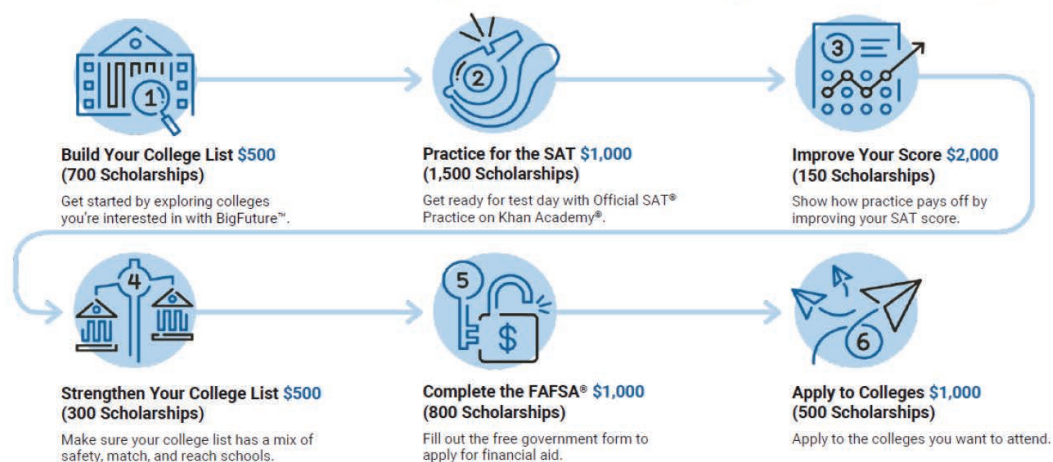
The College Board Opportunity Scholarships guide students through the college planning process and give them a chance to earn money for college. The six simple steps in this program tell students what to do and when to do it to plan, prepare, and pay for college.

By completing the six steps during the months any scholarship is open, students can earn entries for drawings at the end of each month. Winning students are notified by email and on their “My Achievements” page of the College Board Opportunity Scholarships site.

Below are the steps students can take to be eligible for College Board Opportunity Scholarships (Figure 5.3):

FIGURE 5.3 College Board Opportunity Scholarships Steps and Awards

The College Board Opportunity Scholarships Recognize Students Who Take 6 Key Actions to Prepare for College



For more information, please visit [cb.org/opportunity](https://collegeboard.org/opportunity).

College Board Opportunity Scholarships Results for Class of 2020

Total Number of Students that Joined the Program (Class of 2020 Students): 503,628

Total Scholarships Awarded (January 2019—March 2020): 3,975 scholarships

Total Dollar Amount Awarded: \$4,600,000

Scholarship recipients in the class of 2020 represented 47 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. More than 60% of the scholarships were awarded to students identified as lower income¹, based on the program's criteria.

¹ Lower-income students are defined as students eligible to receive a fee waiver from the College Board, attending a school where 75% or more of students receive free or reduced price lunches, or self-identifying as having an annual family income of \$60,000 or less.

FIGURE 5.4 College Board Opportunity Scholarship Winners by State and Territory



College Board Recognition Programs

For over 30 years, College Board has offered academic recognition through the National Hispanic Recognition Program. Research has shown that the program has changed the geographic distribution of where these students go to college and increased college completion. When recognized students say “yes” to Student Search Service, it allows colleges to find them and offer them money.

Given the success of the National Hispanic Recognition Program, beginning in fall 2019, students who take the PSAT/NMSQT and identify as African American, Hispanic American or Latinx, indigenous, and/or attend school in a rural area or small town can apply for academic recognition as part of the College Board National Recognition Programs. The awards to the first cohort were made in September 2020.

The College Board National Recognition Programs grant academic honors that can be included on college applications. Colleges use these honors to identify students from underserved groups who have excelled both on their PSAT/NMSQT and in their classrooms.

We are working with four organizations in an advisory capacity to support this work:

African American Recognition: The Jackie Robinson Foundation

Hispanic Recognition: Hispanic Scholarship Fund

Indigenous Recognition: Indigenous Education, Inc.

Rural and Small Town Recognition: Jack Kent Cooke Foundation

Students interested in recognition programs are encouraged to sign up for College Board’s Student Search Service, which connects them with universities and scholarship programs across the country.

ELIGIBILITY

College Board will contact students deemed eligible for recognition. To be considered, students must:

- Take the PSAT/NMSQT in October of their junior year
- Achieve a minimum PSAT/NMSQT score (qualifying level varies by state each year)
- Earn a cumulative GPA of 3.5 or higher by the middle of their junior year
- Identify as African American, Hispanic or Latinx, indigenous, and/or attend school in a rural area or small town

APPLICATION TIMELINE

- **October of junior year:** Students take the PSAT/NMSQT and indicate their race and ethnicity on the answer sheet.
- **February–March of junior year:** College Board invites eligible students to apply for recognition. Students apply online using the link provided.
- **April–June of junior year:** Students work with an educator or school administrator to submit the Eligibility Verification Form confirming their cumulative GPA. Students invited to apply for the Indigenous Recognition Program must also confirm their tribal affiliation using the same form.
- **July 1:** Deadline for invited students to apply for the National Recognition Programs. This deadline can't be extended.
- **September of senior year:** Students are notified via email that they have been granted recognition and awards are sent to students' high schools. A student must be enrolled as a senior to receive recognition.

College Board Recognition Programs 2020 Results

Table 5.2 summarizes the results of the recognition awards made in September 2020.

TABLE 5.2. September 2020 Recognition Awards

Recognition Program	Total # of Students Recognized
African American	2,537
Hispanic/Latinx	5,258
Indigenous	335
Rural or Small Town	5,375

Implications of Our Work

Summary of Achievements

Over the past year, we have added more opportunities for students to connect to scholarships by increasing the number of scholarship partners by two, launching the College Board Opportunity Scholarship, and expanding the number of Recognition Programs from one to four. While we aim to expand our efforts, here is a summary of achievements to date:

Scholarship Partners

- The number of students made aware of our partners' scholarship opportunities through outreach emails has increased from 926,005 in 2017 to 989,279 in 2019.
- Between 2017 and 2019, our partners saw an increase of 31,115 to 41,383 applicants, an increase of 33%. The total amount awarded to students has grown from \$7.4 million in 2017 to \$33.7 million in 2019.
- United Negro College Fund has seen a surge of applicants from College Board programs, from 4,607 in 2017 to 18,031 in 2019.

College Board Opportunity Scholarships

- About 15% of students in the 2020 cohort joined the scholarship program.
- In the first year of the program, 70% of participants completed one or more of the program's six college planning milestones to be eligible for scholarships.
- Lower-income students in the program completed each of the six steps at the same or higher rates as all other participants.

Recognition Programs

- We have added three recognition programs to expand access to traditionally underserved students. We now have four programs, and in September 2020 the first cohort of students received awards from these programs.

Scholarship Partners

Increasing the number of scholarship partners increases the number of students we can connect to scholarships and the pool of scholarship dollars. This year our goal is to double the number of partnerships connected to the SAT Suite.

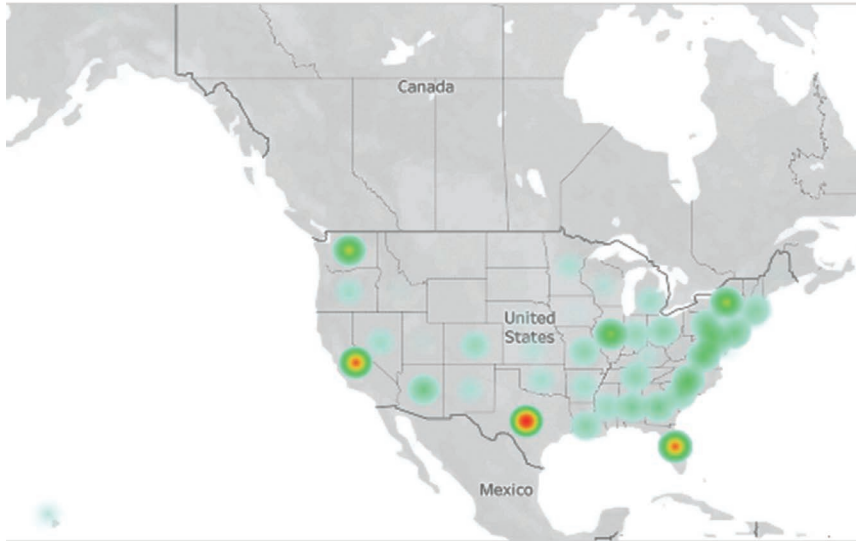
We also recognize that we need to do more to encourage students to apply for more of the supports available to them through our partners. In order to achieve this, we are supplementing our partners' outreach through Student Search Service by conducting email campaigns to educators and students. We are also launching a texting campaign to make sure students don't miss application deadlines.

As we improve our outreach efforts, we want to increase the geographic distribution of the students we reach and connect to our partners. We've made strides in this area by adding state-specific partnerships such as the Boettcher Foundation, Daniels Fund, George Snow Scholarship Fund, Greenhouse Scholars, and Washington State Opportunity Scholarship. The future of this work will include strategic identification of states yielding the highest concentration of SAT Suite test takers and areas where we

haven't connected students to as many scholarships. We have begun collecting state-level results from our partners to better track this progress. Heatmap 1 highlights our concentration of scholarship applicants while Heatmap 2 highlights where scholarships are being awarded.

FIGURE 5.5 Heatmap 1: 2019 State Breakdown

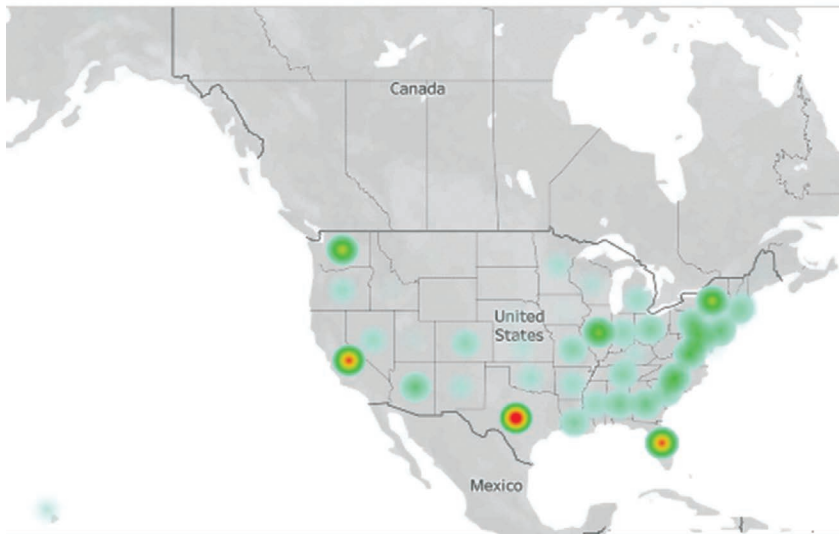
Number of Applicants



States with the largest population of students applying to scholarships in descending order are Texas, California, Florida, Washington, New York, Illinois, North Carolina, Virginia, Maryland, and Arizona.

FIGURE 5.6 Heatmap 2: 2019 Scholarship Dollars Breakdown

\$ Accepted



States with the largest population of students being awarded scholarship money are, in descending order: Washington, Texas, Florida, New York, Illinois, Colorado, California, Georgia, Arizona, and Pennsylvania.

College Board Opportunity Scholarships

This program motivates high school juniors and seniors to complete college planning milestones. About 15% of students in the 2020 cohort participated. Because all students are eligible – regardless of GPA, test scores, citizenship status or family income—we will expand outreach in 2020 and beyond to reach even more students. That effort will include a partnership with Telemundo to build awareness among Hispanic students and families.

We will also test new approaches to motivate participants to complete more of the college planning steps:

- In the first year of the program, 70% of participants completed one or more of the program’s six college planning milestones to be eligible for scholarships.
- Lower-income students in the program completed each of the six steps at the same or higher rates as all other participants.

In 2019, more than 14,000 educators took a pledge to connect students with these scholarships. Educators who took the pledge received resources to support students as they complete each of the program’s six college planning milestones. Students attending a school where one or more educators took this pledge opted into the program at higher rates than students in schools without pledgees.

In the first year of the program, preliminary analyses suggested that earning a scholarship after completing a milestone motivated students to stay on track with their college planning. Students who complete a milestone and earn a scholarship in a monthly drawing are more likely to take more college planning steps compared to students who complete the same milestones but don’t win a scholarship. Compared to nonwinners who completed the same milestones, winners who built a college list, practiced for six or more hours on Official SAT Practice on Khan Academy, or strengthened their college list were at least 15 percentage points more likely to complete the FAFSA and apply to two or more colleges. As we continue to evaluate these outcomes, we’ll seek to expand the number of chances to earn a scholarship in partnership with philanthropic and/or public support.

College Board Recognition Programs

Our first cohort of College Board Recognition Program winners were awarded in September 2020. We are considering additional supports for recognition winners to supplement their exposure and connections to colleges. We also hope to offer new ways to address the social and financial barriers they face.

Our first step is working toward a better understanding of how the four programs help to identify those students who have significant social barriers to access college resources. If we better understand how the intersection of these groups impacts the barriers faced by students, we can develop better tools that are needed to identify these students and help them succeed. We look forward to continuing this important work.

SECTION 6

Breaking Down Financial Barriers

The College Board fee waiver/reduction program assists low-income students for whom fees for testing, applying to college, and applying for financial aid are barriers. College Board offers four types of waivers to students, covering fees related to (1) PSAT/NMSQT, SAT, and SAT Subject Tests registration; (2) sending score reports to colleges; (3) college applications; and (4) applying for financial aid.

Who Is Eligible?

Fee waivers or reductions are available to low-income students in the U.S. or U.S. territories. U.S. citizens outside the country may be able to have test fees waived. Benefits are available for the following grade levels and assessments:

- 11th and 12th graders who take the SAT on the weekend or through SAT School Day
- 9th through 12th graders who take SAT Subject Tests
- 11th graders who take the PSAT/NMSQT

Eligibility is determined by meeting at least one of the following qualifications:

- Enrollment in or eligibility to participate in the National School Lunch Program (NSLP)
- Annual family income within the Income Eligibility Guidelines set by the USDA Food and Nutrition Service
- Enrollment in a federal, state, or local program that aids students from low-income families (e.g., Federal TRIO programs such as Upward Bound)
- Receiving public assistance
- Living in federally subsidized public housing, a foster home, or homeless
- Being a ward of the state or an orphan

What Are the Benefits?

Here are the fee waiver opportunities in 2020-21 for income-eligible students:

- Two free registrations for the SAT, with or without the SAT Essay
- Six free SAT Subject Tests
- Two free Question-and-Answer Service (QAS) or Student Answer Service (SAS) score verifications
- Unlimited score reports to send to colleges
- Waived application fees to over 2,000 participating colleges

- Free CSS Profile™ applications to apply for financial aid from participating schools
- Coverage of the SAT Essay for an SAT School Day tester whose school, district, or state covers the fee for only the SAT but permits essay testing
- Fee reductions for multiple-choice score verification or essay score verification
- Fee reductions for SAT School Day registration when fees aren't covered by the school, district, or state
- Waived international regional fees
- Waived late registration fees for free tests in the U.S. or U.S. territories

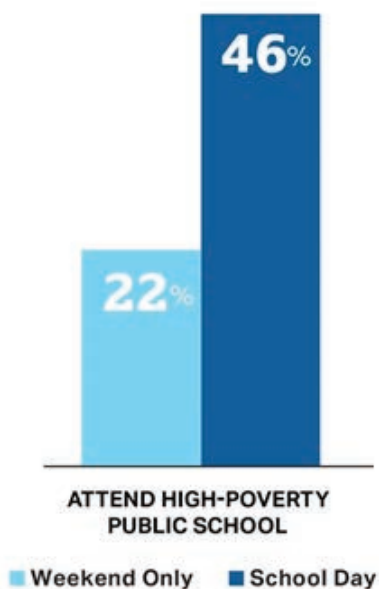
In addition, many low-income students benefit from the College Board's *Access to Opportunity* program, which offers additional college application fee waivers, college-advising and virtual advising available through partnerships with College Advising Corps, Matriculate, Bloomberg Philanthropies' CollegePoint, Reach Higher's Better Make Room initiative, and personalized mailings with guidance and resources to help students through the college search and application process and the financial aid process.

More information about work in progress can be found at professionals.collegeboard.org/guidance/access-to-opportunity/current-campaigns.

How Is College Board Reaching Income-Eligible Students?

While the SAT is reaching far more low-income students through School Day compared to traditional weekend testing (Figure 6.1), many of those students miss out on the additional fee waiver benefits to which they are entitled. We continue to work to better identify and serve these students.

FIGURE 6.1 Characteristics of School Day versus Weekend Only SAT Test Takers, Class of 2019



To improve our ability to identify and serve low-income students, College Board continues to refine its fee waiver programs. Students are connected to the benefits in several ways, and once the student's eligibility has been confirmed, College Board delivers the benefits automatically to the student's account.

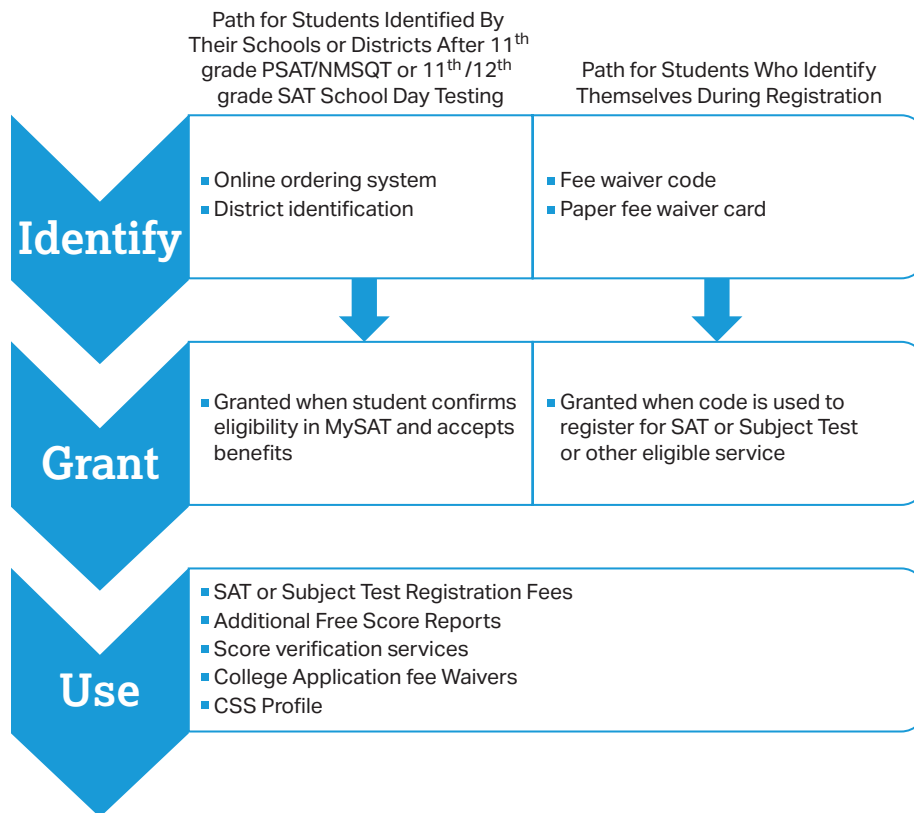
- *Online identification.* Since the 2017-18 school year, most schools have been able to identify fee waiver-eligible PSAT/NMSQT or SAT School Day test takers through the online ordering system.
- *Fee waiver code.* Since spring 2019, College Board has delivered fee waiver codes to schools participating in SAT School Day under statewide contracts via the K-12 Reporting Portal to distribute to eligible students.
- *Paper fee waiver card.* For many decades, College Board has mailed fee waiver cards to schools around the country for distribution to eligible students.
- *District identification.* In order to reduce administrative burden on schools and improve accuracy of identification, College Board is working with school district partners to identify eligible students through existing bulk order processes.

In addition to giving high school counselors the ability to distribute SAT fee waivers, College Board works with community-based organizations (CBOs) to provide additional access to SAT fee waivers. CBOs help expand access to SAT fee waivers and other College Board services for underrepresented students. CBOs that partner with the College Board to connect students with SAT fee waivers include nonprofit college-access organizations, among them Federal TRiO Programs such as Upward Bound and Educational Talent Search, and social service agencies. We continue to seek more ways to help students access all the fee waivers available to them.

The Fee Waiver Pipeline

As highlighted in the previous report, SAT School Day removes barriers for many low-income students, but we continue to see far too many eligible students not taking advantage of the full range of SAT fee waiver benefits. To understand the challenges that College Board, schools/districts, and students face, it's important to understand who gets into the fee waiver pipeline, and how (see Figure 6.2). There are many leaks in this pipeline, and College Board is committed to ensuring that all eligible students can take advantage of all the benefits to which they are entitled.

FIGURE 6.2 Illustration of the Fee Waiver Pipeline



The first step is *identification*. Until very recently, the only option was for a student to use a paper fee waiver card when registering for a weekend SAT or SAT Subject Test. This means the counselor must distribute cards to eligible students or the student tracks down the counselor to get a card.

In order to streamline identification and reduce the administrative burden created by the fee waiver cards, College Board developed ways for schools to identify eligible students online through the process schools use to order PSAT-related and SAT School Day assessment materials. Feedback from schools that use the online identification method of fee-waiver eligible students has been positive. However, many schools don't participate in the online ordering process (for example, if the school is participating under a statewide contract for SAT School Day). To better serve these schools, College Board started delivering fee waiver codes to counselors through the K-12 Reporting Portal that they can distribute to students to use to register for additional SAT or SAT Subject Tests, send score reports, and more. This minimizes the need for physical fee waiver cards, but still requires the counselor to identify eligible students and for those students to be aware of the fee waiver benefits they are entitled to.

Identification is critical and dependent on information not in College Board systems. Based on what we know of free and reduced price lunch eligibility, we believe an extraordinarily large number of students are "lost" at this first stage. Or put another way, students who test under a district or state contract do so at no cost to them, but they fail to enter the fee waiver pipeline and are unaware of the benefits they are entitled to. College Board is working with school district partners to identify eligible students as part

of the School Day ordering process. We believe our most powerful way to identify and support substantially larger numbers of eligible students is through our partnerships with many of the nation's largest school districts.

The next stage of the fee waiver pipeline pertains to *granting* benefits. If the student uses a fee waiver code provided by their counselor to register for a weekend SAT or SAT Subject Test (or less commonly, to apply the code for other benefits), their benefits will automatically be granted. The student will then see all the benefits available to them when they log in to MySAT.

However, students identified by their school or district through the online ordering system or bulk registration process need to first confirm their eligibility (i.e., accept their benefits). This legal requirement results in a significant leak in the pipeline (Figure 6.3). One of the root causes is the disconnect between when schools identify eligible students in the online ordering system (up to six weeks after testing occurs) and students' primary motivation to log in to MySAT (where the confirmation prompt appears)—i.e., when their scores are released, typically 2–3 weeks after testing. In other words, for many students, identification occurs *after* they are most likely to engage with us. Many students will only log in to their accounts after that point to either (a) register for another test or (b) send score reports. This means the students most likely to see the fee waiver confirmation prompt were already planning to take those important steps in the college process (i.e., streamlining the process for some but not changing the behavior of others).

To remedy this, College Board is testing direct outreach to eligible students who haven't accepted their benefits and will continue to explore ways to engage counselors and parents in helping students accept these benefits. We also hope that improved identification through the district and state School Day ordering process will help with this timing disconnect—because the fee waiver eligibility would already be in College Board systems at the time of testing and thus the confirmation prompt would be waiting for the student when they log in to their account at score release.

The final stage of the fee waiver pipeline pertains to *usage*. Once the student's benefits have been "unlocked," the goal is to ensure that they take advantage of them. Data suggest there is only a small leak in the pipeline at this point, which makes sense since students are more aware of their benefits once they have been granted.

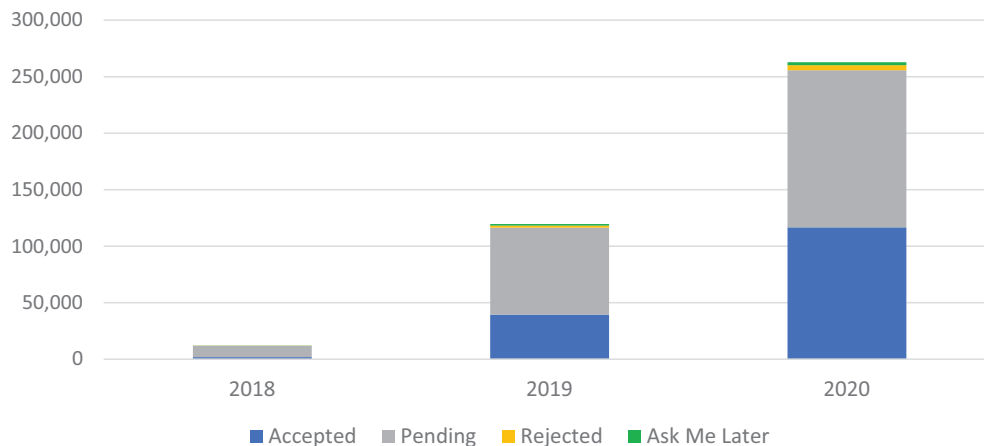
Early Insight into the Pipeline

Many schools have been able to identify eligible students in the online ordering system since the 2017-18 school year. This included a small number in the class of 2018 who participated in SAT School Day in either fall or spring of senior year, as well as those in more recent graduating classes. As shown in Figure 6.3, the number of SAT test takers in a graduating cohort identified through this new method grew rapidly. In fact, nearly 263,000 SAT test takers in the class of 2020 were identified by their schools through early February of their senior year, up from 12,000 in the class of 2018.

As described above, in order to "unlock" all the benefits, the student must confirm eligibility when prompted in the registration portal (MySAT). As shown in Figure 6.3, there was similarly rapid growth in the number of SAT test takers identified through the

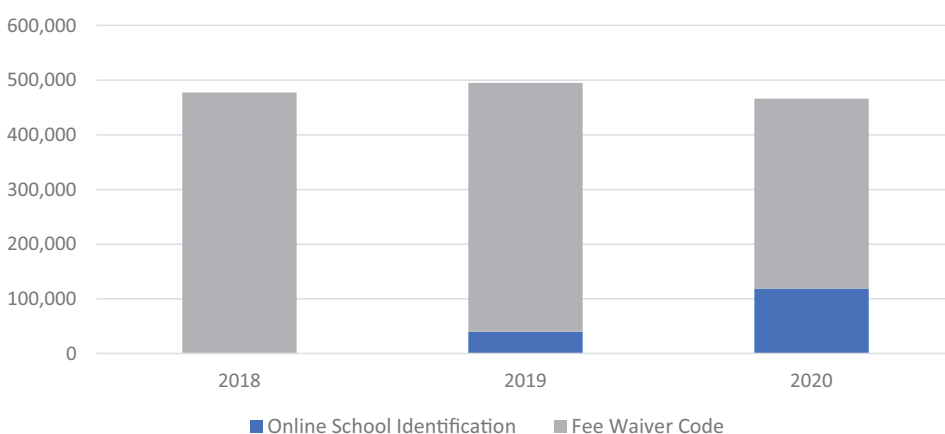
online ordering system who accepted their benefits. However, over half missed out on numerous benefits. Recent efforts to increase awareness helped drive the percentage who accepted benefits from 33% of the class of 2019 to 44% of the class of 2020 (blue portion of bars in Figure 6.3).

FIGURE 6.3 Online Identification of Fee Waiver–Eligible SAT Test Takers, by Cohort



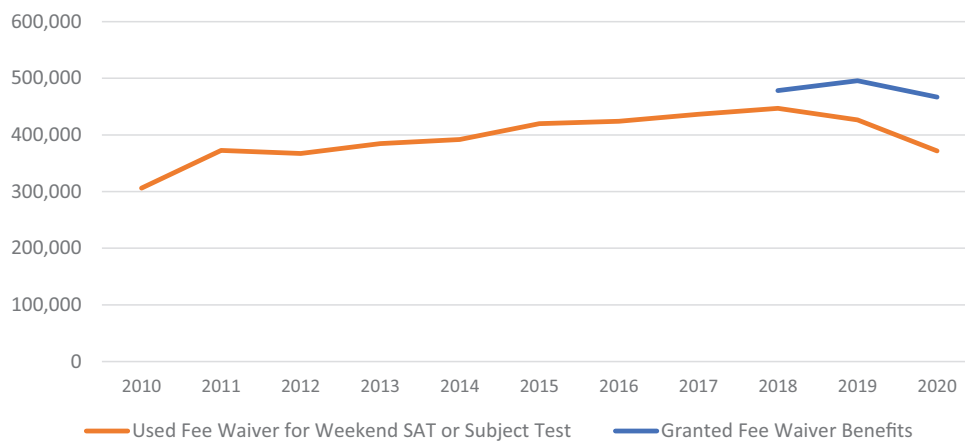
Not surprisingly, there has been a corresponding shift in *how* SAT test takers are identified as eligible because an increasing number of those granted the full range of benefits were identified by their schools in the online ordering system. The proportion of those granted benefits that were identified in the online ordering system grew from 8% of SAT test takers in the class of 2019 to 25% of the class of 2020 (blue portion of bars in Figure 6.4). However, the majority of SAT test takers are still connected to their fee waiver benefits by using a code provided by the counselor, or by using the paper fee waiver card from their counselor.

FIGURE 6.4 SAT Test Takers Granted Fee Waiver Benefits by Method of Identification, by Cohort



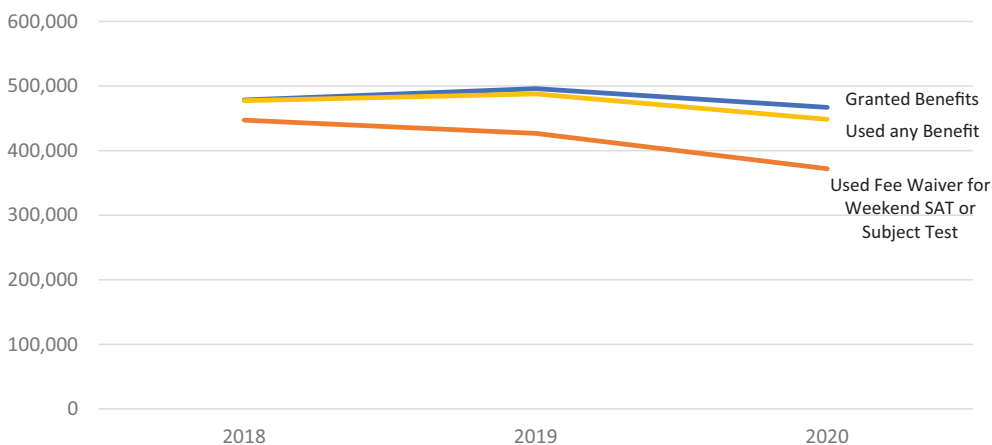
The number of SAT test takers who take advantage of one or more free weekend SAT or Subject Test registrations dropped noticeably, from a peak of 447,000 in the class of 2018 (Figure 6.5). This is part of the continued migration of students from weekend administrations to SAT School Day. In fact, a much larger number of students in the cohort were granted the full range of benefits as shown by the blue line in the chart below. This is important to keep in mind, as the more traditional view of looking at weekend SAT fee waiver usage doesn't reflect all the ways in which students are using benefits. Thus, in locations with particularly high SAT School Day participation, the limited view of weekend fee waivers can grossly mischaracterize low-income student participation.

FIGURE 6.5 Fee Waiver Identification and Weekend Testing Usage, by Cohort



Nearly all students *granted fee waiver benefits use* one or more of the benefits. For example, 467,000 in the class of 2020 were granted fee waiver benefits, and 448,000 used one or more of them (Figure 6.6). In other words, while 372,000 in the class of 2020 took advantage of free weekend SAT or Subject Tests (in addition to other benefits), an additional 76,000 test takers only took advantage of nontesting benefits, such as sending additional free score reports.

FIGURE 6.6 Fee Waiver Identification and Usage, 2018–2020 Cohorts

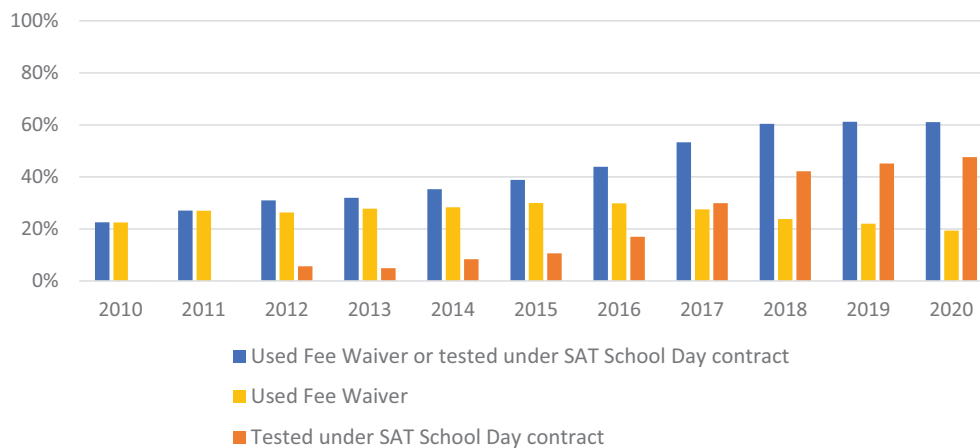


The preceding figures illustrate the challenges in providing a complete picture of low-income student participation in the SAT. Students may not know their counselors can provide fee waiver codes/cards, and counselors may not be able to track down all eligible students. Students may not attend a school using the online ordering system to identify eligible students and, even if they do, they might not encounter the eligibility confirmation prompt and thus be unaware of the range of opportunities available to them.

A slightly different way of looking at the data is to examine the participation of students who either used a fee waiver to test on the weekend or took the SAT under a School Day contract covered by their school district or state. As shown earlier in this report, SAT School Day participants are much more likely to live in economically disadvantaged households and communities.

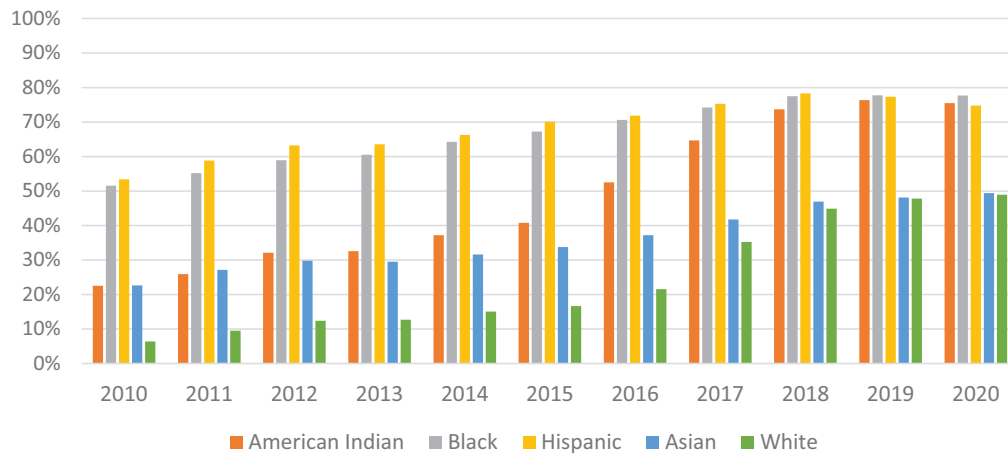
Figure 6.7 shows the trend over the past 10 graduating classes for public schools across the country. As the percentage of the cohort who used a fee waiver declined, the percentage of the cohort testing under a School Day contract rose. Thus, the overall percentage of the cohort with access to one or more SAT tests at no personal cost steadily rose, from 23% in the class of 2010 to roughly 60% for the more recent graduating classes.

FIGURE 6.7 Percentage of U.S. Public School SAT Test Takers Who Used a Fee Waiver or Tested Under a School Day Contract, by Graduating Cohort



While this pattern varied by race/ethnicity, there's an upward trend across subgroups: roughly 75% of American Indian, Black, and Hispanic, and half of Asian and White public school SAT test takers have access to one or more SAT tests at no cost to them (Figure 6.8).

FIGURE 6.8 Percentage of U.S. Public School SAT Test Takers Who Used a Fee Waiver or Tested Under a School Day Contract, by Race/Ethnicity and Graduating Cohort



Implications

College Board was founded in 1900 to expand access to higher education, and for nearly 50 years the fee waiver program has been a crucial part of that mission, defraying the cost of the college-going process for low-income students.

Numerous indicators suggest that more low-income students are taking the SAT than ever before. Whether we leverage free and reduced price lunch information about schools, districts, and states or census information to estimate the level of challenge where SAT test takers live and attend school, it's clear the population taking the SAT today is much more economically diverse than it was years ago. SAT School Day is the primary reason for this shift, but one of the unintended consequences was that we lost insight into which students were eligible for fee waiver benefits.

While we've made improvements to the fee waiver–eligibility identification and benefit-granting processes, much work remains to plug leaks in the fee waiver pipeline, so that all eligible students are connected to all the benefits to which they are entitled. Too many low-income students are missing out on opportunities.

We view this as a call to action and will continue to adapt policies and processes to better serve these students. We have more work to do to help these students take full advantage of these opportunities. This is even more critical in the face of widespread economic hardship related to COVID-19.

SECTION 7

Connecting the SAT Suite to Advanced Placement

Introduction

Advanced Placement® courses are intended to do much more than just share subject-specific knowledge. Students are challenged to engage thoughtfully with complex text, to become astute problem-solvers, and to write persuasively and succinctly. These skills prepare them for high school and beyond. Scores of 3, 4, or 5 on an end-of-year AP Exam often allow entering college students credits to skip entry-level courses, avoid duplicative coursework, and receive credits toward their degrees.

The rigor of Advanced Placement coursework is well established. In a 2016 report, Nat Malkus of the American Enterprise Institute declared that, “AP might be the single happiest education story of the century.” Advanced Placement coursework was once confined to private college preparatory high schools and wealthy suburban public schools, but now it is nearly ubiquitous. Despite this great success, there are gaps in Advanced Placement course taking across many sociodemographic groups. Progress has been made on this front, yet many students with the potential to succeed in AP coursework aren’t taking these courses.

In the class of 2019, only 3 out of 10 Black and Hispanic students with the potential to succeed in an AP math course enrolled in one, compared to 4 out of 10 White students and 6 out of 10 Asian/Pacific Islander students.

The skills developed in AP are essential for college readiness, and the SAT Suite of Assessments provides valuable data to students, parents, and educators on college readiness as students progress through high school. The SAT Suite of Assessments can also identify students who might do well. AP Potential™ allows educators to consider factors such as motivation, interest, preparation, and access before making final course placement decisions. It’s based on College Board research that analyzed the performance of more than one million students and established meaningful correlations between the PSAT/NMSQT scores and AP Exam scores in order to identify students who are prepared to benefit from taking an AP course.

In this section of the report, we focus on efforts to increase college readiness through (1) more rigorous core courses in high school; (2) AP courses that strengthen critical skills needed for college; and (3) innovative interventions intended to get more qualified students into AP courses. We highlight research results from building the pipeline for Advanced Placement through new Pre-AP® courses and an innovative intervention, the

All In intervention which is aimed at increasing participation among high-achieving students with potential for success and who are also at the greatest risk of missing out on AP opportunities. We conclude with research that offers compelling evidence that skills acquired through Advanced Placement courses sharpen students' writing skills.

The key takeaways:

- Pre-AP courses focus on helping students develop the skills and routines that allow them to intellectually engage with the content; these skills and routines are generalizable across all Pre-AP courses. Focusing on these common skills and routines helps students to see the interconnectedness between all their courses.
- The AP All-In intervention moved the needle on AP participation. In this randomized controlled trial, parents, teachers, and students received letters, emails, and phone/text messages encouraging students to take AP courses for which they had potential. Those students who received one or more of these interventions and attended urban high schools were 2.5 percentage points (or 5.7% higher than the control group mean of 44.3%) more likely to take a matched AP Exam during their junior year. This shows that small nudges can change the trajectory for students.
- In West Virginia, where all students take the SAT essay section during the statewide administration of the SAT, AP participants perform better on all three dimensions of the SAT analysis, reading, and essay writing than students who don't take AP. This holds after controlling for race, gender, income, PSAT/NMSQT, high school grades, and AP performance prior to junior year. This is important because AP courses teach and reinforce critical writing skills that students will need in college and in their careers.

Pre-AP: Improving College Readiness

Every student deserves rigorous high school core courses that prepare them for college and career. That's why College Board developed Pre-AP. The program launched with eight courses (English 1, Algebra 1, World History and Geography, Biology, Music, Dance, Visual Arts, and Theatre) in approximately 200 schools beginning in the 2018-19 school year. It will launch nationally with 11 courses (the new courses are English 2, Geometry with Statistics, and Chemistry) for the 2020-21 school year.

The objectives are to:

- Offer every student access to a high-quality education that prepares them for success not only in high school but in college and career; and
- Provide educators with engaging course materials that will help their students master critical college readiness skills.

The Pre-AP Program courses deliver grade-level-appropriate instruction through focused course frameworks, instructional resources, learning checkpoints, and collaborative educator workshops. They are designed to support students across varying levels of readiness. They aren't honors or advanced courses. The program grants educators and their students the space and time for deep engagement with content.

Participating schools receive an official Pre-AP designation for each course that signals consistent, high standards. There are four requirements in order to receive this designation:

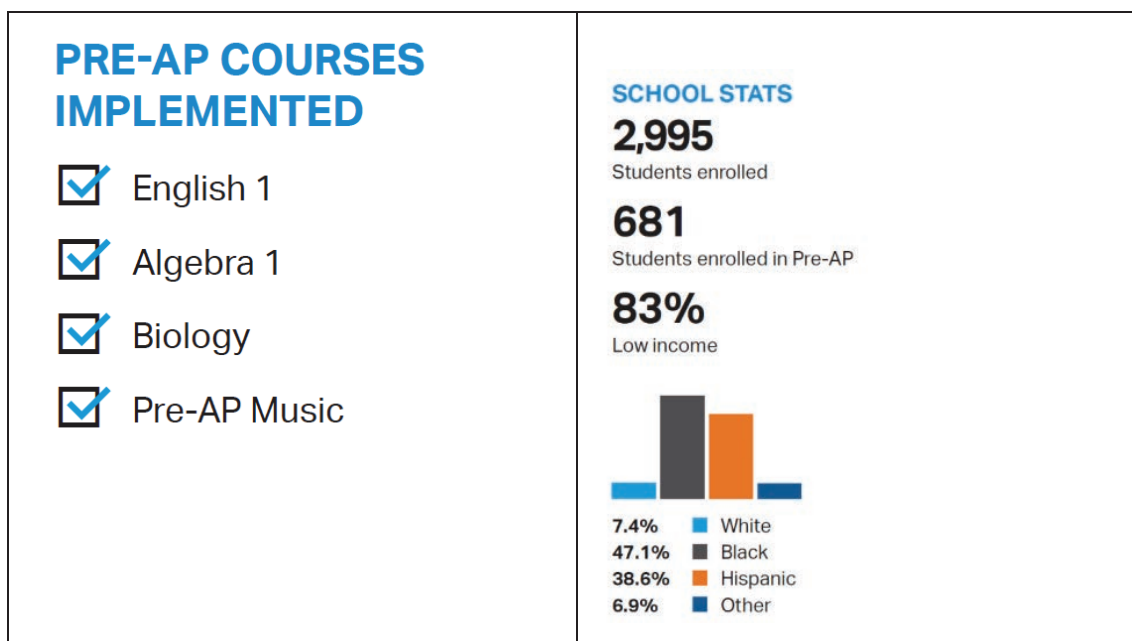
1. **Pre-AP for All:** Pre-AP frameworks and assessments are the foundation for all sections of the course.
2. **Course Frameworks:** Teachers align instruction to the course frameworks.
3. **Assessments:** Teachers administer at least one learning checkpoint (or quiz) per unit and four performance tasks.
4. **Professional Learning:** Teachers and at least one administrator complete a Pre-AP Summer Institute, either in-person or online. Teachers complete at least one online scoring module.

During the 2018 and 2019 school years, College Board studied the impact of these courses and collected data that were used to improve them. We also worked with Pre-AP coordinators and teachers to administer end-of-year surveys to administrators, teachers, and students. Future reports will include the results of these studies on the impact of Pre-AP courses on college-going metrics, including PSAT/SAT scores, AP enrollment, and AP Exam scores.

Early Qualitative Perceptions of Pre-AP

Below are two examples of feedback gathered from partner schools:

PARTNER #1: Bloom Township, IL



Leaders in Bloom Township High School District 206 wanted to raise the level of rigor for students doing grade-level work and encourage consistency across the two district high schools. In addition, they wanted to support teacher planning across disciplines. Before considering Pre-AP, the leadership team brought its teachers into the discussion. It was

critical to have their support; they agreed that Pre-AP could provide an opportunity for faculty collaboration, and support student growth.

As Bloom Township implemented the Pre-AP program, they required the following:

- All Pre-AP teachers attend summer professional learning events led by the College Board.
- Once a quarter, cross-departmental teams meet to collaborate and share best practices.
- Every other week, subject-specific teams meet for 90 minutes to check in and track progress.

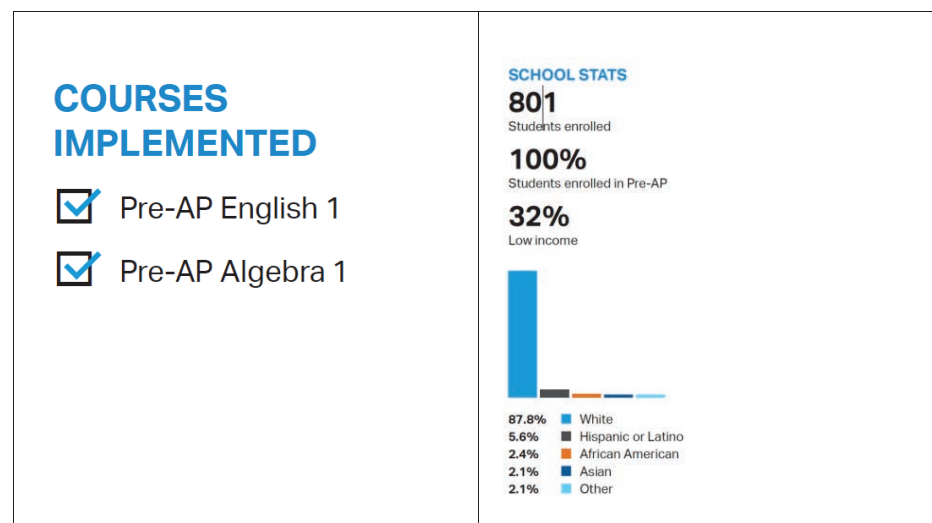
Impact of Pre-AP in Bloom Township

Student engagement and collaboration increased. Students are recognizing the power of the shared instructional routines across courses, which helps them prepare for academic next steps. Students surveyed by the College Board agreed/strongly agreed that Pre-AP courses prepare them for AP courses (75%), SAT (73%), and college (74%).

“We’ve seen a big change in the students from before Pre-AP to after Pre-AP—it’s the ability to openly talk about content with their teachers and fellow students. They are seeing the connections among different courses. Students really like how the concepts are broken down. For example, students build from writing a really strong sentence to writing well-articulated essays.”

CYNTHIA GONZALEZ
DIRECTOR OF COLLEGE AND CAREER READINESS AND INTERVENTION

PARTNER #2: Cabot Freshman High School, Arkansas



The Cabot Public School District and the Cabot Freshman Academy wanted to encourage collaboration and critical thinking by their 9th-grade students, as well as teacher planning across disciplines. After conversations with College Board, the leadership team brought its teachers into the discussion, and they agreed that Pre-AP could enhance faculty collaboration and student growth.

As Cabot Freshman High School implemented the Pre-AP program, they required the following:

- Every week, teachers meet within their disciplines to plan together.
- Every other week, teachers meet across subjects.
- For a full day every 9 weeks, teachers hold progress and tracking meetings.
- The mathematics and ELA department heads deliver lessons several days before all the other teachers, so they can share their learning.

Impact of Pre-AP in Cabot Freshman High School

Student engagement and collaboration increased:

“We had [a student] making Cs and Ds, and he has flourished under this program. “He said he thought he wasn’t Pre-AP material at the beginning of the year, but he has fallen in love with how he is being taught. He found a voice and his confidence.”

AHNA DAVIS
PRINCIPAL, CABOT FRESHMAN ACADEMY

All In: Improving Access to AP for All Students

Despite the steady expansion of AP, there are gaps in participation by race, income, and geography. College Board has invested in numerous initiatives over the last decade to expand AP access to historically underrepresented students. One initiative, the All In outreach campaign, was designed to nudge those with potential to enroll in specific AP courses at their high school.

Beginning in 2014, All In sent racially underrepresented students and rural students a combination of letters, emails, phone calls, and/or text messages to inform them of AP courses for which they demonstrate potential based on their performance on the PSAT 8/9, PSAT 10, PSAT/NMSQT, and/or SAT. Until recently, high school administrators and students and their families could access this information, but College Board didn’t reach out to students directly, so some of those students were unaware of their potential. All In was designed to eliminate this information gap by providing personalized course recommendations to students and parents.

To determine if All In was effective, there was a trial run in the 2016-17 school year. Eligible students entering their junior year were randomly assigned to either a control group that didn’t receive messages and personalized course recommendations, or to one of two treatment groups—one received outreach only via letters and emails; the other received phone and text messages in addition to letters and emails.

Randomization ensures that students assigned to each group are similar so we can compare AP Exam participation and performance between the groups to evaluate the efficacy of the outreach campaign.

Results from the first cohort, expected to graduate in the spring of 2019, show that outreach over the summer increased junior year exam participation by 1.2 percentage points over the control mean of 44.4% (see Figure 7.1). This represents a 2.6% increase over the control group. Despite inducing more students to take recommended APs, the cohort 2019 All In campaign didn't increase the chances that students in aggregate earned scores of 3 or higher on those exams (see Figure 7.1). However, the intervention was particularly successful for students attending urban high schools. For those students, about one-third of the treatment group, outreach increased the probability of taking AP courses and earning scores of 3 or higher by 2.5 and 1.7 percentage points, respectively (Figure 7.2). That represents relative gains of 5%–6% over urban high school students who didn't receive outreach. This is promising evidence that the intervention works in some contexts.

To better understand the interventions that can propel traditionally underserved students into rigorous high school coursework, we have expanded All In to the 2021 cohort.

FIGURE 7.1 Average Effects of 2017 All In Outreach on AP Participation and Performance in AP Potential Exams

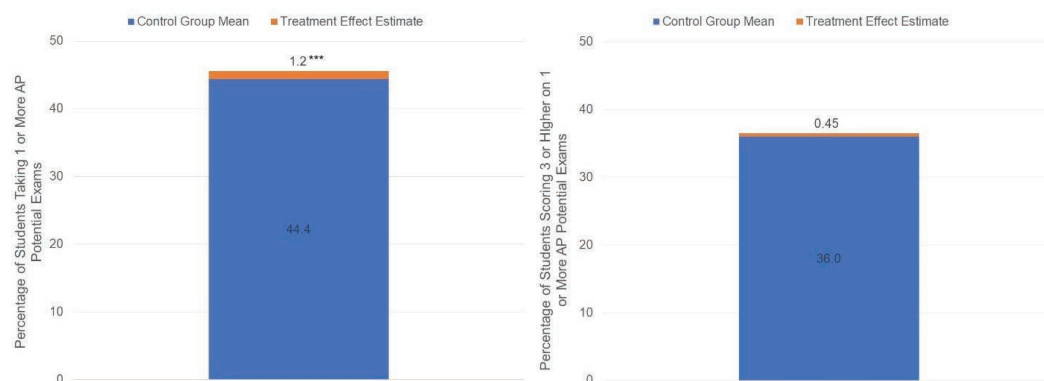
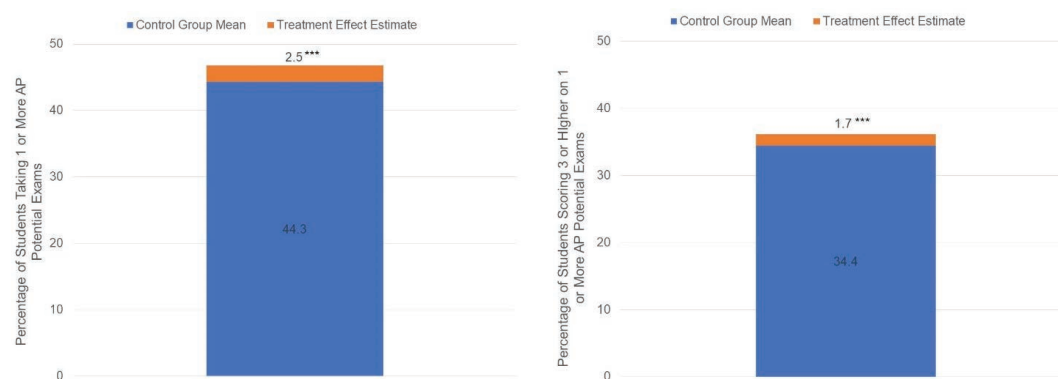


FIGURE 7.2 Effects of 2017 All In Outreach on Overall AP Participation and Performance for Students Attending Urban High Schools



*** Indicates statistical significance at the 0.001 level.

AP Exam-Taking and SAT Essay Scores

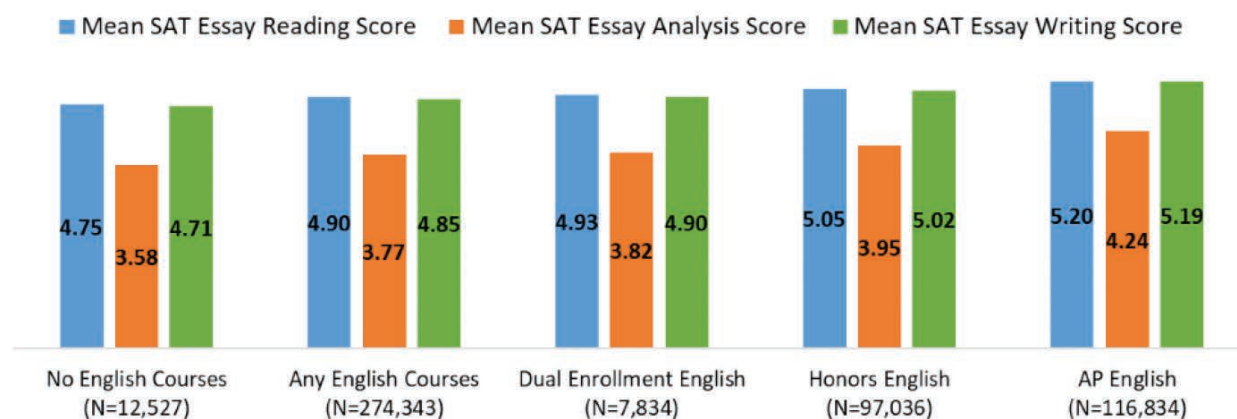
HOW AP IS RELATED TO STUDENTS' WRITING SKILLS

The SAT Essay was redesigned to more closely mirror the writing students will do in college. Each SAT Essay dimension—reading, analysis, and writing—is awarded a score from 1 (lowest possible score) to 4 from two graders. As can be seen in Figure 7.3, students, on average, earn the lowest scores on the analysis dimension of the SAT Essay (Moses and Kim, 2017). The SAT Essay analysis score measures a student's ability to read material and provide a thorough, well-considered evaluation of the author's use of evidence, reasoning, and stylistic elements. Several school districts saw students struggling with analyzing text and asked how coursework may help them. AP English Language courses are uniquely well positioned to improve analysis skills because they teach reading, analysis, and writing skills at the level of an introductory college course. To understand the extent to which AP English coursework prepares students for the SAT Essay, the College Board conducted several studies on the relationship between SAT Essay scores and AP English Language course participation.

ASSOCIATION BETWEEN HIGH SCHOOL COURSE-TAKING AND SAT ESSAY SCORES

Analysis of performance from the class of 2017 finds that coursework has a relationship with a student's SAT Essay score and is strongest for the analysis dimension of the SAT Essay. As depicted in Figure 7.3, after controlling for demographics and SAT Evidence-Based Reading and Writing (ERW) section scores, average SAT Essay scores are higher for students who report some high school instruction versus no instruction in the English Language Arts and are highest for students with Advanced Placement (AP) coursework in English. Furthermore, average SAT Essay scores are higher for students who take AP coursework in English¹ and not English Language Arts dual enrollment or honors courses (Moses and Kim, 2017).

FIGURE 7.3 SAT Essay and ERW Scores of Cohort 2017 Students by English Coursework in HS



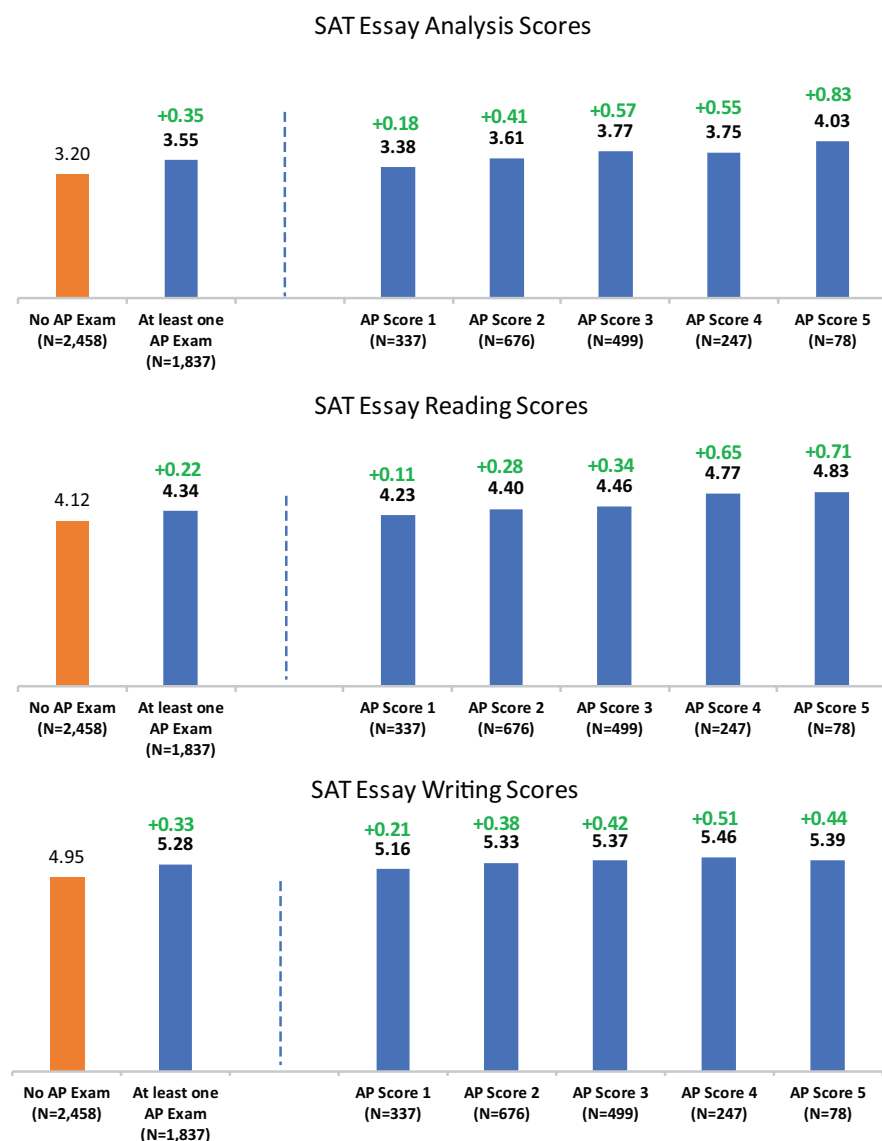
Source: Moses and Kim (2017), Table 7, pp.21.

¹ Students were identified as having completed AP coursework in English based on responses to the SAT Questionnaire. Students could select Advanced Placement designations for English/Language Arts, American Literature, British Literature or World Literature courses.

ASSOCIATION BETWEEN AP EXAM TAKING AND SAT ESSAY SCORES BY USING STATISTICAL MODELS TO CONTROL FOR SPECIFIC VARIABLES

To better understand this relationship between AP coursework and SAT Essay scores and how it may be affected by other factors, recent research examined the relationship between performance on AP Exams, the subject area of the AP Exam, and SAT Essay scores, while controlling for student demographic factors and prior academic preparation. The focus of this research was on the 2019 Cohort of West Virginia students who completed the SAT Essay in the spring of junior year or fall of senior year. West Virginia provides a good sample for this study because all its public school students are required to take the SAT with Essay.

FIGURE 7.4 SAT Essay Scores and AP Exam Taking, West Virginia Cohort 2019



Note: Average scores are based on a multilevel model and are calculated for the average WV student who is White/Asian, female, not first generation, not low income, and has average PSAT-related assessment scores, high school grades, and an average number of AP Exams completed prior to junior year (for students who completed any AP Exams). Numbers in bold indicate that the difference between score of AP students and non-AP students is statistically significant at $p < 0.001$.

In this study, several key factors that may influence the relationship between AP Exam taking and SAT Essay scores are controlled for, including student underrepresented minority status, gender, first-generation status, low-income status, PSAT-related assessment scores, high school grades, the total number of AP Exams completed prior to senior year of high school, and the variation in SAT Essay scores across high schools. Figure 7.4 shows that accounting for all of the background and prior achievement variables, students who take at least one AP Exam score 0.35 points higher (4.4% higher) on the analysis component of the SAT Essay score, 0.22 points higher (2.8% higher) on the reading component of the SAT Essay score, and 0.33 points higher (4.1% higher) on the writing component of the SAT Essay score than students who take no AP Exams at all. The numbers in green indicate the increase in SAT Essay score points for each AP group compared to students who haven't completed any AP Exams.

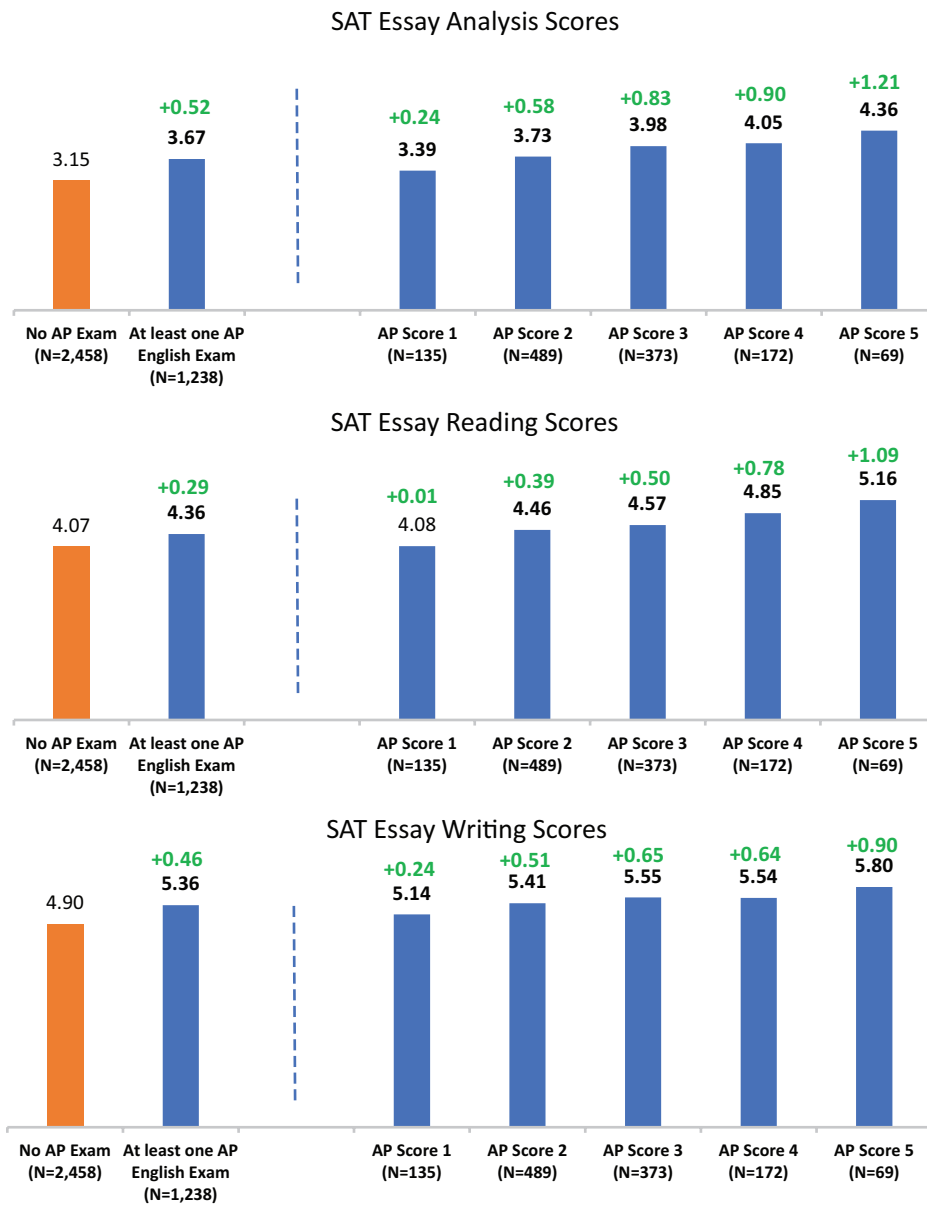
Figure 7.4 indicates that AP examinees have higher SAT Essay scores than students who don't take any AP Exams regardless of their performance on the AP Exams.² Even students whose average AP Exam performance is 0.18 points higher on analysis, 0.11 points higher on reading, and 0.21 points higher on writing than students who didn't take any AP Exams. As can be seen in Figure 7.4, relationships between AP scores and essay subscores are sharpest for the analysis dimension, indicating that the skills students build while engaged in an AP curriculum are highly transferable to the assessment of the analysis score.

Figure 7.5 shows the same results as Figure 7.4, focusing on students who have taken an AP English Language and/or an AP English Literature Exam specifically. The relationships shown in Figure 7.5 are even stronger than in Figure 7.4, supporting the national findings in Figure 7.3 on the benefits of AP English instruction in terms of SAT Essay performance.

In addition, the research examined the relationship between SAT Essay scores and AP Exam taking and performance for the top 10 AP Subject Exams that students in West Virginia are most likely to take. The results revealed that the same positive and statistically significant relationships between the AP Exam score and the SAT Essay score remained. This highlights that taking AP Exams in both English and subjects outside of English Language Arts is positively related to the skills students need to do well in all components of the SAT Essay.

² For students who took more than one AP Exam we used the average of all their AP Exam scores rounded to the nearest integer to define AP Exam performance.

FIGURE 7.5 SAT Essay Scores and AP English Exam-Taking, West Virginia Cohort 2019



Note: Average scores are based on a multilevel model and are calculated for the average WV student who is White/Asian, female, not first generation, not low income, and has average PSAT-related assessment scores, high school grades, and an average number of AP Exams completed prior to junior year (for students who completed any AP Exams). Numbers in bold indicate that the difference between scores of AP students and non-AP students is statistically significant at $p < 0.001$.

Implications

A major goal in the redesign of the SAT and the design of the SAT Suite of Assessments was to provide a better measure of the impact of rigorous high school instruction on increasing the college and career readiness of students. (College Board, 2014, 2017). The research on the relationship between high school coursework and SAT Essay scores, as well as the specific relationship between AP Exam taking and SAT Essay scores, show that progress is being made toward achieving those goals. The skills students learn in their AP English Language coursework are reflected in their performance on the SAT.

Moving Forward

The SAT Suite of Assessments is designed to measure the same skills and knowledge across different grade levels so that students, parents, and educators can monitor student progress. Understanding how the AP and Pre-AP programs relate to the SAT Suite can help schools make the most of the different programs to help students grow. Besides the development of the AP and Pre-AP programs, in response to feedback from students and educators, the following areas are being explored:

- Scaling of the All In campaign: College Board is exploring how to make more students aware of the specific AP courses for which they have potential for success.
- Course recommendation tools: College Board is exploring incorporating student interest, through tools like Career Finder, with student potential for success, using AP Potential, on exams as early as PSAT 8/9 to provide students with a roadmap to AP courses later in their high school career.

The College Board continues to explore how the SAT Suite of Assessments, in combination with curricular programs like AP and Pre-AP, can help students explore their interests in ways that can contribute to academic growth and success.

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SECTION 8

State and District Policy Implications of the Use of the SAT Suite

More and more states and districts have expanded their use of the SAT Suite of Assessments over the last several years, including through SAT School Day (see Section 2 for more information on the growth of School Day use). In many instances, this has been done to meet federal requirements for accountability and assessments. Districts also have to meet state-specific accountability measures, such as district and school report cards, or the requirement to offer a college entrance exam (CEE). They also use these assessments to shape their instruction and track student progress.

CEE for All

In the past five years, several states have introduced or passed legislation requiring all 11th graders to take a CEE, and more of them are using that data to satisfy the federal accountability requirement for high school testing. In 2015, two states made the SAT

FIGURE 8.1 State Use of SAT Suite Assessments

	PSAT [®] 8/9		PSAT [®] 10 or PSAT/NMSQT [®]		SAT
	8th Grade	9th Grade	10th Grade	11th Grade	11th/12th Grade
Arkansas			●		
Colorado		⊕	⊕		✓
Connecticut				●	✓
Delaware	●	●	⊕	●	✓
Florida	●	●	●	●	
Georgia			●		
Idaho			●		●
Illinois		⊕	⊕		✓
Indiana			●	●	
Maine					✓
Michigan	✓	⊕	⊕		✓
Minnesota*					●
New Hampshire					✓
New Mexico			●		✓
Ohio*					●
Oklahoma*			●		✓ ●
Oregon			●		
Rhode Island			⊕		✓
South Carolina*			●		●
Tennessee*					●
Texas*					●
Washington, D.C.					⊕
West Virginia					✓

* Districts/schools/students choose their college entrance/readiness assessment (varies by state)
 ⊕ State funded, required ✓ State funded and used for accountability ● State funded, optional

available for all 11th or 12th graders. By 2018-19, 10 states (Colorado, Connecticut, Delaware, Idaho, Illinois, Maine, Michigan, New Hampshire, Rhode Island, and West Virginia) and the District of Columbia covered the cost of the SAT for all their public school students, and two others (Ohio and Oklahoma) allowed districts to choose to administer a CEE, including the SAT, to all public school students.¹ During the 2018-19 school year, over 450,000 unique test takers in over 3,500 schools in these states took the SAT,² more than double the number from 2015-16. Across the country, states partnering with the College Board to offer tests from the SAT Suite of Assessments to public school students during the school day at no cost. Figure 8.1 provides a list of states offering them in the 2019-20 school year.

The SAT Suite assessments are used in several ways by states:

- as their accountability assessment
- as a college readiness measure, by administering the PSAT 10 and PSAT 8/9 to all students
- as a college and career readiness indicator in accountability
- as an alternative for high school graduation

Let's look at each of these in more detail.

SAT as an Assessment for Accountability

There are compelling reasons to use the SAT for accountability. The redesigned SAT measures the essential standards of all states, and it saves states testing time and taxpayer money. It connects students to benefits like free, personalized practice on Khan Academy and college application fee waivers. It takes only about three hours of instructional time (compared to—on average—7.5 hours for Smarter Balanced assessments), and offers useful data to educators, students, and families.

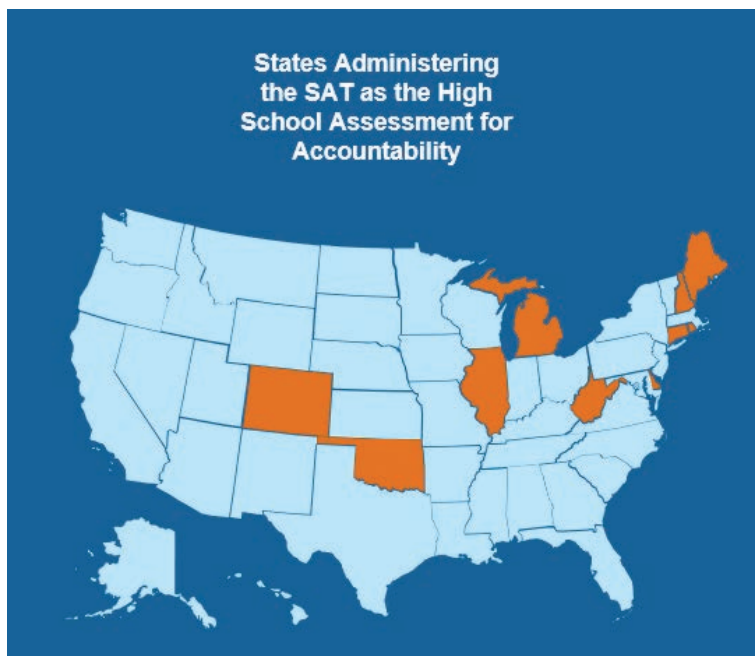
In 2018-19, 10 states—Colorado, Connecticut, Delaware, Illinois, Maine, Michigan, New Hampshire, Oklahoma³, Rhode Island, and West Virginia—administered the SAT as their assessment for federal accountability.

1 In 2019-20, New Mexico was scheduled to administer the SAT to all students before all schools closed due to COVID-19.

2 Data from Integrated Assessment Tool (IAT), public students only in CO, CT, DC, DE, IS, IL, ME, MI, NH, OH, OK, RI, WV, for SY 2018-2019 taken 5/4/2020

3 Oklahoma allows individual districts a choice between administering the ACT and SAT to all 11th graders.

FIGURE 8.2 States Using SAT for High School Accountability



SPOTLIGHT: MICHIGAN—REDUCED COST, TESTING BURDEN, AND EXPANDED PARTNERSHIPS

The Michigan Department of Education (MDE) has been using a CEE as part of their federal accountability assessment system for over a decade. In 2015, Michigan chose the revised SAT to be part of this system through an RFP process. The superintendent of public instruction in Michigan at that time said:⁴

“The College Board’s SAT test is respected and used around the country ... Their bid was rated the highest; [it] provides valuable assistance to Michigan educators, students, and parents; is more aligned to Michigan’s content standards; and saves the state millions of dollars over the course of the three-year contract.”

Based on evaluations during the RFP and feedback since implementation in 2016, the SAT is more closely aligned with Michigan’s teaching and learning standards in mathematics and English than other assessments, delivers more useful data to students and educators, and has saved the state a significant amount of money. Because of the closer alignment, MDE substantially reduced overall testing time for juniors by eliminating the state-developed M-STEP testing in mathematics and English in grade 11.

⁴ Michigan Department of Education, January 15, 2015; <https://www.michigan.gov/mde/0,4615,7-140--344785--,00.html>

The Michigan Department of Education now uses annual testing with PSAT 8/9, PSAT 10, and SAT for grades 11–12 as part of its assessment system and to meet ESSA requirements for grade 8 and to meet high school math and English language arts requirements. Michigan and College Board have worked with in-state professional organizations to help teachers and administrators use the data provided through the SAT Suite for instructional purposes. These partner organizations provide data protocol workshops to help teachers and administrators learn how to use the SAT Suite results to differentiate instruction and provide curated instructional resources aligned to Michigan Standards and SAT Suite subscores. Partners also offered a summer institute for counselors to provide college and career readiness strategies and resources and data and information on college-going trends.

Administering SAT as an Additional College Readiness Measure

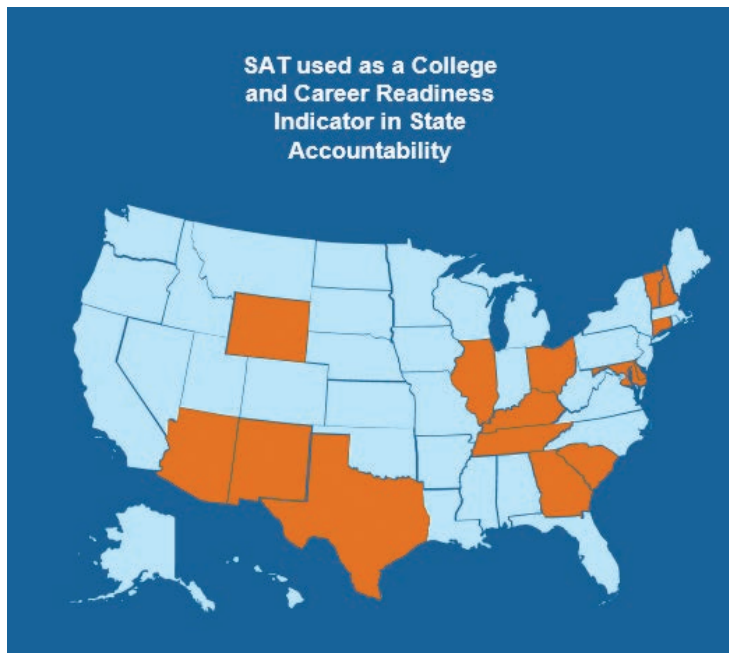
Several states require or provide options for students to take a CEE outside of their accountability systems, which promotes equity because it eliminates any cost barriers to students. Idaho and Washington, D.C. require all students to take the SAT, while Ohio, South Carolina, and Tennessee offer districts or students the choice of taking the ACT or the SAT.

Including SAT as a College and Career Readiness Indicator in Accountability

Fifteen states and Washington, D.C. use the SAT to gauge college and career readiness. This, in conjunction with other indicators, like Advanced Placement participation and performance, helps show how high schools are preparing students for postsecondary institutions. For example, Delaware measures the percentage of graduating students with one or more of the following:

- 3+ on AP
- 4+ on IB
- Postsecondary credit attainment with a B or higher
- SAT benchmark
- Industry credential
- Certificate of multiliteracy
- Successful completion of a work-based learning extension
- ASVAB score of 50+

FIGURE 8.3 SAT a College Readiness Indicator in State Accountability

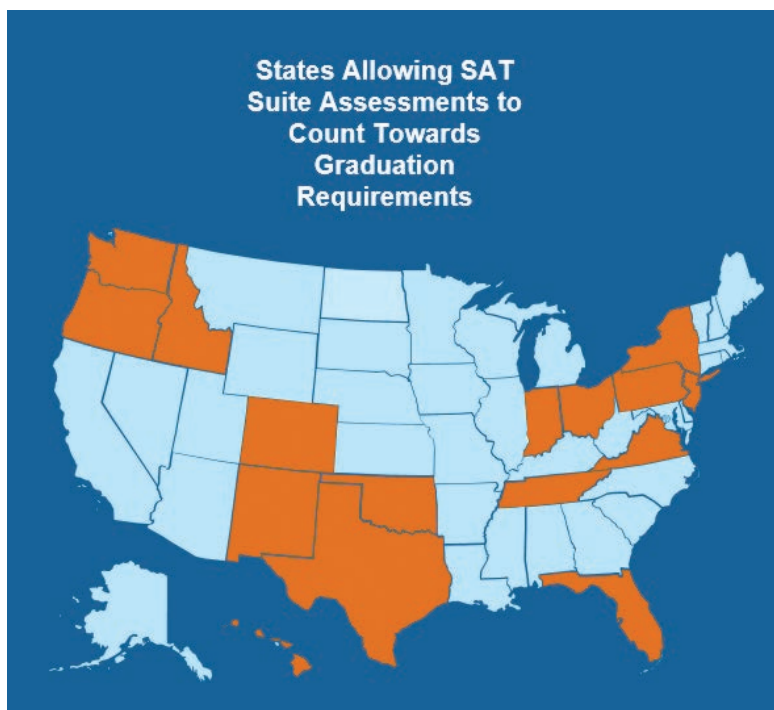


Including the SAT as an Alternative for High School Graduation

In several states, assessments in the SAT Suite can substitute for an end-of-course or other graduation requirement, or be used as evidence for a graduation honor, seal, or endorsement. For example, in Washington state, students may use their math and/or ELA scores on the SAT with Essay (or specified AP Exams) to show they have the key skills expected of high school graduates. This allows students to show what they know and potentially reduce the amount of time they spend taking tests.

Students in Ohio can earn the College-Ready Seal on their diploma by meeting benchmarks on the SAT (480 on EBRW and 530 on math). These seals and endorsements send a strong signal that students are ready for the rigors of college-entry, credit-bearing courses.

FIGURE 8.4 SAT Allowed for Graduation Requirement



Use of the SAT Suite to Trigger Advanced Opportunities for Students

A few states use SAT Suite results to offer students opportunities to take advanced coursework. Three states—Washington, Colorado, and Nevada—passed legislation in 2019 requiring districts to design systems that would automatically enroll students in rigorous courses. Connecticut has also used SAT Suite assessment results to support more rigorous coursework. The Connecticut State Department of Education issued the following guidance to districts:

Using results from the PSAT 8/9, PSAT 10, PSAT/NMSQT, SAT, and AP Potential™ helps educators identify students likely to succeed in certain AP courses and on the respective exams ... Exciting research that ties AP credit to college completion and defraying college expenses through college credit suggests that AP can help more students get into college, stay in college, and graduate. In the 2019 graduating class, 585,588 students (61%) with AP potential participated in at least one matched AP Exam. States are adopting policies to encourage students with AP potential to enroll in matched AP courses. For example, the Connecticut State Department of Education sends congratulatory letters to all students with AP potential based on their PSAT/NMSQT score and encouraging them to enroll in courses that will earn college credit, such as AP. In 2019, Connecticut had the second-highest percentage of students scoring 3+ on an AP Exam and the fifth-highest percentage of graduates taking an AP Exam.⁵

⁵ Connecticut State Department of Education (December 19, 2017). portal.ct.gov/-/media/SDE/Digest/2017-18/Advanced_Placement_2018.pdf?la=en

The chief performance officer for the Connecticut State Department of Education noted that, *"In 2015-16, Connecticut switched to using the redesigned SAT as its high school accountability assessment for a variety of reasons.*

- *The content of the SAT was modified starting with the 2016 administration so that it wasn't as much a test of aptitude but one that more closely aligned to what students learned naturally in the high school curriculum.*
- *Over 70% of students in Grade 11 were already taking the SAT, so designating it as the state assessment substantially reduced the testing time for students. This was particularly important for juniors who were already taking other assessments such as the AP.*
- *Students from historically disadvantaged backgrounds such as low socioeconomic status, first-generation college-going families, English learners, and students with disabilities now had no-cost access to not only a nationally recognized college readiness assessment, but also the plethora of supportive tools that are critical to college transition.*
- *College Board committed to updating its accommodations and supports process to come closer to the more robust accommodations already available to Connecticut students in other assessments like the Smarter Balanced in the elementary/middle grades. Specifically, College Board provided no-questions-asked accommodations for students with disabilities who have those accommodations documented in an Individualized Education Program (IEP) or 504 Plan. In the 2016-17, College Board extended this streamlined process to English learners and offered access to testing instructions in several native languages and use of approved word-to-word bilingual glossaries."*

Connecticut initiated this change to using the SAT as its accountability assessment and received federal approval in August 2015. This change had overwhelming support from educators across Connecticut and was recommended by the State Board of Education's State Student Advisory Council. The change was also mandated in Public Act No. 15-238, which required that effective in the 2015-16 school year, 11th graders should take a nationally recognized college readiness assessment that measures essential and grade-appropriate skills in reading, writing, and mathematics.

The redesigned SAT has benefited educators and students, who are spending less time on standardized testing, especially in Grade 11. With the shift in content of the SAT, pre-2016 models of "SAT test prep" are no longer a prerequisite for doing well on the SAT, so educators can focus on providing rigorous instruction aligned to the standards to prepare students for the SAT. Free, aligned instructional resources through Khan Academy are also available, further leveling the playing field. An added benefit is that all students can send their scores to four colleges for free. The SAT also integrates seamlessly into Connecticut's ESSA accountability system by contributing to both the academic achievement and college readiness indicators.

Providing State Funding for the SAT Suite Through District and Student Choice

Several states offer districts the option to provide a CEE or the PSAT to their students, which has generally resulted in an increase in the number of students who take an assessment. These funding efforts are often coupled with the use of the assessment to meet a graduation requirement, or as a part of a College and Career Readiness indicator.

SPOTLIGHT: TEXAS

In 2014, the Texas Higher Education Coordinating Board (THECB) had an advisory committee set 15-year goals for higher education. The plan that emerged, *60x30TX*, calls for 60% of the 25- to 34-year-old Texas population to hold a certificate or degree by 2030. Four goals in the *60x30TX* plan were deemed essential to the future prosperity of Texas:

- At least 60% of Texans ages 25–34 will have a certificate or degree, which will bolster the state’s economy
- At least 550,000 students in 2030 will complete a certificate, associate, bachelor’s, or master’s from an institution of higher education
- All graduates from public institutions will have marketable skills
- Undergraduate student loan debt will not exceed 60% of first-year wages for graduates

“SAT School Day helps move the culture of many of our schools from minimums and remediation to a college-going culture—an environment where children dream.”

DR. SHARON MENG
ASSISTANT SUPERINTENDENT, FORT WORTH ISD

To reach those goals, Texas Education Agency (TEA) set out to increase the number of students who are college, career, and military ready. House Bill 3 (HB 3) permitted TEA to reimburse districts for fees for the administration of a college preparation assessment. In the 2019-20 school year, eligible students can, for free, take one SAT, ACT, or TSIA in the spring of their junior year or during their senior year. This policy directly benefits first-generation students who want to go to college. By taking a college admission assessment, such as the SAT, students expand the number of postsecondary options available to them. Districts and schools are graded on the percentage of graduates who meet a college readiness indicator, including the SAT and AP Exams. This is reported annually on state accountability report cards available at txschools.gov/.

When the test-ordering window for fall SAT School Day closed in September 2019, over 75,500 exams had been ordered by 586 high schools, more than double the number of Texas schools participating and tests ordered in fall 2018. This incredible growth provides more opportunity for more students, especially those in areas where school day testing was not available. The demographics of the participants in fall SAT School Day mirror the state student demographics, suggesting that students of every race/ethnicity are getting an opportunity to test, proportional to their representation in the state student population.

SPOTLIGHT: FLORIDA

In 1999, Florida and College Board created the Florida Partnership for Minority and Underrepresented Students (The Florida Partnership). Funding to test 10th-grade college readiness and AP Exams was provided to increase academic rigor, access, and opportunity in Florida's public schools. Districts can choose PSAT/NMSQT or PLAN. In fall 2019, all 67 school districts in the state opted to administer the PSAT/NMSQT, compared to 31 districts in 2000. Every graduate in the class of 2019 took the SAT, compared to 63% in the class of 2017.

Florida students can also take the SAT or PSAT/NMSQT to earn a qualifying score to meet state assessment graduation requirements in English Language Arts and math. Districts may choose to administer the PSAT/NMSQT and/or SAT School Day to their students to meet these requirements. In addition to the test score, students and schools also benefit from access to the AP Potential tool, free and customized Official SAT Practice through Khan Academy, college and career awareness tool, and connection to scholarships

“Our district signed up for SAT School Day for a number of reasons. It is all about access for kids, and it’s about equity. For us, we wanted to be sure that we removed barriers that our students would be faced with—of getting to an SAT location on a Saturday if they have to take care of younger siblings or are working. But more importantly, we wanted to build college aspirations in all our students. And sometimes students just don’t think they have it to go to college. Just taking that test can really change their life.”

KEITH OSWALD
DEPUTY SUPERINTENDENT, PALM BEACH COUNTY, FLORIDA

Since the inception of the Florida Partnership in 2000, the state has seen significant increases in participation and performance in Advanced Placement, PSAT/NMSQT, and SAT, especially for minority and underrepresented students. Each year, the Florida Department of Education and College Board collaborate to identify districts that need support developing a college-going culture. Those districts are invited to participate in the Florida Partnership and take advantage of services and support from the College Board. Deliverables include professional development for teachers, counselors, and administrators.

There were 49,313 SAT test takers in Florida's public school class of 1999, as compared to 173,139 in the class of 2019, an increase of 251%. During that time:

- The number of Black SAT test takers increased from 6,848 to 35,506.
- The number of Hispanic SAT test takers increased from 6,511 to 58,957.

In 1999, there were 36,507 public school 10th-grade PSAT/NMSQT test takers. That rose to 174,644 in 2018-19, an increase of 378%.

- There were 5,641 Black 10th-grade PSAT/NMSQT test takers in 1999. In 2018-19, this increased to 28,426 (an increase of 404%).
- There were 4,754 Hispanic 10th-grade PSAT/NMSQT test takers in 1999. In 2019, this number increased to 58,463 (an increase of 1130%).

SPOTLIGHT: NEW YORK—OPPORTUNITY AND ACCESS

The SAT School Day is part of College Access for All, a key initiative in New York City by Mayor Bill de Blasio and then-Chancellor Carmen Fariña's *Equity and Excellence for All* agenda. *Equity and Excellence for All* aims to ensure that by 2026, 80% of students graduate high school on time, and that two-thirds of those graduates are college ready.⁶



Mayor de Blasio and Chancellor Carranza Announce Record High 48,782 New York City Students Enrolling in College

November 21, 2019

College enrollment hits record high of 62 percent of graduating students, an 11 percentage point increase since the start of this administration

De Blasio and current Chancellor Richard A. Carranza announced that a record high 48,782 students in the class of 2018 enrolled in college, up approximately 8,000 students since the start of the administration in 2014 and approximately 3,600 students compared to the previous year. College enrollment is at an all-time high—62% of New York City's class of 2018 enrolled in a two- or four-year college, vocational program, or public service program after graduation, up 3% from the previous year and up 11% from the class of 2013.⁷

Through College Access for All, more students are completing key milestones and directly applying to college: They are visiting a college campus with their high school, taking the SAT, applying to college, applying for financial aid, and enrolling in college and postsecondary programs. The initiative has also removed financial obstacles for students. In the class of 2018, 44,944 students redeemed fee waivers through CUNY, allowing them to apply for free. That same school year, 80% of juniors participated in SAT School Day, taking the exam in school, for free.

⁶ schools.nyc.gov/about-us/vision-and-mission/equity-and-excellence

⁷ www1.nyc.gov/office-of-the-mayor/news/560-19/mayor-de-blasio-chancellor-carranza-record-high-48-782-new-york-city-students#/0

To encourage students to take these critical college access exams, the Department of Education offers PSAT and SAT to all its students in grades 10 and 11. These tests are free of charge when students take them on a regular school day (PSAT School Day or SAT School Day)

Equity and Excellence for All has improved outcomes for students and ensures every high school has resources for students to graduate with a college and career plan; every middle school is providing students with early exposure to college campuses and school-based events that promote the pursuit of higher education. Measures of college readiness for the class of 2018 also improved—51% of all students in the class of 2018 graduated college ready, defined as graduating on time and meeting CUNY’s standards for college readiness in English and math. The graduation rate for the class of 2018 reached a record high 75.9%.⁸

“Our schools launch our kids to successful futures, and now more students than ever are enrolled in college and taking another step toward fulfilling their potential. We are making sure our students know college isn’t just for a select few and that zip code no longer determines who gets to go.”

MAYOR BILL DE BLASIO

Implications

In the past five years, the SAT Suite has become embedded in state and district policies, serving multiple important purposes: as a universal and equitable opportunity for students to show what they know for college entrance and scholarships; as a measure for state accountability to meet federal requirements; as a college readiness indicator; as a substitute measure of proficiency to meet high school graduation requirements; and as a signal of readiness for advanced course opportunities like Advanced Placement. As states move forward in an ever more uncertain and complicated educational environment, the value of the SAT Suite is its flexibility.

Since the 2019 cohort graduated, education in all sectors has changed unpredictably and rapidly with the 2020 covid outbreak. The SAT Suite and the instructional tools associated with it are serving an important role in helping districts and states understand gaps in learning and are providing valuable insights for getting students back on track to college and career aspirations.

⁸ www1.nyc.gov/office-of-the-mayor/news/560-19/mayor-de-blasio-chancellor-carranza-record-high-48-782-new-york-city-students#/0

About College Board

College Board is a mission-driven not-for-profit organization that connects students to college success and opportunity. Founded in 1900, College Board was created to expand access to higher education. Today, the membership association is made up of over 6,000 of the world's leading educational institutions and is dedicated to promoting excellence and equity in education. Each year, College Board helps more than seven million students prepare for a successful transition to college through programs and services in college readiness and college success—including the SAT® and the Advanced Placement® Program. The organization also serves the education community through research and advocacy on behalf of students, educators, and schools.

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