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# Delivering Opportunities

## SAT Suite of Assessments Results 2016-17

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## An open letter on doing more for students,

The College Board was founded over 100 years ago to offer equitable access to higher education. Our guiding belief then and now is that all students can achieve remarkable things when they are encouraged to take advantage of the opportunities they have earned.

Given the unacceptably low national trends in college access and career readiness over the past decade, we recognized that to increase readiness and access we had to do something more than provide rigorous exams. It was time to raise expectations of what assessment could deliver to students beyond a test score.

We embarked on a national listening tour—with K–12, higher education, and policymakers. We were told what was needed to dramatically change the flat trend line of college and career readiness rates. And we responded.

We heard that students need a test they see as relevant to what they are learning in school. In 2015-16, we introduced the SAT® Suite of Assessments to measure college and career readiness beginning in the 8th grade and continuing through 12th grade. The SAT Suite was revised to measure what research tells us is essential for college and career readiness—skills and knowledge that are taught every day in our nation’s classrooms.

Many educators and parents were angered by the inequities of high-priced test preparation. We removed these inequities by partnering with Khan Academy® to provide the free, world-class, personalized practice that reinforces the essential skills for college readiness.

We heard that many students do not make the important connections among their interests, career choices, college majors, and college choices. We partnered with Roadtrip Nation to offer a free tool for educational and career planning that helps students identify potential college majors and careers based on their interests to make sure that the courses they take in high school prepare them for their college choices.

We heard that far too many students do not consider college because they believe they can’t afford it. We responded by removing some of these financial barriers through fee waivers and greatly expanded scholarship partnerships.

We heard from both K–12 and higher education officials that taking the SAT on a national test date on the weekend provided an opportunity to some, but not all students. In response, schools, districts, and states can now administer any assessment in the SAT Suite to all of their students on a school day, avoiding the inconvenience and anxieties associated with national test dates.

And we heard that some students could take and succeed in an AP® course but somehow aren’t placed in those courses. We are expanding access to AP courses through an AP Potential™ tool that helps teachers and counselors identify the students who are ready to benefit from taking an AP course.

We listened, we learned, and then we used this feedback to create a host of new opportunities that are delivered through the SAT Suite. And we are holding ourselves accountable for the results. We have defined metrics so we can measure and monitor how effectively opportunities are being delivered.

This is the first of a series of reports that will chronicle the results of the College Board’s ongoing work to do more for more students. You will see that some of these results surprised us, some pleased us, some disappointed us, and others told us that we must go deeper with our research. And we will, because what we learn through this process will help us to better deliver opportunities for every child who wants a college education.

At every step, we will continue to share our findings and seek feedback from everyone who shares in this critical work.

With thanks and determination,



David Coleman

Cynthia B. Schmeiser

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## Introduction

In September 2013 the College Board released the SAT® results for that year’s graduating class, which showed that more than half of those students would likely need remedial classes when they entered college or a workforce training program. These results were distressing and distressingly familiar: The percentage of high school graduates who had met or exceeded the SAT College Readiness Benchmarks had been flat (and below 50%) for the previous decade.

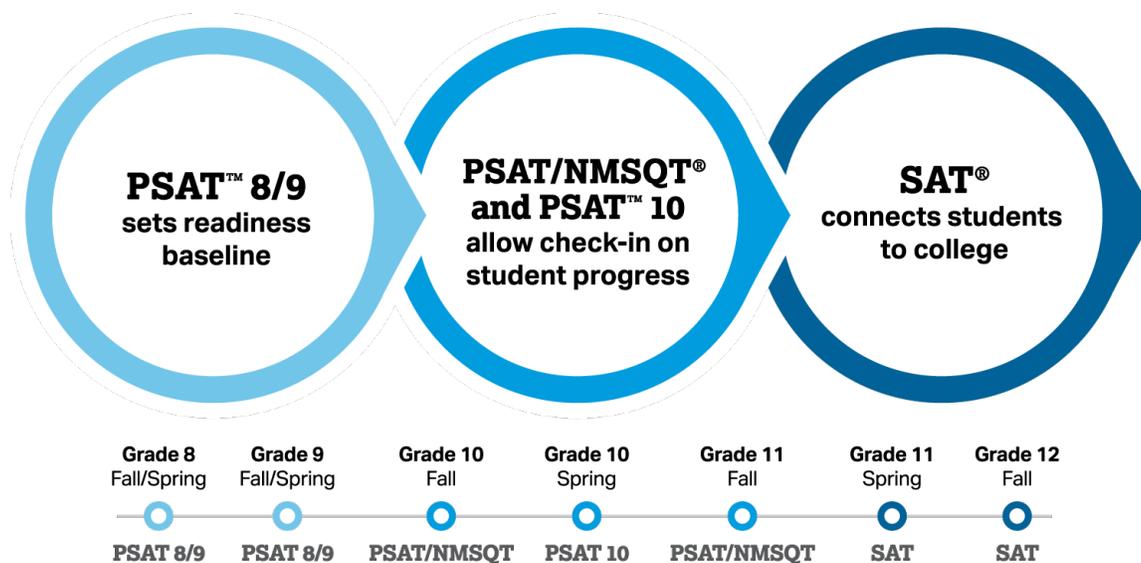
The College Board realized this stagnant performance demanded drastic change and a breakthrough solution. That’s why we started designing a new SAT Suite of Assessments in 2014. The goal was to better measure academic readiness for college and career and connect more students to programs and services that can help them achieve their goals.

The first step was to redesign the SAT so it gives all students the best chance to show their academic skills. We made the SAT a stronger assessment by making it an achievement test that more closely reflects what is being taught in high schools throughout the U.S. We also removed questions that were not essential for college and career readiness, including arcane vocabulary (the dreaded “SAT words”), and we made the test specifications publicly available. The content and skills measured by the SAT Suite are based on what research has shown to be essential for college and career readiness and success in writing, language, reading, and math.

The second step was to build a series of college readiness assessments closely tied to the SAT that would help students, parents, and teachers better understand how students are preparing for college and a career in each year, starting in middle school. The College Board also set out to help students who are behind in their preparation by providing personalized study to strengthen skills they may not have mastered.

The newly designed SAT Suite, which includes the SAT, PSAT/NMSQT®, PSAT™ 10, and PSAT™ 8/9, was created to:

1. **Focus on the skills** that research tells us are essential for college and career readiness, skills taught in the best classrooms across our nation.
2. **Emulate the best instruction** in math, English language arts, science, history, and social studies, while making it clear what students need to know when they graduate from high school, so they won’t need remedial classes when they enter college.
3. **Provide benchmarks and consistent feedback** for monitoring progress. The SAT Suite uses a common score scale that gives educators a baseline to measure student progress from assessment to assessment. It also has individual assessment scores that show where students are excelling and where they need help.
4. **Provide useful data** to educators and students via an online portal, so they can easily view, sort, and analyze that information to guide their instruction and focus their practice.



Redesigning the assessments to measure what really matters for college and career readiness and success was an essential step, but if the College Board was to truly increase both student readiness and access to postsecondary education, we knew we had to do more. We needed to make the SAT Suite the nexus connecting students to opportunities related to college readiness, planning, and admission processes. The purpose of this report is to evaluate how well we delivered on the promises we made to expand assessment to deliver opportunity to students to help them get into college.

The SAT Suite of Assessments launched in fall of 2015 with the first administration of the redesigned PSAT/NMSQT and PSAT 8/9; the new SAT was first administered in March 2016; and the PSAT 10 was first administered in spring 2016. In this report, we'll examine the early outcomes resulting from delivering opportunity through the SAT Suite to see if we've made progress in the first full year of SAT implementation and the first two years of PSAT-related assessments. The outcomes we will examine are:

- **Improve Student Readiness:** Educators need to closely monitor student progress toward college and career readiness so they can offer help before it's too late. This report looks at the first full year of testing for the SAT Suite—the 2016-17 school year—and analyzes growth toward college readiness for students taking two assessments in consecutive years.
- **Personalized Practice:** Students and teachers need better access to free, high-quality resources to reinforce classroom instruction and strengthen students' skills. Through the College Board's partnership with Khan Academy®, we want to level the playing field for all students by removing barriers to high-quality practice resources. The SAT Suite is the only assessment program that offers all students free practice on essential college readiness skills. Students who take any assessment in the suite can sign up for Official SAT Practice on Khan Academy and receive a free, personalized study plan based on their test results. By following this personalized plan, students can focus on the skills they need to work on most. Teachers and coaches can also use the platform to monitor practice and progress for

individual students or an entire class. In this report, we'll examine how successful we've been in removing barriers to high-quality practice and how different practice habits lead to different achievement gains.

- **Career Planning:** High school students need help picking and planning for their careers. That's why the College Board partnered with Roadtrip Nation to create Roadmap to Careers, a free, online career exploration tool that collects student interests to help identify possible careers. It also helps students plan their high school coursework so they're prepared for postsecondary education and/or training in their chosen fields. This report examines Roadmap to Careers participation rates during its first full year of implementation in 2017.
- **SAT School Day:** For many students, taking the SAT on a Saturday is difficult because they have weekend jobs, family responsibilities, or don't have transportation to a test center. That's why the College Board offers schools, districts, and states the opportunity to administer one or more SAT Suite assessments during the school day, so students can test in a familiar, comfortable environment. Several states, large districts, and now schools are funding one or more SAT Suite assessments for their students. This report examines the results of SAT Suite school day testing for the 2016-17 year.
- **Scholarships:** The cost of college is an insurmountable barrier for far too many students. The College Board is committed to breaking down these financial barriers. For many years, through our partnership with the National Merit Scholarship Corporation, students take the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) as an initial screen for entrance to the National Merit® Scholarship Program. To date, we've expanded these opportunities through partnerships with over 15 additional scholarship agencies, offering over \$282 million in scholarships to students who take the PSAT 10, PSAT/NMSQT, or SAT. With these partners, we hope to reach more students who might not otherwise have access to scholarships they have earned. In this report, we'll examine how effective we've been in getting scholarship dollars into students' hands through the SAT Suite in 2016-17.
- **Fee Waivers:** It's well-documented that even the smaller costs students encounter on the road to postsecondary education can derail them. The College Board is taking a four-pronged approach to helping students defray the costs of taking any assessment in the SAT Suite and applying to college. First, the College Board offers fee waivers to income-eligible students taking the PSAT/NMSQT, SAT, and SAT Subject Tests™. Second, the College Board and its higher education partners offer college application fee waivers to students taking the SAT with a fee waiver. Third, for years, all SAT test takers have received four free score sends. Now, students who take the SAT with a fee waiver can send scores to an unlimited number of colleges for free. Finally, eligible students also receive waivers to defray the costs associated with applying for financial aid. In this report, we'll examine the full scope of the SAT fee waiver benefits available to low-income students and the number of students taking advantage of them.
- **AP Access:** Using results from the PSAT 8/9, PSAT 10, PSAT/NMSQT, and SAT, AP Potential™ helps educators identify students likely to succeed in certain AP® courses and

exams. These students are notified as part of their results on any test in the SAT Suite of Assessments. 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. This report examines how many students who have AP potential actually take and succeed in those courses.

The SAT Suite of Assessments will only be successful if it goes beyond the traditional role of assessment by connecting students with free practice, career and educational planning, testing on a school day, expanded scholarships, and fee waivers. This report chronicles early outcomes, which are encouraging; subsequent reports will analyze longer-term studies on the efficacy of the opportunities delivered by the SAT Suite and the impact of improvements we've made.

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## Section 1: Improving Student Readiness

This section examines the level of academic readiness we are seeing through the SAT Suite of Assessments, from grade 8 through grade 12. We will examine the 2016-17 performance of students on each of the assessments. Note that March 2016 was the first administration of the SAT, so we will be examining the performance on the new SAT of the student cohort that graduated in 2017. Since 2016-17 was the second year of implementation of the PSAT-related assessments, we will look at the performance of the students who took these assessments in the first two years. We will then examine growth across assessments for students who took assessments in consecutive years, and we will look at trends in readiness by examining the percentages of students who met or exceeded the SAT College and Career Readiness Benchmarks. The most important question: Are we seeing progress toward college readiness from year to year?

### Overview of the SAT Suite of Assessments

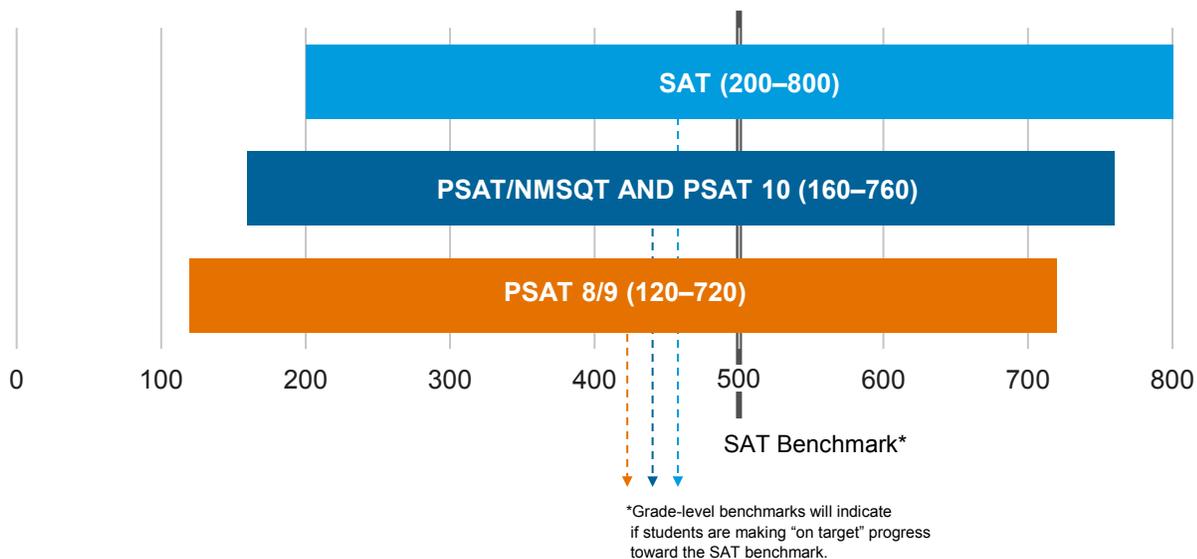
The SAT Suite of Assessments is an integrated system of assessments that measures what students are learning in class and what they need to succeed in college or career training programs, from 8th through 12th grades. The content and skills measured by the SAT Suite are based on what research has shown to be those essential for college and career readiness. Each assessment measures student achievement in writing, language, reading, and math and in an optional essay test (SAT only). The earlier assessments measure the same domains as the SAT but at grade-appropriate levels. A detailed summary of the test specifications of the SAT Suite of Assessments is provided here: [collegereadiness.collegeboard.org/pdf/test-specifications-redesigned-sat-1.pdf](http://collegereadiness.collegeboard.org/pdf/test-specifications-redesigned-sat-1.pdf).

- **PSAT 8/9:** The SAT Suite of Assessments begins with the PSAT 8/9, which sets a baseline for students as they enter high school. Offered to 8th and 9th graders, it provides earlier indicators of college readiness through detailed performance feedback that's 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, while the PSAT 10 is offered to 10th graders in the spring. These assessments serve as “check-ins” on student progress and pinpoint areas for further study. The PSAT/NMSQT was first administered in fall 2015, and the PSAT 10 in spring 2016.
- **SAT:** The SAT connects students to colleges. It is taken by more than 3 million students every year and accepted by all colleges and universities. The new SAT was first administered in March 2016.

## Common Score Scale

The SAT Suite of Assessments is not only focused on what students need to be ready for college and careers, it's designed so students, parents, and teachers can easily identify strengths and weaknesses, monitor growth across assessments in the suite, and make timely interventions when needed. To do this, we put the entire suite on a common score scale and provide in-depth descriptions of the skills associated with each score for each assessment.

Figure 1.1 SAT Suite Score Scale



## SAT Benchmark and Grade-Level Benchmarks

The SAT College and Career Readiness Benchmarks in Math and Evidence-Based Reading and Writing are intended to indicate whether students are likely to need remediation when they leave high school. Students who meet or exceed the SAT Benchmark scores have a 75% likelihood of achieving at least a C grade in a first-semester, credit-bearing course in a related subject. Recognizing that, in a longitudinal assessment system like the SAT Suite of Assessments, educators, parents, and students want to monitor students' progress toward college and career readiness from the eighth grade on, we also set grade-level benchmark scores that represent the expected student growth toward the SAT benchmarks. These grade-level benchmarks indicate whether a student is on track for college and career readiness for their grade. The scores that serve as the grade-level benchmarks and the SAT Benchmarks are shown in the table below.

**Table 1.1 The Values of the SAT Suite 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

**2016-17 SAT Suite of Assessments Program Results**

We'll begin our analysis of early trends in SAT Suite participation and performance by looking at results for the 2016-17 school year. Listed below are the number of students tested, by grade, average test scores, and percentages of students who met or exceeded the benchmarks, by assessment. Note that these results are not representative of all students nationally; the results are based on students who took our assessments and therefore can best be described as a test-taking group, not a nationally representative sample of students.<sup>1</sup>

**Table 1.2 2016-17 SAT Suite Performance****PSAT 8/9**

	Test Takers			Mean Score			Met Benchmarks		
	Number	Percentage	Total	ERW	Math	Both	ERW	Math	None
Grade 8	510,129	39%	818	409	409	33%	56%	37%	40%
Grade 9	749,470	58%	874	440	434	40%	61%	44%	35%
Other/No Response	42,974	3%	788	397	391				

1. <https://reports.collegeboard.org/sat-suite-program-results>

## PSAT/NMSQT and PSAT 10

	Test Takers		Mean Score				Met Benchmarks		
	Number	Percentage	Total	ERW	Math	Both	ERW	Math	None
Grade 10	2,209,759	51%	936	471	465	40%	64%	43%	33%
Grade 11	1,784,169	42%	1018	513	505	45%	69%	48%	29%
Other/No Response	297,103	7%	925	465	460				

## SAT

	Test Takers		Mean Score				Met Benchmarks		
	Number	Percentage	Total	ERW	Math	Both	ERW	Math	None
Total	1,715,481	100%	1060	533	527	46%	70%	49%	27%
Took Essay	1,202,640	70%	1082	544	538	51%	74%	53%	24%

## Observations

Mean scores in both Evidence-Based Reading and Writing (ERW) and Math increased by grade, which is to be expected, since the assessments focus on knowledge and skills being taught in our nation's classrooms. We see increasing college readiness rates from the 8th to the 12th grade, except for a slight flattening between the 9th and 10th grades. It is also noteworthy that college readiness rates tend to be higher overall in ERW than in Math for all grades.

To meet our goal of making all students college and career ready, we need to see all these rates increase. The biggest concern here is that over one-quarter of our high school graduates did not meet either benchmark, indicating they will likely need remediation in both English language arts and math when they enter college or career training programs.

## Early Trends in PSAT-Related Assessment Results

The PSAT-related assessments launched in fall 2015, which gives us two full years of results. Based on that, here are some early observations:

1. Students testing in 2016-17 earned higher scores on each PSAT-related assessment compared to those who tested in 2015-16.
2. For students who took the PSAT/NMSQT or PSAT 10, we see performance increases among Asian, black/African American, Hispanic/Latino, and white students across the two years.

A caveat here: While these early outcomes are positive, substantial increases in the size of the test-taking populations and changes in the demographic composition of the test-taking groups in these two years likely impacted the results.

**Table 1.3 2015-16 and 2016-17 PSAT-Related Assessments Average Total Scores by Grade**

	2015-16 School Year		2016-17 School Year	
	Test Takers	Average Total Score	Test Takers	Average Total Score
Grade 8 (PSAT 8/9)	358,855	808	510,129	818
Grade 9 (PSAT 8/9)	497,641	868	749,470	874
Grade 10 (PSAT 10 or PSAT/NMSQT)	2,127,816	932	2,209,759	936
Grade 11 (PSAT 10 or PSAT/NMSQT)	1,780,618	1009	1,784,169	1018

**Table 1.4 2015-16 and 2016-17 11th Graders' Average Total Scores on the PSAT/NMSQT or PSAT 10, by Race/Ethnicity**

	2015-16 School Year		2016-17 School Year	
	Test Takers	Average Total Score	Test Takers	Average Total Score
American Indian or Alaska Native	10,282	916	10,227	911
Asian	142,207	1130	151,020	1148
Black/African American	195,845	885	192,486	894
Hispanic/Latino	430,514	925	453,039	932
White	863,330	1064	844,748	1075

## Student Growth Across the SAT Suite of Assessments

Now we'll examine the performance growth of students who've taken two assessments in the SAT Suite to determine if they're making strides toward college readiness as they proceed through high school. In this analysis, we pay particular attention to students who were initially off track but got back on track by their second assessment.

### Students Taking the PSAT 8/9 in 8th Grade and Again in 9th Grade

1. Of the 123,071 students in the class of 2020 who took the PSAT 8/9 as 8th graders and went on to take it again as 9th graders in 2016–2017:
  - a. Total scores increased by an average of 60 points, and 33% of the students increased their score by 100 points or more.
  - b. ERW scores increased by an average of 29 points; 37% increased their ERW score by 50 points or more.

- c. Math scores improved, on average, 31 points, and 40% of these students increased their score by 50 points or more.
2. This group's average growth exceeded the typical growth used to set the grade-level benchmarks from 8th to 9th grade (20 points in ERW and Math).
3. Students whose first score was in one of the lower score bands experienced higher than average growth compared to students whose first score was in a higher score band. This is true for all comparisons across the SAT Suite.
4. Of the students who tested as 8th and 9th graders who were not on track for college and career readiness when they took the PSAT 8/9 as 8th graders, 12% (15,284) were on track when they took the PSAT 8/9 as 9th graders in 2016-17.
  - a. 10% of students (12,091) met the ERW benchmark in 9th grade after not meeting it the prior school year.
  - b. 14% (16,884) met the Math section benchmark in 9th grade after not meeting it the previous year.
  - c. The percentages of students who got back on track in both ERW and Math are the highest seen in 2016-17 for any group taking two consecutive assessments within the SAT Suite.

### **Students Taking the PSAT 8/9 as 9th Graders and the PSAT/NMSQT or PSAT 10 as 10th Graders**

1. Of the 378,169 students in the class of 2019 who took the PSAT 8/9 as 9th graders and went on to take the PSAT/NMSQT or PSAT 10 as 10th graders in 2016–2017:
  - a. Total scores increased by an average of 54 points, and 30% of these students increased their total score by 100 points or more.
  - b. ERW scores improved 27 points, on average; 36% of the students increased their section score by 50 points or more.
  - c. Math scores increased by an average of 27 points, and 36% of the students increased their score by 50 points or more.
2. This group's average growth in ERW exceeded the typical growth used to set grade-level benchmarks from 9th to 10th grade (20 points). The growth experienced in Math was similar, but slightly less than the typical growth used to set the benchmarks from 9th to 10th grade in Math (30 points).
3. Of the students who tested as 9th and 10th graders who were not on track for college and career readiness when they took the PSAT 8/9 as 9th graders, only 7% (27,799) were on track when they took the PSAT/NMSQT or PSAT 10 as 10th graders in 2016-17.

- a. 8% of students (31,961) met the ERW benchmark in 10th grade after not meeting it the prior school year.
- b. 8% (28,535) met the Math section benchmark in 10th grade after not meeting it the previous year.
- c. The percentages of students who got back on track in meeting both benchmarks and in Math alone are the lowest seen in 2016-17 for any student cohort taking two consecutive assessments in the SAT Suite.

### **Students Taking the PSAT/NMSQT or PSAT 10 as 10th Graders and the PSAT/NMSQT as 11th Graders**

1. Of the 1,132,240 students in the class of 2018 who took the PSAT/NMSQT or PSAT 10 as 10th graders and went on to take the PSAT/NMSQT as 11th graders in 2016–2017:
  - a. Total scores increased by an average of 62 points, and 34% of the students increased their total score by 100 points or more.
  - b. The average increase in ERW score was 32 points; 39% increased their score by 50 points or more.
  - c. Math scores improved by an average of 30 points, and 39% of these students improved by 50 points or more.
2. The average growth by this group in ERW exceeds the typical growth used to set the grade-level benchmarks from 10th to 11th grade (30 points). The growth in Math was equal to the typical growth used to set the benchmarks from 10th to 11th grade in Math (30 points).
3. Of the students who tested as 10th and 11th graders who were not on track for college and career readiness when they took the PSAT/NMSQT or PSAT 10 as 10th graders, 9% (97,610) were on track when they took the PSAT/NMSQT as 11th graders in 2016-17.
  - a. 7% of students (76,686) met the ERW benchmark in 11th grade after not meeting it the prior school year.
  - b. 9% (97,795) met the Math section benchmark in 11th grade after not meeting it the previous year.
  - c. The percentages of students who got back on track for college and career readiness are similar to what we saw for students between the 9th and 10th grades but less than what we see for students between 8th and 9th grades and 11th grade and the SAT.

### **Students Taking the PSAT/NMSQT as 11th Graders Followed by the SAT**

1. Of the 1,083,301 students in the class of 2017 who took the PSAT/NMSQT as 11th graders and went on to take the SAT between March 2016 and June 2017:
  - a. Total scores increased by an average of 66 points; 35% of the students increased their total score by 100 points or more.

- b. ERW scores improved 35 points, on average; 40% increased their section score by 50 points or more.
  - c. Math scores went up 31 points, on average, and 40% of the students improved their score by 50 points or more.
2. The average growth experienced by this group in ERW and in Math exceeds the typical growth used to set the grade-level benchmarks from 11th grade to the SAT in 12th grade (20 points).
3. Of the students tested as 11th and 12th graders who were not on track for college and career readiness when they took the PSAT/NMSQT as 11th graders, 12% (133,026) were on track when they took the SAT between March 2016 and June 2017.
  - a. 9% of students (101,230) met the ERW benchmark on the SAT after not meeting it on the PSAT/NMSQT the prior school year.
  - b. 12% (129,967) met the Math section benchmark on the SAT after not meeting it on the PSAT/NMSQT as 11th graders.
  - c. The percentages of students who got back on track in ERW and Math are slightly lower than for students between the 8th and 9th grades, but greater than for students between 9th and 10th grades, and between the 10th and 11th grades.

### **Preliminary Observations About Growth Across the SAT Suite**

Given that the PSAT 8/9, PSAT 10, and redesigned PSAT/NMSQT had only been available for two years when this report was compiled, any observations about growth need to be considered as merely preliminary given the continuing increases in the size and composition of the test-taking population.

Here are a few preliminary observations:

- We are seeing between 36%–40% of students increasing their scores across consecutive assessments by 50 points or more. These increases range from 120% of typical growth (as defined by the grade-level benchmarks) to 200% of typical growth from year to year.
- In each analysis of growth, we saw the average growth of students exceed typical growth for ERW. In Math, we saw average growth meet or exceed typical growth in all grade pairs except for students between 9th grade and PSAT/NMSQT or PSAT 10 in the 10th grade. This may suggest the courses students are taking in 9th and 10th grades aren't rigorous enough. This deserves more research by us and others.
- The percentages of students who got back on track by the time they took a second assessment in the SAT Suite are highest between the 8th and 9th grades, and the PSAT/NMSQT in 11th grade and the SAT (12% in each). We see increasing percentages of students getting back on track between the 9th and 12th grades (7%, 9%, and 12%, respectively), but overall these percentages are still way too low.

## Adoption of the SAT Suite of Assessments and Score Changes

Since the launch of the SAT Suite, many schools, districts, and states are offering one or more assessments to students throughout middle and high school. Some have started with later assessments—the SAT or PSAT/NMSQT, for example—and then added earlier assessments, like the PSAT 8/9. This is an opportunity to investigate the impact of adding an earlier assessment on student performance on the later assessment.

We used a “difference in differences” model to analyze the impact of adding earlier SAT Suite assessments on student achievement outcomes. Our results show students in high schools that began offering the PSAT/NMSQT to 10th graders after already offering the SAT during the school day had a mean SAT score gain of 9–10 points higher than students in schools that did not. (This number may underestimate the benefit of introducing the PSAT/NMSQT to a whole class, as some students likely took the PSAT/NMSQT in 10th grade on their own.) When we limited our analysis to high schools with a low percentage of 10th graders taking the PSAT/NMSQT before their school offered it, we found they experienced a mean SAT score gain of 13–14 points.

### Increasing College Readiness Among African American Students

Long Beach Unified School District Superintendent Chris Steinhauser reports that in recent years, more of his students, particularly African American students, are ready for college when they graduate and that the SAT Suite of Assessments has been instrumental in their success. “The SAT Suite is a key part of our work to improve educational equity among our diverse population of students,” he said. “These assessments help students make informed choices and help staff provide each student with customized support.”

Long Beach, the third-largest district in California, has given the SAT free to all students since 2015 and the PSAT/NMSQT since 2009, and participates in the SAT School Day program. Its students can also take the PSAT 8/9 in 8th and 9th grades, which gives educators early feedback so they can identify the skills students need to work on to be ready for the SAT—and college. The district dedicates time during the school day for students to build their skills on Official SAT Practice and uses contests and personalized letters to motivate students.

Steinhauser is especially pleased to see the gains made by African American students on state university admission index scores, which are based on GPA and SAT scores. In 2018, 900 Long Beach graduates went on to attend California State University, up from 500 four years ago. In his district, 44% of African American students in the class of 2018 met the minimum CSU Index score for admission. In the class of 2015, only 30% of African American students qualified.

Here’s some additional data on African American students in Long Beach’s class of 2018:

- SAT Evidence-Based Reading and Writing scores were 68 points higher, on average, than their PSAT 10 scores.
- SAT Math scores were 55 points higher, on average, than their PSAT 10 scores.
- The percentage of students who met the SAT college and career readiness benchmark for Evidence-Based Reading and Writing was 3% higher than that of the class of 2017.
- The percentage of students who met the SAT college and career readiness benchmark for math was 2% higher than that of the class of 2017.

## Implications

These early results are promising. Performance is increasing as students take sequential assessments. We're also seeing an increase in the percentage of students meeting or exceeding the benchmarks across most grades, indicating that more students are reaching college readiness as they progress through high school.

When we look at students who took the PSAT-related assessments in 2015-16 compared to students who took the same assessments in 2016-17, we see increases in performance for the total group, as well as by race and ethnicity, which may be due to the increases in the size of the test-taking population and changes in its demographics. We will learn more about this as the test-taking population stabilizes.

When we examine performance of students who took assessments in consecutive years, we see growth in ERW that exceeds what is typical or expected. We see this less frequently in Math. We are seeing an increasing percentage of students who were off track in the first assessment but got back on track for college and career readiness by the time they took the second assessment, particularly between grades 8 and 9 and grades 11 and 12. The results between grades 9 and 10 show the least progress toward college readiness, a result that deserves more study.

While this analysis suggests that the SAT Suite is preparing more students for college and careers, there are many challenges ahead:

- Fewer than half of students taking the SAT meet the benchmarks, with results for several races and ethnicities falling even shorter.
- We need to understand why readiness in Math is lagging behind the gains in ERW scores so we can engage with educators to address this trend.
- While 7%–12% of students who were off track for college and career readiness got back on track when they took an SAT Suite assessment the following year, these percentages are still far too low. We need to see far more students get back on track than we see today.
- The percentages of students who are off track in both ERW and Math by the time they graduated high school was over one-quarter (27%) of SAT-taking high school graduates. This is clearly unacceptably high.

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

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## Section 2: Strengthening Skills with Personalized Practice

There are too many barriers to college for too many students, particularly those who can't afford high-priced test prep and college planning resources. Recognizing that the culture of high-priced test preparation is driving inequality, the College Board partnered with Khan Academy to provide free, world-class online practice to all students and democratize SAT prep for the first time. First offered in June 2015, Official SAT Practice on Khan Academy creates a personalized plan for each student to prepare for the SAT. Official SAT Practice includes thousands of interactive questions with instant feedback, video lessons, eight full-length practice tests, and more.

Students can either take a series of diagnostics or link their College Board and Khan Academy accounts to access their personalized plan. When students link their College Board and Khan Academy accounts, they receive a personalized SAT practice plan based on their SAT, PSAT/NMSQT, or PSAT 10 results. Here we highlight performance results of students from the high school graduating class of 2017 who linked their College Board and Khan accounts and used Official SAT Practice to prepare for the SAT. Note that some students may have used Khan academy to prepare for the SAT without linking their Khan and College Board accounts; for these students, we are unable to track time spent on Khan Academy.

### Who Links Their College Board and Khan Academy Accounts?

The sample used in these analyses includes over 1.08 million students from the high school class of 2017 who took the October 2015 PSAT/NMSQT and the new SAT between March 2016 and January 2017. One of the metrics, time spent on Official SAT Practice, is calculated as the total number of minutes spent on Official SAT Practice between the October 2015 administration of the PSAT/NMSQT and the date of the student's last SAT.

Table 2.1 below offers descriptive statistics on the sample, by the last SAT date. The October 2016 SAT administration accounted for the largest share (30%) of SAT takers in the sample. Approximately 29% of these students linked College Board and Khan accounts, and the average linker spent nearly 4 hours on Official SAT Practice, with 17% of linkers spending 6 or more hours on Official SAT practice.

In general, we see higher account-linking rates for students who took the SAT later in high school, which is not surprising, since more time elapsed between their PSAT/NMSQT and SAT dates. Similarly, we see a higher percentage of linkers who spent at least 6 hours—an amount of time equivalent to two full-length SAT tests—on Official SAT Practice among students who took the SAT later.

Although we focus on the percentage of linkers spending at least 6 hours on Official SAT Practice, it is important to point out that nearly 22,700 students (9%) who linked their accounts spent at least 10 hours on the platform. About 8,000 (3%) of the linkers spent 20 hours or more on Official SAT Practice.

**Table 2.1 Linking Rates, Average Time Spent, and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice, by Last SAT Date**

Last SAT Date	Total Number of Students	% of Total	Linking Rate	Average Time Spent (Minutes) on Official SAT Practice Among Linkers	Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice
March 2016	116,297	11%	15%	104	7%
April 2016	106,230	10%	25%	111	7%
May 2016	100,114	9%	15%	142	10%
June 2016	135,582	13%	20%	202	16%
October 2016	327,186	30%	29%	231	17%
November 2016	158,894	15%	26%	236	17%
December 2016	96,776	9%	27%	306	22%
January 2017	42,146	4%	26%	337	25%

Note: Sample includes students who took the October 2015 PSAT/NMSQT and the new SAT between March 2016 and January 2017. Students do not need to take one of the SAT Suite of Assessments to participate in Official SAT Practice.

**Figure 2.1 Linking Rates and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice by Race/Ethnicity**

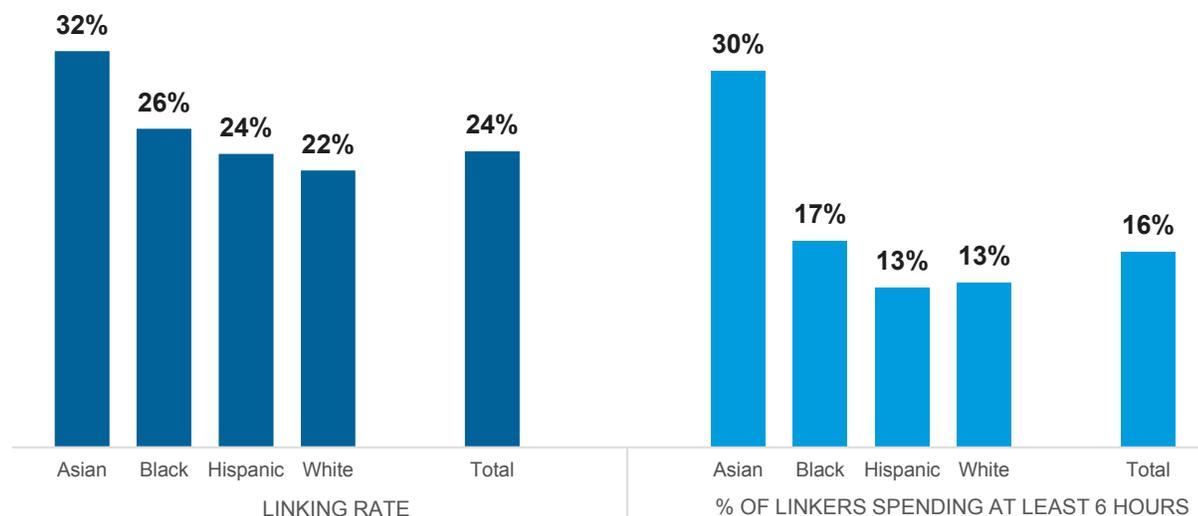
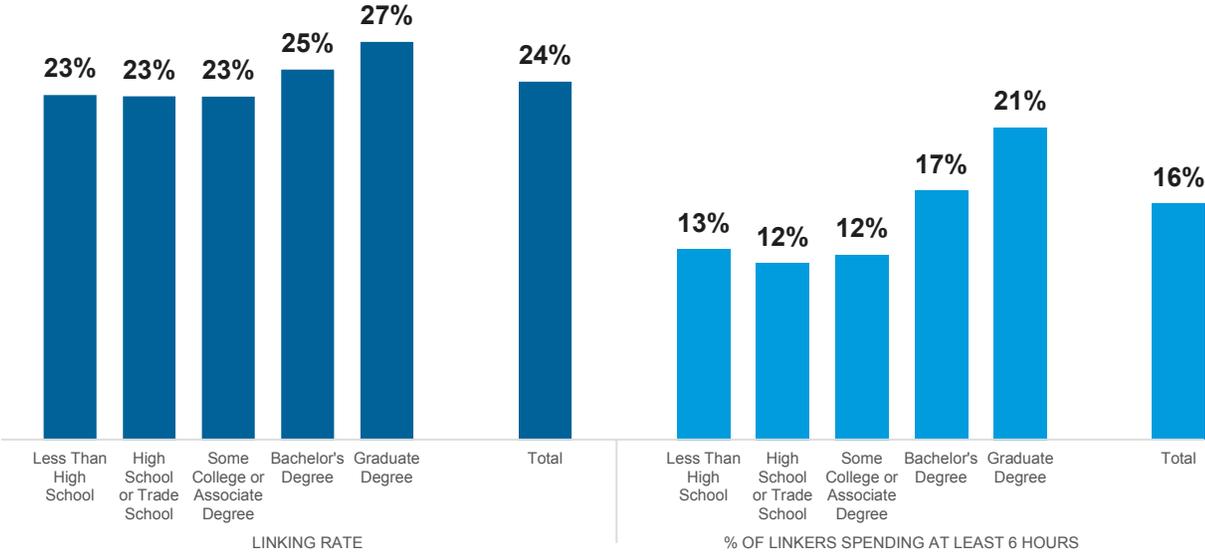


Figure 2.1 shows the percentage of the sample that linked their Khan Academy and College Board accounts by race/ethnicity. Overall, 24% of the sample linked accounts and 16% of students who linked their accounts spent at least 6 hours on Official SAT Practice.

Account linking rates, as well as the share of students who spent at least 6 hours among those who linked accounts, were similar among white, black and Hispanic students. Approximately 22% of white students and 24% of Hispanic/Latino students linked accounts, and 13% of students in both groups who linked spent at least 6 hours on Official SAT Practice. Linking rates for African American students were slightly higher, at 26%, and 17% of those who linked accounts spent at least 6 hours on Official SAT Practice. Nearly one-third of Asian students linked accounts, with 30% of those who linked spending at least 6 hours on Official SAT Practice.

We observe a similar story when we view the data by highest level of parental education. Figure 2.2 shows a general parity in linking rates across parental education categories, with about 25% of students in each category linking accounts. However, we do observe some differences in the amount of practice among linkers when the data are disaggregated by parental education. Among linkers, 21% of students whose parents have a graduate degree spent at least 6 hours on Official SAT Practice, compared with rates of 12% to 13% among students whose parents do not hold a bachelor’s degree, and 17% among students from families where the highest level of parental education is a bachelor’s degree.

**Figure 2.2 Linking Rates and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice by Highest Level of Parental Education**

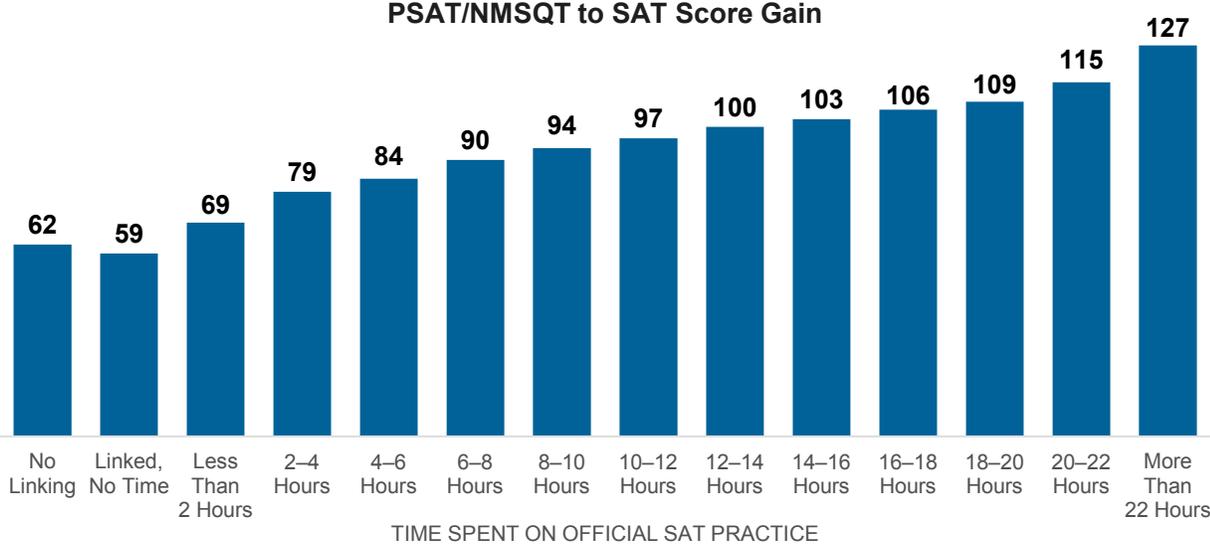


**Association Between Official SAT Practice and Score Gains from the PSAT/NMSQT to the SAT**

Figure 2.3 shows the descriptive association between time spent on Official SAT Practice and score gains from the PSAT/NMSQT to the SAT. Students who spent no time on Official SAT Practice, either because they did not link College Board and Khan accounts (first bar) or because they linked but spent no time on Official SAT Practice (second bar), gained about 60

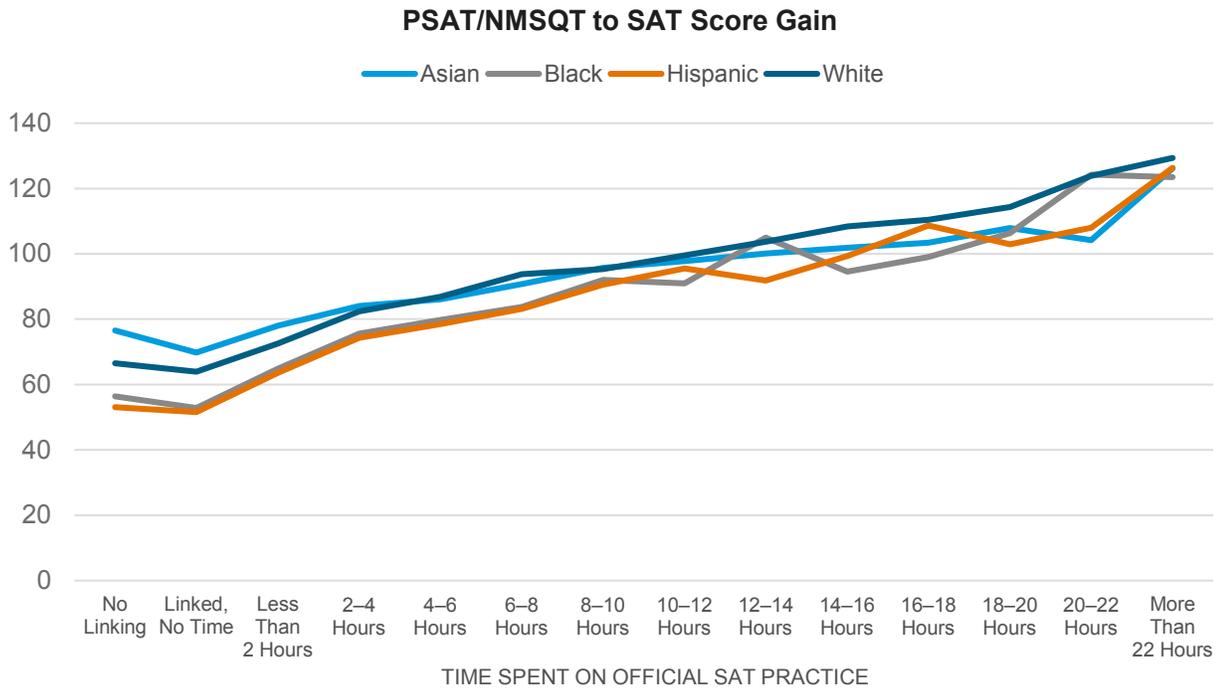
points between the PSAT/NMSQT and the SAT. For students who spent 6 hours on Official SAT Practice, this gain was about 90 points. For the group of students who spent 20 hours on Official SAT Practice, the average gain was about 115 points. Students who dedicated more than 22 hours to Official SAT Practice experienced an average score gain of 127 points between the PSAT/NMSQT and the SAT.

**Figure 2.3 PSAT/NMSQT to SAT Score Gain Based on Time Spent on Official SAT Practice**



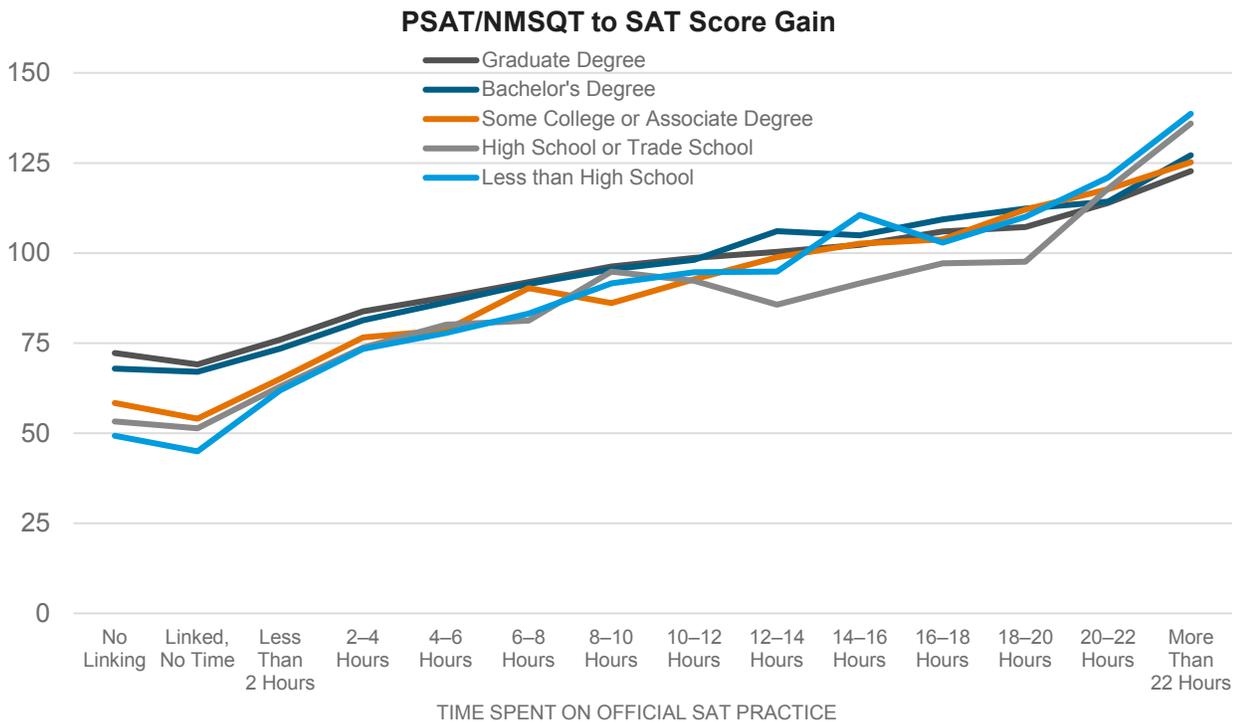
The positive relationship between time spent on Official SAT Practice and score gains from the PSAT/NMSQT to the SAT holds across all racial and ethnic groups. For example, among white, black, Hispanic, and Asian students who spent 10 hours on Official SAT Practice, the score gains were between 91 and 100 points. At 22+ hours, the gains were between 124 and 129 points for these racial/ethnic groups. See Figure 2.4 below.

**Figure 2.4 PSAT/NMSQT to SAT Score Gain Based on Time Spent on Official SAT Practice, by Race/Ethnicity**



When we look at the relationship between time spent on Official SAT Practice and score gains from the PSAT/NMSQT to the SAT by parental education, a different story emerges. Students whose parents have a high school degree or less tend to experience the steepest relationship between time spent on Official SAT Practice and score growth. Nonlinkers among these students experienced a 50-point gain between the PSAT/NMSQT and the SAT, while students who spent 22 hours or more experienced scores gains between 130 and 140 points. See Figure 2.5 below.

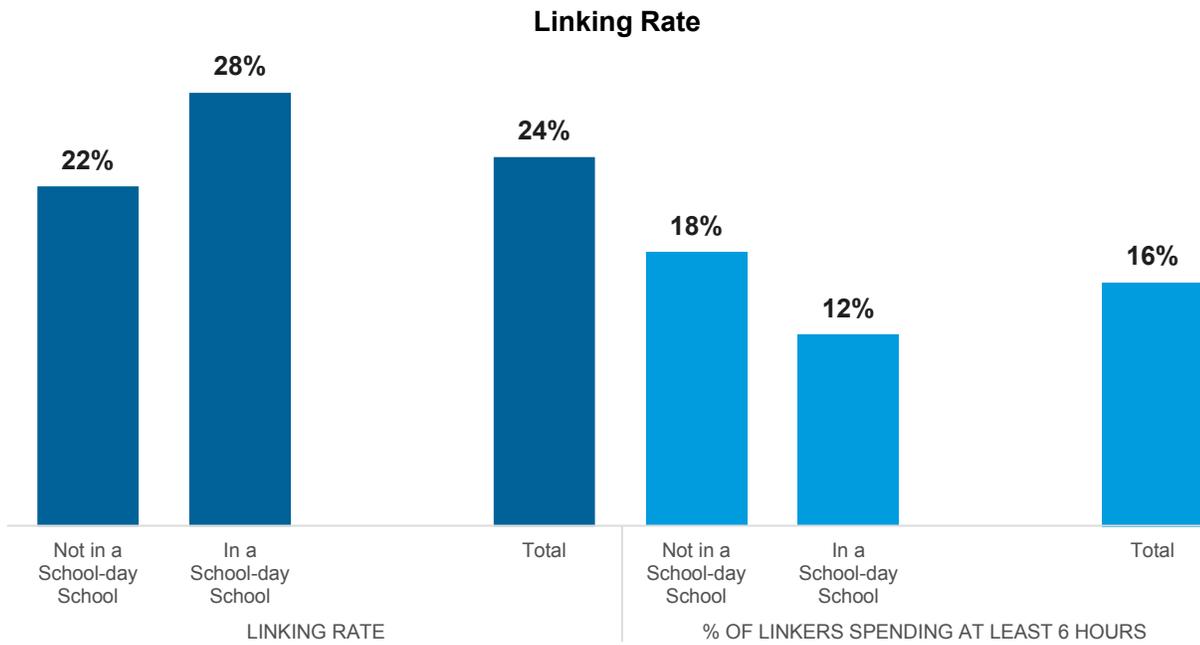
**Figure 2.5 PSAT/NMSQT to SAT Score Gain by Highest Level of Parental Education**



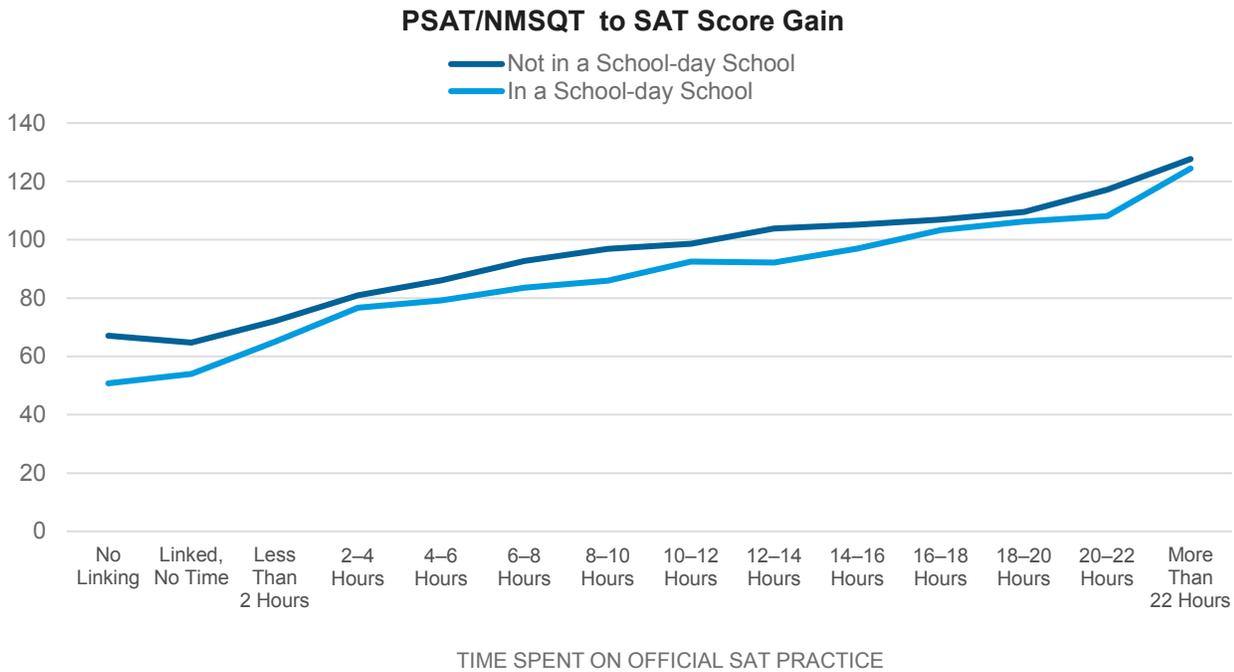
### Association Between Official SAT Practice and Score Gains for School Day Administrations

Beginning in 2011, the College Board began offering the SAT during the school day to participating schools. In 2017, approximately 340,000 (31%) of students in the analyses were enrolled in a school-day school. Figure 2.6 shows these students had higher linking rates than students attending other schools (28% versus 22%); however, a lower share of school-day students who linked their College Board and Khan Academy accounts spent at least 6 hours on Official SAT Practice. The relationship between score growth and time spent on Official SAT Practice was similar for students in the school-day schools and those in other schools (Figure 2.7).

**Figure 2.6 Linking Rates and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice, by School Day/Non-School Day Administrations**



**Figure 2.7 PSAT/NMSQT to SAT Score Gain by School Day/Non-School Day Administrations**



## Association Between Official SAT Practice and Score Gains by Initial PSAT/NMSQT Score

Figure 2.8 shows the linking rates and share of linkers who spent at least 6 hours on Official SAT Practice by PSAT/NMSQT score. Specifically, we find that students with the highest PSAT/NMSQT scores ( $\geq 1400$ ) were twice as likely to link their College Board and Khan accounts than students with the lowest scores ( $< 800$ ). Among students who did link accounts, those with the highest PSAT/NMSQT scores were nearly three times as likely to spend at least 6 hours on Official SAT Practice than students with the lowest scores (26% versus 9%).

**Figure 2.8 Linking Rates and Percentage of Linkers Spending at Least 6 Hours on Official SAT Practice, by PSAT/NMSQT Score**

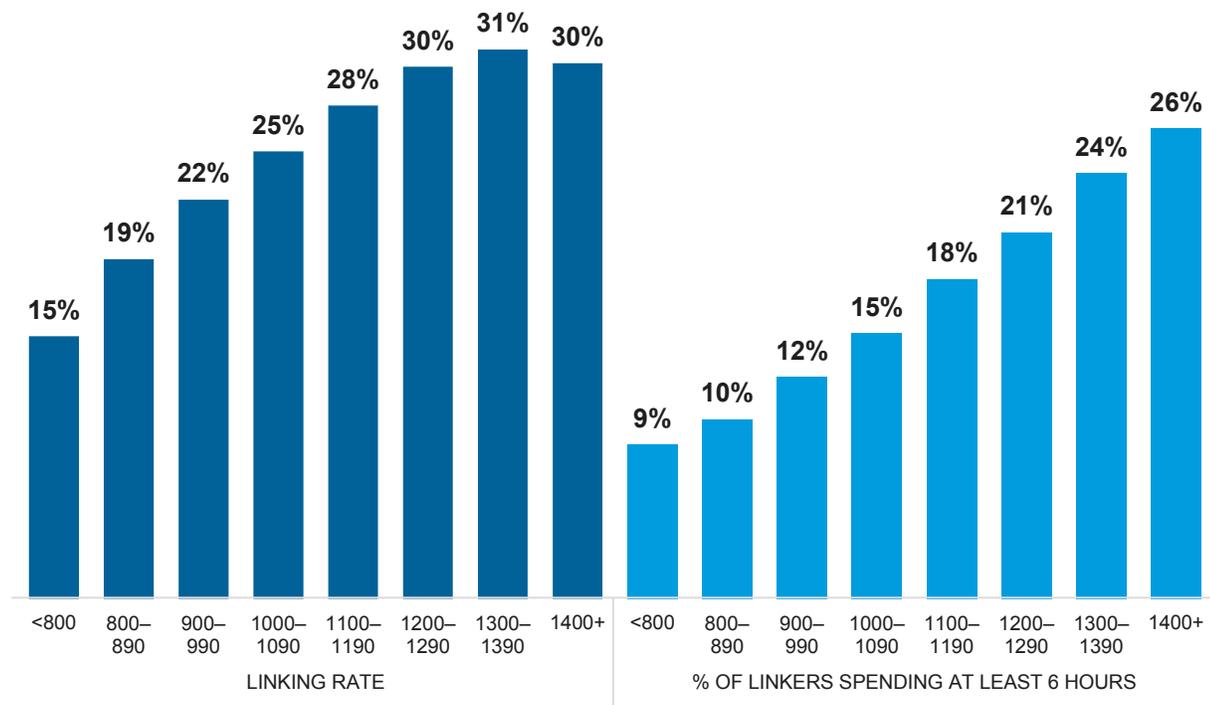
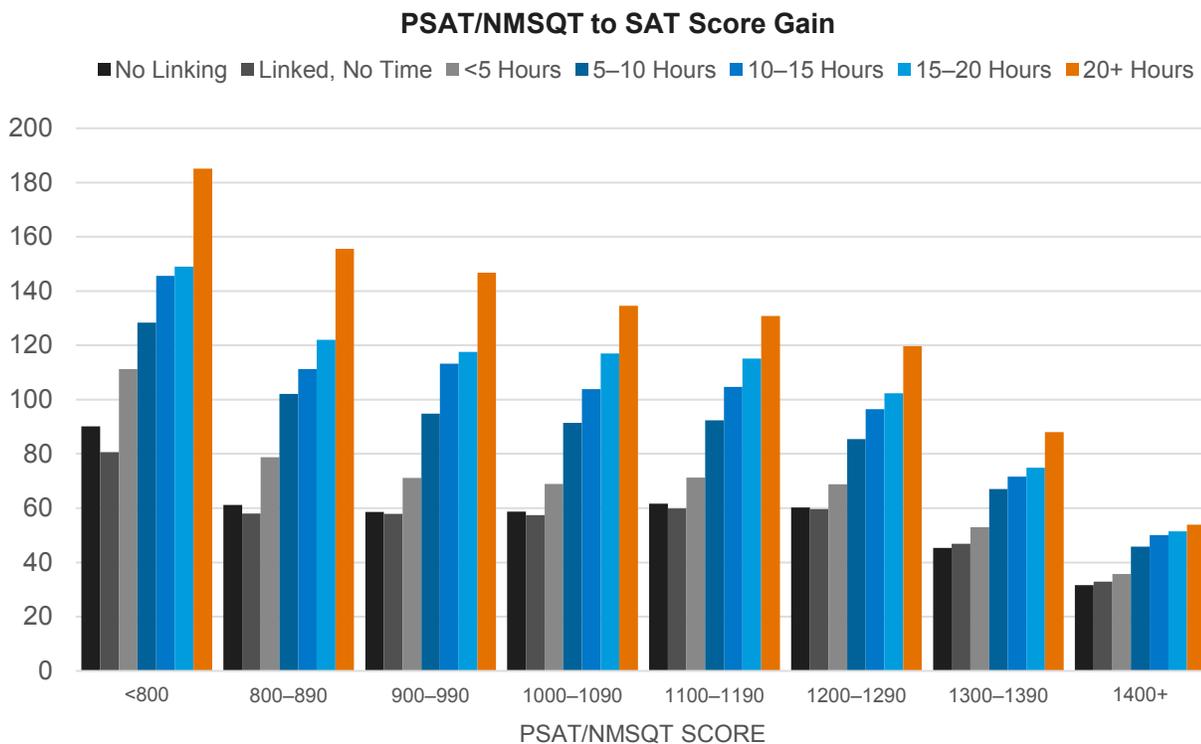


Figure 2.9 shows that positive associations between time spent on Official SAT Practice and score gains exist across the entire range of PSAT/NMSQT scores. The associations are strongest among students with lower PSAT/NMSQT scores, which is encouraging given they have the most progress to make.

**Figure 2.9 PSAT/NMSQT to SAT Score Gain and Time Spent on Official SAT Practice, by PSAT/NMSQT Score**

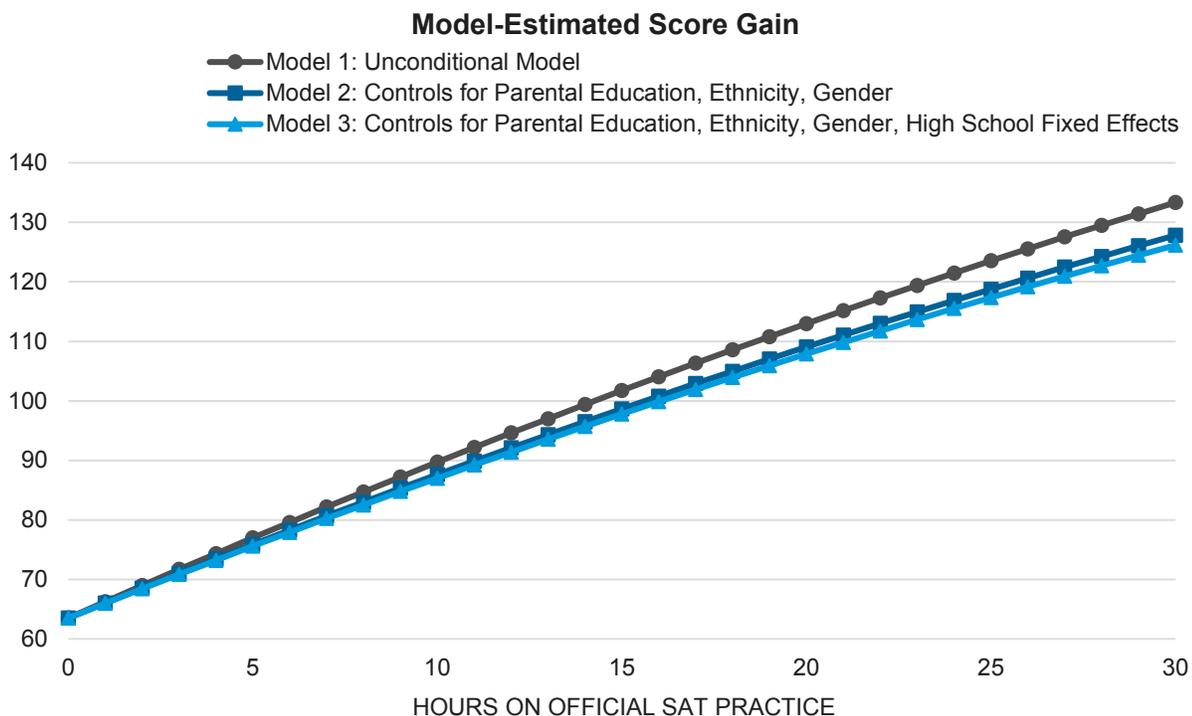


**Association Between Official SAT Practice and Score Gains by Using Statistical Models to Control for Specific Variables**

The positive association between time spent on Official SAT Practice and score gains from the PSAT/NMSQT to the SAT documented above is seen consistently in statistical analyses that account for a host of demographic and academic characteristics of students. We fit several regression models that control for variables, such as parental education, race/ethnicity, gender, and school factors such as school-day status, free/reduced-price lunch eligibility rates, and private/public status to pressure test the empirical relationship between Official SAT Practice and score gains.

As Figure 2.10 shows, controlling for student demographics and school-level characteristics barely diminishes the relationship between time spent on Official SAT Practice and score gains. Students who practiced for an average of 10 hours experienced a 90-point increase in all three models, while those who spent 20 hours experienced average gains of nearly 115 points in the unconditional models and gains of nearly 110 points in the models with controls.

**Figure 2.10 PSAT/NMSQT to SAT Score Gain and Time Spent on Official SAT Practice Controlling for Various Demographics**



### Implications

The analysis of students from the high school class of 2017 shows that sustained Official SAT practice is associated with score gains between the PSAT/NMSQT and the SAT. Positive relationships between score growth and Official SAT Practice are evident across all student subgroups, defined by race/ethnicity and highest level of parental education.

Across the entire sample, students who spent no time on Official SAT Practice gained about 60 points between the PSAT/NMSQT and the SAT. For students who spent 6 hours on Official SAT Practice, this gain was about 90 points. For the group of students who spent 20 hours on Official SAT Practice, the average gain was about 115 points.

While we observe higher linking rates for students who participate in SAT School Day, we see a smaller share of those students spending at least 6 hours on Official SAT Practice. Further research is necessary to better understand this finding. One of the most encouraging results is the positive association between time spent on Official SAT Practice and score gains across the entire range of PSAT/NMSQT scores, with the steepest relationship occurring among students with lower PSAT/NMSQT scores.

The relationship between score gains and time spent on Official SAT Practice is consistent across statistical models that control for a host of demographic variables related to Official SAT Practice usage and score growth. While this correlational evidence is promising, our research is

ongoing to establish causal relationships and to better understand the role of motivation in driving student score growth from the PSAT/NMSQT to the SAT.

## **Additional Resources**

The videos and case studies listed below provide more examples of how Official SAT Practice resources are being used in classrooms across the country.

### **Videos:**

Oak Ridge High School in FL:

<https://youtube/P9qM1eezN-c>

Patterson High School in Rural CA:

<https://www.youtube.com/watch?v=tm5Mb1mKSvE>

Chicago Public Schools in IL:

[https://www.youtube.com/watch?v=9JX\\_eIaHt3U](https://www.youtube.com/watch?v=9JX_eIaHt3U)

### **Case Studies:**

Chicago, Denver, Fresno, and Long Beach:

<https://collegereadiness.collegeboard.org/pdf/official-sat-practice-strategies-brochure.pdf>

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## Section 3: Helping Students Plan for Careers

Approximately 70% of high school students enroll in college after graduation,<sup>2</sup> and that percentage has increased in recent years. However, this statistic leaves out a significant population that is moving straight into the workforce. Furthermore, among four-year college graduates, 46% are unemployed or underemployed at age 25.<sup>3</sup>

This comes at a time when employers are struggling to fill the most in-demand jobs. Georgetown's Center on Workforce and Education projects that by 2020, the United States will fall short by 5 million workers who need some postsecondary training in health care, STEM, and community services.<sup>4</sup> About one-quarter of U.S. companies say they have difficulty filling network administrator, computer support specialist, and customer support roles, and many states see improving their job training as central to filling jobs and economic growth.<sup>5</sup>

These statistics suggest that educational and career planning is a critical process that can help students identify career opportunities and take the right courses in high school to prepare them for those opportunities. We believe that counselors have a crucial role to play as students explore potential careers and choose their high school courses and college majors. Unfortunately, the student to counselor ratio in this country is 482:1, nearly double the recommended ratio of 250:1.<sup>6</sup> To support counselors in their conversations with students about careers, the College Board and Roadtrip Nation partnered in late 2016 to offer students a free tool to explore their career interests and plan their high school coursework to prepare them to enter training for those careers.

### Roadmap to Careers

In late 2016 we launched Roadmap to Careers,<sup>7</sup> a free online tool that allows students to connect their interests to related careers, with tips for finding compatible colleges on BigFuture™, a college exploration tool, and ideas for small steps to try out the careers and majors they discover. It helps students make informed decisions based on what truly motivates them and then plan their roadmap through high school and into college to prepare for their future.

2. College Enrollment and Work Activity of 2016 High School Graduates, Bureau of Labor Statistics (November 17, 2017), <https://www.bls.gov/news.release/hsgec.nr0.htm>.

3. "The Labor Market for Recent College Graduates," The New York Federal Reserve, (July 2018), <https://www.newyorkfed.org/research/college-labor-market/index.html>.

4. Anthony Carnevale, Nicole Smith, Jeff Strohl, "Recovery: Job Growth and Education Requirements Through 2020," CEW (June 2013), <https://cew.georgetown.edu/cew-reports/recovery-job-growth-and-education-requirements-through-2020/#full-report>.

5. "Bridge the Gap;" Jon Marcus, "Impatient with universities' slow pace of change, employers go around them," *Hechinger Report* (December 18, 2017), <http://hechingerreport.org/impatient-universities-slow-pace-change-employers-go-around/>; see for example, Katherine Long, "Not Everyone Needs a 4-year college, so schools should do better with career training," *Seattle Times* (January 8, 2018), <https://www.seattletimes.com/education-lab/state-needs-to-do-better-at-career-education-audit-report-says/>.

6. "State-By-State Student-To-Counselor Ratio Report: 10-Year Trends," National Association for College Admission Counseling and American School Counselor Association (retrieved March 7, 2018). <https://www.nacacnet.org/globalassets/documents/publications/research/ratioreportdr3.pdf>

7. <http://collegeboard.roadtripnation.com>

Roadmap to Careers isn't just another course planning tool. If students don't see how planning in high school prepares them to pursue what they care about, they can get bored. Through Roadmap to Careers, students have access to an archive of over 6,000 candid video interviews with successful professionals from all walks of life and across thousands of careers. They take away what they need to push through obstacles and reach goals.

## Early Outcomes

In 2017, 375,000 students (representing around 20% of SAT test takers) received personalized high school course recommendations aligned to the careers that sparked their interest—84% of students viewed a recommended course plan aligned to their career choices. Students committed to preparing themselves for their career interests, with the most popular being, “Find a volunteer position in health and medicine.” Over 100,000 students continued their investigation on BigFuture, where they explored colleges that offered majors recommended by Roadmap to Careers. The number of students who accessed Roadmap to Careers in its initial year is 175% of the access rate of MyRoad™, an earlier College Board career offering.

We are encouraged by these early usage rates, and we are working with educators and partners to increase student usage of Roadmap to Careers. In 2018, Roadtrip Nation will be adding up to 1,000 new interviews and leaders to their database, including in industries like cybersecurity and with populations like veterans and Dreamers. Not only are we striving to increase access to educational and career planning, we also will expand the outcomes we monitor, including students taking the high school courses that are consistent with their career interests, attending colleges offering majors that are consistent with their interests, and increases in believing they can succeed in their careers (i.e., self-efficacy) as a result of using Roadmap to Careers.

We'll tackle the following questions in future research:

1. Do students who come to BigFuture with recommended majors end up considering colleges that have those majors? Do these students end up applying to and matriculating to such schools at higher than expected rates?
2. What is the impact of students receiving a list of recommended high school courses that are tied to the students' areas of career interests? Are students more likely to take the courses that are recommended to prepare them for their career interest areas? What are the college application and matriculation outcomes for these students?
3. Research<sup>8</sup> shows that student usage of Roadtrip Nation boosts student self-efficacy and perseverance. Does the same hold true for student usage of Roadmap to Careers?

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8. Sarah K. Collins, Whitney L. Davis-Mollin, David T. Conley, “Journey Toward Deeper Learning: An Evaluation of the Roadtrip Nation Experience in the San Jose Plus Academies,” Educational Policy Improvement Center. <http://rmedia.roadtripnation.com/documents/org/ImpactReport.pdf>

## Section 4: Making the SAT Suite Available to More Students

The SAT Suite of Assessments is an integrated system of tests that reflects what students are already learning in their classrooms and gives educators benchmarks for assessing students' progress as they enter and move through high school. The College Board now allows schools, districts, and states to administer the SAT, PSAT/NMSQT, PSAT 10, and PSAT 8/9 in schools during the school day. Participation in the SAT Suite on a school day helps schools foster a college-going culture from middle school through high school so students and educators can monitor progress toward college and career readiness and make timely interventions.

SAT School Day was first introduced 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 barriers for students and were able to offer the program to *all students*. One of the most important outcomes was that some students who were not considering college decided they could go to college once they saw their results on the SAT through School Day. Since that time, SAT School Day participation has increased dramatically, and more and more students have applied to college, as will be reported in this section.

Beginning in spring 2018, all U.S. schools may order SAT School Day for any number of students and without a contract. This means that for the first time, 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 2016-17 SAT School Day program have reported the following benefits:

- **Expands access:** When students take the SAT in school 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 have decided to consider it once they saw their assessment results.
- **Increases comfort:** Students have lower stress levels when they test in a familiar setting with people they know.
- **Builds 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 to view progress and support their students.

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*“The SAT School Day program has been essential in helping our students on the path to college. Since we started utilizing the assessment in 2011, we have seen a significant increase in college enrollment and financial aid. Our class of 2017 received over \$380 million dollars in scholarships and financial aid, a 300% increase from 2010.”*

JENNIFER ERTEL  
COLLEGE READINESS MANAGER  
HOUSTON ISD

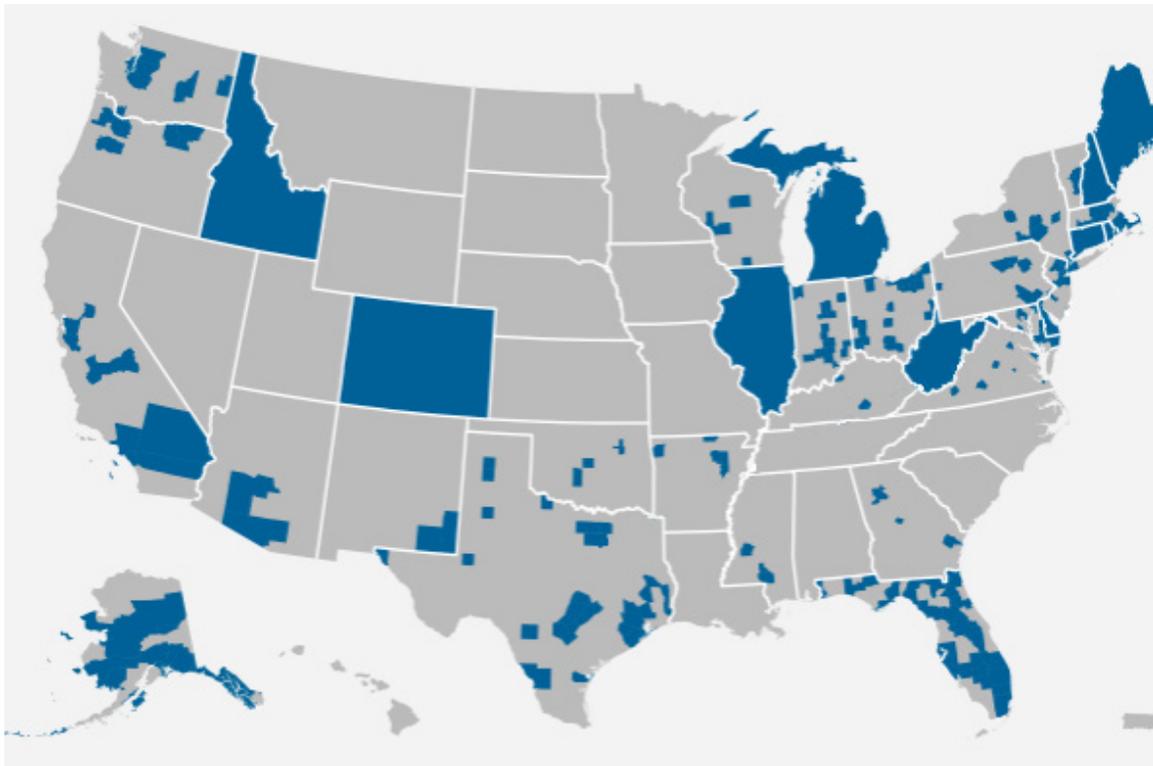
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## Outcomes: Participation in SAT School Day

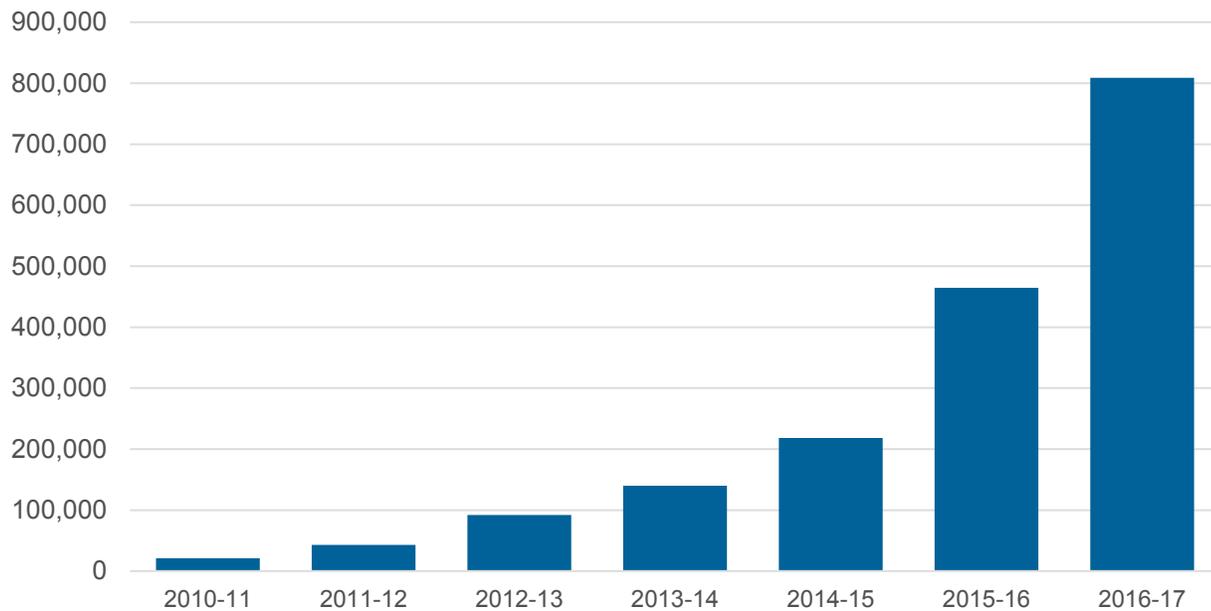
SAT School Day has grown significantly since 2011, when just over 20,000 students participated. In the 2016-17 school year, almost 810,000 students took the SAT during a school day. Over 1.7 million students, 2,000 school districts, and over 5,500 schools participated in SAT School Day through spring 2017.

- In 2016-17, nine states (Colorado, Connecticut, Delaware, Idaho, Illinois, Maine, Michigan, New Hampshire, and Rhode Island) and the District of Columbia administered the SAT during the school day at no cost to students. That's in addition to more than 250 school districts, including large 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, Long Beach Unified School District in California, New York City, and Tulsa Public Schools in Oklahoma, who also offered the option.

**Figure 4.1 U.S. Districts and States Participating in SAT School Day 2016-17**

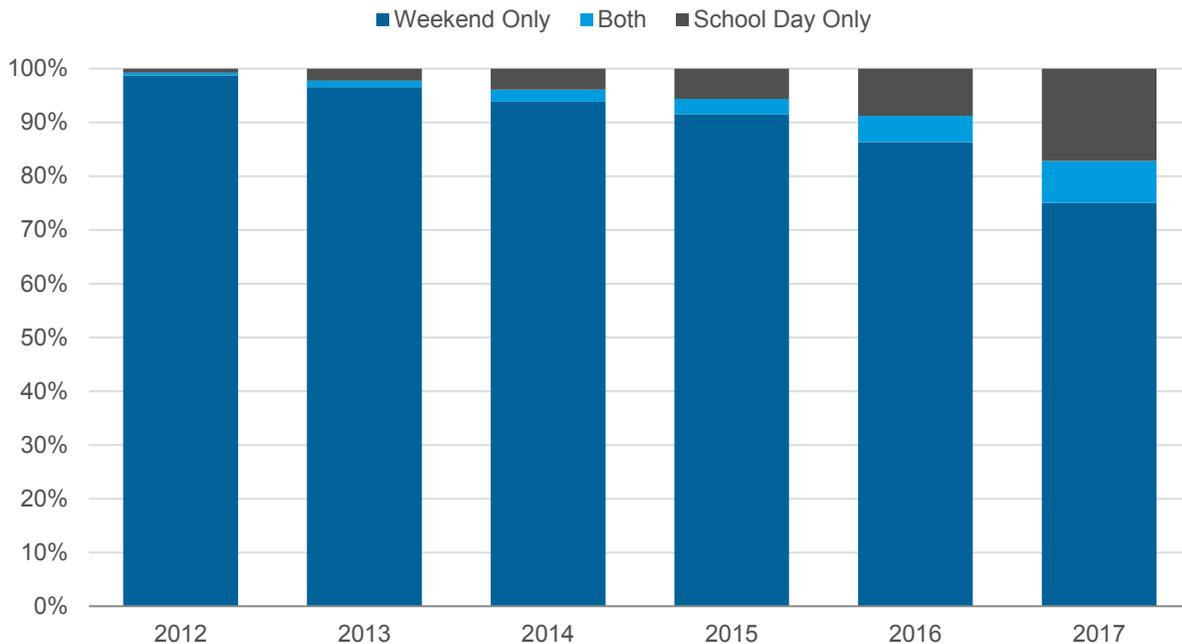


**Figure 4.2 Number of Students Participating in SAT School Day 2011–2017**



Not surprisingly, we can see SAT School Day’s influence on graduating classes. Only 1% of the class of 2012 tested on a school day, compared to 25% of the class of 2017.

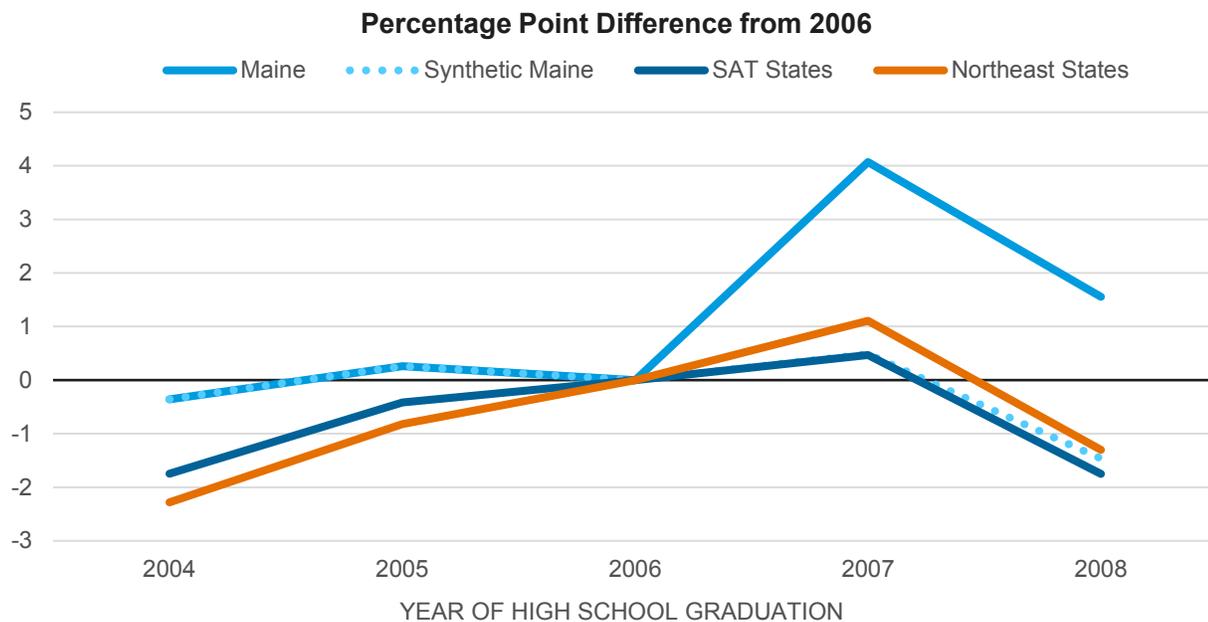
**Figure 4.3 Participation in SAT School Day by Cohort 2012–2017**



## What Is the Impact of Universal SAT Adoption?

More and more states are choosing to adopt a college entrance exam universally, which means students take the test in their own schools, during the school day, and free of charge. Maine was the first state to offer the SAT to all public school students at their own high school for free. [Research shows](#) this increased four-year college-going rates among Maine public high school graduates by at least 2–3 percentage points overall, and by 10 percentage points among those students who took the SAT only because it was made universal.<sup>9</sup> This growth in four-year college enrollment was driven by students in Maine’s rural and small-town public schools. Maine is far from a typical state in demographics, but an emerging consensus in the [research](#) on college access indicates similar increases in other states that have adopted universal college entrance exam policies.<sup>10</sup> The graph below plots the results of college access in Maine before and after the adoption of the universal SAT compared to other four-year college access rates in the Northeast.

**Figure 4.4 Impact of Universal SAT Adoption in Maine on 4-Year College Enrollment**



The universal SAT policy adopted by Maine is not just good for low-income students, it’s also a cost-effective strategy for increasing four-year college enrollment. To achieve a similar increase in four-year college enrollment, Maine would have needed to spend more than four times as much on financial aid. Again, research bears this out in other states, where universal college

9. Hurwitz, M., J. Smith, J. Howell, and S. Niu. (2015). The Maine Question: How Is Four-Year College Enrollment Affected by Mandatory College Entrance Exams? *Educational Evaluation and Policy Analysis* 37(1), 138–159.

10. Dynarski, S. “Simple Way to Help Low-Income Students: Make Everyone Take SAT or ACT.” *New York Times* 14 Jul. 2017: *The Upshot*.

admission testing is determined to be a cheaper way to drive college enrollment than traditional student financial aid.<sup>11</sup>

## How Has SAT School Day Impacted the SAT Fee Waiver Program?

SAT School Day removes barriers for many low-income students, but it has presented challenges in identifying these students and connecting them to the full range of SAT fee waiver benefits.

SAT fee waiver benefits are available to eligible students regardless of whether they participate in SAT School Day or a weekend test date. However, given that the registration fee for SAT School Day testing is often covered by the state, district, or school, until 2017, we only became aware of a student's eligibility if the student used a fee waiver for one of its related benefits such as free score sends or the SAT Question-and-Answer Service (QAS) or registered for another SAT or SAT Subject Test on their own (i.e., outside of the SAT School Day program). Roughly 1 in 5 SAT or SAT Subject Test takers in the class of 2010 (19% or roughly 306,000) were classified as low-income based on their use of an SAT fee waiver, compared to 23.4% (roughly 438,000) of the class of 2017 who took the old SAT (prior to March 2016), new SAT, or SAT Subject Tests during high school.

Thus, it's likely that using the SAT fee waiver as a proxy underestimates fee waiver-eligible student participation in the SAT. More importantly, it is highly likely that some fee waiver-eligible students who participated in SAT School Day missed the opportunity to use additional fee waiver benefits.

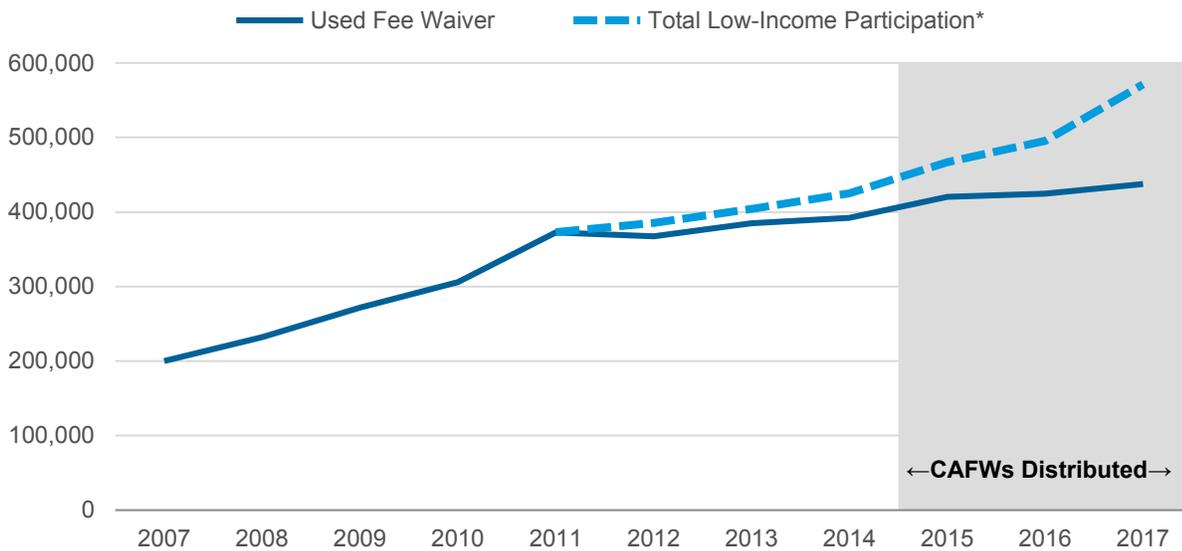
To examine the issue, we used school-level free and reduced-price lunch information to estimate the number of fee waiver-eligible SAT School Day test takers in each school's class. We compared this to the number of SAT School Day test takers in each school's class who used fee waivers during high school. The resulting difference is an estimate of the number of low-income students not accounted for in the fee waiver data.

The results show how much the SAT School Day opportunity has expanded access for low-income students. However, when we consider the total population of low-income students using free and reduced-price lunch information for each participating school, an estimated 30.6% of test takers were low income—that's over 571,000 test takers in the class of 2017.

The gap between those who used a fee waiver (23.4%) and all income-eligible students (30.6%) is clearly a missed opportunity for 7.2% of the class of 2017. See Section 6 in this report for more details about fee waiver use.

11. 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.

**Figure 4.5 Use of Fee Waivers by Graduation Class, 2007–2017**



## Implications

We're seeing a surge in momentum around the SAT Suite of Assessments. More than 7.3 million students took the SAT or a PSAT-related assessment in the 2016-17 school year. That's an increase of more than 650,000 students—nearly 10%—compared to the 2015-16 school year. This momentum is also visible in the growth of SAT test takers in recent graduating classes, due in large part to the SAT School Day program. More than 1.7 million students took the old or new SAT at least once during high school, more students than any graduating class before, and the class of 2018 will include more than 200,000 students who took the SAT during Colorado's, Illinois's, and Rhode Island's first statewide administrations in spring 2017, as well as from tens of thousands of students in large districts that participated in SAT School Day for the first time.

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*"By accurately assessing students' strengths and areas for improvement, and then providing effective and targeted support based upon that assessment, we're reaching more and more students and seeing more of them prepare for success in college."*

CHRISTOPHER J. STEINHAUSER,  
SUPERINTENDENT, LONG BEACH  
UNIFIED SCHOOL DISTRICT

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These results reveal that adopting universal testing policies like SAT School Day can lead to a more socioeconomically diverse group of students taking college entrance exams like the SAT and enrolling in college. We will continue to monitor and evaluate the impact of offering the SAT Suite on a school day on student outcomes, and we will pursue new strategies to increase awareness among income-eligible students of the full array of fee waiver opportunities available to them.

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## Section 5: Connecting Students to Scholarships

To give qualified students, especially those with financial need, greater access to financial resources to help them pay for college, the College Board is expanding the number of scholarship providers that use the PSAT/NMSQT, PSAT 10, and SAT to identify potential candidates. Our objective is to clear as many hurdles as possible for students on their path to college, and we believe our efforts will be successful when students, parents, and educators can point to specific examples of students in their communities who have received scholarship awards through participation in one of these assessments.

Since 1971, the College Board has partnered with National Merit Scholarship Corporation (NMSC) to co-sponsor the Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT). NMSC uses the PSAT/NMSQT as an initial screen of entrants to its National Merit Scholarship Program, an academic competition for recognition and scholarships.

In 2015, the College Board welcomed five new scholarship partners: [American Indian Graduate Center](#), [Asian & Pacific Islander American Scholarship Fund](#), [Hispanic Scholarship Fund](#), [Jack Kent Cooke Foundation](#), and the [United Negro College Fund](#). In 2016, we added another partner, [Cobell Scholarship](#) (administered by Indigenous Education, Inc.). Together, these seven partners connected students to roughly \$205 million in combined awards in 2016-17.

Since 2017, the College Board welcomed nine additional partnerships with [Coca-Cola Scholars Foundation](#), [Daniels Fund](#), [George Snow Scholarship](#), [Greenhouse Scholars](#), [Horatio Alger Association](#), [The Jackie Robinson Foundation](#), [Ron Brown Scholar Program](#), [TheDream.US](#), and [Washington State Opportunity Scholarship](#). These additions expanded the pool of available scholarships by over \$77.5 million. There are now 16 partners linked to the SAT Suite of Assessments, potentially connecting students to over \$282.5 million in annual awards.

These partnerships, including the College Board's longstanding work with National Merit Scholarship Corporation, create a portfolio of opportunities that are reaching major segments of the student population. The scholarships range from programs focused purely on academic merit to those available to students who meet specific financial, racial/ethnic, geographic, and other eligibility requirements.

### How We Work Together

#### National Merit Scholarship Program

The PSAT/NMSQT is the qualifying test for entry into the [National Merit Scholarship Program](#), an academic competition for recognition and scholarships. NMSC 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.

## Additional Scholarship Partners

Our scholarship partners use SAT Suite information to identify and recruit students who opt in to the free Student Search Service®. Our partners filter this data to identify students who meet the demographic criteria to qualify for their respective scholarship programs. Our partner organizations then send information about their programs to students who took the PSAT/NMSQT, PSAT 10, and/or the SAT and who indicated they want to receive this information, and invite them to apply. To become a candidate, students need to respond to the invitation to apply for the scholarship.

## 2017 Scholarship Partnership Results

In 2017, we had seven partners who used the information in the PSAT/NMSQT or PSAT 10 assessments in their scholarship programs. The data below are based on results of six of seven partners. Results from the American Indian Graduate Center have not yet been tabulated and are not included.

- Through our six scholarship partnerships in 2016-17, a total of \$205M in combined annual awards were available.
- 89% of the scholarship applicants were identified through the PSAT/NMSQT or PSAT 10 assessments in 2016-17.
- 22,500 scholarships were awarded; over 42% of them were given to PSAT/NMSQT or PSAT 10 tested applicants.
- By engaging scholarship candidates from the students who've taken the PSAT/NMSQT or PSAT 10, our partners have seen the volume of their applicants grow significantly. Several partners have seen so much growth they are looking to expand their programs and provide students with additional resources to help pay for college.

Below are results from six scholarship partners using data from the PSAT/NMSQT or PSAT 10 for the 2016-17 scholarship award year, followed by Table 5.1 that summarizes the total awards made in 2016-17 to PSAT-tested students.

**Asian and Pacific Islander American Scholarship Fund:** 70% of applicants and 58% of recipients this past year were identified through the PSAT/NMSQT or PSAT 10. The fund has seen a 42% increase in applications as a result of the College Board partnership.

**Cobell Scholarship (awarded by Indigenous Education, Inc.):** Our partnership has expanded scholarship opportunities to American Indian and Alaska Native students—22% of this year's applicants were identified through the PSAT/NMSQT or PSAT 10, and 10% of awards were given to PSAT-tested students.

**Hispanic Scholarship Fund:** 13% of applicants were identified through the PSAT/NMSQT or PSAT 10. In 2017, the Hispanic Scholarship Fund became the sole administrator of the Gates Scholarship. Through the Hispanic Scholarship Fund alone, 300 students were awarded full

tuition scholarships to the college of their choice. Information from the PSAT/NMSQT and PSAT 10 facilitates the diversification of the applicant pool and ensures that the Gates Scholarship reaches highly deserving students.

**Jack Kent Cooke Foundation:** 13% of applicants, 18% of semifinalists, and 30% of scholarship recipients were identified through the PSAT/NMSQT or PSAT 10. Each recipient received up to \$40,000 per year to attend a four-year accredited undergraduate institution. Over the last three years, the fund has seen a 186% increase in applications as a result of the College Board partnership.

**National Merit Scholarship Corporation:** 100% of the over \$42 million in scholarship dollars (8,840 scholarship awards) was awarded in 2017 to students who entered the National Merit Scholarship Program by taking the PSAT/NMSQT.

**United Negro College Fund:** Of the 7,894 scholarships awarded in the 2017 cycle, 194 or 2.4% were awarded to students who took the PSAT/NMSQT or PSAT 10.

**Table 5.1 Total Amounts Awarded to PSAT-Tested Scholarship Recipients, 2016-17**

PSAT/NMSQT Co-Sponsor	Total \$ Awarded
National Merit Scholarship Corporation	\$42,200,000

Partners	Total \$ Awarded SAT Suite – Tested Students
Asian & Pacific Islander American Scholarship Fund	\$715,000
Cobell Scholarship (awarded by Indigenous Education, Inc.)	\$125,000
Hispanic Scholarship Fund	\$181,000
Jack Kent Cooke Foundation	\$3,840,000
United Negro College Fund	\$2,600,000

### Student and Educator Awareness

With the increase in scholarship dollars students can access through the PSAT/NMSQT and PSAT 10, we need to do more to encourage students to follow up and apply for more of the support available to them. We hope that as the percentage of PSAT-tested applicants

increases, we'll see increases in awards to them. We are taking the following steps to encourage more students to apply for these scholarships:

### **1. Increasing Educator Awareness**

- a. Increasing communications with teachers and counselors about these programs, so they can make sure students know about these opportunities. In the latest scholarship cycle, the Jackie Robinson Foundation had a 22% increase in applications as a result of teacher and counselor outreach. The Jack Kent Cooke Foundation saw a 25% spike in applications as a result of teacher/counselor outreach. We plan to use this strategy with all our partners.
- b. Incorporating scholarship information in the College Board K–12 score reporting portal so educators can see which students opted in to being considered for these scholarships.

### **2. Increasing Student Awareness**

- a. Incorporating scholarship information in the student reporting portal to help drive applications and student awareness of scholarship programs and the need for them to opt in to the applicant pool to be considered for these opportunities.

## What Our Scholarship Partners Say

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*“Our partnership with College Board has enabled APIASF to access thousands of Asian and Pacific Islander American student leaders who may not otherwise hear about our scholarship programs. Through the hundreds of APIASF scholarships awarded each year, this partnership empowers rising leaders to turn dreams of higher education into real-life benefits for themselves, their families, and communities.”*

—JEANNETTE SOON-LUDES, PH.D., DIRECTOR, APIASF SCHOLARSHIPS & PROGRAMS

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*“The College Board partnership has allowed us to improve upon and provide new language regarding how a Native student identifies and the implications of such identities. Serving a comparatively small yet critical population, I am impressed by the College Board’s willingness to hear the concerns we share with many of our Native-serving, scholarship-providing peer organizations.”*

—MELVIN E. MONETTE-BARAJAS, COBELL PRESIDENT AND EXECUTIVE DIRECTOR

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*“The Hispanic Scholarship Fund’s partnership with the College Board has allowed us to expand our recruitment efforts to students from all 50 states and from all economic backgrounds. This type of reach ensures that we find, select, and promote the success of America’s young leaders to new heights.”*

—FIDEL A. VARGAS, PRESIDENT & CEO, HISPANIC SCHOLARSHIP FUND

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*“By partnering with the College Board, we can locate more high-achieving, low-income students who have the ability to excel when given the resources to develop their talents. The College Board has done extraordinary things by facilitating our outreach efforts.”*

—HAROLD LEVY, EXECUTIVE DIRECTOR, JACK KENT COOKE FOUNDATION

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## Section 6: Breaking Down Financial Barriers

The College Board's fee waiver program assists low-income students for whom fees associated with testing, applying to college, and applying for financial aid present a barrier to college access. The College Board offers four types of fee waivers to these students: 1) fee waivers for taking the PSAT/NMSQT and SAT (and SAT Subject Tests); 2) fee waivers covering college application fees in partnership with our higher education partners; 3) fee waivers for sending score reports to an unlimited number of colleges; and 4) fee waivers for applying for financial aid.

### Who Is Eligible?

- Income-eligible 11th and 12th graders in the U.S. or U.S. territories who take the SAT on a national (weekend) test date;
- Income-eligible students who take the SAT through SAT School Day;
- Income-eligible students in grades 9–12 who take SAT Subject Tests;
- Income-eligible 11th-grade students who take the PSAT/NMSQT; and
- Students who are U.S. citizens living outside the U.S. may also qualify.

### What Are the Benefits?

Here are the fee waiver opportunities in 2016-17 for income-eligible students:

- 2 free registrations for the SAT, with or without the SAT Essay.
- 6 free SAT Subject Tests.
- 2 free Question-and-Answer Service (QAS) or Student Answer Service (SAS) score verifications.
- Coverage of the SAT Essay for an SAT School Day tester whose school or district covers the fee for only the SAT but permits essay testing (introduced in spring 2016 with the release of the redesigned SAT).
- Since fall 2007, income-eligible students qualified for 4 additional SAT score reports, which could be ordered at any time in addition to the 4 that could be requested at the time of registration and testing. As of April 2018, there is no limit to the number of score reports income-eligible students can send to colleges.
- Since fall 2014, students who used SAT or SAT Subject Test fee waivers have received 4 college application fee waivers that can be used to apply to over 2,000 participating colleges.
- Up to 8 CSS Profile™ fee waivers to use to apply online for nonfederal financial aid. While eligible students have long qualified for CSS Profile fee waivers, College Board systems were updated in fall 2015 to ensure that students automatically qualified based on having received an SAT or SAT Subject Test fee waiver. Starting in fall 2018, an unlimited number of CSS Profile applications will be allowed for first-time, domestic college applicants who

take the SAT with a fee waiver or meet income-eligibility criteria. In addition, since Hurricane Katrina in 2005, students impacted by natural disasters receive CSS Profile fee waivers.

- Fee reductions for multiple-choice score verification or essay score verification.
- No non-U.S. regional fees for eligible students testing internationally.
- No late registration fees for free tests.

In addition, many low-income students have benefited from additional supports through initiatives driven by the College Board's Access to Opportunity program. These include additional college application fee waivers, college-advising and virtual advising available through partnerships with [College Advising Corps](#), [uAspire](#) (college affordability support), Bloomberg Philanthropies' [CollegePoint](#) (text message reminders of key deadlines throughout the admission process), and personalized mailings with guidance and resources to help students through the college search and application process and the financial aid process.

### **How Is the College Board Reaching Income-Eligible Students?**

While the SAT School Day program is reaching far more low-income students, many of these students missed out on the additional fee waiver benefits. Since the introduction of SAT School Day, we have experimented with ways to better identify and serve these students. For example, many high-achieving low- and moderate-income students are identified for additional support based on where they live (e.g., census information related to median household income) and/or the school they attend (e.g., Title I status).

To improve our ability to identify and serve low-income students, the College Board is in the process of implementing significant changes to its fee waiver programs. As of the 2017-18 school year, schools are asked to indicate through the online ordering system whether a PSAT/NMSQT or SAT School Day test taker is a fee waiver-eligible student. This allows the College Board to deliver the benefits automatically to the student's account. Once a student is identified as fee waiver eligible (for example, when taking the PSAT/NMSQT in fall of 11th grade), they will automatically qualify for SAT fee waiver benefits.

In addition, the College Board observed a decline in SAT score sending correlated with the rise of SAT School Day, so we tested ways to collect the score-send information at the time of testing. During the 2016-17 school year, we started asking students to enter their four free SAT score-send codes directly on the answer sheet for SAT School Day. This had an immediate and substantial impact: There was a 65% increase in the number of students who sent a score report before senior year from the class of 2017 to the class of 2018, and a 62% increase in the number of score reports sent. Students in the class of 2018 also sent scores to a much broader set of institutions.

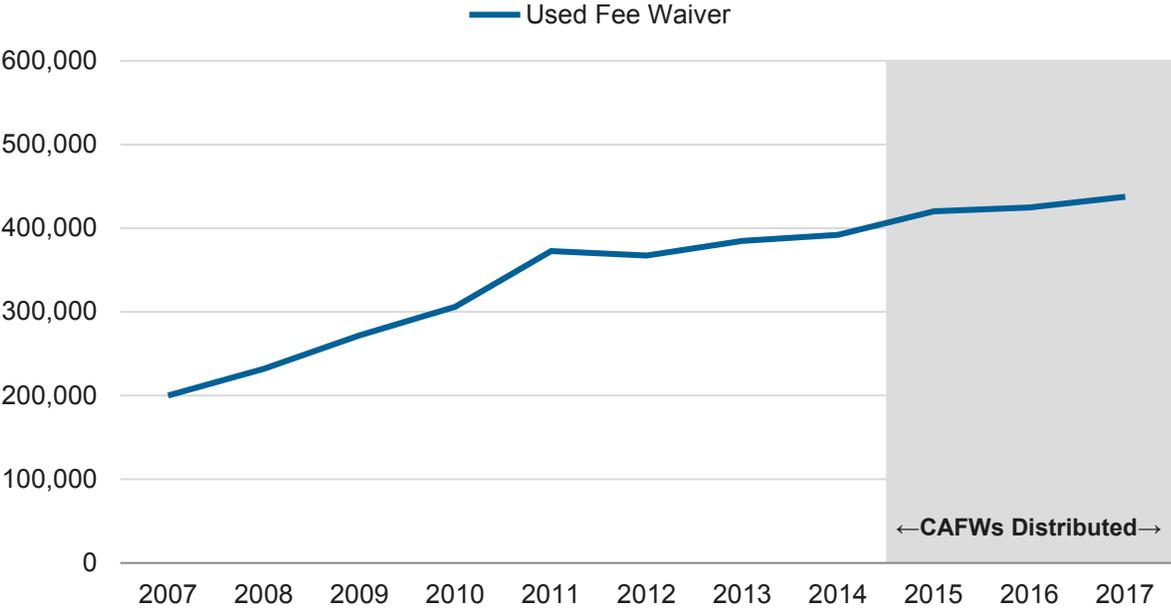
In addition to giving high school counselors the ability to distribute SAT fee waivers each year, the College Board also works with community-based organizations (CBOs) to provide additional access to SAT fee waivers. CBOs play an important role in expanding access to SAT fee waivers

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 ways to help income-eligible students access the full array of fee waivers available to them.

**How Many Students Benefited from the College Board’s SAT Fee Waiver Program?**

The number of SAT and/or SAT Subject Test takers who used a fee waiver during high school more than doubled over the past 10 years, from roughly 200,000 (13%) in the class of 2007 to almost 438,000 (23%) in the class of 2017. This includes 1,300–2,200 eligible students who tested internationally and for whom the non-U.S. regional fee was waived.

**Figure 6.1 Use of Fee Waivers by Graduation Class, 2007–2017**



Most students who have participated in SAT School Day had the SAT Essay fee covered by their school district or state. The SAT Essay was included for 74% of students registered in spring 2016 and 68% of students registered for SAT School Day in the 2016-17 school year. Among SAT School Day students testing where the district or state permitted essay testing but didn’t cover the cost, very few income-eligible students used a fee waiver for the SAT Essay. One reason for this might be that if students used a fee waiver for the essay, they could not use the waiver for a future SAT or SAT Subject Test registration.

Despite modernizing the delivery of college application fee waivers from paper forms mailed to students and/or counselors to automatic delivery to students’ online College Board accounts, analyses suggest that students are not taking advantage of this opportunity. Roughly 156,000

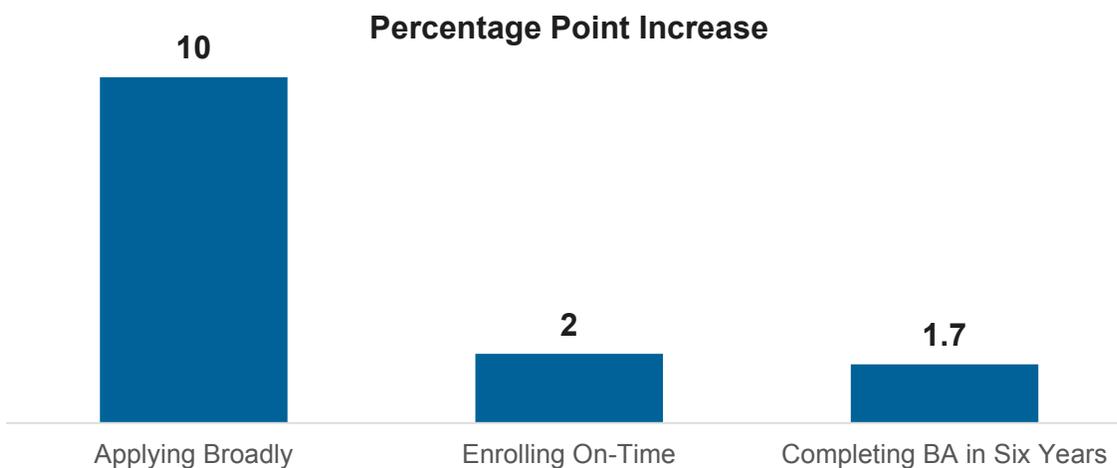
recipients (37%) in the class of 2015 accessed their college application fee waivers compared to 159,000 recipients (36%) in the class of 2017. Unfortunately, we cannot determine how many students used the college application fee waivers, since students mail the fee waivers directly to colleges with their application.

### What Is the Impact of Free SAT Score Reports on College Access for Low-Income Students?

In the fall of 2007, the College Board launched the flexible SAT score report initiative, which awarded low-income students who took the SAT with a fee waiver for four additional free SAT score reports that could be used at any point prior to high school graduation. This initiative increased the number of free SAT score reports available to low-income students from four to eight and was designed to reduce small financial barriers faced by low-income students in the college application process.

[Research shows](#) this change resulted in a 10-percentage-point jump in the number of low-income SAT test takers who sent eight or more SAT score reports to colleges and scholarship organizations.<sup>12</sup> This also had positive effects on their college trajectories, likely because they received a wider array of admission and financial aid offers. Among low-income SAT test takers who used the additional SAT score reports, on-time college attendance and six-year bachelor's completion rates increased by 2 percentage points. Clearly the impact of free score reports is a positive one. Now we need to increase the number of students who take advantage of this opportunity. Because of the positive impact resulting from the increase in score reports, as of April 2018, income-eligible students have no limit on the number of score reports they can send to colleges.

**Figure 6.2 Improved College Outcomes for Low-Income Students Due to SAT Score-Send Policy Change**



12. Hurwitz, M., P. Mbekeani, M. Nipson, and L. Page (2017). Surprising Ripple Effects: How Changing the SAT Score-Sending Policy for Low-Income Students Impacts College Access and Success. *Educational Evaluation and Policy Analysis* 39(1), 77–103.

## The Benefits of Retaking the SAT

Nearly half of all students who take the SAT do so more than once, including 43% of low-socioeconomic status students in the class of 2017 who took the SAT. When students retake the SAT, it's possible they have increased their readiness, which can improve their chances of admission to college and/or receiving financial aid.

Recent research indicates that retaking the SAT causes college admission–relevant scores to increase by 50–80 points on the 1600 SAT scale, with improvements equally likely in the Math, Reading, and Writing and Language Tests.<sup>13</sup> The evidence also shows substantial gains in four-year college enrollment from retaking the SAT, particularly among low-income students. Students in the lower half of the initial SAT score distribution—many of whom are low-income and belong to underrepresented minority groups—are 20–33 percentage points more likely to enroll in a four-year college after they retake the SAT. Retaking also drives these low-income students to enroll in colleges with higher graduation rates.

Low-income students who take their first SAT with a fee waiver can take it a second time for free. The research suggests that, if all initially lower-scoring SAT test takers (who currently do not retake) retook the SAT, overall four-year college-going rates could increase to as much as 55% (up from 48%) among this group of students.

## Implications

The College Board was founded in 1900 to expand access to higher education, and for nearly 50 years, the fee waiver program has played a crucial role in fulfilling that mission. Numerous fee waiver policy and process changes have streamlined the experience for students and schools to improve the rate of students taking advantage of fee waiver benefits and to defray the cost of the college-going process for low-income students.

But our work is not done. Many low-income students are missing out on the opportunities available to them. We view this as a call to action and will continue to adapt policies and processes to better serve these students, as exemplified by the changes being introduced in 2018 (i.e., unlimited score sends, unlimited CSS Profile applications, and unlocking fee waiver benefits once a student has been identified as fee waiver eligible through any one of our assessment programs).

Our research suggests these changes can increase both college access and success. Increasing the number of free score reports for a student is associated with increases in applications to colleges and scholarship agencies as well as higher completion rates. We have more work to do to help these students take full advantage of these opportunities.

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13. Goodman, J., O. Gurantz, and J. Smith (2018). SAT Retaking and Inequality in College Enrollment. Social Science Research Network Working Paper.

## Section 7: Expanding Access to AP and College Credit

Research shows that access to challenging coursework is essential for college and career readiness.

For 60 years, the College Board's Advanced Placement Program® (AP) has enabled students to pursue college-level coursework while still in high school. College faculty and AP teachers collaborate to develop, deliver, and evaluate AP courses and exams. Most colleges and universities offer credit, advanced placement, and/or consideration in the admission process for qualifying AP Exam scores.

Students who succeed on AP Exams are more likely to graduate from college on time ([Morgan & Klaric, 2007](#); [Mattern, Shaw, & Ewing, 2011](#)), and they have the potential to save time and money through placement and credit-granting policies. Research consistently shows that, when compared to their matched peers, students who score a 3 or higher on an AP Exam typically:

- Earn higher GPAs in college.<sup>14</sup>
- Perform as well as or better in subsequent college courses in the exam discipline than non-AP students who took the corresponding introductory college course.<sup>15</sup>
- Take more—not less—college coursework in the discipline.<sup>16</sup>
- Are more likely to graduate from college on time in 4 years; in fact, each credit-granting score earned up to about 5 predicts a 1–2 percentage point increase in their chances of graduating in 4 years.<sup>17</sup>

When students take one of the assessments in the SAT Suite, they and their counselors can access an AP Potential indicator that tells them if they are likely ready to take and succeed in a specific AP course. The AP Potential indicator identifies students who have a better than average chance of earning a score of 3 or higher on a particular AP Exam based on their performance on the reading, writing, and math tests of the PSAT 8/9, PSAT 10, PSAT/NMSQT, or SAT. AP Potential is grounded in research that examines the correlations among SAT Suite subscores and performance on AP Exams. AP Potential is student- and subject-specific and is available to high school administrators at no cost via the College Board's web-based platform. Educators and counselors can generate rosters of students who have demonstrated AP potential to easily identify additional recruits for AP classes.

Next, we will report on the outcomes that have come from delivering the AP Potential opportunity to students and educators.

14. Hargrove, Godin, & Dodd (2008); Keng & Dodd (2008); Mustafa & Compton (2017).

15. Patterson & Ewing (2013); Patterson, Packman, & Kobrin (2011).

16. Mattern et al. (2011).

17. Godfrey, Beard, & Ewing (in press); Hargrove, Godin, & Dodd (2008).

## Identifying AP Potential: Results

Beginning in 2016-17, AP potential calculation was expanded from the PSAT/NMSQT and PSAT 10 for 10th and 11th graders to include the SAT and PSAT 8/9, and to include 9th graders taking any assessments in the SAT Suite (the latter associated with World History and European History only). District leaders receive AP Potential reports, such as the *Right to Rigor* report that spotlights gaps in AP potential fulfilled—defined as taking at least one AP Exam for which a student has 60% or higher AP potential—by discipline and race/ethnicity, and the *Opportunities to Expand AP* report that shows where students have potential for courses their schools do or do not offer. Campaigns such as All In and AP Student Activation target students with potential to succeed in multiple courses their schools offer—but who have never taken an AP Exam before—using print materials and email to nudge them toward AP participation.

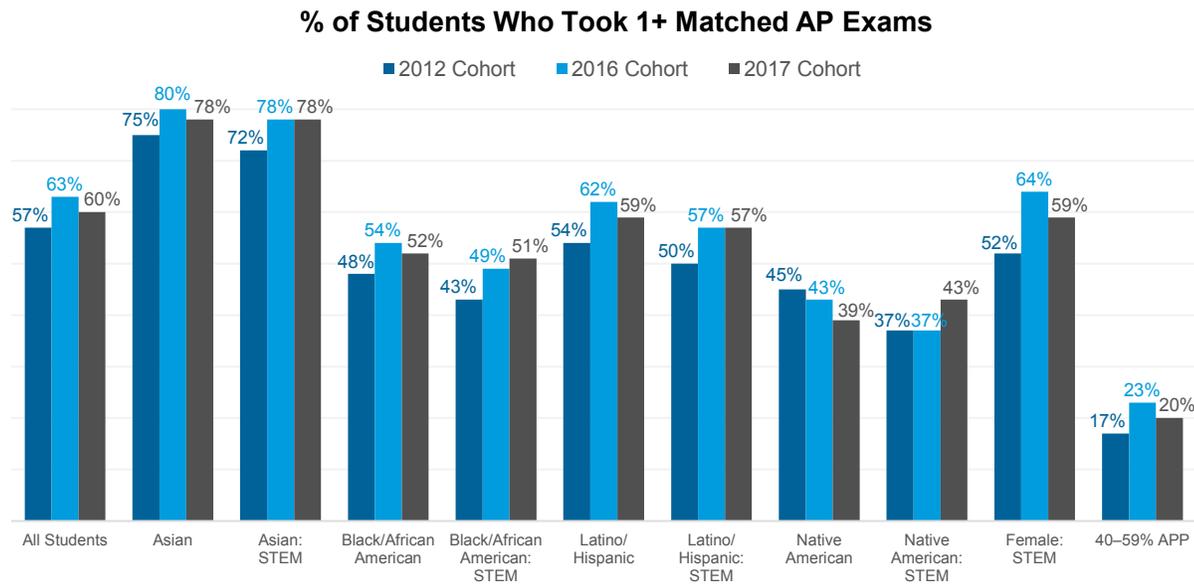
In the 2016-17 school year, 8,274 administrators across 5,637 schools and districts accessed the AP Potential tool to generate rosters of students who've demonstrated potential for specific AP courses, up from 7,185 users in 5,105 schools and districts in 2012-13. Because of the increase in the number of students identified with AP Potential through the SAT Suite and the increased use of AP Potential by administrators, 925,917 students in the 2017 public high school graduating cohort had 60% or higher potential for at least one course, up from 695,938 in the 2016 public high school graduating cohort—a 33% increase.

## Fulfilling AP Potential: Results

As a result of the more widespread identification of students with AP potential, in concert with other initiatives to expand AP availability, more students are fulfilling their AP potential (i.e., taking at least one AP Exam they have potential to succeed in). Among U.S. public school students who have demonstrated potential for at least one AP course, the percentage who fulfilled it by taking at least one exam they had potential for during high school increased from 57% of all students with potential (N = 390,259) in the 2012 high school graduating cohort to 63% (435,677) in the 2016 graduating cohort and 60% (551,895) in the 2017 cohort.<sup>18</sup> This trend also consistently held and was generally stronger for underrepresented minority groups. The percentage of students with “marginal potential”—40%–59% AP potential for at least one course—who fulfilled their potential also increased. Figure 7.1 illustrates these results.

18. Due to changes in reporting definitions in 2017, including students in the AP Potential calculation pool, cohort definition, and ethnicity classification, comparisons of the 2017 cohort to prior cohorts may be misleading.

**Figure 7.1 Percentage of AP Potential Students Taking a Matched Course – Three Cohorts**



Sources: AP Potential Rapid Response Dashboards (2012, 2016, 2017)

Note: Includes U.S. public school students. Includes all AP subjects and 60%+ AP Potential threshold except where specified.

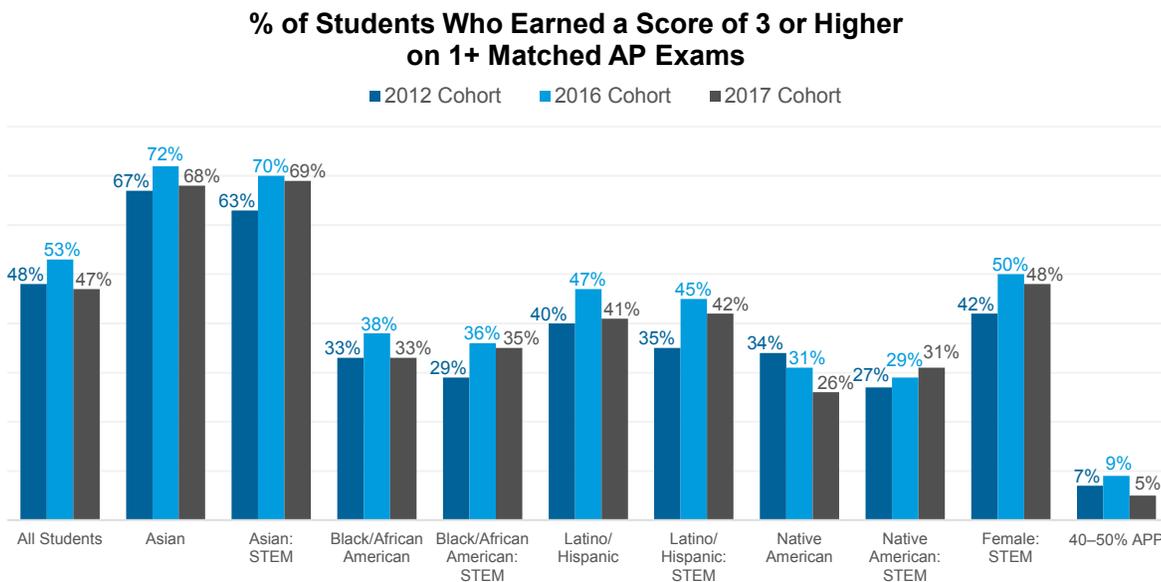
## Earning Qualifying Scores: Results

During this period of increased identification of students with AP potential, and the resulting increase in numbers of students fulfilling their potential, more students with AP potential are earning qualifying scores. This metric is worth focusing on for two reasons. First, reporting on students who earn qualifying scores more directly highlights the benefits students receive from taking courses they have demonstrated potential for—namely, receiving a qualifying score and possibly earning college credit. Second, reporting on this metric shows that the increase in percentages of students fulfilling their potential does not reflect mere increases in numbers of students *taking* AP Exams, but taking and *passing* these exams.

The percentage of U.S. public school students with AP potential for one or more courses who earned at least one score of 3 or higher on a matched exam during high school increased from 48% of all students with potential (N = 326,697) in the 2012 high school graduation cohort to 53% (435,677) in the 2016 graduation cohort, and decreased to 47% (438,237) in the 2017 cohort.<sup>19</sup> Increases for underrepresented minority groups consistently held from 2012 to 2016, and generally reflected more positive trends/increases for underrepresented minority groups from 2012 to 2017. We suspect that the slight decreases we see from 2016 to 2017 are due to changes in reporting definitions in 2017 affecting cohort definition and ethnicity classification. These results are shown in Figure 7.2 below.

19. Due to changes in reporting definitions in 2017, including students in the AP Potential calculation pool, cohort definition, and ethnicity classification, comparisons of the 2017 cohort to prior cohorts may be misleading.

**Figure 7.2 Percentage of Students Earning Qualifying Scores on AP Matched Exams – Three Cohorts**



Sources: AP Potential Rapid Response Dashboards (2012, 2016, 2017)

Note: Includes U.S. public school students. Includes all AP subjects and 60%+ AP Potential threshold except where specified.

## Implications

Though it has helped expand access to AP by aiding in the identification of students who are prepared for the challenges of AP courses, we will continue to evolve the AP Potential tool to improve its impact on participation in AP. Only one-third of AP coordinators say their schools consider students' AP potential when deciding which courses to add (*AP Participation Survey, 2017-18*). Only a quarter consider AP potential when helping students decide whether to enroll in AP courses. Instead, coordinators report that they rely more frequently on such factors as student interest, teacher recommendations, prior grades, and parental support. Clearly there is more that can be done to increase the usefulness of the tool by AP coordinators.

We are improving the AP Potential tool reporting format to make it more practical and useful for students. We are continuing to conduct validation research for the tool, and we are researching AP Potential thresholds for new subjects such as AP Computer Science Principles (CSP), AP Seminar, and AP Research. Finally, the College Board's new Pre-AP<sup>®</sup> Program—to be introduced in 2019-20—is being designed to increase the number of students who are ready for AP. Together, these steps are intended to deliver more opportunities to students to help them attain access to more rigorous courses, earn qualifying scores, and earn college credit, thus reducing college costs and increasing the likelihood that they will complete their postsecondary education.

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