

**THE SCHOOL BOARD OF BROWARD COUNTY, FLORIDA**

**DANIEL GOHL  
CHIEF ACADEMIC OFFICER**

*Signatures on File*

DATE: August 21, 2017

TO: All Principals

FROM: Daniel F. Gohl  
Chief Academic Officer

VIA: Valerie S. Wanza, Ph.D., Designee  
Chief School Performance and Accountability Officer

SUBJECT: **2016 AND 2017 SAT SCHOOL DAY**

Broward County Public Schools (BCPS) offered an SAT School Day administration for the first time in 2016 to all 11<sup>th</sup> grade students at its traditional schools. This new initiative was put in place to eliminate the economic and logistical barriers that have limited students' participation in the SAT in the past. This report summarizes student participation and scores from the 2016 and the 2017 SAT School Day administrations.

Major findings include:

- **Participation in the SAT increased by 37 percentage points** (from 50% of 11<sup>th</sup> grade students in 2015 to 87% of 11<sup>th</sup> grade students in both 2016 and 2017) since the implementation of SAT School Day in 2016. The increase in participation was especially high for groups with historically low SAT participation rates: Black students, students qualifying for free or reduced-price lunch, students with limited English proficiency, and students with disabilities.
- **Over one-third of the students who hadn't yet met the graduation requirement for English Language Arts achieved a concordant score on SAT Day** (36% of 11<sup>th</sup> grade students in 2016,  $n=1,863$ ; 44% of 11<sup>th</sup> grade students in 2017,  $n=2,180$ ; and 34% of 12<sup>th</sup> grade students in 2017,  $n=484$ ).
- **The overall average scores increased over the two-year period.** The average Evidence-Based Reading and Writing (EBRW) score went from 492 in 2016 to 503 in 2017, and the average mathematics score increased from 477 in 2016 to 481 in 2017.
- More than half of all 11<sup>th</sup> grade students participating in SAT School Day achieved the college-readiness benchmark score for the EBRW sub-test (53% in 2016 and 57% in 2017), while almost one-third met the benchmark for the math sub-test (31% in 2016 and 30% in 2017).

Please direct any questions or comments concerning this report to **Richard Baum, Director, Student Assessment & Research, at 754-321-2500**. This memo and report may also be accessed via the Student Assessment & Research website at <http://www.broward.k12.fl.us/sar/Releases.htm>.

VSW/DG/RGB/SLS/RAA:rs  
Attachment

CC: School Board Members  
Senior Leadership Team  
Directors, School Performance and Accountability



# Assessment Report

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Report from the Office of the Superintendent

Number 182  
August 2017

## 2016 and 2017 SAT School Days

The SAT, a college entrance exam offered through College Board, provides many benefits, both to students and schools. In order to increase SAT participation throughout the District, Broward County Public Schools (BCPS) partnered with College Board to provide a school day administration of the SAT to all 11<sup>th</sup> grade students enrolled in the District's traditional schools.

The District, in collaboration with high schools, pre-registered students, paid their registration fee (providing a direct cost savings of fifty-seven dollars to each student), and offered the SAT assessment during a regular school day, thus making it highly convenient for students to take the exam. Prior to the exam, students were given access to the *Official SAT Practice* online exam preparation course. The first SAT School Day took place on April 12, 2016, following a successful pilot in three high schools the year before. In 2017, BCPS held the second annual SAT School Day on April 5, and this time also invited all 12<sup>th</sup> grade students who had not yet met the English Language Arts (ELA) graduation testing requirement to participate.

### ***SAT: Benefits to Students***

The SAT is a college entrance exam accepted by all U.S. colleges. As such, many students participate to meet college entrance requirements. Additionally, various colleges and educational organizations award scholarships or grants based in part on SAT scores. Students can also use their scores to determine areas where they are ready for college-level courses and areas where they need to improve their skills and knowledge. Finally, students who did not pass the 10th grade ELA portion of the Florida Standards Assessment (FSA) can meet that graduation requirement by earning a concordant score on the Evidence-Based Reading and Writing (EBRW) section of the SAT.

### ***SAT: Benefits to Schools***

Schools have access to an online educator reporting portal that offers participation and score reports for the whole school, broken down by different demographic groups (College Board, 2015). Reports include the percent of students meeting the college readiness benchmark scores for both the EBRW and Mathematics sections of the redesigned SAT (College Board, 2016). Schools can

compare the performance of their students with students at the district and at the state level. The portal also supplies Instructional Planning reports and Question Analysis reports that allow schools to drill down to the student level on specific questions. Taken together, these reports allow for curriculum planning at the student, class, school, and district level. Additionally, schools benefit by increasing their graduation rate when students who failed to pass the 10<sup>th</sup> grade ELA portion of the FSA meet that graduation requirement by earning a concordant score on the EBRW section of the SAT.

***Barriers to Taking the SAT***

The SAT is typically offered on specified weekend dates seven or eight times yearly at a cost of forty-five dollars per student (for the SAT without essay) and fifty-seven dollars (for the SAT with the Essay Test). The cost, plus the need to take the SAT outside of school time—often at testing sites far from home—limits students’ ability to take the assessment. While some students from low-income families can waive the testing fee, not all are aware that they may be eligible for a waiver. Even those students who can afford to pay the registration fee or are aware that they are eligible for a fee waiver face the burden of arranging travel to and from the testing site during weekend days when many have work or family obligations. Thus, despite the benefits associated with the SAT, taking the SAT has been out of reach for many students.

***Redesigned SAT***

Students participating in the SAT School Day administrations took the redesigned SAT. This new version of the exam was deployed by College Board in March 2016. Changes to test construction and scoring are summarized in Table 1.

Table 1

*Differences between prior SAT and redesigned SAT*

	Prior SAT	Redesigned SAT (starting March 2016)
Sections	Critical Reading Writing Mathematics Essay (required)	Evidence-Based Reading & Writing Mathematics Essay (optional)
Scoring	Subtest range 200-800 Composite score range 600-2400 Essay rolled into Writing score	Subtest range 200-800 Composite score range 400-1600 Essay reported separately

**Method**

This report summarizes SAT data from the 2016 and 2017 SAT School Day Administrations. Eleventh grade students enrolled on the day of the exam (April 12, 2016 for 2016 and April 5, 2017 for 2017)

were included in the analysis. Additionally, 12<sup>th</sup> grade students who participated in the 2017 SAT School Day were included in the 2017 analysis. Results detail participation rates and scores Broward-wide as well as broken down by school, gender, race/ethnicity, and special student populations. These special populations include students eligible for free and reduced-price lunch (FRL), students with disabilities (SWD), gifted students, and students with limited English proficiency (LEP). The percent of students participating in the *Official SAT Practice* online course comes from a report generated by College Board. The Broward County SAT data were obtained by linking SAT scores from College Board with demographic, enrollment, and testing records from the District's data warehouse.

### ***Data Definitions***

- **Number of Linked Accounts** refers to the number of students who signed up for the *Official SAT Practice* online course between December 10, 2016 and April 8, 2017.
- **Number of Active Accounts** refers to the number of students who actively practiced SAT problems via the *Official SAT Practice* online course between December 10, 2016 and April 8, 2017.
- **Participation Rate** refers to the number of 11<sup>th</sup> grade students who took the SAT on SAT School Day divided by the number of 11<sup>th</sup> grade students enrolled on that day. Participation rate for 12<sup>th</sup> grade students in 2017 was not calculated because only 12<sup>th</sup> grade students who had not yet met the 10<sup>th</sup> grade ELA Reading graduation test requirement were invited to participate. Twelfth grade students were not invited to participate in the SAT in 2016; these students participated in the ACT.
- **EBRW Mean** refers to the average score on the Evidence-Based Reading and Writing section of the SAT. Possible scores range from 200 to 800.
- **Math Mean** refers to the average score on the Mathematics section of the SAT. Possible scores range from 200 to 800.
- **Concordant Score** refers to a score that a student may use to satisfy the 10<sup>th</sup> grade ELA FSA graduation requirement if s/he scored lower than a level 3 on the ELA portion of the FSA. Currently, a concordant score on the redesigned SAT is a score of 430 (or higher) on the EBRW section *or* a score of 24 (or higher) on the redesigned SAT Reading subtest (Florida Department of Education, 2016).
- **EBRW Benchmark** refers to the college readiness benchmark College Board put forth for the redesigned Evidenced-Based Reading and Writing section of the SAT. Students who meet the benchmark, a score of 480 on the EBRW, have a 75 percent likelihood of achieving at least a C in first-semester, credit-bearing college-level courses in history, literature, social science or writing (College Board, 2016).

- **Math Benchmark** refers to the college readiness benchmark College Board put forth for the redesigned Mathematics section of the SAT. Students who meet the benchmark, a score of 530 on the Math section, have a 75% likelihood of achieving at least a C in first-semester, credit-bearing college-level courses in algebra, statistics, precalculus, or calculus (College Board, 2016).

## Results

### Participation Rates

**Official SAT Practice online course.** Between December 10, 2016 and April 8, 2017 Broward County had a total of 32,528 linked accounts, or number of students who signed up for the *Official SAT Practice* online course. During that same time-period, 3,680 students had active accounts. That is, 3,680 actively went online to the College Board site and practiced for the SAT. Note students who took the PSAT in 10<sup>th</sup> grade were also given the opportunity to create an account for the course, thus not all students with linked accounts participated in SAT School Day. College Board reports that from December 10, 2016 through June 5, 2017 an **average of five percent of Broward test takers practiced using the Official College Board SAT online practice course.**

**Comparison of SAT Day with Traditional SAT Administrations.** Among 11<sup>th</sup> grade students, 87 percent in traditional BCPS schools participated in both the 2016 ( $n=15,149$ ) and 2017 ( $n=15,474$ ) SAT School Day Administrations (Figure 1). By comparison, 50 percent of 11<sup>th</sup> grade students ( $n=10,132$ ) took the SAT at any time during the 2015 school year. The increase in the participation rate from 2015, when no District-wide SAT School Day was offered, to SAT School Day 2016 was especially dramatic for groups that have historically been underrepresented among SAT participants in Broward County. For example, **the percent of Black and FRL students participating more than doubled and the percent of LEP and SWD students more than tripled from 2015 to 2016.**

## SAT Participation Among 11th Grade Students\*

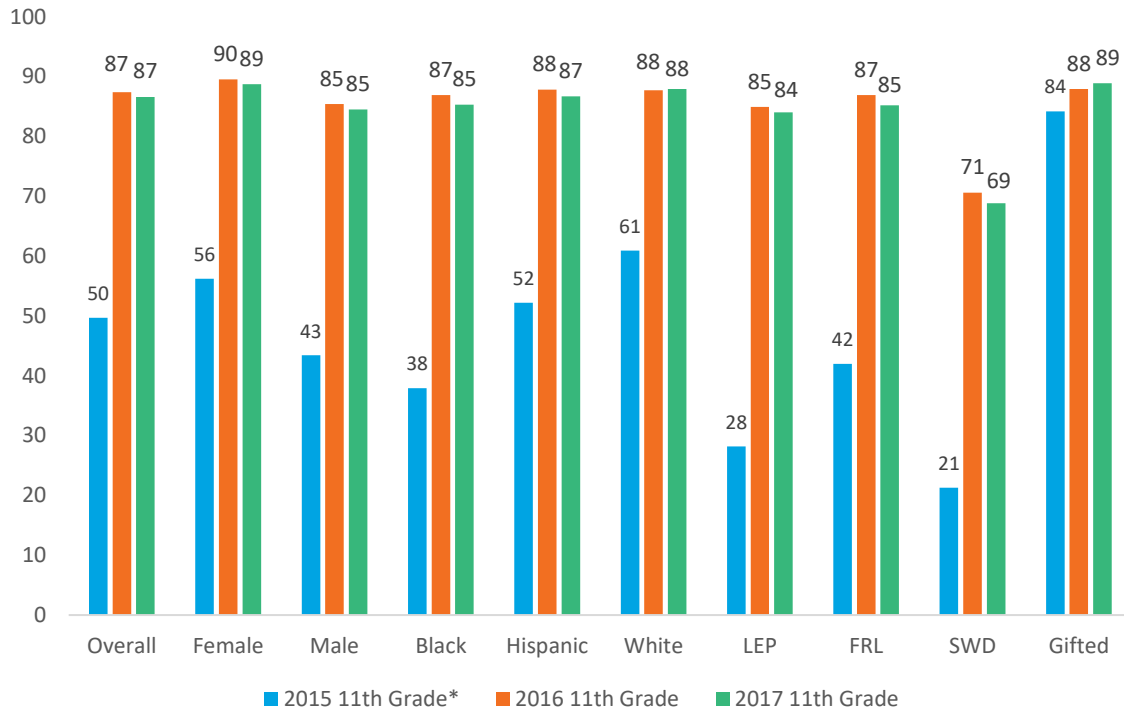


Figure 1: SAT participation among 11<sup>th</sup> grade students, 2015 through 2017

\*Note: Numbers for 2015 represent the students who took the SAT at any time during school year 2014-2015 as the first District-wide SAT School Day was offered in 2016.

**Participation during SAT School Days.** More than 80 percent of all subgroups of 11<sup>th</sup> grade students participated in the 2016 and in the 2017 SAT School Days with one exception: Participation among students with disabilities was somewhat lower than among others (70.6% SWD vs. 89.1% Not SWD in 2016 and 68.8% SWD vs. 88.4% Not SWD in 2017).

**Participation rate varied by school type.** The District’s SAT School Days included students from center schools as well as traditional schools (but not charter schools). Participation among 11<sup>th</sup> grade students enrolled in center schools was lower (31.9%) than among those enrolled in traditional schools (91.2%) in 2016. A similar gap in participation between 11<sup>th</sup> grade students enrolled in center schools (31.1%) compared to traditional schools (90.0%) held in 2017 as well. School-by-school participation rates for 11<sup>th</sup> grade students are detailed in Appendix A.

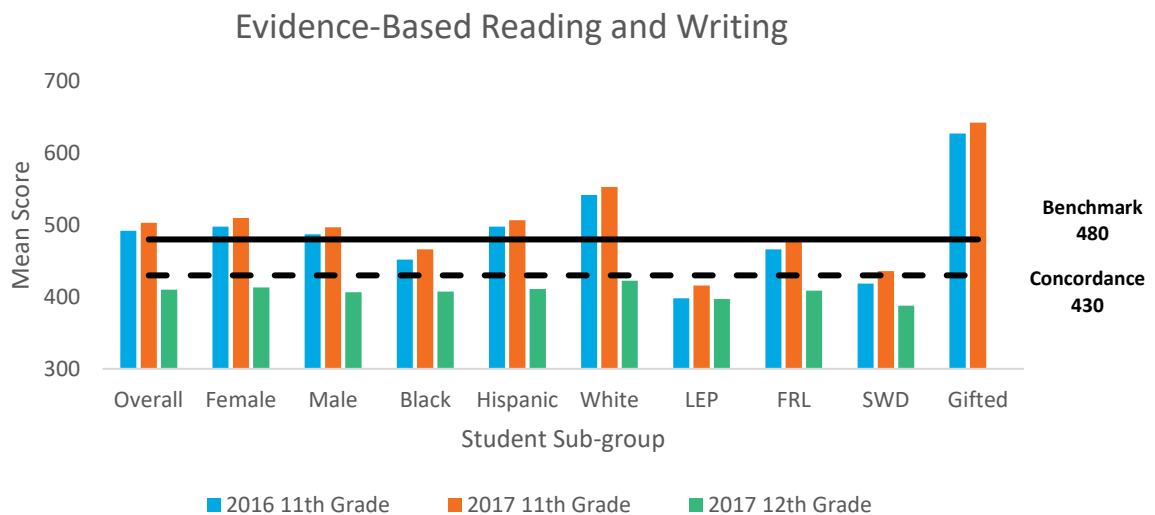
### Performance

Figures 2, 4, and Appendix C display SAT scores overall and by subgroup for EBRW and for Math. Appendix C includes mean scores as well as the percent that met concordance and college-ready

benchmark scores. EBRW and Math mean scores that are at least one standard deviation above the mean are displayed in green, while scores at least one standard deviation below the mean are displayed in red (there were none). Statistically significant differences by subgroup in the percentage that met concordance and the percentage that met college-ready benchmarks are displayed in orange. School-by-school measures of performance are displayed for 11<sup>th</sup> grade students in Appendix A and for 12<sup>th</sup> grade students in Appendix B.

**Performance: Evidence-Based Reading and Writing (EBRW)**

**Mean Score.** Figure 2 displays mean scores overall and by subgroup for the 2016 11<sup>th</sup> grade students, the 2017 11<sup>th</sup> grade students, and the 2017 12<sup>th</sup> grade students. The solid black line denotes the college-readiness benchmark of 480, while the dotted black line denotes the concordance score of 430.

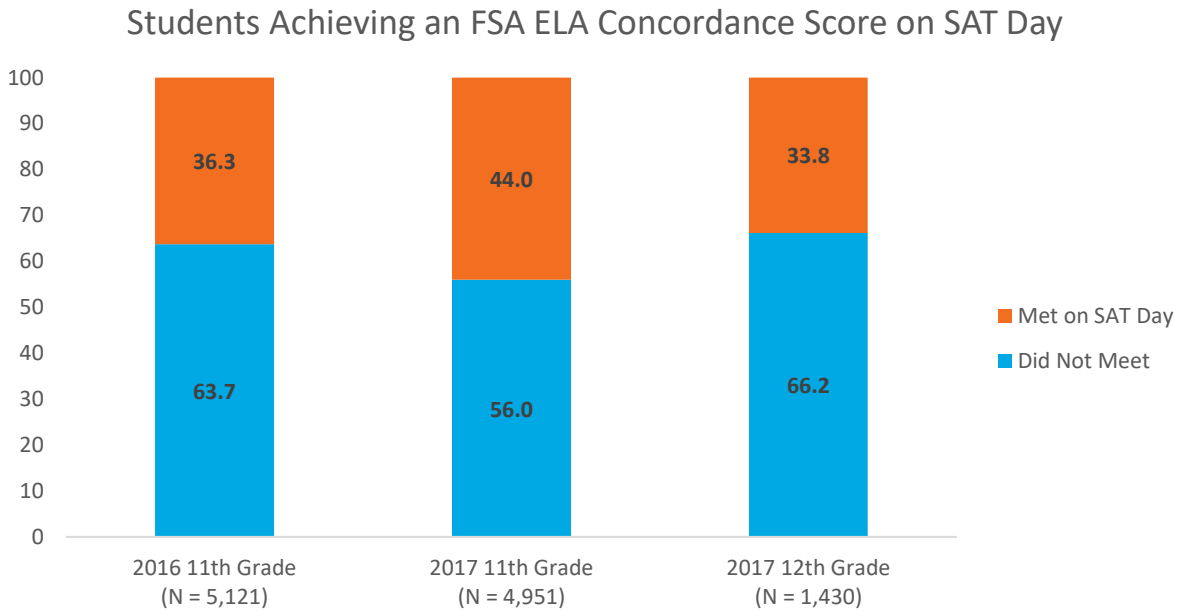


*Figure 2. Evidence-Based Reading and Writing SAT mean scores by student sub-population, 2016 and 2017 SAT School Days*

**Eleventh Grade Students.** On a scale from 200 to 800 the mean score for 11<sup>th</sup> grade students was 492 in 2016, and 503 in 2017, exceeding both the concordant score of 430 and the college-readiness benchmark of 480 in both years. The two highest-performing groups in both years were White students (2016 *m*=542; 2017 *m*=553) and gifted students (2016 *m*=627; 2017 *m*=642), with gifted students scoring more than one standard deviation above the mean score in both years. The lowest performing group in both years was LEP students (2016 *m*=398; 2017 *m*= 416), although their scores did not fall one standard deviation below the overall average in either year.

*Twelfth Grade Students, 2017.* Twelfth grade students who had not yet met the 10<sup>th</sup> grade ELA reading test graduation requirement were invited to participate in the 2017 SAT School Day. Their overall mean score was 410 on a scale from 200 to 800. The highest performing group<sup>1</sup> was White students ( $m=422$ ), while the lowest performing group was SWD ( $m=388$ ).

**Concordance Score.** Over one-third of the students who had not yet met the ELA graduation testing requirement by SAT School Day met concordance via the SAT during the SAT School Day administration. Currently a score of 430 (or higher) on the EBRW section *or* a score of 24 (or higher) on the Reading subsection of the EBRW earns concordance. Of the 11<sup>th</sup> grade students who had not yet met the requirement, 36.3 percent ( $n=1,863$ ) met the requirement on the 2016 SAT School Day and 44 percent ( $n=2,180$ ) met the requirement on 2017 SAT School Day. Of the 1,430 12<sup>th</sup> graders who had not yet met the requirement by 2017 SAT School Day, 484 (33.8%) met concordance that day (Figure 3 and Appendix C).



*Figure 3. Percent of students not meeting ELA graduation testing requirement who achieved a concordance score on SAT Day in 2016 and 2017*

There were differences by subgroup in who met concordance on SAT Day (see Appendix C; statistically significant differences highlighted in orange). Among 11<sup>th</sup> grade students in both years, female students were more likely than male students, White students were more likely than Hispanic or Black students, and gifted students were more likely than non-gifted students to meet concordance. Students eligible for free or reduced-price lunch, students with disabilities, and

<sup>1</sup> There were fewer than 10 Gifted students in 12<sup>th</sup> grade participating so their scores are not reported.



students with limited English proficiency were less likely than their counterparts to meet concordance. Among 12<sup>th</sup> grade students the only differences by subgroup were for students with disabilities and students with limited English proficiency who were both less likely to achieve a concordance score.

**Benchmark Score.** Students who meet the college-ready benchmark score for the EBRW section, a score of 480, have a 75 percent likelihood of achieving at least a C in first-semester, credit-bearing college-level courses in history, literature, social science or writing (College Board, 2016). More than half of 11<sup>th</sup> grade participants in SAT School Day met the EBRW college-ready benchmark in both years (53.4 in 2016, 57.3 in 2017). Nine percent of 12<sup>th</sup> grade students met the EBRW benchmark in 2017.

The same patterns of subgroup differences in meeting concordance emerged for meeting the college-ready benchmark. Among 11<sup>th</sup> grade students in both years, female students, White students, and gifted students were more likely to meet the benchmark than were their counterparts. Students with disabilities, students eligible for free-and-reduced-price lunch, and students with limited English proficiency were less likely than their counterparts to meet the college-readiness benchmark. Among 12<sup>th</sup> grade students the only subgroup difference was between students with disabilities and others, with students with disabilities less likely to meet benchmark than others.

### **Performance: Mathematics**

**Mean Score.** Figure 4 displays mean scores overall and by subgroup for the students who participated in the 2016 and 2017 SAT School Days. The solid black line denotes the college-readiness benchmark score of 530.

*Eleventh Grade Students.* On a scale from 200 to 800, the mean score for 11<sup>th</sup> grade students was 477 in 2016, and 481 in 2017. Just as with EBRW, the two highest-performing groups in both years were White students (2016  $m=524$ ; 2017  $m=530$ ) and gifted students (2016  $m=622$ ; 2017  $m=629$ ), with gifted students scoring more than one standard deviation above the mean score in both years. The lowest performing group in both years was LEP students (2016  $m=404$ ; 2017  $m=417$ ), although their mean scores did not fall one standard deviation below the overall average in either year.

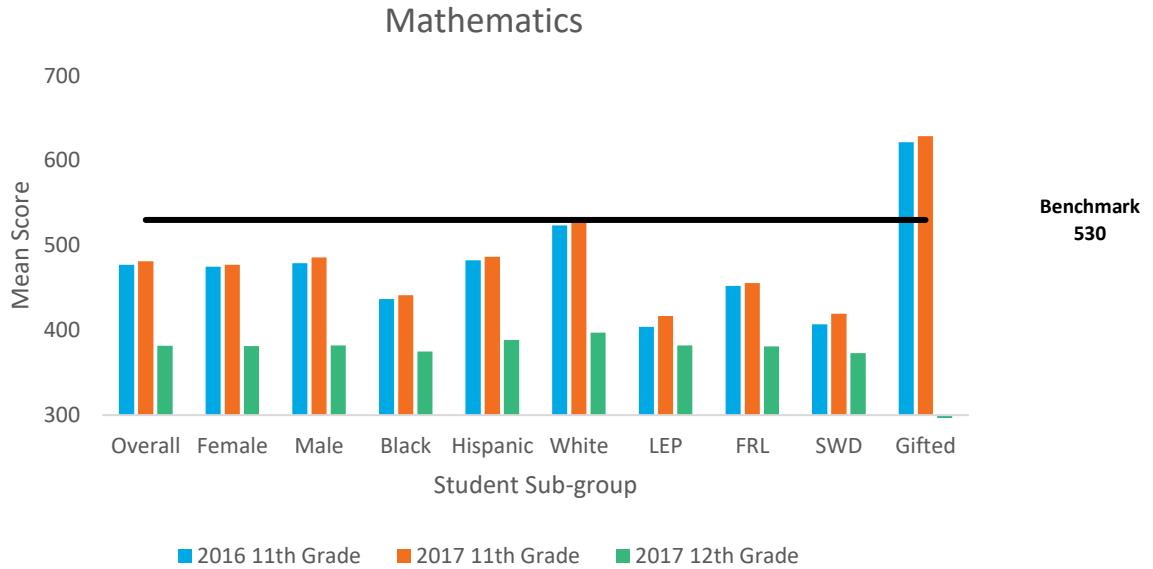


Figure 4. Mathematics SAT mean scores by student sub-population, 2016 and 2017 SAT School Days

*Twelfth Grade Students, 2017.* As noted above, twelfth grade students who had not yet met the 10<sup>th</sup> grade ELA graduation testing requirement were invited to participate in the 2017 SAT School Day. Their overall mean Math score was 382 on a scale from 200 to 800. The highest performing group<sup>2</sup> was White students ( $m=397$ ), while the lowest performing group was Students with Disabilities ( $m=373$ ).

**Benchmark Score.** Students who meet the Math college-ready benchmark score, a score of 530, have a 75 percent likelihood of achieving at least a C in first-semester, credit-bearing college-level courses in algebra, statistics, precalculus, or calculus (College Board, 2016). Just under a third of 11<sup>th</sup> grade students (30.5% in 2016; 30.0% in 2017) scored at or above the Math benchmark in both years. Just one percent of 12<sup>th</sup> grade students in 2017 met the Math benchmark.

Among 11<sup>th</sup> grade students in both years, male students, White students, and gifted students were more likely to meet the math benchmark than were their counterparts. Students with disabilities, students eligible for free or reduced-price lunch, and students with limited English proficiency were less likely than their counterparts to meet the math benchmark. This pattern in subgroup differences was the same for math and EBRW with the exception of the gender difference. While female students in the 11<sup>th</sup> grade scored higher on the Evidence-Based Reading and Writing section of the SAT, male students scored higher on the math section.

<sup>2</sup> There were fewer than 10 Gifted students in 12<sup>th</sup> grade participating so their scores are not reported.

## Summary

BCPS hosted its first SAT School day for all 11<sup>th</sup> grade students in traditional BCPS schools in 2016. In 2017, 12<sup>th</sup> grade students who had not met the 10<sup>th</sup> grade ELA graduation testing requirement were also invited to participate. All students were offered the *Official SAT Practice* online course to help them prepare for the exam. According to College Board, five percent of test takers actively participated in the course.

**Participation in the SAT increased by 37 percentage points since the implementation of SAT day in 2016.** Eighty-seven percent of enrolled 11<sup>th</sup> grade students participated in the SAT School Day in both 2016 and 2017. The year prior to BCPS launching the SAT School Day (2015), 49.7 percent of 11<sup>th</sup> grade students took the SAT at any time during the school year. The increase in participation was especially high for groups with historically low SAT participation rates. **The advent of SAT School Day dramatically narrowed or, in some cases, eliminated the participation gap between Black students, students eligible for free and reduced-price lunch, students with disabilities, and students with limited English proficiency and their counterparts.** Participation varied by school type, with students from centers less likely to participate than students from traditional schools.

**Over one-third of the students who hadn't yet met the ELA graduation testing requirement achieved a concordant score on SAT Day.** Thirty-six percent of 11<sup>th</sup> grade students in 2016, 44 percent of 11<sup>th</sup> grade students in 2017, and 34 percent of 12<sup>th</sup> grade students in 2017 fulfilled this requirement on SAT School Day.

**The overall average scores increased over the two-year period.** The average Evidence-Based Reading and Writing (EBRW) score went from 492 in 2016 to 503 in 2017, and the average mathematics score increased from 477 in 2016 to 481 in 2017.

Just over half of 11<sup>th</sup> grade students reached the EBRW college-ready benchmark in both 2016 and 2017, while just under a third of 11<sup>th</sup> grade students met the college-ready math benchmark in 2016 and 2017. Nine percent of 12<sup>th</sup> grade students in 2017 met the EBRW college-ready benchmark, while one percent of 12<sup>th</sup> grade students met the math college-ready benchmark.

## Discussion

**There are many reasons for schools to encourage students to participate in SAT School Day.** SAT School Days offer free and convenient access to a popular college entrance exam accepted by all U.S. colleges. The school-day administrations of the SAT are designed to eliminate economic and logistical barriers to participation that have traditionally limited many students' ability to take this

exam. Students who participate in SAT School Day can use their results to meet college entrance requirements and to apply for scholarships and grants. Students who have not yet met the ELA graduation testing requirement can meet that requirement by earning a concordant score on the SAT. Finally, educators can use the results from the SAT School Day to guide instruction by identifying existing strengths and weaknesses in their curriculum in English, reading, writing and mathematics. The online educator reporting portal that accompanies the redesigned SAT allows educators to tailor reports to the school, class and student level.

School administrators can use the information in Appendices A and B to evaluate their school's level of participation and their students' performance on the Evidence-Based Reading and Writing and the Mathematics sections of the SAT. Administrators and educators at schools with lower than average mean scores on either section can use these results to inform their curriculum, instruction, and enrichment programs in order to best serve their students.

**Schools can boost their students' performance on the SAT by encouraging them to practice for the SAT using online preparation tools available free of charge to all students.** College Board offers great tools to prepare students for the SAT, yet few students take advantage of them. From December of 2016 to June of 2017 only five percent of test takers practiced for the SAT using College Board's *Official SAT Practice* online course (see [satpractice.org](http://satpractice.org)). These materials are customized based on a student's results on the PSAT (which all students take in the 10<sup>th</sup> grade) and SAT. Promoting early preparation and practice is especially important among groups such as students with limited English proficiency, students with disabilities, and Black students who fared poorer on the SAT School Day administrations than did others. Schools could dedicate a class session or hold an assembly to demonstrate how students can access and use the *Official SAT Practice* materials. See <https://collegereadiness.collegeboard.org/sat/k12-educators/advising-instruction/practice-resources> for suggestions on how to encourage your students to practice for the SAT.

## Appendices

### **Appendix A**

2016 and 2017 SAT School Day school-level participation and performance – Grade 11.

### **Appendix B**

2017 SAT School Day school-level performance – Grade 12.

### **Appendix C**

2016 and 2017 SAT School Day District-level scores for EBRW and Math, including percent that met concordant score and percent that met college-ready benchmarks, overall and by student sub-populations.

*Note that data were not displayed for any school or center with fewer than 10 participants in order to protect confidentiality. This is in accordance with policy guidance from the Florida Department of Education.*

## References

College Board (2015). The SAT suite of assessments: Using scores and reporting to inform instruction. Retrieved on March 2, 2017 from <https://collegereadiness.collegeboard.org/pdf/redesigned-sat-k12-using-scores-and-reporting-inform-instruction.pdf>

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