

# College Admissions Testing General Information, Class of 2016

# **College Admissions Testing: The SAT and ACT**

#### Introduction

The SAT and ACT examinations are designed to measure students' college readiness and academic achievement as they prepare for postsecondary college and career opportunities. Most U.S. colleges and universities take into consideration some combination of college admissions test scores and school achievement records when making decisions about admissions and course placement. Both examinations are based on the high school curriculum. The SAT measures examinees' knowledge in core subject areas and how well students can apply that knowledge, as well as their ability to reason, solve problems, and communicate (College Board, 2014a). The ACT measures examinees' academic readiness for college in key content areas and assesses student mastery of both college and career readiness standards (ACT, Inc., 2014). The College Board develops the SAT with guidance from test development committees made up of experienced educational professionals and subject-matter experts (College Board, 2014a). All test questions are subjected to independent sensitivity review processes and pretested on students under live testing conditions. ACT, Inc., develops the ACT using a range of information, including state curriculum frameworks, state-adopted textbooks, surveys of college faculty, and consultation with educational experts at the secondary and postsecondary levels (ACT, Inc., 2014).

This document supplements the following reports: College Admissions Testing Results for Graduating Seniors in Texas Public Schools, Class of 2016 (Texas Education Agency [TEA], 2018c) and College Admissions Testing Results for Graduating Seniors in Texas and the United States, Class of 2016 (TEA, 2018b). It provides background information on the SAT and ACT examinations, including descriptions of the examinations, uses of individual scores in Texas, data sources, and interpretation of results.

#### The Examinations

**SAT.** The College Board began administering a redesigned version of the SAT in March 2016. Among Texas public high school graduates in the class of 2016, 93.2 percent of the SAT examinees took the previous version of the test. The previous version of the SAT consisted of three sections: critical reading, mathematics, and writing (Table 1 on page 2). The critical reading section was 70 minutes in length

Table 1
A Brief Comparison of the SAT and ACT Examinations, 2015-16

	ACT		
The SAT is a curriculum-based, college readiness test that assesses the academic skills and knowledge students acquire in high school and the ability to apply that knowledge.	The ACT is a curriculum-based, college and career readiness test that assesses what students learn in their classes; similar to an achievement test.		
Critical Reading (3 sections) Mathematics (3 sections) Writing (3 sections) Includes 1 experimental section	English (1 section) Mathematics (1 section) Reading (1 section) Science (1 section) Includes 1 experimental section on selected testing dates Writing (1 optional section)		
Critical Reading Passage-based reading with multiple-choice questions measuring ability to:	English Passage-based reading with multiple-choice questions measuring understanding of:		
<ul> <li>analyze and synthesize information</li> <li>comprehend what is stated or implied</li> <li>understand vocabulary in context</li> <li>Multiple-choice sentence completion questions measuring ability to: <ul> <li>understand vocabulary</li> <li>understand sentence structure</li> </ul> </li> <li>Mathematics <ul> <li>Multiple-choice and student-produced responses</li> <li>(grid-in) questions covering four content areas:</li> <li>numbers and operations</li> <li>algebra and functions</li> <li>geometry and measurement</li> <li>data analysis, statistics, and probability</li> </ul> </li> <li>Writing <ul> <li>Multiple-choice questions covering three content areas:</li> <li>improving sentences</li> <li>improving paragraphs</li> <li>identifying sentence errors</li> </ul> </li> <li>Essay test measuring ability to: <ul> <li>develop a point of view on an issue presented in an excerpt</li> <li>support the point of view using reasoning and examples from reading, studies, experience, or observations</li> <li>follow the conventions of standard written English</li> </ul> </li> </ul>	usage/mechanics:         punctuation         grammar and usage         sentence structure      rhetorical skills:         strategy         organization         style      Mathematics Multiple-choice questions covering six content areas:         pre-algebra         elementary algebra         elementary algebra         intermediate algebra         coordinate geometry         plane geometry         plane geometry         etrigonometry  Reading Passage-based reading with multiple-choice questions measuring reading comprehension as a function of referring and reasoning skills, including understanding of vocabulary in context  Science Presents data representations, research summaries, and conflicting viewpoints with multiple-choice questions measuring ability to understand, analyze, and generalize scientific information from biology, chemistry, earth/space sciences, and physics  Writing (optional) Essay test measuring writing skills emphasized in high school English classes and in entry-level		
	test that assesses the academic skills and knowledge students acquire in high school and the ability to apply that knowledge.  Critical Reading (3 sections) Mathematics (3 sections) Writing (3 sections) Includes 1 experimental section  Critical Reading Passage-based reading with multiple-choice questions measuring ability to:  • analyze and synthesize information • comprehend what is stated or implied • understand vocabulary in context Multiple-choice sentence completion questions measuring ability to:  • understand vocabulary • understand sentence structure  Mathematics Multiple-choice and student-produced responses (grid-in) questions covering four content areas: • numbers and operations • algebra and functions • geometry and measurement • data analysis, statistics, and probability Writing Multiple-choice questions covering three content areas: • improving sentences • improving sentences • improving bentence errors  Essay test measuring ability to: • develop a point of view on an issue presented in an excerpt • support the point of view on an issue presented in an excerpt • support the point of view using reasoning and examples from reading, studies, experience, or observations • follow the conventions of standard written		

Note. Information contained in this table was compiled and summarized from resources available from ACT, Inc., and College Board, including ACT, Inc. (n.d.-b, 2014, 2015b, 2016b) and College Board (2014a, 2014b, 2015c).

continues

<sup>&</sup>lt;sup>a</sup>The College Board began administering a redesigned version of the SAT in March 2016. <sup>b</sup>Not including the experimental section. <sup>c</sup>Beginning September 2015.

# Table 1 (continued) A Brief Comparison of the SAT and ACT Examinations, 2015-16

Characteristic	SAT (prior to March 2016) <sup>a</sup>	ACT	
Length	170 items: 2 hours, 55 minutes <sup>b</sup> 1 essay: 25 minutes 215 items: 2 hours, 55 minutes <sup>b</sup> Optional writing section essay: 40 minu		
Penalty for incorrect answers	Formula scoring: subtracts 1/4 point for each incorrect answer, except on student-produced response questions in the mathematics section	No penalty	
Scoring	The score on each of the three major sections ranges from 200 to 800 (in 10-point increments).	The score on each of the four major sections ranges from 1 to 36. Composite score is the average of the four section scores rounded to the nearest whole number. The optional writing section has five scores: a writing score ranging from 1 to 36, and four subscores, each ranging from 2 to 12.°	
Score reporting	If a student takes the test multiple times, he or she can choose which scores to have sent to colleges.	If a student takes the test multiple times, he or she can choose which scores to have sent to colleges.	
Cost of exam	\$54.50	\$39.50 plus an additional \$17 for the optional writing section	

Note. Information contained in this table was compiled and summarized from resources available from ACT, Inc., and College Board, including ACT, Inc. (n.d.-b, 2014, 2015b, 2016b) and College Board (2014a, 2014b, 2015c).

(College Board, 2014a). This section consisted of 19 multiple-choice sentence completion questions and 48 multiple-choice passage-based reading questions (College Board, 2014b). The sentence completion questions assessed vocabulary and understanding of sentence structure. The passage-based questions assessed understanding of vocabulary in context; ability to analyze and synthesize information; and ability to comprehend what is explicitly stated, as well as what is implied, in text passages.

The mathematics section was 70 minutes in length (College Board, 2014a). This section consisted of 44 multiple-choice questions and 10 student-produced response questions (College Board, 2014b). Both types of questions in the mathematics section assessed ability to reason logically in a variety of situations. The questions assessed knowledge and ability in the areas of numbers and operations; algebra and functions; geometry and measurement; and data analysis, statistics, and probability.

The writing section was 60 minutes in length (College Board, 2014a). This section consisted of 25 multiple-choice questions related to improving sentences, 18 multiple-choice questions related to identifying sentence errors, 6 multiple-choice questions related to improving paragraphs, and a student-produced essay (College Board, 2014b). The multiple-choice section assessed ability to: "communicate ideas clearly and effectively; improve a piece of writing through revision and editing; recognize and identify sentence-level errors; understand grammatical elements and structures and how they relate to one another in a sentence; recognize correctly formed grammatical structures; clearly express ideas through sentence combining and use of transitional words and phrases; and improve coherence of ideas within and among paragraphs" (p. 25). The student-produced essay required students to develop and support a point of view on an issue presented in an excerpt using the conventions of standard written English.

The redesigned version of the SAT was first administered to examinees in March 2016 (College Board, 2015a). The structure of the redesigned SAT differs from the previous version in that: (a) the

The College Board began administering a redesigned version of the SAT in March 2016. Not including the experimental section. Beginning September 2015.

reading and writing sections were combined into one evidence-based reading and writing section, consisting of a reading test and a writing and language test; (b) the essay section was made optional; and (c) the mathematics section was modified to focus more on algebra, problem solving, and data analysis (College Board, 2015b). The testing time for the redesigned SAT is 3 hours, not including the 50-minute optional essay test or the 20-minute experimental section, which is administered to some examinees who choose not to take the essay test (College Board, 2015a).

**ACT.** The ACT consists of five sections: English, mathematics, reading, science, and an optional writing section (ACT, Inc., 2014). The English section is 45 minutes in length and consists of 75 multiple-choice passage-based questions that assess "understanding of the conventions of standard written English ... and of rhetorical skills" (p. 5). Specifically, the six elements assessed by this section are punctuation, grammar and usage, sentence structure, strategy, organization, and style.

The mathematics section is 60 minutes in length and consists of 60 multiple-choice questions that assess mathematical reasoning skills in the areas of pre-algebra, elementary algebra, intermediate algebra, coordinate geometry, plane geometry, and trigonometry (ACT, Inc., 2014). The mathematics items are categorized according to four levels: knowledge and skills, direct application, understanding concepts, and integrating conceptual understanding.

The reading section is 35 minutes in length and consists of 40 multiple-choice questions that assess reading comprehension by requiring examinees to understand what is explicitly stated, as well as what is implied, in text (ACT, Inc., 2014). Specific skills assessed include the ability to determine main ideas, locate and interpret significant details, understand sequences of events, make comparisons, comprehend cause-effect relationships, use context to determine meaning, draw generalizations, and analyze voice and method. The reading section presents passages in four content areas: literary narrative, humanities, social studies, and natural sciences.

The science section is 35 minutes in length and consists of 40 multiple-choice questions that assess skills required in the sciences, including interpretation, analysis, evaluation, reasoning, and problem solving (ACT, Inc., 2014). The content includes biology, chemistry, earth/space sciences, and physics. The science items are constructed in three formats: data representation, requiring examinees to interpret graphs, scatterplots, and information presented in tables, diagrams, and figures; research summaries, requiring examinees to interpret experimental results; and conflicting viewpoints, requiring examinees to understand, analyze, and compare alternative viewpoints or hypotheses.

The optional writing section was added to the ACT in February 2005 and was 30 minutes in length (ACT, Inc., 2014). As of September 2015, ACT, Inc., made several changes to the writing section. The changes included: (a) extending the duration of the test to 40 minutes; (b) broadening the writing task; (c) updating the scoring rubric; and (d) modifying the scoring scale (ACT, Inc., 2015a). The optional writing section now requires each examinee to write an essay, based on a prompt, by presenting a position on an issue (ACT, Inc., 2016b). The prompt describes an issue and provides three different perspectives on the issue. Examinees are asked to support one of the three perspectives or to develop a response based on their own perspective and analyze the relationship between their perspective and one or more of the others. Of class of 2016 ACT examinees who took the writing test, approximately 40 percent took the

old version, while the others took the updated version. Because the scores from the previous and current versions of the writing section are not equivalent or comparable and ACT, Inc., does not offer concordance to the combined English/writing score that was previously reported, writing results are not presented in the report *College Admissions Testing Results for Graduating Seniors in Texas Public Schools, Class of 2016* (TEA, 2018c). Not including the optional writing section or the experimental section, the testing time for the ACT is 2 hours, 55 minutes.

## SAT and ACT Scoring

Student performance on the SAT is reported as a scaled score, which is a normative standard score calculated from a raw score (College Board, 2014a). Prior to March 2016, when the College Board began administering a redesigned version of the SAT, scaled scores on each section of the test ranged from 200 to 800 in 10-point increments. For the critical reading and mathematics sections, the raw score equaled the number of questions answered correctly minus one-quarter of the number of multiple-choice questions answered incorrectly. No points were deducted for unanswered questions or for wrong answers to student-produced response questions on the mathematics section. The writing scaled score was derived from: (a) a raw score calculated in the same manner as the critical reading and mathematics sections and (b) the essay score, which was the sum of two readers' scores. The essay made up approximately 30 percent of the total writing score. The total scale score ranged from 600 to 2400.

For the redesigned SAT, scaled scores on each section range from 200 to 800 in 10-point increments (College Board, 2015b). In contrast to the previous version of the SAT, no points are deducted for incorrect answers. The evidence-based reading and writing section scale score is derived from two raw subscores from a reading test and a writing and language test. The total scale score ranges from 400 to 1600.

Scores for the redesigned SAT and its predecessor are not equivalent because the examinations are different in content, structure, and scoring. Only 6.8 percent of class of 2016 SAT examinees took the redesigned SAT. Scores for these students were converted to scores comparable to those for the previous version of the test using the College Board's concordance tables. This made it possible to summarize data for the class of 2016 SAT examinee population as a whole for the report *College Admissions Testing Results for Graduating Seniors in Texas Public Schools, Class of 2016* (TEA, 2018c). The College Board created the concordance tables by calculating percentile ranks of score and subscore distributions on each section and combination of sections on both versions of the SAT (College Board, 2016a). Scores for the two versions of the test are concorded when they have the same percentile ranks.

For class of 2016 examinees who took the redesigned SAT, scores for each section and subsection were converted to corresponding scores on the previous version of the test using the College Board's concordance tables. Scores for the redesigned mathematics section were converted to corresponding scores for the mathematics section of the previous version of the test. Subscores for the redesigned reading test, a subsection of the new version's evidence-based reading and writing section, were converted to corresponding scores for the critical reading section of the previous version of the test. And subscores for the redesigned writing and language test, a subsection of the new version's evidence-based reading

and writing section, were converted to corresponding scores for the writing section of the previous version of the test. In addition, combined scores for multiple sections of the redesigned SAT were converted to corresponding scores on the previous version of the test. For example, to calculate a combined critical reading and mathematics score: (1) examinees' scores for the redesigned evidence-based reading and writing section and mathematics section were summed; then (2) the summed scores were converted to corresponding scores for the critical reading and mathematics sections of the previous version of the test. Because scores for the combined critical reading and mathematics measure were converted separately from the individual test sections, sums of section mean scores may not always equal the mean scores of the combined measure.

Student performance on the ACT is reported as a scaled score that ranges from 1 to 36 in 1-point increments (ACT, Inc., 2014). For the English, mathematics, reading, and science sections of the ACT, the raw score equals the number of questions answered correctly; no points are deducted for incorrect answers. Examinees also receive a composite score, calculated as the average of the English, mathematics, reading, and science scores rounded to the nearest whole number.

Because the SAT and ACT may vary in difficulty from test form to test form or from year to year, the raw scores are not comparable. To allow for performance comparisons, the raw scores are converted to scaled scores. The statistical equating procedures used in the conversion ensure that any given scaled score indicates the same level of ability across test forms or testing dates.

### Use of Individual SAT and ACT Scores in Texas

# **Distinction Designations**

**Overview.** Under the Texas public school accountability system, distinction designations are awarded to recognize school districts and campuses for outstanding achievement in specified academic areas (Texas Education Agency [TEA], 2017; Texas Education Code [TEC], Chapter 39, Subchapter G, 2016). The distinction designations are based on results across a number of indicators. Results for a campus are evaluated in relation to results for a comparison group of similar campuses. Results for a district are evaluated based on results for campus-level indicators aggregated across all campuses in the district. To be eligible to earn a distinction designation, a district or campus must receive an accountability rating of *Met Standard*. For purposes of distinction designation calculations, scores for the small percentage of class of 2016 SAT examinees who took the redesigned SAT were converted to scores comparable to those for the previous version of the test. See the section "SAT and ACT Scoring" on page 5 for additional information on test score conversion.

**Academic achievement distinction designations.** For the 2017 accountability ratings cycle, there were six campus-level academic achievement distinction designation (AADD) indicators for SAT and ACT examinations: (1) participation in either the SAT or ACT examination; (2) performance in English language arts (ELA) on the SAT; (3) performance in ELA on the ACT; (4) performance in mathematics on the SAT; (5) performance in mathematics on the ACT; and (6) performance in science on the ACT. The ELA indicators were based on performance on the critical reading and writing sections of the SAT

and performance on the English and reading sections of the ACT. The mathematics indicators were based on performance on the mathematics section of each examination. The science indicator was based on performance on the science section of the ACT. The SAT and ACT indicators for AADDs were evaluated based on data for the class of 2016. AADDs were not available for districts. For information about SAT and ACT calculations for AADDs, see *College Admissions Testing Glossary of Terms, Class of 2016* (TEA, 2018a).

Postsecondary readiness distinction designations. For the 2017 accountability ratings cycle, one postsecondary readiness distinction designation (PRDD) was available at the campus level, and one was available at the district level. In each case, the PRDD included three SAT/ACT indicators: participation in, and performance on, either the SAT or ACT examination, and college-ready graduates. For purposes of awarding PRDDs, the SAT/ACT performance indicator measured the percentages of graduating examinees who scored at or above a criterion score on either the SAT or ACT examination. The criterion scores were defined as a combined score of 1110 on the critical reading and mathematics sections of the SAT and a composite score of 24 on the ACT. The college-ready graduates indicator measured the percentages of graduates with results in both ELA and mathematics who scored at or above the Texas Success Initiative (TSI) criteria in both ELA and mathematics on any of three assessments: the TSI assessment, the SAT, or the ACT. The ELA TSI criteria were defined as a score of 351 on the reading section of the TSI assessment; a score of 500 on the critical reading section and a combined score of 1070 on the critical reading and mathematics sections of the SAT; or a score of 19 on the English section and a composite score of 23 on the ACT. The mathematics TSI criteria were defined as a score of 350 on the mathematics section of the TSI assessment; a score of 500 on the mathematics section and a combined score of 1070 on the critical reading and mathematics sections of the SAT; or a score of 19 on the mathematics section and a composite score of 23 on the ACT. The SAT/ACT indicators for PRDDs were evaluated based on data for the class of 2016. For information about SAT and ACT calculations for PRDDs, see College Admissions Testing Glossary of Terms, Classes of 2016 (TEA, 2018a).

# **Exemption From Texas Success Initiative Testing**

In 1987, the Texas Legislature established a system of testing and remediation called the Texas Academic Skills Program, or TASP (TEC §51.306, 1988). In 2003, TASP was replaced by the TSI (TEC §51.3062, 2004). Under the TSI, undergraduate students enrolling for the first time in public institutions of higher education are required to take an assessment to evaluate their readiness for freshman-level academic coursework (TEC §51.3062, 2016). For the class of 2016, the Texas Legislature allowed exemptions from TSI assessment requirements based on student performance on the SAT, the ACT, and the state assessment (Title 19 of the Texas Administrative Code §4.54, 2018, amended to be effective August 30, 2016; TEC §51.3062, 2016). To qualify for an exemption based on the SAT or ACT, a student must have received a specified minimum score in one of the five years prior to enrollment in a public institution of higher education. For SAT examinations administered prior to March 2016, a student must have received a combined score of 1070 or higher on the critical reading and mathematics sections and (a) a score of 500 or higher on the critical reading section to be exempt from both the reading and writing sections of the TSI assessment or (b) a score of 500 or higher on the mathematics section to be exempt from the mathematics section of the TSI assessment. For SAT examinations administered in March 2016

or after, a student must have received a score of 480 or higher on the evidence-based reading and writing section to be exempt from both the reading and writing sections of the TSI assessment, and a score of 530 or higher on the mathematics section to be exempt from the mathematics section of the TSI assessment. On the ACT, a student must have received a composite score of 23 or higher and (a) a score of 19 or higher on the English section to be exempt from both the reading and writing sections of the TSI assessment or (b) a score of 19 or higher on the mathematics section to be exempt from the mathematics section of the TSI assessment.

# Reporting of SAT and ACT Results by the Texas Education Agency

#### **Data Sources**

**Texas public schools.** The College Board provides the Texas Education Agency (TEA) with annual examination results and demographic information for Texas public high school SAT examinees. Similarly, ACT, Inc., provides TEA with annual examination results and demographic information for Texas public high school ACT examinees. TEA receives scores from the testing companies based on year of graduation, rather than year of test administration. When registering for SAT or ACT examinations, students are asked to provide an expected year of graduation. The testing companies use information such as the student-reported expected year of graduation to determine whether to include examinees' scores in that reporting year. The TEA Public Education Information Management System (PEIMS) uses the actual year of graduation reported by school districts after students have graduated. All Texas public school students who graduated in the 2015-16 school year were considered class of 2016 graduates for this report. Because examinees who are reported by the testing companies to have graduated in any given year may not have actually done so, the difference in reporting methods can result in imprecise participation rates. Students may take the SAT and ACT examinations more than once, but TEA receives and reports only the results of examinees' most recent examinations.

Data on public school student grade level, race/ethnicity, economic status, and gender, as well as other relevant district, campus, and student information, are obtained from PEIMS. College Board and ACT, Inc., data on race/ethnicity and gender for examinees are used when the equivalent PEIMS data are not available.

Sums of public school examinees by student characteristic and program participation may differ from one another or from the total of all examinees. Whereas counts of all examinees reflect all examinees reported by the testing companies, counts of examinees by race/ethnicity and by gender reflect examinees who could be found in PEIMS plus examinees who could not be found in PEIMS but for whom the specified demographic data were available from the testing companies. Examinees reported by the testing companies may not be found in PEIMS because of data reporting errors. Because data on other student characteristics and program participation are not available from the testing companies, counts of examinees by these data reflect only those examinees who could be found in PEIMS.

Similarly, sums of public school graduates by student characteristic and program participation may differ from one another or from the total of all graduates. Graduate counts by student characteristic and

program participation reflect only graduates who had student characteristic and program participation data available in PEIMS for the 2015-16 school year.

Combined public and nonpublic schools in Texas and in the United States. SAT and ACT results for public and nonpublic school graduates combined in Texas, other states, and in the United States were obtained, when available, from summary reports released annually by the College Board (College Board, 2016c) and ACT, Inc. (ACT, Inc., n.d.-a, 2016a), respectively. As is the case with testing data reported by TEA, annual reports provided by the testing companies include only the results of examinees' most recent examinations. College Board reports for the class of 2016 include only the results from the version of the SAT examination administered prior to March 2016. Results in the reports provided by the testing companies are based only on the scores of examinees identified by the College Board and ACT, Inc., as expecting to graduate in the reporting year.

The denominators for examination participation rates obtained from the College Board and ACT, Inc., are projected counts of graduating seniors reported by the Western Interstate Commission for Higher Education (WICHE). Participation rates not available from College Board or ACT, Inc., reports were derived by dividing counts of graduating examinees obtained from the testing companies by WICHE projections of graduating seniors.

Beginning with the class of 2016, the College Board reported SAT data for the following seven racial/ethnic categories: African American, American Indian, Asian, Hispanic, Pacific Islander, White, and multiracial. Prior to the class of 2016, the College Board reported SAT data for the following four racial categories: African American, American Indian, Asian/Pacific Islander, and White. In addition, the College Board reported SAT data for three separate Hispanic subgroups: Mexican American, Puerto Rican, and other Hispanic students. TEA used these data to calculate results for Hispanic students overall. Because of rounding, for these classes, the average scores for Hispanic students on the critical reading and mathematics sections of the examination may not sum to the average critical reading and mathematics combined scores shown for the group.

Beginning with the class of 2011, ACT, Inc., reported ACT data for the following seven racial/ethnic categories: African American, American Indian, Asian, Hispanic, Pacific Islander, White, and multiracial. Prior to the class of 2011, ACT, Inc., reported ACT data for the following five racial/ethnic categories: African American, American Indian, Asian/Pacific Islander, Hispanic, and White.

# Interpretation of Results

The effect of group size. It may be informative to compare a group's average scores over time, but the reliability of such comparisons is dependent on the size of the group. When the group is small, reliability is reduced and caution should be used when interpreting year-to-year change. In general, changes in the average scores of a large group, such as White SAT examinees in Texas, are less likely to have occurred by chance than changes in the average scores of a small group, such as American Indian or Pacific Islander SAT examinees in Texas. Between-group comparisons are also dependent on the sizes of the groups. When groups differ substantially in size, comparisons of changes in scores between them can be misleading and, generally, are not appropriate. The non-Hispanic American Indian and Pacific Islander

examinee populations are small in number, compared to other racial/ethnic examinee populations. Similarly, within the overall Hispanic examinee population, African American, Asian, Pacific Islander, and multiracial examinees are small in number, compared to other racial examinee populations. Therefore, performance results for these groups are not discussed in SAT/ACT reports published by the TEA Division of Research and Analysis.

The effect of participation rate. Because both the SAT and ACT are voluntary, a self-selected portion of the high school population takes the tests. In situations like this, the rate of participation plays an important role in the interpretation of average scores. Specifically, the accuracy of the estimate of the average score for a population on a given examination is dependent on the proportion of that population that takes the examination. For example, a 90 percent participation rate would generally yield an average score that is more representative of the population than a 10 percent participation rate. This effect of participation rate on reported average scores affects the kinds of group comparisons that can be made. Typically, in groups with low participation rates, the examinees have completed academically rigorous courses and apply to the nation's most selective scholarship programs and colleges (College Board, 2011). Consequently, low participation rates generally result in inflated average score estimates. Assuming the average ability level of each population is in reality the same, the average score estimate for a population with a very low participation rate will usually be higher than the average score estimate for a population with a high participation rate.

The inverse relationship between participation rate and average score estimate is illustrated by SAT mathematics participation and performance data in the 50 states and the District of Columbia for the class of 2016 (Figure 1). As a state's participation rate increases, its average score estimate usually decreases. Bias in the estimate of a population's average score tends to be reduced when the participation rate is moderate to high. Participation rates directly affect the validity of comparisons among states, districts, campuses, and various student groups. Generally, comparisons of average SAT or ACT scores are most informative between groups with similar participation rates.

Participation rates over time. SAT and ACT participation rates can be affected by many factors, including varying graduation rates, availability of test fee waivers, availability of financial aid for higher education, and state-mandated participation in one of the examinations. The number of graduates is the denominator in SAT and ACT participation rate calculations, and the number of examinees is the numerator. In 2005, for the first time in nearly a decade, the number of students graduating from Texas public schools decreased (TEA, 2006). Because the decrease in graduates did not result from a decrease in enrollment, and because the numbers of SAT and ACT examinees increased, examination participation rates increased for all student groups in 2005. Shifts such as this should be taken into account when comparing participation rates over time.

Texas Education Code §39.0261 (2016) provides that "high school students in the spring of the 11th grade or during the 12th grade may select and take once, at state cost, one of the valid, reliable, and nationally norm-referenced assessment instruments used by colleges and universities as part of their undergraduate admissions processes." Under the Texas College Preparation Program, TEA contracted with the College Board and ACT, Inc., to offer free SAT and ACT examinations in 2010 and 2011 to

Average Score Participation Rate (%)

Figure 1
Relationship Between SAT Mathematics Participation and Performance for States, Class of 2016

Source. Primary data from College Board.

high school juniors enrolled in Texas public school districts and charters. The standard registration fees for the SAT and ACT were funded by TEA.

Beginning in the 2011-12 school year, three Texas public school districts offered SAT School Days to their 11th- and/or 12th-grade students (J. Schott, personal communication, May 12, 2016). Similarly, beginning in the 2012-13 school year, one Texas public school district offered ACT district testing (M. Fuller, personal communication, August 24, 2016). The purpose of SAT School Days and ACT district testing is to increase student access to SAT and ACT examinations by offering the examinations at no cost or at reduced cost to students during school hours (College Board, 2016b; M. Fuller, personal communication, September 25, 2017). In 2015-16, approximately 40 school districts offered SAT School Days, and approximately 80 school districts offered ACT district testing (J. Schott, personal communication, May 12, 2016; M. Fuller, personal communication, August 24, 2016). The number of school districts offering SAT School Days and ACT district testing increased every school year from the initial year offered to 2015-16.

Calculation of Texas public school SAT and ACT participation rates changed beginning with the class of 2012. For the class of 2011 and earlier classes, students served in special education programs were included in the numerators but excluded from the denominators in such calculations. Beginning with the class of 2012, special education students were included in both numerators and denominators. Consequently, results for the class of 2012 and later classes are not comparable to results for the class of 2011 and earlier classes.

## References

- ACT, Inc. (n.d.-a). *ACT profile report—state: Graduating class 2016 Texas*. Retrieved February 22, 2017, from <a href="https://www.act.org/content/dam/act/unsecured/documents/">https://www.act.org/content/dam/act/unsecured/documents/</a> P 44 449999 S S N00 ACT-GCPR Texas.pdf
- ACT, Inc. (n.d.-b). *Getting ready*. Author.
- ACT, Inc. (2014). *Technical manual: The ACT*. Retrieved August 25, 2015, from <a href="https://www.act.org/content/dam/act/unsecured/documents/ACT">https://www.act.org/content/dam/act/unsecured/documents/ACT</a> Technical Manual.pdf
- ACT, Inc. (2015a). *Linking the current and former ACT writing tests*. Retrieved March 28, 2018, from <a href="https://www.act.org/content/dam/act/unsecured/documents/ACTWritingConcordance.pdf">https://www.act.org/content/dam/act/unsecured/documents/ACTWritingConcordance.pdf</a>
- ACT, Inc. (2015b). *Using your ACT results: 2015-2016*. Retrieved August 6, 2016, from <a href="https://www.act.org/content/dam/act/unsecured/documents/Using-Your-ACT-Results.pdf">https://www.act.org/content/dam/act/unsecured/documents/Using-Your-ACT-Results.pdf</a>
- ACT, Inc. (2016a). Average ACT scores by state: Graduating class 2016. Author.
- ACT, Inc. (2016b). *Technical manual supplement: The ACT*. Retrieved August 8, 2017, from <a href="https://www.act.org/content/dam/act/unsecured/documents/ACT-Technical-Manual-Supplement.pdf">https://www.act.org/content/dam/act/unsecured/documents/ACT-Technical-Manual-Supplement.pdf</a>
- College Board. (2011). *Guidelines on the uses of College Board test scores and related data*. Retrieved October 28, 2015, from <a href="http://media.collegeboard.com/digitalServices/pdf/research/guidelines-on-uses-of-college-board-test-scores-and-data.pdf">http://media.collegeboard.com/digitalServices/pdf/research/guidelines-on-uses-of-college-board-test-scores-and-data.pdf</a>
- College Board. (2014a). 2014-16 advising and admission handbook for the SAT and the SAT subject tests. Retrieved September 2, 2015, from <a href="http://media.collegeboard.com/digitalServices/pdf/sat/sat-advising-and-admission-handbook.pdf">http://media.collegeboard.com/digitalServices/pdf/sat/sat-advising-and-admission-handbook.pdf</a>
- College Board. (2014b). 2014-16 getting ready for the SAT. Retrieved August 24, 2015, from <a href="https://sat.collegeboard.org/SAT/public/pdf/getting-ready-for-the-sat.pdf">https://sat.collegeboard.org/SAT/public/pdf/getting-ready-for-the-sat.pdf</a>
- College Board. (2015a). Advising and admission handbook for the redesigned SAT and the SAT subject tests. Revised for March—June 2016. Retrieved September 9, 2016, from <a href="http://media.collegeboard.com/digitalServices/pdf/professionals/sat-advising-and-admission-handbook-2015-16.pdf">http://media.collegeboard.com/digitalServices/pdf/professionals/sat-advising-and-admission-handbook-2015-16.pdf</a>
- College Board. (2015b). *Test specifications for the redesigned SAT*. Retrieved September 13, 2017, from https://collegereadiness.collegeboard.org/pdf/test-specifications-redesigned-sat-1.pdf
- College Board. (2015c). 2015-16 quick reference guide. Retrieved September 13, 2017, from <a href="https://secure-media.collegeboard.org/digitalServices/pdf/sat/sat-and-sat-subject-tests-quick-reference-guide.pdf">https://secure-media.collegeboard.org/digitalServices/pdf/sat/sat-and-sat-subject-tests-quick-reference-guide.pdf</a>

- College Board. (2016a). *Concordance*. Retrieved December 1, 2016, from <a href="https://collegereadiness.collegeboard.org/educators/higher-ed/scoring-changes/concordance">https://collegereadiness.collegeboard.org/educators/higher-ed/scoring-changes/concordance</a>
- College Board. (2016b). *SAT school day*. Retrieved May 18, 2016, from <a href="https://collegereadiness.collegeboard.org/sat/k12-educators/coordinating/sat-school-day">https://collegereadiness.collegeboard.org/sat/k12-educators/coordinating/sat-school-day</a>
- College Board. (2016c). 2016 college-bound seniors: Total group profile report. Retrieved February 22, 2017, from <a href="https://secure-media.collegeboard.org/digitalServices/pdf/sat/total-group-2016.pdf">https://secure-media.collegeboard.org/digitalServices/pdf/sat/total-group-2016.pdf</a>
- Texas Administrative Code, Title 19, Education. (2018). Retrieved May 30, 2018, from http://texreg.sos.state.tx.us/public/tacctx\$.startup
- Texas Education Agency. (2006). Secondary school completion and dropouts in Texas public schools, 2004-05 (Document No. GE06 601 06). Austin, TX: Author.
- Texas Education Agency. (2017). 2017 accountability manual. Retrieved September 12, 2017, from <a href="http://tea.texas.gov/2017accountabilitymanual.aspx">http://tea.texas.gov/2017accountabilitymanual.aspx</a>
- Texas Education Agency. (2018a). College admissions testing glossary of terms, class of 2016. Available at <a href="http://tea.texas.gov/acctres/sat">http://tea.texas.gov/acctres/sat</a> act index.html
- Texas Education Agency. (2018b). College admissions testing results for graduating seniors in Texas and the United States, class of 2016 (Document No. GE19 601 04). Available at <a href="http://tea.texas.gov/acctres/sat\_act\_index.html">http://tea.texas.gov/acctres/sat\_act\_index.html</a>
- Texas Education Agency. (2018c). College admissions testing results for graduating seniors in Texas public schools, class of 2016 (Document No. GE19 601 05). Available at <a href="http://tea.texas.gov/acctres/sat">http://tea.texas.gov/acctres/sat</a> act index.html
- Texas Education Code. (1988). Texas school law bulletin. St. Paul, MN: West Publishing.
- Texas Education Code. (2004). Texas school law bulletin. St. Paul, MN: West.
- Texas Education Code. (2016). Texas school law bulletin. Charlottesville, VA: Matthew Bender.

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**Abstract.** This report presents general information about the SAT and ACT, including descriptions of the examinations, uses of individual scores in Texas, data sources, and interpretation of results, as a supplement to the following reports: *College Admissions Testing Results for Graduating Seniors in Texas Public Schools, Class of 2016* (Texas Education Agency [TEA], 2018c) and *College Admissions Testing Results for Graduating Seniors in Texas and the United States, Class of 2016* (TEA, 2018b).

The report is available in PDF format on the agency website at <a href="http://tea.texas.gov/acctres/sat\_act\_index.html">http://tea.texas.gov/acctres/sat\_act\_index.html</a>. Additional information about this report may be obtained by contacting the Texas Education Agency Division of Research and Analysis by phone at (512) 475-3523 or by e-mail at Research@tea.texas.gov.

For additional information about the SAT, contact the College Board Southwestern Regional Office at (866) 392-3017 or <a href="https://www.collegeboard.org/">https://www.collegeboard.org/</a>. For additional information about the ACT, contact ACT, Inc., Southwest Region, at (512) 345-1949 or <a href="http://www.act.org/">http://www.act.org/</a>.



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