

SAT or ACT: Which Test is Better for Me? A Guide for College Entrance Examination Decision-Making

by

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Each year, about three fourths of Montgomery County Public Schools (MCPS) graduates take a college entrance examination as part of their postsecondary preparation. Historically, most MCPS graduates have taken the SAT. However, since 2005, there have been significant increases in the numbers and percentages of MCPS graduates who took the ACT in addition to, or in lieu of, the SAT (Table 1).

Table 1
Number and Percentage of Graduates in the
MCPS Classes of 2005 to 2008 Who Took the SAT and/or ACT

College Entrance Exam Taken	N Took				% Took			
	2005	2006	2007	2008	2005	2006	2007	2008
SAT or ACT	7,431	7,392	7,798	7,630	77.3	77.9	80.4	77.2
SAT and ACT	1,059	1,253	1,599	1,986	11.0	13.2	16.5	20.1
SAT Only	6,296	5,938	6,061	5,288	65.5	62.6	62.5	53.5
ACT Only	76	201	138	356	0.8	2.1	1.4	3.6

Note. The sums of percentages of test taken by groups may differ by ± 0.1 point from the total percentage of test takers for the SAT or ACT because of rounding.

In 2008, 20.1% of MCPS graduates took both the SAT and ACT, a percentage nearly double that of graduates in the Class of 2005. Likewise, 3.6% of graduates in the MCPS Class of 2008 took the ACT only, a percentage more than four times that of the Class of 2005. Preliminary analysis of test taking patterns for the MCPS Class of 2009 indicates a continuing upward trend in ACT participation.

The purpose of this document is to provide information that can be used by students, parents, and school staff to guide decisions about which college entrance examination individual students should take. The following sections describe uses of college entrance examinations and provide a comparison of SAT and ACT test difficulty, format, content, and scoring procedures. The SAT/ACT Checklist (Table A1)



can be used to summarize choices about which test is a better match for a student's plans, academic strengths, and testing preferences.

Uses of College Entrance Examinations

The SAT and ACT are college entrance examinations that allow college admissions officers to compare the academic preparation of applicants from a wide range of educational backgrounds. The SAT and ACT provide information about individuals' test performance relative to that of other applicants, and reliable estimates of how individuals will perform in their first year of college (Allen & Sconing, 2005; College Board, 2002; Kobrin, Patterson, Shaw, Mattern, & Barbuti, 2008; Ziomek & Harmston, 2004).

The decision to take the SAT or ACT may be determined by the admission criteria of the college to which an individual is applying. Traditionally, the SAT has been the college admissions test of choice for private colleges and for colleges that are geographically situated in the northeast or on the east and west coasts. The ACT traditionally was required by public colleges and colleges geographically situated in the Midwest and south. Increasingly, however, the majority of the nation's colleges accept both tests. MCPS graduates are taking advantage of the new college entrance examination options.

Another change that has occurred in recent years is that more colleges have begun to accept the ACT with the optional writing test in lieu of the SAT and two SAT II subject tests (e.g., Boston College, 2009; Duke University, 2009). Many selective colleges that require the SAT also require applicants to take at least two SAT II subject tests. Students who take the ACT with the writing test rather than the SAT and SAT II subject tests may spend fewer hours preparing for and taking college entrance examinations and save money on test fees.

Test Comparison

Detailed descriptions of the SAT and ACT are available online at the College Board (www.collegeboard.com) and ACT, Inc. (www.act.org) websites. The following comparisons of SAT and ACT similarities and differences are based on information obtained from the websites.

Test Difficulty

There is no evidence that the SAT is harder (or easier) than the ACT (ACT, Inc., 2009a; Dorans, 1999). On average, students who perform well on one test also perform well on the other (Dorans, Lyu, Pommerich, & Houston, 1997; Schneider & Dorans, 1999). However,



test takers have different strengths and weaknesses. There are differences in test format, content, and scoring that might make either the SAT or the ACT a better match for a given individual (Dolecki, 2009).

Test Format

The SAT consists of three subtests—critical reading, mathematics, and writing—that are administered in sections that take 10, 20, or 25 minutes to complete. Total testing time for the SAT is 3 hours and 45 minutes, not counting breaks. The SAT critical reading, mathematics, and writing subtests each include multiple choice items. The SAT mathematics subtest also includes student-produced “grid-in” items. The writing subtest includes an essay that asks test takers to use reasoning and evidence to express their point of view about an assigned topic.

The ACT consists of four required subtests—English, reading, mathematics, and science—and an optional writing subtest. Total testing time for the ACT is 2 hours and 55 minutes, not counting the 30 minute optional writing test and breaks. Each required subtest is administered as one section that takes 35, 45, or 60 minutes to complete. All of the required ACT subtests use a multiple choice format. The ACT writing subtest asks test takers to compose an essay in response to a writing prompt that presents two positions on an issue.

Even when the SAT and ACT test the same concepts, the format of the test items may be different. The wording of SAT items tends to be complex and challenging and multiple choice items have five options. The wording of ACT items tends to be more straightforward and multiple choice items have four options (fewer distracters).

Test Content

Compared with the ACT, the SAT places greater emphasis on critical thinking and problem-solving abilities that test takers have learned in and outside of the classroom. The SAT subtests measure knowledge and skills in the following areas:

- Critical reading—critical reading of passages that vary in length from about 100 to 850 words; reading comprehension; sentence completion.
- Mathematics—understanding of numbers and operations; algebra and functions; geometry and measurement; data analysis; statistics; probability concepts.

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- Writing—grammar usage and word choice; ability to write an essay that uses reasoning and evidence to support a point of view on an assigned essay topic.

Compared with the SAT, the ACT places more emphasis on the knowledge and skills students have acquired in high school courses. The emphasis includes the following:

- English—writing skills; language mechanics (grammar and usage, punctuation, sentence structure); rhetorical skills (writing strategy, organization, and style).
- Reading—comprehension of prose passages drawn from the humanities, literature, social studies, and natural science.
- Mathematics—pre-algebra; elementary and intermediate algebra; coordinate and plane geometry; trigonometry.
- Science—skills required in the natural sciences (interpretation, analysis, evaluation, reasoning, and problem solving).
- Writing (optional essay)—writing skills emphasized in high school English and entry-level college composition courses.

Test Scoring

The SAT awards one point for each correct answer and deducts one quarter (1/4) of a point for each incorrect multiple choice answer. The SAT does not award or deduct points for incorrect student-produced responses or blank answers. Each SAT subtest raw score is converted to a scale score and reported in increments of ten on a scale that ranges from 200 to 800 points. The maximum possible total score is 2400.

Some perceptions about the relative difficulty of earning high scores on the SAT versus the ACT stem from the slight “guessing penalty” deduction. In fact, the penalty for incorrect multiple choice answers does not reduce the probability of getting a higher score. The SAT multiple choice items have five options; if test takers guessed randomly, they would get one correct answer for every four incorrect answers. The guessing penalty is a statistical correction in which the one point awarded for each correct guess is offset by one quarter point deductions for four incorrect guesses.

The overall SAT combined score is the sum of the three subtest scores. The average combined score is 1500 (College Board, 2009). Students who earn combined scores of 1650 (~70th percentile) or higher are unlikely to be required to take remedial courses upon entry to college. Students who earn combined scores of 2200 (~99th percentile) or



higher are most likely to be accepted by highly selective colleges and to qualify for full scholarships.

The ACT awards one point for each correct answer and awards no points for incorrect or blank answers. The ACT does not make a correction for guessing. The ACT subtest raw score is converted to a scale score and reported in increments of one on a scale that ranges from 1 to 36 points. The maximum possible composite score is 36.

The overall ACT composite score is the average of the four subtest scores rounded to the nearest whole number. The average composite score is 20 (ACT, Inc., 2009b). Students who earn composite scores of 24 (~70th percentile) or higher are unlikely to be required to take remedial courses upon entry to college. Students who earn composite scores of 34 (~99th percentile) or higher are most likely to be accepted by highly selective colleges and to qualify for full scholarships.

The College Board and ACT, Inc. jointly developed concordance tables that can be used to estimate the correspondence of scores on the ACT and SAT (Table A2). Concordance tables are useful for identifying the proportions of all test takers who attained a given percentile rank on the SAT and ACT (e.g., 50th percentile rank) but are less reliable for estimating score correspondence for individuals. Due to test differences and test taker preferences and strengths, some individuals attain higher percentile ranks on the SAT and others attain higher percentile ranks on the ACT.

Deciding Which Test To Take

Students, parents, and school staff can use information in this accountability update to guide discussions about which test is a better match for an individual test taker's academic strengths, testing style, and college plans. Final decisions about which test to take should recognize that there is no "right answer" about whether the SAT or ACT is a better fit for a given individual. Among test takers who take the SAT or ACT more than one time, scores on the same examination typically vary from one administration to another. Increasingly, MCPS high school students are taking both tests and then deciding which better represents what they know and are able to do.

Additional information about the SAT and ACT is available online at:

- www.collegeboard.com (SAT)
- www.act.org (ACT)



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Table A1
SAT/ACT Checklist: Which Test is Better For Me?

	SAT Characteristics	Better For Me (Mark One)		ACT Characteristics
		SAT	ACT	
Which test format matches my preferred style?	170 items plus required essay			215 items plus optional essay
	Total test time: 3 hours 45 minutes (includes essay)			Total test time: 2 hours 55 minutes (optional 30-minute essay)
	Multiple choice, student-produced mathematics responses, required essay			Multiple choice; optional essay
	Item wording is complex and challenging; may seem “trickier” to understand			Item wording is more straightforward; may be easier to understand
	Subtest items organized by difficulty			Subtest items not organized by difficulty
Which test content areas matches my strengths?	Three required sections: critical reading, mathematics, and writing			Four required sections: English, mathematics, reading, and science
	Emphasizes critical thinking and problem-solving abilities			Emphasizes content covered in a typical high school curriculum
	Tends to focus on a few specific areas			Tends to focus on a wide range of topics
	Emphasizes reading material beyond what is related to high school assignments			Emphasizes reading material typical of that assigned by a high school teacher
	Emphasizes reading comprehension, vocabulary, ability to understand how the different parts of a sentence fit logically together, and critical reading			Emphasizes language mechanics (grammar, punctuation, sentence structure) and rhetorical skills (writing strategy, organization, and style)
	Emphasizes numbers and operations, algebra and functions, geometry, measurement, data analysis, statistics, and probability; no trigonometry			Emphasizes pre-algebra, elementary algebra, intermediate algebra, coordinate geometry, and plane geometry; some trigonometry (4 items)
	No science test			Emphasizes science process skills (reasoning, interpretation, analysis, evaluation, problem solving)
	Required essay			Optional essay
Which test taking strategies match my preferred style?	Reads slowly; prefers more time to read passages and answer items			Reads quickly; can manage fast pace needed to complete section
	Strategic guessing that narrows choices; no random guessing			Randomly guesses answers for unfinished items as time runs out
	Prefer subtest administered in multiple, shorter testing blocks (20 to 25 minutes)			Prefer subtest administered in one, longer testing block (35 to 60 minutes)
	Prefer to move back and forth between different content areas (3 subtests are tested alternately in 9 or 10 sections)			Prefer to complete all items in one content area before moving on to the next (4 subtests are not broken into sections)
What scoring options match my strengths?	Small penalty for incorrect multiple choice answers			No penalty for incorrect answers; not penalized for random guessing
	Emphasis on each subtest; less emphasis on the combined total for all tests			Emphasis on average composite score; less emphasis on each subtest
	May choose to cancel scores (remove from SAT record)			No score canceling option
TOTAL	SAT (Sum SAT choices)			ACT (Sum ACT choices)

Source: Clare Von Secker, Ph.D.

Note. Some characteristics of the SAT and ACT are the same. Nearly all colleges and universities accept both the SAT and ACT. Students may use calculators on the mathematics subtests of the SAT and ACT. Test takers may choose whether or not to send SAT and ACT scores from a given test administration to colleges or universities.

Table A2
 Estimated Concordance of ACT Composite Score and
 SAT Combined Critical Reading, Mathematics, and Writing Score

Actual ACT Composite Score	Estimated SAT Combined Score	Actual SAT Combined Score Range	Estimated ACT Composite Score
36	2390	2380–2400	36
35	2330	2290–2370	35
34	2250	2220–2280	34
33	2180	2140–2210	33
32	2120	2080–2130	32
31	2060	2020–2070	31
30	2000	1980–2010	30
29	1940	1920–1970	29
28	1880	1860–1910	28
27	1820	1800–1850	27
26	1770	1740–1790	26
25	1710	1680–1730	25
24	1650	1620–1670	24
23	1590	1560–1610	23
22	1530	1510–1550	22
21	1470	1450–1500	21
20	1410	1390–1440	20
19	1350	1330–1380	19
18	1290	1270–1320	18
17	1230	1210–1260	17
16	1170	1140–1200	16
15	1100	1060–1130	15
14	1020	990–1050	14
13	950	910–980	13
12	870	820–900	12
11	780	750–810	11
1 to 10	n/a	600 to 740	n/a

Source: ACT, Inc. (www.act.org)

Note. Because the scale for the SAT score has more score points than the scale for the ACT, a range of SAT combined scores concurs to a single ACT composite score. Concordance estimates are not available (n/a) for ACT composite scores in the range of 1 to 10 and SAT combined scores in the range of 600 to 740.