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THE REVISED SAT's AND THE ACT's--ARE THEY REALLY DIFFERENT?

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They have been battered by protests of unfair testing and cultural bias; their image bruised by litigation aimed against them, charged by minorities as discriminatory and skewed toward the middle class--all despite their efforts to reflect today's education. These are the college admission tests, the Scholastic Aptitude Test (SAT) and the American College Test (ACT), often called a barometer of the American school system, our educational "Dow-Jones Index". In the past school year 1991-1992, 1.8 million SAT's, 1.6 million PSAT's were administered; while 1.4 million ACT's, 400,000 P-ACT+s were administered. Although both these tests have undergone several re-evaluations over the years, the recent revisions are markedly significant and change part of the format and content of each test. Have they created such significant differences between the two tests that a student could conceivably score significantly higher in one than the other?

SAT-I and the Enhanced ACT Assessment

The SAT was revised to meet the needs of an increasingly diverse student population. It will now be called the SAT-I but will have the same two sections, verbal and math. The changes will take effect in the spring of 1994. The achievement tests or subject area tests have undergone several changes and will now be called SAT-II. Similarly, the ACT, upon extensive research, and for the first time in twenty-five years, underwent significant revisions in 1989 and was re-named the Enhanced ACT Assessment.

The SAT is a sixty-five year old test. The College Board, sponsor for Educational Testing Service, (ETS), which administers

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the SAT, has always defined the SAT as an aptitude test. The revised SAT-I is supposedly distances itself even more from testing school-based learning or curricula by measuring the student's ability to learn. In reading, it will introduce the content material in advance so that it is not what information you have on content in advance but what you do with it that is important. Other major SAT changes will be that students will be allowed to use calculators in the mathematics section and that some of the questions will require the students to produce their own responses or write-their answers. The Test of Standard Written English (TSWE) which accompanies the SAT every year as a separate score will now be given as a SAT-II Writing Test.

The Enhanced ACT Assessment is still a curriculum-based test. It now measures academic development in the areas of English, mathematics, reading, and science reasoning. The idea underlying the use of the four tests is that the best way to measure student preparedness for college is "to measure as directly as possible the knowledge and skills students will need in this setting."¹ The American College Testing points out that the Enhanced ACT tests contain "relatively few measures of narrow skills or basic recall."²

Both tests have always claimed to be an accurate assessment of student capacity for college level work. The majority of colleges and universities accept either SAT or ACT scores as a part of their admissions screen and convert the scores interchangeable according to their concordance or equivalency tables. However, not all testing statisticians recognize these comparison measures and

contend that the two tests do measure different things.

SAT-I Verbal

The SAT-I, is referred to as a test of reasoning. Its verbal section will consist of revised and expanded versions of the current SAT verbal but with increased emphasis on critical reading and reasoning. The reading passages, now somewhat longer, analogies and sentence-based questions will be continued; but antonyms will be dropped. Solving the analogies, an associative process, involves divergent thinking as well as convergent thinking in perceiving resemblances and is probably the most recondite measure of the verbal section. In addition, much reading is thinking analogously.

Vocabulary will be tested through use in context questions, based either in the reading comprehension passages or in the sentences completion questions. Desired meanings may be far well less known.

The SAT reading passages can be very intense and abstract with their approximations or estimates. One has to select the more precise answer from the obliquely correct answer such as the most likely or the least likely questions as well as the analysis and interpretation questions. ETS says that the reading material in SAT-I is relevant to today's world and the content relevant.

"The critical reading questions will better assess the ability of students to evaluate and make judgments about points of view expressed in written passages." ^{3.} Reading comprehension will now include a double passage with two different points of view on the

same subject. Also new will be the introductory and contextual information given for the reading passage. For example, in their new introductory booklet explaining the features of the SAT, a reading passage from Pericles' funeral oration is compared to a passage from Lincoln's Gettysburg Address. Historical background is given on both speeches. So it is not what content data you have in advance but how you reason with what is given to you that counts.

The reading material which has been obscure and abstruse is now supposed to be relevant to today's world. Higher order analytical and evaluation skills will be stressed. Half of the questions and three quarters of the time spent on the verbal section will be on these reading passages and questions.

SAT-I Math

The Math Section will continue to pose simple mathematical equations but difficult problems to solve. One major change will be test questions requiring students to write their own response, not just to select an answer from a set of multiple-choice alternatives or grid-in questions. Some of these questions have more than one possible correct answer. These student-produced answers will make up about 20% of the mathematical section of SAT-I, with the remainder being multiple-choice, problem-solving, and quantitative comparison questions. Students will be permitted but not required to use calculators. However, the College Board points out that it is not necessary to use a calculator to solve any problem on this test.

This mathematics revision includes more data interpretation with applied mathematics questions to be geared to problem solving in practical real-life situations, not computation alone. However, it might be noted that the SAT has always given a simple mathematical equation but posed a difficult problem to solve. It is possible to do well on the mathematical section of the SAT without having had courses beyond first-year algebra. The College Board Technical Handbook states that the math covers material covered in a student's first nine grades. Divergent thinkers should do well in the mathematics. They approach a question in a way different from the way a teacher may have presented a similar problem in class and then devise a solution to the problem.

Overall, there are slightly fewer questions on the new SAT-I with slightly more time for the test-taking itself. It was felt that by giving more time for certain tests, students could demonstrate their skills more fully in these areas while reducing possible test anxiety related to test "speededness."⁴

The Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) will also reflect the new SAT and will first be administered in October 1993.

The Enhanced ACT Assessment

The American College Testing Program revision of its ACT Assessment in 1989 changed the nature of its questions in general as well as two of its four subject tests. It describes its four tests, English, Mathematics, Reading, and Science Reasoning, as curriculum-based and measuring academic achievement. The American

College Testing Service maintains that the Enhanced ACT is not an aptitude test but rather describes their test as an analytical, problem-solving test. It has relatively few measures of basic skills.

The test content and skills measured are based on three sources of information: the current educational objectives, the state approved textbooks, (grades seven through twelve), and information gleaned from consultation with educators of secondary education.

ACT English

The Enhanced ACT English test measures the writing skills of punctuation, grammar, sentence structure, strategy, organization, and style; but now focuses more on writing style and organization and less on the mechanics of punctuation and grammar. Over half of the test is on usage and mechanics. The balance of the English section tests appropriateness of expression, organization and style of writing or rhetorical skills. The English Test is the most factual of the four tests.

ACT Reading

The ACT Reading Test measures reading comprehension as a product of skill in referring and reasoning both explicit and implicit meanings meanings. The reading passages, representative of text encountered in college freshman curricula, are drawn equally from subject matter in the social and natural sciences, prose fiction, and the humanities--all from published sources. Most are quite difficult reasoning questions and do not test rote recall of facts from outside the passage.

ACT Math

The ACT Math section tests skills learned in school from easier, basic math questions to those on the level of trigonometry. It emphasizes quantitative reasoning, application, and analysis from testing of basic skills through a complex analysis. The American College Testing explains that the math test involves "items that can be solved by performing a familiar sequence of operations in a familiar setting."⁵ The student proceeds from testing of basic skills through a complex analysis.

ACT Science

The ACT Science Reasoning Test measures the scientific reasoning required in the natural sciences. It requires a background knowledge at the level of a high school general science course. Minimal arithmetic computations may be needed to answer some of the questions.

The American College Testing Program continues to offer its Preliminary ACT Test (P-ACT+) which, like the PSAT, is available to high school sophomores.

Comparisons and Differences

Test taking times for both tests are about the same--three hours. The scoring remains the same. SAT-I will continue to include an unknown practice section that doesn't count in the final score. The SAT-I will continue to penalize for incorrect answers using its mathematical correction. On questions with five answer choices, one fourth of a point is subtracted for each wrong answer; for questions with four possible answer choices, one third of a

point is deducted. There is no penalty for wrong answers on the ACT.

The scales remain the same on both tests. The SAT scale is 200-800 for each test, with a combined score of 1600. And in the Enhanced ACT Assessment, there are four separated scores, scaled from 1 to 36 for each test. There is also a breakdown of sub-scores.

One would think that the obvious differences between the two tests in the emphasis of math would be made apparent to prospective student test-takers. Fifty percent of the SAT-I is quantitative, whereas only twenty-five percent of the ACT is quantitative. Common sense would dictate that a student who is poor in math would probably do better on the ACT, and the composite score would not reflect the student's poor showing in math.

The ACT tests academic development and how much a student has already learned so that the student with a solid academic background taking the ACT is more likely to be familiar with the content of the test. This prior knowledge of content should facilitate the reading process. The more you bring to reading, the better you read. Also, the ACT being a curriculum-based test should be more amenable to improvement by studying so that increased course work in high school, especially in math, should increase test scores. The students can target their test preparation by following ACT advice: "Spend your time refreshing your knowledge in the content areas that make up large portions of the test."⁶

Students from less-advantaged high schools, as well as those students who have not really applied themselves in school, should do better on the SAT, a test less closely tied to specific curricula and one that is more concerned with the application of general, intellectual skills.

Choosing a college admission tests may make a significant difference to a student. Given a choice, a student who is a divergent thinker, an underachiever, a member of a minority group, from a mediocre high school, or strong in math could do better on the SAT. On the other hand, a student who has a good educational background, good grades in high school, or a weakness in math might choose the ACT. Or, that student may opt to take both tests.

References

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