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A Rite of Passage in Peril:

A Look at the Benefits and Detriments of the SAT

& the Alternatives in College Admissions

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Abstract

Looks at the issues surrounding the SAT test, from its history to the present and future. Examines the benefits and detriments of using the SAT in college admissions. Considers the incidence of racial differences in scores and examines possible causes behind those disparities. Discusses the results of Bates College's decision to make SATs and other standardized tests optional. Considers the effects of California's anti-Affirmative Action Proposition 209 and its effect on minority college enrollment as well as the impact of changes made in response to it. Finally, considers the potential impacts of the SAT's planned 2005 overhaul and the possibility of California's public university system abandoning the SAT.

Introduction

It is the junior year of high school and the thoughts of the typical American teenager are fairly easy to gauge. The junior prom and who to take to it and what to wear, perhaps a new car and the responsibilities associated with that, or maybe a new job and the first strains of adulthood. And for many students, the junior year is the time to start thinking seriously about college. And with that comes the SAT.

The SAT is a rite of passage for about 1.3 million students each year (Gose, et al, 2001), three hours spent on a Saturday morning filling in little bubbles on a Scantron sheet in an attempt to prove one's worth to colleges. This three hours is considered one of the most important times in some students' lives, a make-or-break time that can decide between the prestigious college, the not-so-prestigious school, junior college, or stepping straight into the workforce. The two sets of numbers that the SAT gives are considered so important that millions of dollars annually are spent on courses and books designed to make those numbers climb higher, the Saturday morning ritual is frequently repeated several times, and many years after the fact, when the college career is finished, the workforce career is well-established, and it is time to put one's children through this same rite of passage, many people still can remember what two numbers were assigned to them.

Yet what is it that the SAT measures? The answer is not so clear, and therein lies one of the main problems with the SAT. If we cannot be sure what it is that the SAT

measures, how can we then use it to determine something as important as one's entire future?

The SAT was initially known as the Scholastic Aptitude Test, with the idea that it tested innate aptitude, natural intelligence, the ability to assimilate knowledge (Gose, et al, 2001). The idea was not to test the actual knowledge itself, hence the reason there is little specific subject matter. The idea was to test potential for college success. The test was not supposed to be coachable, and the information in the test was to be such that studying for it should not be necessary or helpful.

But then reality struck. The test is coachable, studying for it is helpful and necessary, and in fact, students and their parents were willing to spend a great deal of time, energy, and money to make sure that the scores gained on the SAT were the highest possible. This left the College Board, the developers of the test, in quite a conundrum. On one hand, the test is not supposed to be influenced by the degree of preparation. On the other hand, a great deal of money is to be made through helping students prepare for the test. When faced with such a contradiction, the College Board took the side of money, and began selling test preparation materials for a test that should not be prepared for.

If scores could be influenced by the degree of preparation, and it was becoming clear that they could, then what was being measured was not necessarily innate aptitude, and so the College Board decided to change the name of the test to the Scholastic Assessment Test.

While the name was perhaps more honest, in that it no longer purported to measure that which it clearly did not measure, it never cleared up what it did assess. Faced with critics who continued to ask that question, finally the College Board decided

on a rather strange solution. The College Board today denies that the SAT stands for anything. The test is called the SAT, plain and simple, and any abbreviations that may indicate are archaic (FairTest, 2001a).

The question of what is measured by the SAT is an important one in that if it measures innate ability, then it would stand to reason that whites are naturally more able than blacks, males than females, and Asians more than anyone. This is what the test results seem to indicate.

At one time in our history, such an explanation would possibly have been plausible. But eugenics is not accepted today, nor should it be. In fact, there are several factors which may influence scores leading to those results, factors that have nothing to do with innate ability. These factors often deal with truths we do not want to address, truths that lead us to question major issues in our educational system, and truths that make us question the use of the SAT at all.

Format

The SAT (or more specifically, SAT I, differentiating it from the subject-specific SAT II s, formerly known as Achievement Tests) is an approximately three hour test consisting of seven sections, 138 questions total. Three of the sections test various aspects of verbal ability —primarily vocabulary and reasoning, leading to the verbal score, ranging from 200 to 800. Three sections test math up to geometry and algebra, resulting in a math score ranging from 200 to 800. Finally, an extra math or extra verbal

section, ungraded, is included which is used for researching new questions. The test taker does not know which section is the ungraded one.

The ungraded section consists of questions that have not appeared on previous forms of the SAT, but have been developed by psychometricians at the Educational Testing Service (ETS) and have passed their internal standards for eliminating bias. The ungraded section will be evaluated, with each question given a right/wrong percentage, which is compared not only with other questions but also on a race and gender basis so that if members of a specific race or gender did unusually well or poorly, the question would be discarded. Questions that pass muster, including further internal checks and revisions, are then set aside for use in future SAT exams (Gose, et al, 2001).

SAT scores are generally mentioned either as the verbal and math scores listed separately, verbal listed first (example, 450V/520M), or as the combined sum of the two scores (970 in the above example).

History

The SAT was first given in 1926, borne out of an early military intelligence test. It was originally an all-essay test, but with psychological testing becoming more popular, it was changed to a multiple-choice format in 1941. It began to be used widely in the 1940 s,' after Harvard president James B. Conant declared that the subject-based achievements tests used at that time favored the rich and privileged students from boarding schools. The SAT was seen as more egalitarian with its multiple-choice format and easily interpreted scores. (Gose, et al, 2001; English Plus, 1999; FairTest, 2001a).

The test has undergone a variety of changes since then. One example is the temporary inclusion of a Test of Standard Written English (TSWE) that was scored on a separate 60-point scale and was designed to aid colleges in placing freshmen in English composition courses (it was eliminated in 1994 after colleges revealed that they paid little attention to the score. English Plus, 1999).

In 1994, testing of vocabulary through the use of antonyms was eliminated, as it encouraged the study of vocabulary without regard for context and paid no attention to practical usage of the words. Also, calculators were allowed to be used for the first time, reflecting their increased acceptance in college math courses (Gose, et al, 2001).

Another change was the recentering of scores in 1995. Scoring of the SAT was based on 500 being average for each section. However, this was based on the scores of college-bound students in 1941, and as performances have changed, the average score has changed accordingly.

The average scores have dropped over that time, making it appear as though students today are less qualified than they were in 1941. Recentering was a very controversial move, as it appeared to represent an acceptance of lower standards in education (English Plus, 1999).

While there is some justification for such an argument (today's students are not accustomed to having to do math by hand and may not be as well-read in classic literature, and therefore, vocabulary), in fact the majority of the reason is due to an illusion.

In 1941, only five percent of high school graduates went on to college. Accordingly, the number taking the SAT was quite low. The students going to college,

and thus taking the SAT tended to be at or near the top of their graduating class and tended to be well off financially.

In 1995, however, about 60 percent of high school graduates went to college. Students taking the SAT range from the top to the bottom of the graduating class and cover all socioeconomic classes. In 1995, many average and below-average students took the SAT, thus driving average scores down. In 1941, this was almost never the case (English Plus, 1999).

The end result of the recentering is that once again, 500 was the established average for verbal and math scores in 1995. Scores prior to that year will thus appear to be artificially low. The new formula raises the average SAT nearly 100 points (FairTest, n.d.(a)).

Benefits of the SAT

The basic intention of the SAT is that it is supposed to predict success in college, especially during the freshman year. Higher scores would naturally indicate more ability to assimilate knowledge, and therefore to learn in a college environment.

In addition, the SAT allows for a leveling of standards for different educational backgrounds. There is a wide discrepancy among public and especially private high schools, both in quality and in grading standards, and the difficulty of coursework taken may also vary widely. A student at a lower-quality school may have a 3.8 grade point average (GPA) and be less intelligent than a student at a higher-quality school with a 3.2. Likewise, a student who takes primarily basic-level courses may carry a 3.8 GPA, while another student carries a 3.2 in honors courses. Grade inflation may be a problem at some

schools, where the 75th percentile may be a 3.8 GPA, but grade deflation may occur at others, with the 3.8 student in the 95th percentile. The SAT is able to account for all these differences (McCarty, 2001).

Another, more recent issue, is the home-schooled student, for whom it would be difficult to get accurate grading and evaluation standards. The SAT allows the home-schooled student to be compared evenly with students from public and private schools.

In essence, the SAT levels the playing field for college admissions and scholarship applications. Students from a diverse range of backgrounds may be compared evenly, with the most qualified ones scoring the best on the SAT, while lesser qualified students could reasonably be expected to do worse.

This leveling of the playing field, however, creates problems in that the SAT becomes the primary, or even sole criterion for accepting and rejecting students. This practice does not account for the margins of error for the SAT (approximately 60 points, FairTest, n.d.(a)) and disregards the College Board's own instructions against using score cutoffs for admissions or scholarships (in fact, the use of cutoffs is very widespread, especially with scholarship applications).

College admissions departments, understaffed and facing deadlines, not knowing any information about the strengths and weaknesses of a particular school (especially if the school is located out of state or in a small town) have no way of knowing how accurate a student's GPA is in comparison to students from other schools. An SAT score of 1050 is the same for a student from a poor inner-city school as it is for one from a rich suburban school as it is for a student from a rural county school. It is very easy and

efficient to place extra weight on the SAT over the GPA or class rank when pressed for time.

SAT scores also give students the means to compare colleges, and college guides regularly publish SAT averages as a means for students to do so. An institution with an average student SAT score of 1250 could be considered a better (or at least more selective) school than one with an average SAT of 1000. But is more selective really better? The SAT average reflects what caliber of student has enrolled —it says nothing about the quality of the faculty or curriculum.

Issues with the SAT

The primary issue with the SAT, the one that gets all the press, is bias. Despite the efforts of the ETS to ensure a bias-free test (and to some extent possibly because of it), there is a definite gap between the scores of various ethnicities and a smaller, but still important gap between scores for each gender.

When the ETS considers new questions for bias, it does not examine whether each ethnicity scored identically on a question. In other words, if whites answered a question correctly 75% of the time, they do not expect to see 75% correct for blacks, Asians, and Hispanics. They look to see if the questions fit the national trends, so perhaps they would expect to see 80% correct for Asians, 50% for blacks, and 60% for Hispanics. Indeed, the question that scored 75% across the board could potentially be thrown out as favoring blacks since they scored so much better than expected. In fact, all 138 questions on a

form of the SAT given in October 1998 showed a higher correct answer rate for whites than blacks (Rosner, 2003).

If there is a legitimate reason for such an expected disparity to exist, then such a move makes sense. On the other hand, it would not be difficult to manipulate the test in such a way as to keep the disparity in place. If the ETS looked to widen the disparity, then questions on which white people did far better could be favored, whereas narrowing the disparity could happen if they chose to include questions where blacks did equally well. Grading them in comparison to other test items is problematic in that they are considering whether the bias of each question is the same as opposed to whether there is no bias.

The difference between races is highly significant. White students in 2002 scored on average 527 verbal/533 math, 1060 total, while blacks scored 430 verbal/427 math, 857 total, a decrease of 19.2%. Hispanics scored 458 verbal/464 math, 912 total. Asians topped the list at 501 verbal, 569 math, 1070 total. Overall, the average was 504 verbal, 516 math, 1020 total, indicating that scores have risen slightly since scores were recentered in 1995 (Young, 2002).

Gender scores also show a discrepancy, though not as great. In 2002, women scored, on average, 502 verbal, 500 math, 1002 total, while men scored 507 verbal, 534 math, 1041 total, a difference of 3.7% (Young, 2002). In reality, men tend to do better in math and on time-pressured tests and are more willing to take educated guesses, while women tend to do better with verbal tasks and are more likely to skip questions if not given the time to think things through. The combination of these factors may actually account for the entire gender difference (Mau, 2001; FairTest, n.d.(b)).

Does the mere existence of a discrepancy indicate bias, or can the discrepancy be valid? In other words, do whites outperform blacks because of bias, or because they have better skills? There are a couple questions to look at in considering this possibility.

First of all, if the sole issue was SAT bias, then there should be in existence alternative tests that do not show the same performance gap. The SAT's primary competitor is the American College Test (ACT), scored on a 36-point scale and far more subject-oriented than the SAT. In 2002, whites scored on average 21.7, while blacks scored 16.8, 22.6% lower, an even larger disparity. In fact, no curriculum-based alternative skills test that closes the gap has been shown to be fair and valid (Hirsch, 2001).

Another check against SAT bias would be GPAs. If SAT bias was the only issue, GPAs between whites and blacks would be similar. In fact, according to the College Board, in 2001 the average GPA for white students was 3.35, while black students averaged 2.94, a drop of 12.2% (College Board, 2001).

Finally, considering the goal of the SAT is to predict college success, it would stand to reason that if bias was the only issue, then college success between whites and blacks would be identical. The University of Michigan in Ann Arbor aggressively uses Affirmative Action in its admissions. As such, the average black student admitted has an SAT score 230 points lower and a GPA nearly a half point lower than the average white student (the national average difference on the SAT is 203 points and the GPA 0.41, so we are considering slightly higher than normal gaps, but well within the SAT's margin of error). Chavez (2002) reports that the difference is significant enough that the odds of a black student being admitted with an average white student's qualifications was 174 to 1.

The end result of all this is that within six years, almost 90% of white students graduate, but only about two thirds of black students do. Results at other selective schools with Affirmative Action admissions policies are reportedly similar.

It is not difficult to see where racial disparities may come from. Funding of schools in the U.S. varies widely from school to school, and frequently occurs along racial lines. That is, schools that serve a predominately black neighborhood tend to be funded at a far lower level than schools serving a white area. In addition, suburban schools, which tend to be almost exclusively white, frequently are the highest funded, while inner-city schools, predominately black and Hispanic, are poorly funded (Kozol, 1991).

The reason for this is not necessarily institutional racism, but property values. One of the primary means for funding schools is property tax. Property values in the suburbs and in white neighborhoods tend to be much higher than in the inner-city and black neighborhoods. In addition, voters in the suburbs, who have more disposable income, are far more likely to approve school funding levies than poor inner-city voters who may be living paycheck to paycheck (though considering they frequently rent their property from suburban landowners, their income would not be affected by passage of a levy). Finally, poor people are far less likely to vote, and especially less likely to vote in minor elections (where the president or the state governor is not up for office). These minor elections frequently are when school funding levies appear on the ballot. The difference in funding may be more than double on a per-pupil basis (Kozol, 1991).

Even when looking at children who graduate from the same high school, there may be significant differences between elementary and junior high schools, as districts do not always fund their individual schools equally.

Poorly funded schools tend to have lower-qualified teachers, outdated textbooks and equipment (provided any equipment exists), and fewer elective classes to choose from (especially among upper-level courses, such as college prep or honors programs).

One area in which bias seems absolutely clear is income. The SAT is actually a better predictor of current parental income than it is of college GPA (Elert, 1992). The Vermont Institutes (n.d.) reported the following average verbal scores by income level:

INCOME	AVERAGE VERBAL
<\$20,000	464
\$20,000-\$35,000	500
\$35,000-\$50,000	506
\$50,000-\$60,000	517
\$60,000-\$70,000	523
>\$70,000	539

That is a 13.9% variance from the under \$20,000 income level to the over \$70,000 level. The College Board itself acknowledges a 30 point total score increase for each \$10,000 in parental income (Challenging, n.d.).

In addition to neighborhood property values/school funding issues, part of this score disparity may be related to coaching, which until recently the College Board denied

could be done. In the early days of the SAT, it was purported to study aptitude, which was innate or acquired over years of education. If indeed that were true, then it would reason that coaching and repeated test taking would not alter scores. Yet, even in the early days, the College Board tended to wait until variances of 150 points between tests taken by the same person occurred before examining tests for possible cheating —well over the standard margin of error of 60 points or less (FairTest, n.d.(a).; Elert, 1992).

In 1976, the Federal Trade Commission, at the request of ETS, investigated SAT coaching schools for fraudulent claims in their promises of raising scores by 100 points or more in six weeks. The ETS contended that:

Despite variable factors from one study to another, the net result across all studies is that score gains directly attributable to coaching amount, on the average, to fewer than 10 points —a difference of such small magnitude ... that it is unreasonable to expect it to affect college admissions decisions. The magnitude of the gains resulting from coaching varies slightly, but they are always small regardless of the coaching method used or the differences in the students coached. (1968 College Board document cited in Elert, 1992).

The FTC ruled that indeed, there was false, fraudulent advertising —on the part of ETS! The FTC discovered that coaching courses on the average raised scores by more than 100 points on both the verbal and math sections. The interesting thing is that some key officials of ETS were aware of coachability. An Internal study from four years before the investigation showed that the math section was clearly coachable, while the verbal

section likely was, though studies had not yet been attempted. The ETS official that published information disclosing that was fired immediately, and the next year the College Board reaffirmed its position that coaching would not lead to significant gains in scores (Elert, 1992).

Coaching is a high-dollar business, from book sales to courses that may exceed \$1,000 in cost (Lieber, 2001). The College Board more recently has decided to abandon its non-coachable stance and to compete with the coaching companies. They sell PrepPacks through their website and the book 10 Real SATs in bookstores (College Board, n.d.), and even attempt to create a monopoly by denying any other companies the opportunity to use real SAT questions designed by ETS —the copyrighted questions exist solely in the 10 Real SATs books.

In addition, the College Board (n.d.) offers the following advice to students asking the question “Should I take a coaching course? :”

That depends on your particular needs. It makes sense to approach the tests with a confident and positive attitude. To develop such an attitude, most students need only to familiarize themselves with the test ... Others, including many academically able students, may benefit from the reassurance that comes from systematic preparation ..If you do decide to take a coaching course, there is no reason to pay big bucks ...[S]elf-paced courses are readily available from the College Board and other sources.

The College Board (n.d.) in the same document maintains that coaching gains an average of 18 points on the verbal and eight points on the math, and that the 100-point gains cited by the companies are in comparison to their SAT-like practice tests taken in artificial situations where there is no motivation to do well. However, FairTest (n.d.(c)) cites the College Board's own figures in stating that SAT scores only account for 22% of the variation in freshman grades, while high school grades alone account for almost 30%.

The Move Away from the SAT

In response to the many criticisms of the SAT, including questions of bias and its poor predictive ability, about 400 different schools, some of them top ranked public and private colleges and universities, are making the SAT optional or even ignoring the scores altogether. They instead look at other factors which they feel are more predictive of success, such as GPA, class rank, extracurricular activities, writing ability, and teacher recommendations. These other factors are supposed to be used by the schools that require the SAT as well, but to which degree they actually are used is unclear.

Bates College in Lewiston, Maine is one school that has not required the SAT since 1984 (Hiss, 2001). They considered several questions before the faculty voted to eliminate the requirement. Were the tests reducing their applicant pool? Were the tests equally predictive across populations? Were certain groups of students hurt by the test? Were they taking too much importance in the application process?

The admissions department states that they use what they call a multiple-intelligences [plural intentional] approach to admissions. They compare it to theatrical

lighting, telling their applicants, Tell us and show us what you are proud of about yourself. Turn on the lights that apply to you. (Hiss, 2001).

Eleven graduating classes have been studied for the results of their philosophy (1989-2000). About a quarter to a third of each class entered Bates without submitting test scores —their graduation rates have been nearly identical to those who have submitted scores. GPAs of non-submitter are lower —by 0.04 points, hardly significant. Some years their scores have been higher and in the worst year, the difference was 0.22 points (Hiss, 2001).

Their conclusion was not that the SAT leveled the playing field and gave admissions officers a common measure with which to compare students, but actually eliminated up to a third of applicants by underrepresenting their ability and potential. And by not requiring the SAT, they have doubled their applicant pool, allowing them to become far more selective. By eliminating the testing requirement, they also have seen a greater increase in minority enrollment and among white students who come from rural or working-class backgrounds, people whose SAT scores tend to be lower. Bates College is quick to point out, however, that they have had increased applications at all levels, and that the elimination of the SAT requirement has not caused a decrease among top students or among the overall qualifications, and many non-submitters do not request financial aid, which shows that it is also not just the poor who benefit (Hiss, 2001).

In 1996, California voters passed Proposition 209, outlawing racial and gender preferences (i.e., Affirmative Action) in a wide variety of areas, including public education. Among other effects, it outlawed the practice of adding 300 points to blacks' and Mexicans' SAT scores, as was the practice at the University of California-San Diego

(UCSD). Civil rights groups immediately objected and lawsuits were filed, arguing that without race-norming, SATs and other standardized tests are biased against minorities (Heriot, 2001). Without race-norming, the University of California system (UC) would become comprised almost entirely of white and Asian students.

Richard Atkinson, the president of the University of California system, proposed the elimination of SATs in the admissions process. He states that this idea actually predates Proposition 209 by many years (Atkinson, 2002), and given that the California State University system (CSU, California's other major public university system) already has an SAT-optional policy, Atkinson can see how well it is or is not working.

The impact of Proposition 209 for the UC system was immediately apparent. In 1998, the first class affected by Proposition 209, the number of blacks, Hispanics, and native Americans offered enrollment at UC-Berkeley dropped by more than 55%. For the system as a whole, the number of black students accepted dropped by 17% and Hispanics 7%, a drop that would have been worse had UC-Riverside not expanded its total enrollment the same year (FairTest, n.d. (d)).

UC-Berkeley, the UC system's most selective college, started reviewing all 36,000 applications, whereas prior to Proposition 209, the first 50% of slots (about 4,400) were automatically assigned based solely on GPA and SAT scores. Now, while they still consider the SAT and GPA, they add such factors as strength of curriculum and patterns of grades. In so doing, they discovered that a full 25% of their admissions decisions were different than they would have been under the old policy (Gose, et al, 2001).

California schools now also guarantee spots for all students ranked in the top four percent of their class, regardless of SAT scores. This works to the advantage of students

who graduate from predominately minority schools, and is a system also in use in Florida (top 20%) and Texas (top 10%). In addition, Texas is strongly considering dropping the SAT requirement for the half of all freshmen admitted who do not rank in their top 10%.

In 1999, it was revealed that ETS was working on a *Strivers* system, where ETS would identify students who scored 200 points above the average for students from a similar background, considering 14 different factors including income and parental education. Though they were slow to admit it, it was disclosed that race was one of the major factors. The ETS was immediately derided by opponents of affirmative action, and the plan was abandoned.

Realizing the enormous financial impact of the UC system dropping the SAT (and thus thousands of students who would not need to take it), the College Board announced plans to completely overhaul the SAT in 2005. A new timed essay section, scored again from 200 to 800, will be added. Some of the verbal test items will be eliminated (such as the dreaded analogies) and the section will be renamed critical reading. Higher algebra and trigonometry will be added to the math section. With three sections to the test, a perfect score will become 2400 instead of the current 1600 (Hoover, 2002).

The ETS and College Board claim that the new system will reduce bias and coachability by eliminating the focus on vocabulary and adding new focus on creative writing. In addition, the essay writing section is more relevant to college work and will allow admissions offices to better gauge students' preparedness for college level work.

Critics, on the other hand, deride the subjectivity of the new SAT. Essay writing will be graded not by computers, but by humans who will have differing standards of grading. In addition, grammatical and spelling errors made by minorities (particularly

those for whom English is not a native language), especially in a timed pressure situation will negatively affect scores. The information also will not necessarily be used by college admissions offices anyway, as they generally require essays on their own applications and can interpret writing ability themselves. Finally, it is believed that the new section will add about \$10 to the current \$26 testing fee.

Conclusion

The SAT and standardized testing in college admissions is at a critical period right now. Several assertions made by the College Board regarding aptitude testing and coachability have been disproven, and their attempts to deal with score disparities (whether due to bias or a result of an unequal educational system) have been ineffective at best and embarrassing at worst.

The 2005 change in the SAT is the most major overhaul in its history since it went to a multiple choice format in 1941. There are currently no standards in place by which to judge this change, and its sudden implementation in 2005 has the potential to be catastrophic. There is also ample evidence that schools will not be quick to embrace the changes.

Colleges are increasingly moving away from standardized testing and toward more diverse student bodies that have skills above test taking. While small colleges like Bates may have little effect on the educational system as a whole, large scale defections like those in California and Texas have the potential to completely revolutionize the process. The likely result is a more diverse and well-rounded student body.

References

Atkinson, Richard. Achievement versus aptitude in college admissions. Issues in Science & Technology, 18, (2), 31-37.

Challenging the SAT and ACT (n.d.). Retrieved June 14, 2003 from

<http://www.nomoretests.com/satflyer.pdf>

Chavez, Linda (2002). Make college admissions colorblind. Human Events, 58, (45), 1-2.

College Board (n.d.). Everything you want to know about the SAT: Q & A. Retrieved

June 14, 2003 from

http://www.collegeboard.com/prod_downloads/sat/satguide/SATOnA.pdf

College Board: More work needed to end racial test score gaps (2001). District

Administration, 37 (11), 17.

Elert, Glenn (1992). The SAT: Aptitude or demographics? Retrieved June 14, 2003 from

<http://hypertextbook.com/eworld/sat.shtml>

English Plus (1999). The new SAT of 1999. Retrieved June 14, 2003 from

<http://englishplus.com/news/news0399.htm>

FairTest (2001a). The SAT: Questions and answers. Retrieved June 14, 2003 from

<http://www.fairtest.org/facts/satfact.htm>

FairTest (n.d.(a)). Ten myths about the SAT. Retrieved June 14, 2003 from

<http://www.fairtest.org/facts/myths.htm>

FairTest (n.d.(b)). Gender bias in college admissions tests. Retrieved June 14, 2003 from

<http://www.fairtest.org/facts/genderbias.htm>

- FairTest (n.d.(c)). SAT I: A faulty instrument for predicting college success. Retrieved June 14, 2003 from <http://www.fairtest.org/facts/satvalidity.html>
- FairTest (n.d.(d)). University testing: Texas public university system. Retrieved June 14, 2003 from <http://www.fairtest.org/univ/Texas.htm>
- Gose, Ben, Selingo, Jeffrey, & Brownstein, Andrew (2001). The SAT s 'greatest test. Chronicle of Higher Education, 48, (9), A10-A15.
- Heriot, Gail (2001). The politics of admissions in California. Academic Questions, 14, (4), 29-36.
- Hiss, William (2001). Optional SAT s 'at Bates: 17 years and not counting. Chronicle of Higher Education, 48, (9), B10-B11.
- Hirsch, E.D. Jr. (2001). The SAT: Blaming the messenger. Retrieved June 14, 2003, from http://www-hoover.stanford.edu/PubAffairs/we/current/hirsch_0501.html
- Hoover, Eric (2002). SAT is set for an overhaul, but questions linger about the test. 48, (38), A35-A36.
- Kozol, Jonathan (1991). *Savage Inequalities: Children in America s Schools*. New York: Crown Publishers.
- Mau, Wei-Ching (2001). Gender differences on the Scholastic Aptitude Test, the American College Test, and college grades. Educational Psychology, 21, (2), 133-136.
- McCarty, Barry (2001). Lafayette s 'comfort level is higher with SAT s .' Chronicle of Higher Education, 48, (9), B11-B12.
- Rosner, Jay (2003). On white preferences. Nation, 276, (14), 24.

The Vermont Institutes (n.d.). 2001 verbal scores & self-reported family income.

Retrieved June 14, 2003 from

http://www.vermontinstitutes.org/equity/data/01satverbal_inc.html

Young, Jeffrey (2002). Average SAT scores hold steady, while ACT scores slip.

Chronicle of Higher Education, 49, (2), A50.