

INFORMATION

BOARD OF EDUCATION OF HOWARD COUNTY

Board Agenda Item

TITLE: Report on the Results of the SAT Reasoning Test for the Class of 2006

DATE: September 7, 2006

OVERVIEW:

The SAT report for the graduating class of 2006 presents for the first time the scores on the new SAT Reasoning Test, which includes three sections—critical reading, mathematics, and writing. According to the College Board report, Howard County graduates in 2006 achieved outstanding performance with an average score of 539 for the critical reading test, an average score of 559 for the mathematics reasoning test, and an average score of 538 for the writing test. This is a composite score of 1636 out of a possible 2400—and establishes a new baseline measure for HCPSS. The performance of our students is markedly above the national average of 503 for critical reading, 518 for mathematics, and 497 for writing. Our students also exceeded the state average of 503 for critical reading, 509 for mathematics, and 499 for writing. The report generated for the College Board is based on self-report data from students participating in the SAT program and may include errors in reporting schools or demographics. When we receive the data file from the College Board, we are able to confirm records and correct errors. Thus when reporting SAT data, particularly trend data, we prefer to use the HCPSS analyses, which form the basis for the attached briefing.

FUTURE DIRECTION:

The performance by HCPSS graduates in the Class of 2006 continues to exceed state and national averages. Strategic initiatives implemented over the last three years coupled with the hard work of our students, parents, and staff have brought us these excellent scores. However, there is still work to be done to achieve the high standards we have set for ourselves in the *Bridge to Excellence* plan. With the advent of a new SAT Reasoning test, HCPSS staff members have made adjustments to our curriculum and instruction at both the middle and high school levels to better prepare students for the additional elements on the new SAT. Staff members will continue to examine the data, to study research, and to design improvement plans at the school and system level to continue to produce high performance for every child.

Submitted by:

Approval/Concurrence:

Sandra J. Erickson
Deputy Superintendent

Sydney L. Cousin
Superintendent

Theresa R. Alban
Director
Student Assessment and Program Evaluation

Introduction

The SAT report for the graduating class of 2006 presents for the first time the scores on the new SAT Reasoning Test, which includes three sections—critical reading, mathematics, and writing. According to the College Board report, Howard County graduates in 2006 achieved outstanding performance with an average score of 539 for the critical reading test, an average score of 559 for the mathematics reasoning test, and an average score of 538 for the writing test. This is a composite score of 1636 out of a possible 2400—and establishes a new baseline measure for HCPSS. The performance of our students is markedly above the national average of 503 for critical reading, 518 for mathematics, and 497 for writing. Our students also exceeded the state average of 503 for critical reading, 509 for mathematics, and 499 for writing.

The report generated by the College Board is based on self-report data from students participating in the SAT program and includes only the most recent score of a graduating senior. Any errors in the self-report data are difficult for the College Board to recognize or correct. However, when we receive the data file from the College Board, we are able to confirm that the students are actually enrolled in the Howard County Public School System (HCPSS), to eliminate duplicate records, and to correct errors in demographic information or school of attendance. Therefore, we are more confident in presenting data, particularly trend data, on the SAT using our own files. The remainder of this briefing will present information from the HCPSS analysis of SAT data.

Results for the Graduating Class of 2006

There were 2720 students in the graduating class of 2006 who participated in SAT testing—the largest number of participants ever. Most of these students took the new version of the SAT (2633 students) but some students only had scores from the old version of the SAT. To compute the average scores, students with verbal scores were included in the critical reading mean and students with math scores from either test were included. For the writing score, only the 2633 students taking the new test were included. Table 1 presents the mean scores, number of test takers, and participation rate for the county and each high school.

Table 1: Summary of Mean Scores and Participation Rates for the Graduating Class of 2006

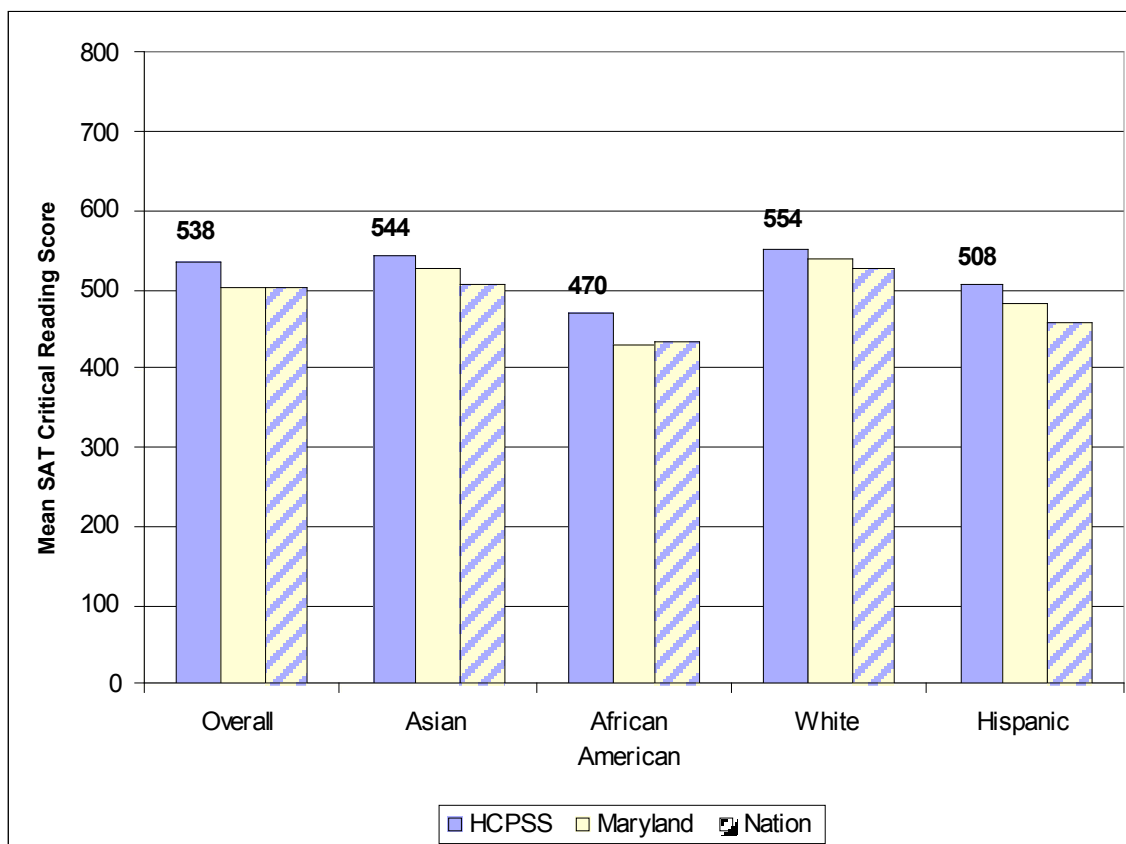
School	Verbal/Critical Reading	Mathematics	Writing	Number Tested	Participation Rate
County	538	558	535	2720	71%
Atholton	557	578	563	276	80%
Centennial	581	609	574	339	85%
Glenelg	546	562	539	224	70%
Hammond	543	540	534	198	64%
Howard	517	540	506	224	70%
Long Reach	495	533	500	226	65%
Mt. Hebron	532	569	547	288	70%
Oakland Mills	513	519	507	183	62%
Reservoir	506	532	507	186	58%
River Hill	553	580	550	333	86%
Wilde Lake	538	518	522	243	69%

The performance of our high schools continues to exceed state and national averages. The state and national average for critical reading was 503, and all but one high school surpassed that mark. In mathematics, the state average was 509 and the national average was 518. All of our high schools had a mean score above the state average, and all of our high schools were equal to or better than the national average. In writing, all of our high schools exceeded the state average of 499 and the national average of 497.

Performance by Student Groups

The performance of HCPSS for every racial/ethnic group exceeded state and national averages for the graduating class of 2006 as shown in the figures below. Of particular note is the performance of HCPSS Hispanic students, which exceeded the overall average for the state and nation on the critical reading and writing tests.

Figure 1: SAT Critical Reading Mean Score 2006 Results by Student Group



Note: Scores for American Indian/Alaskan Native are not included in any of the figures because fewer than 10 students are included in that student group.

Figure 2: SAT Mathematics Mean Score 2006 Results by Student Group

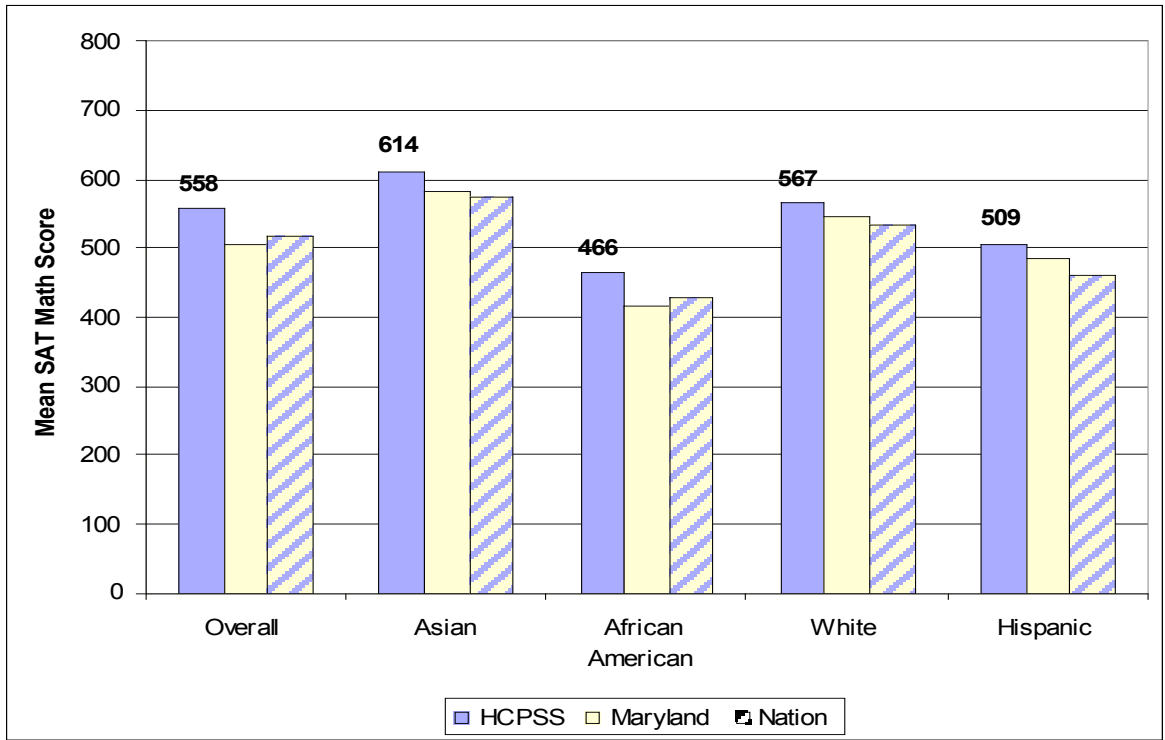
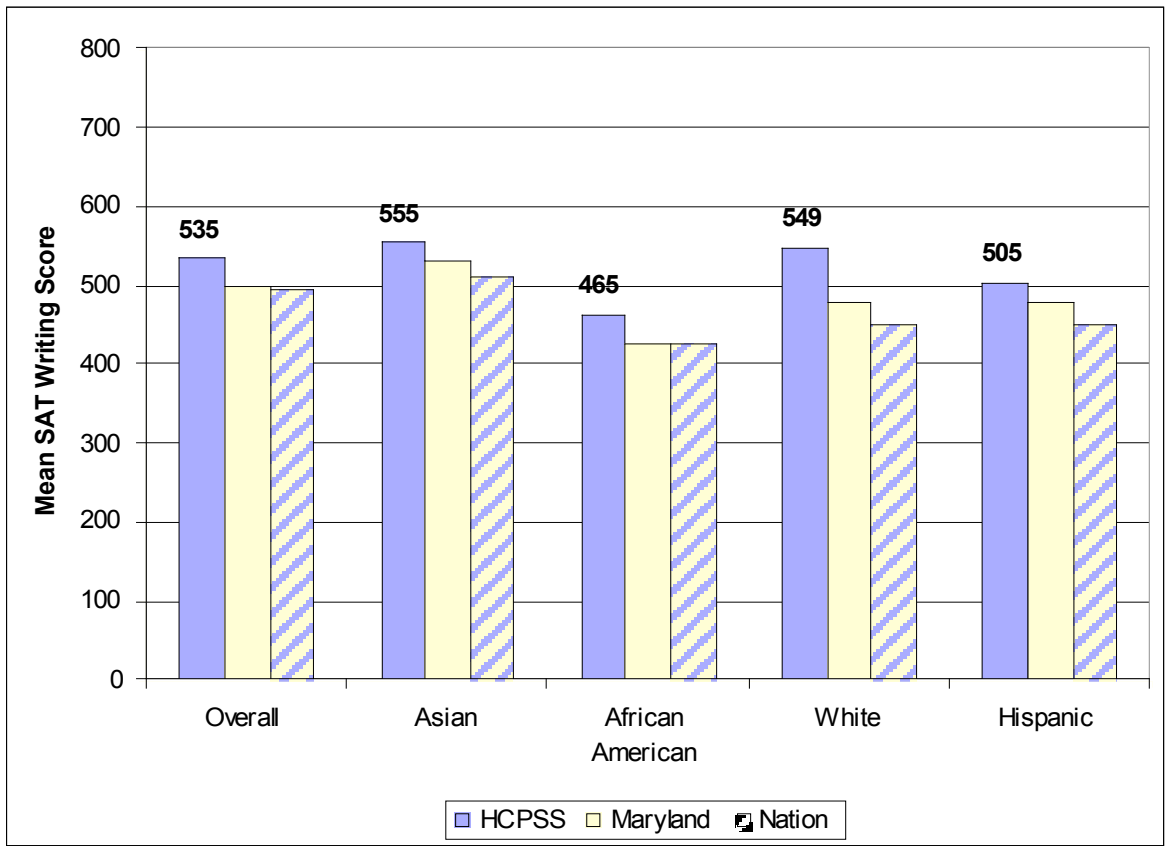


Figure 3: SAT Writing Mean Score 2006 Results by Student Group



Trend Performance

While the College Board has chosen to present trend data for a 5 year period in its report, it is important to note that the SAT Reasoning Test changed significantly for the graduating class of 2006. The verbal test became a critical reading test, which included more reading passages and vocabulary items from the passages rather than presented in the analogy format familiar to many students. The mathematics test was also changed with the addition of items related to the content of Algebra 2 courses. The writing test was a completely new test which included multiple choice items on grammar and the construction of an essay. Although the College Board asserts that the old SAT sections are comparable to the new SAT sections, it is important to consider the impact of these changes to the test when examining trend data. It is also important to note that the average SAT scores in HCPSS, Maryland, and the nation decreased from 2005 to 2006 in both the verbal/critical reading and mathematics tests.

The HCPSS students have shown steady growth in both SAT performance and participation since 2002 as presented in Table 2. The 2006 results represent the largest number of SAT participants in HCPSS history.

Table 2: Trend Performance for HCPSS

	Class of 2002	Class of 2003	Class of 2004	Class of 2005	Class of 2006	Five Year Change
Students Participating	1854	2259	2443	2562	2720	+866
Verbal/Critical Reading	532	539	540	553	538	+6
Mathematics	550	554	554	561	558	+8
Writing					535	NA

Examining trend data for all racial/ethnic student groups reveals that a slight decline occurred in 2006 for many student groups. A similar decline occurred at both the state and national levels as well. However, HCPSS Hispanic students made a gain of 17 points in the average critical reading score and 1 point in the average mathematics score from 2005 to 2006. African American students increased their average mathematics score by 1 point as well from 2005 to 2006. There has also been an increase in the number of students participating since 2003 for each racial/ethnic group. Table 3 includes the trend data for these groups on the verbal/critical reading SAT and Table 4 presents the trend data for mathematics.

Table 3: Trend Performance on the Verbal/Critical Reading SAT

	2003	2004	2005	2006
Overall	539	540	553	538
Male	539	541	557	537
Female	539	540	550	539
Asian	548	541	574	544
African American	474	463	479	470
White	551	556	566	554
Hispanic	469	520	491	508
American Indian	*	*	*	*

*Fewer than 5 students.

Table 4: Trend Performance on the Mathematics SAT

	2003	2004	2005	2006
Overall	554	555	561	558
Male	573	572	578	576
Female	538	538	546	541
Asian	625	610	625	614
African American	460	459	465	466
White	561	564	569	567
Hispanic	490	536	508	509
American Indian	*	*	*	*

*Fewer than 5 students.

Summary and Future Direction

The performance by HCPSS graduates in the Class of 2006 continues to exceed state and national averages. Strategic initiatives implemented over the last three years coupled with the hard work of our students, parents, and staff have brought us these excellent scores. However, there is still work to be done to achieve the high standards we have set for ourselves in the *Bridge to Excellence* plan.

With the advent of a new SAT Reasoning test, HCPSS staff members have made adjustments to our curriculum and instruction at both the middle and high school levels to better prepare students for the additional elements in the areas of critical reading and writing. As teachers and students become more familiar with the types of questions on the new SAT, it is expected that strategic practice with those types of items will lead to an increase in scores. This type of systemic effort is critical, as the best test preparation is a well-taught curriculum.

The administration of the PSAT to both 10th and 11th grade students continues to provide valuable information to parents, students, and schools as they prepare for the SAT. The PSAT mirrors the SAT in content and format, thus providing students with information on their strengths and areas for improvement. For many students, taking the PSAT helps them to realize their potential for success in college and may drive decisions about course selection or future goals.

Staff members will continue to examine the data from the PSAT and SAT, to study research, and to design improvement plans at the school and system level to continue to encourage every student to strive for excellence.