Report on of Student Achievement
Department of Research and Accountability

PSAT/NMSQT 2003–2004: Reported April 2004

Houston Independent School District

HOUSTON INDEPENDENT SCHOOL DISTRICT

Board of Education

PSAT/NMSQT
2003–2004

Introduction

The Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test (PSAT/NMSQT) is a national examination administered in October of each year by the College Entrance Examination Board (CEEB). It measures verbal reasoning, critical reading, mathematics problem solving, and writing skills. The examination is comprised of five sections: two verbal, two mathematics, and one writing.

The PSAT/NMSQT serves as preparation for the Scholastic Aptitude Test (SAT I) and the SAT II subject test in writing. The SAT I, a college admission examination, may be taken by juniors typically in the spring or by seniors in the early fall, October or November. One of the benefits that students receive is a report assessing their performance on the PSAT/NMSQT with suggestions to improve their skills. Another important benefit is that the PSAT/NMSQT serves as a qualifying examination for numerous scholarship programs that are sponsored by corporations, colleges and universities, and other organizations, including the National Merit scholarships. The National Merit Scholarship Program began in 1955. Of the top 50,000 scorers nationwide, approximately 16,000 students qualify yearly, as semifinalists for the National Merit Scholarship.

In addition to the National Merit Scholarship finalists, other specific recognition is bestowed to high-scoring Hispanic students through the National Hispanic Scholar Program, and to high scoring African-American students through the National Scholarship Service and Fund for Negro Students which provides a National Achievement Scholarship to qualified students. Information on those students that qualified for these awards is reported in May and will not be included in this report.

The College Search Service, which is operated by the Educational Testing Service, represents another important benefit for students of the PSAT/NMSQT program. For the 2002 administration, 95% of the students taking the PSAT/NMSQT registered to participate in this search service, by which colleges and universities obtain names and addresses of tested students who meet specific parameters set forth by the colleges, such as geographic location, areas of major interest, and test score range. The colleges then directly contact the students with recruitment information and materials. As a result, the PSAT/NMSQT has come to serve as a vehicle of bringing prospective students to the attention of colleges and universities.

In the Fall of 2003, the Houston Independent School District (HISD) implemented the PSAT Initiative. Through the HISD Foundation, funds were secured to enable the district to fund this proactive initiative by offering the PSAT to all tenth grade students attending HISD schools in the Fall of 2003. This initiative is designed to provide schools with information about sophomores' academic strengths and interests and to aid the district in identifying students with the aptitude for Advance Placement (AP) courses. This initiative also assists the district in preparing students for college entrance exams and enables students to realize the possibilities of continuing their academic careers after high school. This initiative was funded by $46,000 from the HISD Foundation and $22,614 from Title I funds.

The College Board (1997) reports that the PSAT/NMSQT can be utilized to identify students who may be successful in AP courses. Previously, teacher recommendations, self-nomination, previous courses completed, grades in course work, and scores on achievement tests have been successfully used to identify those students that can complete and excel in AP courses. However, this system does not identify all students who could benefit from taking AP courses. The PSAT/NMSQT provides another method of identifying students that can profit academically from enrollment in AP courses. Specifically, recent analyses have shown that a majority of students who score a 46 or above on the verbal sections of the PSAT received grades of 3 or above on a majority of the 29 AP examinations. Similarly, students with PSAT mathematics scores of 56 or above achieved success in

mathematics and science AP courses. Research on the predictive value of the PSAT writing examination is forthcoming.

Currently, under the PSAT Initiative, HISD plans on using the 46 or above as the verbal criterion and the 56 or above as the mathematics criterion to aid in identifying students that will benefit in enrolling in AP courses. Students meeting these criteria will be considered for AP courses.

The PSAT consists of 52 verbal, 40 mathematics, and 39 writing items. The verbal section of the examination includes three types of questions: sentence completion, analogies, and critical reading. The sentence completion questions measure the ability to recognize logical relationships between parts of a sentence. Analogy questions test the ability to see a relationship between a pair of words, and to recognize a similar or parallel relationship in another pair of words. The critical reading questions include reading selections from social sciences, natural sciences, and the humanities. The mathematics questions are presented in three formats: multiple-choice, quantitative comparison, and student-produced responses. The mathematics section requires a basic knowledge of arithmetic, algebra, and some geometry. The use of calculators is encouraged. The writing section consists of multiple-choice questions that are designed to measure the ability to express ideas effectively in standard written English, to recognize faults in usage and structure, and to use language with sensitivity to meaning.

The purpose of this report was to provide an initial formative examination of the participation and performance of HISD students under the innovative HISD PSAT Initiative. The investigation was also designed to supply a baseline from which to track student performance on the PSAT. Expressly, it examined the participation rates of sophomores and juniors as well as their mean scores and the percentages of these students that met the AP criteria.

Administration

The PSAT/NMSQT is a two hour and ten minute test. The verbal questions are presented in two 25-minute sections. The mathematics questions are also presented in two 25-minute sections for a total of 100 minutes. For the writing section, a total of 30 minutes is allotted for completion. High schools administered the PSAT/NMSQT on their campuses on Tuesday, October 21, 2003.

Scoring

Three scaled scores are generated for each student: a verbal score, a mathematics score, and a writing score. Each score ranges from 20 to 80; these numbers are analogous to the scaled scores of 200 to 800 generated by the SAT I. Nationally, the average verbal, mathematics, and writing scores are nearing the midpoint (50) of the 20 to 80 scale. Beginning with the 1994 test administration, the verbal and mathematics scales were recentered to make the two scores comparable.

An additional score is calculated for determining eligibility for National Merit recognition: the Selection Index (SI), computed by adding the verbal, mathematics, and writing scores. The selection index scores are not provided in this report.

Methods

Participants

A total of 16,951 HISD sophomores and juniors participated in the Fall 2003 PSAT/NMSQT. This represents an increase of 58% over the previous year. The major increase in the number taking occurred at the sophomore level, where 5,234 more sophomores took the PSAT in the Fall of 2003 than in the Fall of 2002. For the 2003-04 school year, 38 schools participated in the PSAT/NMSQT. Of these schools, the CEEB provided the district with student-level results from 33 schools; these data are the basis for the analyses found in this report.

Given the radical increase in the number of students tested due to the implementation of the HISD PSAT Initiative, it would be inappropriate to compare the current year's results to previous years' results using either cross-sectional or longitudinal analyses. Therefore, the performance and participation data collected for this report will be utilized as baseline results for comparison to future years' results.

Data Collection and Analysis

The CEEB reported test performance, along with demographic information supplied by the students, to HISD. These data included results for all HISD schools that had participating students except for five schools. These schools were Accelerated Learning and Transition Academy (ALTA), Challenge Early College HS, Community Education Partners (CEP), Community Services, and Energized for Excellence HS. These data, together with enrollment data from the Public Education Information Management System (PEIMS) database, were analyzed. The analysis was completed on the results from sophomores and juniors, which represent 98% of the students assessed. Participation rates for sophomores and juniors were calculated by dividing the number of students tested by the PEIMS snapshot of fall enrollment for the same group. Participation rates for sophomores and juniors were calculated across the district and by school. The gender and racial/ethnic composition of the junior and sophomore classes in the Fall 2003 PSAT/NMSQT participation group were calculated, and compared with the composition of the 2003–04 HISD enrollment of these classes as a whole. The Hispanic group from the CEEB file consists of Mexican American, Puerto Rican, and Latin American participants. In order to provide a more valid picture of the performance of HISD juniors and sophomores, data from the CEEB files were matched to PEIMS and HISD student master files in order to correct missing demographic data. The demographic data for over 800 sophomores and juniors from the CEEB were incomplete and required completion through the utilization of PEIMS data.

Mean verbal, mathematics, and writing scores for sophomores and juniors were calculated by school, gender, and race/ethnicity. Similarly, the number and percentages of students that scored at or above 46 were summed and calculated for verbal results, while the number and percentages of students that scored at or above 56 on the mathematics section were calculated and summed. Analyses were conducted using the aggregated data by grade, race/ethnicity, and gender. Results were analyzed by districtwide, administrative district, and school levels.

Results

Participation

Districtwide Participation

Of the 22,372 HISD juniors and sophomores eligible to take the PSAT, a total of 16,951 students participated in the Fall 2003 PSAT/NMSQT. These included 9,779 sophomores and 7,172 juniors. Junior year is the year when participation qualifies a student for National Merit scholarships and recognition; many students take the exam in the sophomore year to prepare for the junior year testing. **Table 1** shows the number and rate of participation for HISD juniors and sophomores in the Fall of 2003 by student groups including race/ethnicity and gender.

Table 1: Participation Rates of HISD Sophomores and Juniors for the Fall 2003 PSAT by Student Groups

Grade	All Students			Female			Male		
	N	N Tested	% Tested	N	N Tested	% Tested	N	N Tested	% Tested
10th	12,547	9,779	77.9	6,276	5,109	81.4	6,271	4,641	74.0
11th	9,825	7,172	73.0	5,044	3,838	76.1	4,781	3,323	69.5
10th&11th	22,372	16,951	75.8	11,320	8,947	79.0	11,052	7,964	72.1

	African American			Asian American			Hispanic			White		
	N	N Tested	% Tested	N	N Tested	% Tested	N	N Tested	% Tested	N	N Tested	% Tested
10th	3,943	2,802	71.1	474	442	93.2	6,622	5,156	77.9	1,499	1,146	76.5
11th	3,163	2,175	68.8	399	343	86.0	4,884	3,543	72.5	1,376	978	71.1
10th&11th	7,106	4,977	70.0	873	785	89.9	11,506	8,699	75.6	2,875	2,124	73.9

- For juniors, the level of participation of all students was 73.0%; the level of participation of sophomores was 77.9%. The participation rate for all juniors and sophomores was 75.8%.
- Of the 11,320 female sophomores and juniors eligible to take the PSAT, 79.0% took the examination. Of the 11,052 male sophomores and juniors eligible to take the PSAT, 72.1% took the examination. For both grades included in this analysis, females had higher participation rates than males for the Fall 2003 PSAT.
- The results of the analysis of participation by race/ethnicity indicated that Asian American sophomore students had the highest percentage of sophomores eligible to take the PSAT actually participate with a rate of 93.2%. African American sophomores had the lowest participation rate, 71.1%. Asian American juniors had the highest 11th grade participation rate, 86.0%, while African American juniors had the lowest rate at 68.8%.

The demographic composition of the sophomores and juniors that took the PSAT in the Fall of 2003 is presented in **Table 2**. Rates are presented by race/ethnicity and gender.

Table 2: Composition of Fall 2003 PSAT Test Takers by Race/Ethnicity and Gender

Grade	N Tested	% African American	% Asian American	% Hispanic	% White	% Female	% Male
Sophomores	9,779	28.7	4.5	52.7	11.7	52.2	47.5
Juniors	7,172	30.3	4.8	49.4	13.6	53.5	46.3
Combined	16,951	29.4	4.6	51.3	12.5	52.8	47.0

- Of the 9,779 sophomores that took the PSAT in the Fall of 2003, 52.7% were Hispanic, 28.7% were African American, 11.7% were White, and 4.5% were Asian American. Of the 7,172 juniors that took the PSAT in the Fall of 2003, 49.4% were Hispanic, 30.3% were African American, 13.6% were White, and 4.8% were Asian American.
- Of the 16,951 total number of sophomores and juniors that took the PSAT in the Fall of 2003, 52.8% were female and 47.0% were male.

Participation by Schools

A total of 38 HISD high schools had students taking the Fall 2003 PSAT/NMSQT. For this analysis, the CEEB supplied HISD with student-level data for 33 schools. **Table 3** presents the number of eligible students, the number of students tested, and the percentages of the junior and sophomore classes from each of these high schools which took part in the PSAT/NMSQT.

- For the sophomore class in the Fall of 2003, the highest participation rates were found at Carnegie Vanguard and DeBakey High School, where 100% and 98.9% of the eligible sophomores participated. The lowest participation rates for the sophomore class were found at Kay On-Going, 43.5%, and Carter Career Center, 45.0%.
- Of the 33 schools included in this analysis, 24, or 73%, had a participation rate of 75% or higher from their sophomore class in the Fall of 2003.
- For the junior class in the Fall of 2003, the highest participation rates were found at Carnegie Vanguard, Chavez High School, and Eastwood Academy where 100% of the juniors participated. The lowest participation rates for the junior class in the Fall of 2003 were found at Kay On-Going, 6.1%, and Scarborough High School, 22.2%.
- Of the 33 schools included in this analysis, 18, or 55%, had a participation rate of 75% or higher from their junior class in the Fall of 2003.

Table 3: Participation Rates of Juniors and Sophomores on the Fall 2003 PSAT/NMSQTby School

	Sophomores			Juniors		
School	N	N Tested	% Tested	N	N Tested	% Tested
Austin	469	415	88.5	359	315	87.7
Bellaire	812	698	86.0	719	520	72.3
Carnegie	47	47	100.0	31	31	100.0
Carter Career Center	20	9	45.0	28	14	50.0
Chavez	688	560	81.4	484	484	100.0
CLC	137	84	61.3	122	28	23.0
Davis	423	312	73.8	361	305	84.5
DeBakey	190	188	98.9	145	143	98.6
Eastwood	63	60	95.2	63	63	100.0
Furr	328	226	68.9	221	160	72.4
HSLECJ	170	159	93.5	168	113	67.3
HSPVA	172	165	95.9	165	160	97.0
Houston	777	627	80.7	433	394	91.0
Jones	299	200	66.9	234	184	78.6
Jordan, Barbara	294	243	82.7	319	274	85.9
Kashmere	199	148	74.4	147	98	66.7
Kay On-Going	23	10	43.5	33	2	6.1
Lamar	891	786	88.2	785	725	92.4
Lee	600	451	75.2	320	236	73.8
Madison	566	453	80.0	307	281	91.5
Middle College	87	80	92.0	86	68	79.1
Milby	552	486	88.0	501	440	87.8
Reagan	406	365	89.9	395	167	42.3
Scarborough	243	200	82.3	167	37	22.2
Sharpstown	385	285	74.0	314	272	86.6
Sterling	274	210	76.6	240	174	72.5
Waltrip	466	404	86.7	396	155	39.1
Washington	313	198	63.3	229	84	36.7
Westbury	479	371	77.5	387	145	37.5
Westside	707	627	88.7	705	527	74.8
Wheatley	225	186	82.7	169	131	77.5
Worthing	300	237	79.0	262	209	79.8
Yates	377	289	76.7	281	233	82.9

Student Mean Performance

In the following section, the performance of both juniors and sophomores and these grades combined was analyzed for the Fall of 2003. Results were presented by mean score for each section: verbal, mathematics, and writing. Results were presented in terms of districtwide, administrative district, and school-level performance. Results were disaggregated by student groups for the districtwide results. In cases where demographic data were missing on the PSAT file, the PEIMS file was used to identify student grade level and demographics.

Districtwide Performance by PSAT Mean Score

Analysis of districtwide performance focused on the performance of sophomores, juniors, and the combined performance of these two groups. Results from the Fall of 2003 PSAT/NMSQT are presented in **Table 4**. The

averages of student verbal, mathematics, and writing scores were calculated and analyzed to describe student performance of specific student groups.

Table 4: Fall PSAT Mean Verbal, Mathematics, and Writing Scores by Student Group: Sophomores, Juniors, and Combined (Sophomores and Juniors)

	Sophomores			Juniors			Combined		
Student Group	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**
All Students	36.1	37.2	41.4	39.7	40.7	44.4	37.7	38.7	42.7
African American	34.9	35.1	40.0	37.7	38.0	42.7	36.1	36.4	41.2
Asian American	44.2	50.2	48.2	49.3	54.4	52.2	46.4	52.1	49.9
Hispanic	33.7	35.1	39.6	36.4	37.7	41.8	34.8	36.2	40.5
White	46.8	46.3	49.8	52.3	52.1	54.9	49.3	49.0	52.1
Female	36.5	37.0	42.1	39.8	40.0	44.9	37.9	38.3	43.3
Male	35.7	37.4	40.6	39.6	41.5	43.9	37.4	39.1	42.0

- The average performance of HISD juniors in the Fall of 2003 was 39.7 verbal, 40.7 mathematics, and 44.4 writing. The average performance of HISD sophomores and juniors combined in the Fall of 2003 was 37.7 verbal, 38.7 mathematics, and 42.7 writing.
- In the sophomore class, White students had a higher mean score than other racial/ethnic groups on the verbal and writing sections of the PSAT in the Fall of 2003. Asian Americans out performed their cohorts on the mathematics section, with a mean score of 50.2. Hispanic students had the lowest mean scores for the verbal and writing sections, while both Hispanic and African American sophomores had the lowest mean performance, 35.1, on the mathematics section.
- The highest mean scores on the verbal and writing sections of the Fall 2003 PSAT for the junior class were achieved by the White student group with mean scores of 52.3 and 54.9, respectively. The highest mean score on the mathematics section was achieved by Asian American juniors, 54.4. The lowest junior performance was found in the Hispanic group for all three sections of the Fall 2003 PSAT.
- For both the sophomore and junior classes, females out performed males on the verbal and writing sections of the Fall 2003 PSAT, while males out performed females on the mathematics section.

The Fall 2003 PSAT mean scores for the verbal, mathematics, and writing sections were also examined to determine the relationship between the performance of student groups. Expressly, the achievement gap between minority student groups, Hispanic and African American students, and their White cohorts was examined. The districtwide differences in mean scores were calculated for sophomores, juniors, and those grades combined. These results are presented in **Table 5**.

Table 5: Fall 2003 PSAT Mean Score Achievement Gap for Verbal, Mathematics, and Writing Scores: Sophomores, Juniors, and Combined (Sophomores and Juniors)

	Sophomores			Juniors			Combined		
	Verbal	**Math**	**Writing**	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**
African American-White	-11.9	-11.2	-9.8	-14.6	-14.1	-12.2	-13.2	-12.6	-11.0
Hispanic-White	-13.1	-11.2	-10.2	-15.9	-14.4	-13.1	-14.5	-12.8	-11.6

- The largest achievement gap between White sophomores and their minority cohorts on the verbal section of the Fall 2003 PSAT was -13.1 between White and Hispanic students. On the mathematics section, the gap between White students and both African American and Hispanic students was -11.2. On the writing section, the largest achievement gap was 10.2 between White sophomores and their Hispanic cohorts.
- The results of the analysis of the achievement gap between juniors indicated that the largest mean differences were between Whites and Hispanics for each section of the Fall 2003 PSAT: verbal, -15.9; mathematics, -14.4; and writing, -13.1.
- The results of the analysis of the achievement gap between sophomores and juniors combined indicated that the largest mean differences were between White and Hispanic students for each section of the Fall 2003 PSAT: verbal, -14.5; mathematics, -12.8; and writing, -11.6.

Administrative District Performance

Analysis of administrative district performance focused on the performance of sophomores, juniors, and the combined performance of these two groups. Results from the Fall of 2003 PSAT are presented in **Table 6**. The averages of student verbal, mathematics, and writing scores were calculated and analyzed to describe student performance.

Table 6: Fall 2003 PSAT Mean Verbal, Mathematics, and Writing Scores by Administrative District: Sophomores, Juniors, and Combined (Sophomores and Juniors)

	Sophomores			Juniors			Combined		
	Verbal	Math	Writing	Verbal	Math	Writing	Verbal	Math	Writing
Alternative District	41.2	42.1	45.5	45.0	44.9	48.8	43.0	43.4	47.0
Central District	42.7	42.5	46.3	46.6	46.4	49.5	44.6	44.3	47.9
East District	33.7	35.0	38.9	35.4	37.7	40.5	34.5	36.2	39.6
North District	31.9	33.6	38.1	33.6	35.1	39.9	32.6	34.2	38.8
Northeast District	29.9	31.6	36.4	33.4	34.3	39.8	31.3	32.7	37.7
Northwest District	35.3	36.1	40.6	41.1	42.0	45.4	36.9	37.7	41.9
South Central District	32.6	32.8	38.8	35.2	34.9	40.6	33.8	33.8	39.6
South District	33.2	34.1	39.2	34.9	35.8	40.9	33.9	34.8	39.9
Southeast District	33.1	34.7	39.3	34.8	36.2	40.5	33.9	35.4	39.9
Southwest District	33.0	33.7	38.8	37.1	38.8	42.7	34.1	35.1	39.9
West Central District	46.4	48.3	49.6	52.9	55.0	56.0	49.2	51.1	52.4
West District	36.3	37.3	41.3	40.7	42.1	44.8	38.2	39.4	42.8

- For both the sophomore and junior classes, the highest mean performance on the verbal, mathematics, and writing sections of the Fall 2003 PSAT were achieved by students in the West Central District.
- The lowest mean performance for sophomores and juniors on the verbal, mathematics, and writing sections of the Fall 2003 PSAT was found in the Northeast District.

School Performance by Mean Score

Analysis of school-level performance focused on the performance of sophomores, juniors, and the combined performance of these two groups. Results from the Fall of 2003 PSAT/NMSQT are presented in **Table 7**. The averages of student verbal, mathematics, and writing scores were calculated and analyzed to describe student performance.

- For the Fall 2003 test administration, the highest mean verbal scores of sophomores were achieved by students at The High School for the Performing and Visual Arts, 48.6, and DeBakey High School for Health Professions, 47.7. The lowest mean verbal scores were found at Carter Career Center, 28.6, and Wheatley High School, 29.1.

Table 7: Fall 2003 PSAT Mean Verbal, Mathematics, and Writing Scores by School: Sophomores, Juniors, and Combined (Sophomores and Juniors)

	Sophomores			Juniors			Combined		
School	Verbal	Math	Writing	Verbal	Math	Writing	Verbal	Math	Writing
Austin	33.1	34.7	38.1	34.9	37.4	40.2	33.9	35.9	39.0
Bellaire	46.4	48.3	49.6	52.9	55.0	56.0	49.2	51.1	52.4
Carnegie	46.8	48.5	50.4	57.0	53.2	58.9	50.9	50.4	53.8
Carter	28.6	32.9	36.8	31.4	32.1	38.6	30.3	32.4	37.9
Chavez	33.1	34.2	39.2	34.9	35.7	40.3	33.9	34.9	39.7
CLC	31.2	31.5	36.8	33.0	31.0	38.9	31.6	31.4	37.4
Davis	32.0	34.5	39.4	33.5	35.1	39.8	32.7	34.8	39.6
DeBakey	47.7	52.6	52.4	54.3	58.5	56.0	50.5	55.2	54.0
Eastwood	35.9	37.5	43.0	36.3	39.6	42.2	36.1	38.6	42.6
Furr	34.3	35.1	39.3	36.1	37.6	40.2	35.1	36.1	39.7
HSLECJ	41.0	40.2	44.8	42.2	41.4	46.0	41.5	40.7	45.3
HSPVA	48.6	47.0	51.0	55.0	51.3	58.0	51.7	49.1	54.5
Houston	31.8	33.2	37.4	33.6	35.1	39.9	32.5	33.9	38.4
Jones	32.4	31.8	38.8	36.4	35.5	41.3	34.3	33.6	40.0
Jordan	35.1	36.0	40.3	36.1	36.6	41.7	35.6	36.3	41.0
Kashmere	30.8	31.9	36.9	33.6	34.7	40.6	31.9	33.0	38.3
Kay On-Going	31.4	31.2	40.2	*	*	*	32.8	32.5	40.6
Lamar	42.7	42.5	46.3	46.6	46.4	49.5	44.6	44.3	47.9
Lee	31.7	34.0	37.7	33.2	35.1	38.8	32.3	34.4	38.1
Madison	33.5	34.2	39.6	35.3	35.6	41.0	34.2	34.7	40.1
Middle College	39.9	39.3	42.8	44.7	44.8	46.7	42.1	41.8	44.6
Milby	33.1	35.3	39.4	34.7	36.8	40.7	33.8	36.0	40.0
Reagan	33.3	34.2	39.3	37.1	37.6	42.2	34.5	35.3	40.2
Scarborough	33.9	34.9	40.1	43.2	43.8	46.5	35.3	36.3	41.1
Sharpstown	33.7	34.4	38.8	35.8	37.2	41.5	34.7	35.8	40.1
Sterling	33.6	34.6	39.3	34.8	35.7	40.9	34.2	35.1	40.0
Waltrip	36.3	36.6	40.9	41.0	41.4	45.2	37.6	37.9	42.1
Washington	38.2	39.7	43.0	48.5	51.0	51.6	41.3	43.0	45.6
Westbury	33.0	33.7	38.8	37.1	38.8	42.7	34.1	35.1	39.9
Westside	40.8	41.0	45.1	46.7	47.6	49.1	43.5	44.0	46.9
Wheatley	29.1	31.5	36.0	33.3	34.1	39.1	30.8	32.5	37.3
Worthing	32.3	33.2	38.2	34.6	36.1	40.7	33.3	34.6	39.4
Yates	32.7	33.4	38.7	34.3	34.5	40.0	33.4	33.9	39.3

* Less than 5 students tested

- The highest mean mathematics scores for sophomores in the Fall of 2003 were achieved by students at DeBakey High School for Health Professions, 52.6, and Carnegie Vanguard, 48.5. The lowest mean mathematics score was found at Kay On-Going, 31.2.
- The highest mean writing scores for sophomores on the Fall 2003 administration of the PSAT/NMSQT were achieved by students at DeBakey High School for Health Professions, 52.4, and The High School for the Performing and Visual Arts, 51.0. The lowest level of writing performance was found at Wheatley High School, 36.0.
- For the Fall 2003 test administration, the highest mean verbal scores were achieved by juniors at Carnegie Vanguard, 57.0, and The High School for the Performing and Visual Arts, 55.0. The lowest mean verbal scores were found at Carter Career Center, 31.4, and Contemporary Learning Center (CLC), 33.0.

- The highest mean mathematics scores for juniors in the Fall of 2003 were achieved by students at DeBakey High School for Health Professions, 58.5, and Bellaire High School, 55.0. The lowest mean mathematics scores were found at CLC, 31.0, and Carter Career Center, 32.1.
- The highest mean writing scores for juniors on the Fall 2003 administration of the PSAT/NMSQT were achieved by students at Carnegie Vanguard, 58.9, and The High School for the Performing and Visual Arts, 58.0. The lowest level of writing performance was found at Carter Career Center, 38.6, and Lee High School, 38.8.

The combined performance of sophomores and juniors based on the Fall 2003 PSAT/NMSQT mean verbal, mathematics, and writing scores by school is also presented in **Table 7**.

- For the Fall 2003 test administration, the highest mean verbal scores were achieved by students at The High School for the Performing and Visual Arts, 51.7, and Carnegie Vanguard, 50.9. The lowest mean verbal scores were found at Carter Career Center, 30.3, and Wheatley, 30.8.
- The highest mean mathematics scores for students in the Fall of 2003 were achieved by students at DeBakey High School for Health Professions, 55.2, and Bellaire High School, 51.1. The lowest mean mathematics scores were found at CLC, 31.4, and Carter Career Center, 32.4.
- The highest mean writing scores on the Fall 2003 administration of the PSAT/NMSQT were achieved by students at The High School for the Performing and Visual Arts, 54.5, and DeBakey High School for Health Professions, 54.0. The lowest levels of writing performance were found at Wheatley High School and CLC, 37.3 and 37.4, respectively.

Districtwide Performance by PSAT Advance Placement Criteria

The Fall 2003 PSAT performance of sophomores and juniors was evaluated in terms of the district performance standard of a score of 46 for verbal performance and a score of 56 for mathematics. The number of students taking the PSAT was compared to the number meeting this standard, and the percentages of students that scored at or above 46 on verbal and at or above 56 on mathematics were calculated and are presented in **Table 8**. Race/ethnicity and gender student performance results are based on these standards.

Table 8: Fall 2003 PSAT Advance Placement Criteria Results: Percentages of Sophomores, Juniors, and Combined (Sophomores and Juniors) that Met or Exceeded the Verbal Standard of 46 and the Mathematics Standard of 56

	Sophomores		Juniors		Combined	
Student Group	**Verbal**	**Math**	**Verbal**	**Math**	**Verbal**	**Math**
All Students	16.2	5.4	26.4	11.5	20.5	7.9
African American	10.3	1.4	18.4	4.2	13.8	2.7
Asian American	45.2	36.2	58.6	47.5	51.1	41.1
Hispanic	8.0	1.6	14.8	4.5	10.7	2.8
White	54.5	19.7	72.6	39.5	62.9	28.8
Female	17.1	4.3	26.3	9.8	21.1	6.6
Male	15.3	6.6	26.5	13.5	20.0	9.5

- For all sophomores tested, 16.2% met the district's Advance Placement criteria of a score of 46 or better, while 5.4% of the same students met the mathematics standard of 56 or better. White students achieved the highest performance of sophomores on the verbal PSAT Advance Placement criteria with 54.5% meeting this standard. On the mathematics section, 36.2% of the Asian American sophomores met the 56 or better standard. This represents the highest performance of any ethnic group.
- For all juniors tested, 26.4% met the verbal standard of 46 or above, while 11.5% met the mathematics standard of 56 or above. White juniors had the highest percentage of students, 72.6%, meet the verbal Advance Placement standard. Asian American juniors had the highest percentage of students, 47.5%, meet the mathematics Advance Placement standard.

- For all sophomores and juniors tested, 20.5% met the verbal standard of 46 or above, while 7.9% met the mathematics standard of 56 or above. White students had the highest percentage of students, 62.9%, meet the verbal Advance Placement standard. Asian American students had the highest percentage of students, 41.1%, meet the mathematics Advance Placement standard.

Administrative District Performance by PSAT Advance Placement Criteria

Analysis of administrative district performance focused on the performance of sophomores, juniors, and the combined performance of these two groups. Results from the Fall of 2003 PSAT/NMSQT are presented in **Table 9**. The averages of student verbal, mathematics, and writing scores were calculated and analyzed to describe student performance.

- For both the sophomore and junior classes, the highest percentage of students to meet the Advance Placement standards on the verbal and mathematics sections of the Fall 2003 PSAT were reached by students in the West Central District.
- The lowest percentages of sophomores and juniors on the verbal and mathematics sections to reach the Advance Placement criteria on the Fall 2003 PSAT were found in the Northeast District.

Table 9: Fall 2003 PSAT Advance Placement Criteria Results: Percentages of Sophomores, Juniors, and Combined (Sophomores and Juniors) that Met or Exceeded the Verbal Standard of 46 and the Mathematics Standard of 56 by Administrative District

	Sophomores		Juniors		Combined	
	Verbal	Math	Verbal	Math	Verbal	Math
Alternative District	32.1	10.3	47.2	18.7	39.0	14.1
Central District	38.2	11.6	50.3	22.9	44.0	17.0
East District	6.4	0.7	9.1	2.6	7.6	1.5
North District	3.1	0.3	4.7	1.9	3.8	1.0
Northeast District	1.5	0.0	4.0	0.0	2.5	0.0
Northwest District	11.6	2.7	31.2	9.7	17.0	4.6
South Central District	3.7	0.6	11.0	1.4	7.1	1.0
South District	5.0	0.3	8.3	0.9	6.4	0.6
Southeast District	5.6	0.9	9.0	2.1	7.2	1.4
Southwest District	6.5	0.5	17.9	4.1	9.7	1.6
West Central District	51.7	29.2	71.2	48.1	60.0	37.3
West District	18.1	5.2	31.4	13.9	23.9	9.0

School Performance by PSAT Advance Placement Criteria

The performance of sophomores and juniors was evaluated in terms of the district performance standard of a score of 46 for verbal and 56 for mathematics performance. The number of students taking the PSAT was compared to the number meeting this standard, and the percentages of students that scored at or above 46 on the verbal section and 56 on the mathematics section were calculated and are presented by school in **Table 10**.

- For the Fall 2003 administration of the PSAT, the highest percentage of sophomores that met the HISD standard score of 46 on verbal performance was found at HSPVA where 60.0% met the standard and at Carnegie Vanguard and DeBakey high schools where 59.6% met the standard.
- For the Fall 2003 administration of the PSAT, the highest percentage of sophomores that met the HISD standard score of 56 on mathematics performance was found at DeBakey High School where 31.4% met the standard and at Bellaire High School where 29.2% met the standard.
- For the Fall 2003 administration of the PSAT, the highest percentage of juniors that met the HISD standard score of 46 on verbal performance was found at DeBakey High School where 88.8% met the standard and at Carnegie Vanguard where 87.1% met the standard.

Table 10: Fall 2003 PSAT Advance Placement Criteria Results: Percentages of Sophomores, Juniors, and Combined (Sophomores and Juniors) that Met or Exceeded the Verbal Standard of 46 and the Mathematics Standard of 56 by School

	Sophomores		Juniors		Combined	
School	Verbal	Math	Verbal	Math	Verbal	Math
Austin	7.2	0.5	6.3	2.9	6.8	1.5
Bellaire	51.7	29.2	71.2	48.1	60.0	37.3
Carnegie	59.6	23.4	87.1	41.9	70.5	30.8
Carter	0.0	0.0	0.0	0.0	0.0	0.0
Chavez	5.2	0.4	10.7	2.1	7.8	1.2
CLC	2.4	1.2	10.7	0.0	4.5	0.9
Davis	4.2	0.3	5.3	2.0	4.7	1.1
DeBakey	59.6	31.4	88.8	61.5	72.2	44.4
Eastwood	8.3	1.7	12.7	7.9	10.6	0.8
Furr	4.4	0.9	13.1	0.0	8.0	1.8
HSLECJ	25.8	3.1	33.6	2.7	29.0	2.9
HSPVA	60.0	13.3	84.4	30.0	72.0	21.5
Houston	2.6	0.3	4.3	1.8	3.2	0.9
Jones	5.5	0.5	16.3	1.6	10.7	1.0
Jordan	6.6	0.4	10.9	0.7	8.9	0.6
Kashmere	1.4	0.0	4.1	0.0	2.4	0.0
Kay On-Going	0.0	0.0	0.0	0.0	0.0	0.0
Lamar	38.2	11.6	50.3	22.9	44.0	17.0
Lee	6.0	1.8	6.4	2.5	6.1	2.0
Madison	5.1	0.4	7.5	1.4	6.0	0.8
Middle College	22.5	2.5	48.5	2.9	34.5	2.7
Milby	6.2	1.4	7.0	2.1	6.6	1.7
Reagan	5.8	0.8	15.0	3.0	8.6	1.5
Scarborough	7.0	1.0	40.5	13.5	12.2	3.0
Sharpstown	8.4	1.1	12.1	3.7	10.2	2.3
Sterling	7.1	0.5	10.3	1.1	8.6	0.8
Waltrip	14.6	2.0	31.0	6.5	19.1	3.2
Washington	20.7	9.1	59.5	27.4	32.3	14.5
Westbury	6.5	0.5	17.9	4.1	9.7	1.6
Westside	31.3	9.6	52.6	24.3	41.0	16.3
Wheatley	1.6	0.0	3.9	0.0	2.5	0.0
Worthing	3.0	0.0	7.7	0.0	5.2	0.0
Yates	2.4	0.7	6.9	1.3	4.4	1.0

- For the Fall 2003 administration of the PSAT, the highest percentage of juniors that met the HISD standard score of 56 on mathematics performance was found at DeBakey High School where 61.5% met the standard and at Bellaire High School where 48.1% met the Advance Placement criteria.

Conclusion

The purpose of this report was to provide an initial formative examination of the participation and performance of HISD students under the innovative HISD PSAT Initiative. The investigation was also designed to supply a baseline from which to track student performance on the PSAT.

The results from this report indicated that under the HISD PSAT Initiative, HISD schools have begun the process of meeting district mandates to increase participation. Specifically, 58% more juniors and sophomores participated in the examination process. While only one school met the district mandate of testing all sophomores, the majority of the schools tested at least 75% of the sophomores enrolled at their campuses. The Fall 2003 PSAT assessed 78% of the sophomores districtwide. It was surprising to note that African American and White students exhibited the lowest participation rates. The results from this report can be used to identify those schools, which need to focus on increasing the number of sophomores tested.

This report supplies a valid and reliable baseline of mean performance of sophomores and juniors that can be used in future investigations. Specifically, results at the district, administrative district, and school levels can be employed as comparisons for future years' results. While, districtwide, the performance of HISD students on each section of the PSAT was below the test's mean score standard of 50, these results provide a starting point from which the improved performance of HISD sophomores and juniors can be assessed. It is of interest to note that the current year's results indicate that HISD White juniors are scoring above the PSAT mean standard of 50 on the verbal, mathematics, and writing sections of the PSAT, and HISD Asian American juniors are scoring above the test's mean score on mathematics and writing. Unfortunately, the achievement gap in academic performance between HISD student groups is present in the Fall 2003 PSAT results. Similar to the results on tests of academic achievement, the greatest gap was found between White and Hispanic students, with the gap between African American and White students not much smaller. The results of this analysis suggest that HISD should continue its efforts to reduce these academic performance gaps.

School-level results indicate that a wide range of performance on the PSAT can be found across HISD campuses. These results suggest that HISD should focus its efforts on increasing the equity of performance by providing support to those schools that exhibited uninspiring performance on the Fall 2003 PSAT.

The results from the analysis of student performance on the Fall 2003 PSAT in regards to the Advance Placement criteria fosters the district's attempts to increase the number of students enrolled in Advance Placement courses. Specifically, these results can identify the schools where a preponderance of students performs at or above Advance Placement criteria on the PSAT. This will provide a quantitative commencement in this process.

Globally, HISD and its high school campuses have successfully begun the process of meeting the mandates of the HISD PSAT Initiative. The process of achieving the goals of this initiative and preparing our high school students to achieve greater academic success has received a strong start by the efforts produced so far during the 2003–04 school year.