RESEARCH

Report on of Student Achievement

Department of Research and Accountability

PSAT/NMSQT 2002–2003: Reported May 2003

Houston Independent School District

HOUSTON INDEPENDENT SCHOOL DISTRICT

Board of Education

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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, math problem solving, and writing skills. The examination is comprised of five sections: two verbal, two math, and one writing skills.

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.

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.

The test consists of 52 verbal, 40 mathematics, and 39 writing items. The verbal sections of the PSAT/NMSQT include 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 are 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.

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 administer the PSAT/NMSQT on their campuses. Each school selects one of two alternative test dates, a weekday or a Saturday, on which to test

their students. A student who is unable to be tested on the day his or her school selects may be tested on the alternative date at another test site.

Although the two testing dates utilize different versions of the examination, the tests have been equated by the College Entrance Examination Board (CEEB) so that the two versions of the test are equivalent. The two test administrations discussed in this report took place on Tuesday, October 15, 2002, and Saturday, October 19, 2002.

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 by Schools

A total of 10,939 HISD students participated in the 2002–03 PSAT/NMSQT. This represents an increase of 33% over the previous year. Participation by grade level included 193 freshmen, 4,545 sophomores, 6,151 juniors, and 37 seniors. The major increase in number taking occurred at the sophomore level, where 1,734 more sophomores took the PSAT in the Fall of 2002 than in the Fall of 2001. For the 2002-03 school year, thirty-one schools participated in the PSAT/NMSQT.

Data Analysis

Test performance, along with demographic information supplied by the students, was reported to HISD by the CEEB via diskettes. These data, together with enrollment data from the Public Education Information Management System (PEIMS) data base, were analyzed. 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 ethnic composition of the junior and sophomore classes in the 2002–03 PSAT/NMSQT participation group were calculated, and compared with the composition of the 2002–03 HISD enrollment of these classes as a whole. Longitudinal participation rates for juniors and sophomores from the 2001-02 PSAT/NMSQT administration were also extracted. In order to provided 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.

Mean verbal, mathematics, and writing scores for juniors were calculated by school, gender, and ethnicity. The Hispanic ethnic group consists of Mexican American, Puerto Rican, and Latin American participants. Analyses were conducted using the aggregated data. Longitudinal analysis of mean scores, ranging from 1992–93 to 2002–03, were extracted from the previous PSAT/NMSQT report. The percentage of students participating in the student search service was calculated by dividing the number of students participating in the student search by the total number of students responding to the question.

Student data identifying areas for improvement on the verbal, mathematics, and writing skill sets were provided by the CEEB via diskette. For each subtest, the student data identifying specific areas were aggregated and reported based on the highest frequency of occurrence for the top four skill sets. The CEEB provided the strategies for implementation for each of the problem areas identified (**Appendix A**). The National Merit Scholarship list was provided by the Secondary School Manager for Counseling and Guidance.

Results

Participation

Districtwide Participation

A total of 10,939 students participated in the 2002–03 PSAT/NMSQT. These included 4,545 sophomores and 6,151 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 1998–99 through 2002–03.

Table 1: PSAT Participation by Juniors and Sophomores

		02–03	01–02	00–01	99–00	98–99
Juniors	n	6,151	5,018	3,945	3,492	3,534
	%	64	52	43	37	37
Sophomores	n	4,545	2,811	2,387	2,051	2,147
	%	37	26	23	20	16

- For juniors, the level of participation increased from 37% in 1998–99 to 64% in 2002–03. This represents a steady increase in participation of approximately 1,000 students per year from 1999–2000 to the present.
- The level of participation for HISD sophomores increased from 16% to 37% for the same time interval. The majority of this increase in participation occurred over the past year.

Participation and Gender/Ethnicity

Table 2 compares the gender and ethnic composition of HISD juniors from Fall 2001 and Fall 2002 administrations of the PSAT. Specifically, the percentage of the total number of juniors taking the PSAT is disaggregated for specific student groups and the percentage of eligible students for each student group that took the PSAT are presented.

Table 2: Gender and Ethnic Composition of Fall 2001 and 2002 HISD Junior PSAT/NMSQT Participants

Junior Class	Total	Female	Male	Native American	Asian	African American	Hispanic	White
2002 Test-Takers	6,151							
Percent of Test-Takers	—	54.4	45.6	<1.0	5.5	26.4	49.9	16.5
Percent of Eligibles	64.2	68.5	59.6	>100.0	84.3	52.4	66.0	68.2
2001 Test-Takers	5,018							
Percent of Test-Takers	—	55.8	44.2	<1.0	7.2	29.7	38.0	18.7
Percent of Eligibles	52.1	57.2	46.9	>100.0	84.7	45.6	42.7	64.1

- The number of juniors taking the test increased from 5,018 to 6,151, representing a 22.5% increase from the previous year.
- For both males and females, the percent of eligible juniors that participated in taking the PSAT increased from the 2001 to 2002. Specifically, the percentage of females increased from 57.2% to 68.5%, while male participation increased from 46.9% to 59.6%. Over the past two years, females comprised a higher percentage of the test-taking population than males.
- From Fall 2001 to Fall 2002, the percentage of PSAT test takers reflects the general demographics of the district. The percentage of Hispanic students taking the PSAT continues to increase, while the participation rates of the other groups decrease. However, in terms of the percentage of eligible students within each student group that

take the PSAT, participation for African American and White students increased along with Hispanic student participation rates over the past two years. Hispanic students had the largest increase in participation, increasing from 42.7% to 66.0% of eligible students from that group taking the test.

Disaggregated results for HISD Sophomores were collected over the past two years. These data from Fall 2001 and 2002 are presented in **Table 3**.

Table 3: Gender and Ethnic Composition of Fall 2001 and 2002 HISD Sophomore PSAT/NMSQT Participants

Sophomore Class	Total	Female	Male	Native American	Asian	African American	Hispanic	White
2002 Test-Takers	4,545							
Percent of Test-Takers	—	53.2	46.8	<1.0	6.1	22.5	50.6	18.1
Percent of Eligibles	37.5	40.2	34.8	>100.0	64.7	26.4	36.3	55.8
2001 Test-Takers	2,811							
Percent of Test-Takers	—	56.9	43.0	<1.0	8.6	28.6	32.1	28.0
Percent of Eligibles	25.7	29.1	22.2	71.4	55.5	22.5	17.1	48.6

- The number of sophomores taking the test increased from 2,811 to 4,545, representing a 61.7% increase from the previous year.
- For both males and females, the percent of eligible sophomores that participated in taking the PSAT increased from the 2001 to 2002. Specifically, the percentage of females increased from 29.1% to 40.2%, while male participation increased from 22.2% to 34.8%. Over the past two years, females comprised a higher percentage of the test-taking population than males and the gap between female and male participation rates decreased.
- The percentage of Hispanic students taking the PSAT continues to increase, while the participation rates of the other groups decrease. However, in terms of the percentage of eligible students within each student group that take the PSAT, participation for all groups increased over the past two years. In terms of the percentage of eligible test-takers who took the PSAT, Asian American students had the highest rate, 64.7% followed by White students, 55.8% of eligible students in the group.

Participation by Schools

A total of 31 HISD high schools had students taking the Fall 2001 and Fall 2002 PSAT/NMSQT. **Table 4** presents the percentages of the junior and sophomore classes from each participating high school who took part in the PSAT/NMSQT.

- For the junior class in the Fall of 2002, the highest participation rates were found at DeBakey and Lee High Schools, 98.0%, Middle College, 96.2%, Westside High School, 96.0%, Eastwood Academy, 95.1%, and HSPVA, 94.2%. The lowest participation rates for the junior class were found at Contemporary Learning Center, 13.4%, Worthing High School, 27.9%, and Kay On-Going, 38.9%.
- Of the 31 schools included in this analysis, 13, or 42%, had a participation rate of 75% or higher from their junior class in the Fall of 2002.
- From the Fall of 2001 to the Fall of 2002, 22 high schools improved the participation rate of their juniors on the PSAT/NMSQT. The greatest level of improvement occurred at Davis High School where the rate improved from 22.5% to 85.6%, Furr High School where the rate increased from 24.0% to 79.6%, and Milby High School with an increase from 28.4% to 84.1%.
- For the sophomore class in the Fall of 2002, the highest participation rates were found at Westside High School, 91.2%, Austin High School, 88.7%, Chavez High School, 83.0%, and Davis High School, 80.2%. The lowest participation rates for the sophomore class in the Fall of 2002 were found at Eastwood High School, 0%, Milby

Table 4: Participation of Juniors and Sophomores in the PSAT/NMSQTby School, 2002–2003 and 2001–2002

School	2002–03		2001–02	
	% of Juniors	% of Sophomores	% of Juniors	% of Sophomores
Austin	87.9	88.7	57.2	15.2
Bellaire	66.6	54.0	66.2	45.2
CLC	13.4	4.1	8.9	5.2
Chavez	88.0	83.0	34.7	2.5
Davis	85.6	80.2	22.5	10.5
DeBakey	98.0	56.9	100.0	42.3
Eastwood	95.1	0.0	83.8	12.8
Furr	79.6	68.5	24.0	2.2
Sam Houston	39.5	11.8	81.3	24.2
HSPVA	94.2	37.3	94.1	50.3
Jones	68.6	36.4	75.7	72.1
Jordan	69.8	13.1	29.3	24.2
Kashmere	44.8	6.5	68.2	2.9
Kay	38.9	36.6	72.0	45.8
Lamar	73.7	46.8	75.5	31.4
HSLECJ	75.9	50.5	72.0	56.6
Lee	98.0	70.2	69.3	0.3
Madison	53.2	12.6	41.4	7.6
Middle College	96.2	58.4	96.4	74.1
Milby	84.1	0.2	28.4	11.2
Reagan	43.4	9.5	27.9	12.3
Scarborough	61.4	13.4	41.7	13.3
Sharpstown	51.8	11.0	47.6	13.9
Sterling	42.8	56.5	32.2	23.6
Waltrip	47.0	20.1	30.5	30.8
Washington	51.0	40.3	42.8	42.4
Westbury	44.5	11.9	45.4	13.6
Westside	96.0	91.2	95.4	91.4
Wheatley	87.4	2.1	40.0	6.5
Worthing	27.9	18.2	64.9	11.2
Yates	42.1	10.5	21.6	17.5

High School, 0.2%, Wheatley High School, 2.1%, Contemporary Leaning Center, 4.1%, and Kashmere High School, 6.5%.

- Of the 31 schools included in this analysis, 13, or 42%, had an increase in sophomore participation from the Fall of 2001 to the Fall of 2002. The largest improvement was at Chavez High school where the rate improved from 2.5% to 83.0% and Austin High School where the participation rate improved from 15.2% to 88.7%.

Student Performance

In accordance to district initiatives enacted during the spring of 2003, more detail to the performance of sophomores is included in this report than in prior reports. In the following section, the performance of both juniors and sophomores over the past two years is analyzed at the districtwide and individual school-level. Results are also

disaggregated by student groups. 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

Analysis of districtwide performance focused on the performance of sophomores, juniors, and the combined performance of these two groups. Results from the Fall of 2001 and the Fall of 2002 PSAT/NMSQT are compared in **Table 5**. The averages of student verbal, math, and writing scores were calculated and analyzed to describe student performance.

Table 5: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores and Comparison Differences: Sophomores, Juniors, and Combined (Sophomores and Juniors)

	2002–03				2001–02				Difference			
	N	Verbal	Math	Writing	N	Verbal	Math	Writing	N	Verbal	Math	Writing
Sophomores	4,545	38.9	40.5	42.6	2,811	43.9	43.9	44.9	1,734	-5.0	-3.4	-2.2
Juniors	6,151	41.1	42.9	44.5	5,018	43.8	44.8	45.2	1,133	-2.7	-1.8	-0.7
Combined	10,696	40.2	41.9	43.7	7,829	43.9	44.5	45.1	2,867	-3.7	-2.6	-1.3

- The average performance of HISD juniors decreased from the Fall of 2001 to the Fall of 2002 on the verbal, math, and writing sections of the PSAT/NMSQT. The largest decline in performance was found on the test of verbal abilities, with a difference of -2.7 points.
- The average performance of HISD sophomores decreased from the Fall of 2001 to the Fall of 2002 on the verbal, math, and writing sections of the PSAT/NMSQT. The largest decline in performance was found on the test of verbal abilities, with a difference of -5.0 points.
- For the combined performance of juniors and sophomores, verbal scores decreased 3.7 points from the Fall of 2001 to the Fall of 2002. In the same comparison, math scores decreased 2.6 points and writing decreased 1.3 points.
- The results included in **Table 5** suggest that an inverse relationship exists between the number of students tested and the average level of performance on the verbal, math , and writing sections. Expressly, as the number of students increased, the average performance decreased for the sophomore and junior classes.

School Performance

The performance of juniors based on the 2002–03 PSAT/NMSQT mean verbal, mathematics, and writing scores by school is presented in **Table 6**. These scores are compared to the performance of HISD juniors tested in 2001–02.

- For the 2002–03 test administration, the highest mean verbal scores were achieved by students at DeBakey High School for Health Professions, 55.7, and The High School for the Performing and Visual Arts, 55.5. The lowest mean verbal scores were found at Wheatley High School, 32.0 and Contemporary Learning Center, 32.6.
- The highest mean math scores for juniors in 2002–03 were achieved by students at DeBakey High School for Health Professions, 58.0, and Bellaire High School, 55.9. The lowest mean math scores were found at Jones High School, 35.2 and Contemporary Learning Center, 33.4.
- The highest mean writing scores for juniors on the 2002–03 administration of the PSAT/NMSQT were achieved by students at The High School for the Performing and Visual Arts, 58.3, and Bellaire High School, 57.0. The lowest level of writing performance was found at Wheatley High School, 36.8, and Davis High School, 38.3.
- When compared to the results from 2001–02, current results indicate that on the verbal section of the PSAT/NMSQT the mean performance improved for juniors at 6 of the 31 schools. The greatest level of improvement was at Worthing High School.
- When compared to the results from 2001–02, current results indicate that on the math section of the PSAT/NMSQT the mean performance improved for juniors at 13 of the 31 schools. The greatest level of improvement was at Kay On-Going.

Table 6: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores by School: Juniors

School	2002–03				2001–02			
	N Tested	Verbal Score	Math Score	Writing Score	N Tested	Verbal Score	Math Score	Writing Score
Austin	392	34.8	38.9	39.5	273	36.6	39.7	38.5
Bellaire	545	54.9	55.9	57.0	502	55.6	58.4	56.6
Chavez	436	33.6	35.5	39.0	138	37.6	40.7	39.5
CLC	18	32.6	33.4	38.5	13	34.7	35.0	39.0
Davis	326	32.8	35.9	38.3	82	40.0	41.5	38.9
DeBakey	144	55.7	58.0	56.8	144	56.7	56.9	57.2
Eastwood	39	36.3	39.1	40.3	31	36.2	37.4	37.5
Furr	187	34.6	35.9	39.5	58	40.6	42.5	44.3
Houston, Sam	177	35.2	38.5	40.6	295	35.6	37.0	38.2
HSLECJ	126	43.1	42.4	46.8	131	44.6	43.9	44.8
HSPVA	130	55.5	52.4	58.3	160	55.0	53.8	56.9
Jones	155	33.9	35.2	39.2	202	41.0	41.0	43.1
Jordan	176	38.0	39.4	40.9	77	41.8	42.3	42.7
Kashmere	69	35.7	38.8	38.8	103	35.0	37.5	39.2
Kay On-Going	14	33.6	38.0	39.7	18	33.7	32.9	37.3
Lamar	501	51.6	52.2	52.0	596	51.6	50.1	50.6
Lee	249	33.3	36.4	38.9	273	34.2	36.3	38.0
Madison	164	36.6	37.5	40.6	150	38.9	39.0	41.2
Middle College	50	42.8	44.3	44.4	54	43.1	41.6	44.4
Milby	369	36.7	41.0	40.4	139	43.3	45.1	43.5
Reagan	154	39.1	39.5	42.6	96	42.6	42.1	43.4
Scarborough	108	36.9	38.6	41.3	85	43.1	42.6	43.5
Sharpstown	101	41.5	44.2	45.1	119	41.3	43.7	43.3
Sterling	115	37.2	41.0	41.8	91	40.9	42.4	41.6
Waltrip	179	41.8	42.6	44.4	106	46.4	44.3	46.4
Washington	131	46.4	50.0	48.1	115	50.6	52.5	50.6
Westbury	158	39.1	40.2	42.7	169	40.3	40.1	43.2
Westside	631	45.0	45.9	46.5	435	44.8	45.7	45.5
Wheatley	104	32.0	35.3	36.8	52	32.9	37.4	36.7
Worthing	78	40.5	42.1	44.4	250	35.1	38.0	38.2
Yates	125	37.7	38.9	40.4	61	38.1	37.4	39.0

- When compared to the results from 2001–02, current results indicate that on the writing section of the PSAT/NMSQT the mean performance improved for juniors at 15 of the 31 schools. The greatest level of improvement was at Worthing High School.

The performance of sophomores based on the 2002–03 PSAT/NMSQT mean verbal, mathematics, and writing scores by school is presented in **Table 7**. These scores are compared to the performance of HISD sophomores tested in 2001–02.

- For the 2002–03 test administration, the highest mean verbal scores were achieved by students at DeBakey High School for Health Professions, 52.7, and The High School for the Performing and Visual Arts, 52.5. The lowest mean verbal scores were found at Lee High School, 31.0, and Contemporary Learning Center, 30.0.
- The highest mean math scores for sophomores in 2002–03 were achieved by students at DeBakey High School for Health Professions, 53.1, and Bellaire High School, 53.1. The lowest mean math scores were found at Kay On-Going, 32.5, and Contemporary Learning Center, 32.7.

Table 7: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores by School: Sophomores

	2002–03				2001–02			
School	**N Tested**	**Verbal Score**	**Math Score**	**Writing Score**	**N Tested**	**Verbal Score**	**Math Score**	**Writing Score**
Austin	376	32.3	35.2	38.1	39	38.8	39.9	41.5
Bellaire	408	51.3	53.1	53.2	385	52.7	53.6	53.2
Chavez	528	32.0	33.9	38.1	16	36.1	39.8	38.3
CLC	6	30.0	32.7	37.5	7	38.0	35.4	37.3
Davis	319	32.3	35.5	37.6	39	36.6	39.8	38.3
DeBakey	95	52.7	53.1	51.7	66	53.1	54.2	52.8
Eastwood	0				5	36.8	43.0	38.8
Furr	185	33.0	35.1	38.3	4	*	*	*
Houston, Sam	85	37.6	40.2	41.0	132	37.0	38.4	39.2
HSLECJ	104	40.8	40.3	44.2	112	42.5	40.2	42.6
HSPVA	66	52.5	51.5	54.7	77	51.3	49.6	52.5
Jones	127	32.2	33.6	37.3	194	38.1	37.1	41.4
Jordan	48	40.5	39.9	42.4	69	39.9	38.7	40.4
Kashmere	11	36.9	38.7	40.3	5	35.6	36.2	37.2
Kay On-Going	15	35.7	32.5	38.7	11	31.6	32.7	35.6
Lamar	378	49.1	49.2	49.5	267	52.2	50.9	51.5
Lee	410	31.0	34.5	37.7	1	*	*	*
Madison	71	35.8	36.5	39.7	42	38.5	39.0	39.3
Middle College	52	42.8	41.3	45.3	40	40.9	40.0	40.3
Milby	1	*	*	*	57	41.1	42.8	42.3
Reagan	44	36.1	37.1	42.3	51	40.9	40.4	42.2
Scarborough	36	39.0	41.2	41.3	33	41.3	39.3	40.6
Sharpstown	48	38.8	42.1	42.9	61	41.5	41.0	42.0
Sterling	118	34.0	34.7	37.3	53	37.2	40.8	40.1
Waltrip	90	41.5	42.5	44.8	96	42.7	42.7	43.9
Washington	104	44.9	47.6	45.6	95	46.1	47.9	46.8
Westbury	54	38.9	39.3	42.9	60	38.5	38.4	40.5
Westside	677	42.4	42.7	44.5	688	42.1	41.9	42.9
Wheatley	4	*	*	*	13	35.9	36.8	39.2
Worthing	50	38.3	42.0	40.1	30	39.5	39.4	43.6
Yates	35	33.2	35.3	38.2	63	37.4	37.5	37.5

* Less than 5 students tested

- The highest mean writing scores for sophomores on the 2002–03 administration of the PSAT/NMSQT were achieved by students at The High School for the Performing and Visual Arts, 54.7, and Bellaire High School, 53.2. The lowest level of writing performance was found at Jones High School, 37.3, and Sterling High School, 37.3.
- When compared to the results from 2001–02, current results indicate that on the verbal section of the PSAT/NMSQT the mean performance improved for sophomores at 8 of the 26 schools that tested at least five students both years. The greatest level of improvement was at Kay On-Going.
- When compared to the results from 2001–02, current results indicate that on the math section of the PSAT/NMSQT the mean performance improved for sophomores at 11 of the 26 schools. The greatest level of improvement was at Worthing High School.
- When compared to the results from 2001–02, current results indicate that on the writing section of the PSAT/NMSQT the mean performance improved for sophomores at 16 of the 26 schools. The greatest level of improvement was at Middle College for Technology Careers.

Performance and Gender/Ethnicity

The average performance of juniors from the past two annual administrations of the PSAT/NMSQT was disaggregated for specific student groups. The PEIMS file was used to identify students with missing demographic data. The results from this analysis of juniors are presented in **Table 8**, and include the average scores from the Fall of 2001 and 2002 and the differences in performance between these two administrations.

Table 8: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores and Comparison Differences: Juniors

	2002-03				2001-02				Difference			
	N	Verbal	Math	Written	N	Verbal	Math	Written	N	Verbal	Math	Written
Native Amer	17	42.9	42.9	46.4	6	48.8	47.2	48.0	11	-6.0	-4.2	-1.6
Asian Amer	338	49.7	56.1	52.3	371	50.5	56.2	51.7	-33	-0.8	-0.2	0.6
African Amer	1,623	39.9	40.9	42.9	1,553	40.7	41.0	42.4	70	-0.8	-0.1	0.5
Hispanic	3,031	36.7	39.1	41.1	2,022	39.9	41.1	41.5	1,009	-3.3	-2.0	-0.3
White	1,012	53.1	53.1	54.4	981	53.9	53.6	54.5	31	-0.8	-0.5	-0.2
Other	101	46.1	46.6	48.6	85	46.2	47.7	47.1	16	-0.2	-1.1	1.5

- Based on the results from the Fall 2002 administration of the PSAT/NMSQT, the highest scores on the verbal and writing sections were achieved by the White students, 53.1 and 54.4, respectively. The highest math performance was accomplished by the Asian American students with an average math score of 56.1.
- Between the Fall 2002 and Fall 2001 administrations, none of the student groups exhibited improvement on the verbal or math sections of the test. In writing, Asian Americans and African Americans both showed group-level improvement.
- When comparing the performance of African American students with White students over the past two years the achievement gap remained constant at 13.2 points on the verbal section, and decreased in math and writing. The gap between Hispanic and White students widened over the past two years in verbal, math, and writing.

The average performance of sophomores from the past two administrations of the PSAT/NMSQT was disaggregated for specific student groups. The PEIMS file was used to identify students with missing demographic data. The results from this analysis are presented in **Table 9**, and include the average scores from the Fall of 2001 and 2002 and the differences in performance between these two administrations.

Table 9: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores and Comparison Differences: Sophomores

	2002–03				2001–02				Difference			
	N	Verbal	Math	Written	N	Verbal	Math	Written	N	Verbal	Math	Written
Native Amer	10	40.9	44.4	44.7	5	48.8	47.2	47.6	5	-7.9	-2.8	-2.9
Asian Amer	279	46.1	51.0	48.6	241	49.3	53.4	49.6	38	-3.2	-2.5	-0.9
African Amer	1,024	38.2	38.5	41.4	805	40.6	39.8	41.7	219	-2.4	-1.3	-0.4
Hispanic	2,299	34.5	36.7	39.6	903	39.5	39.9	41.1	1,396	-5.0	-3.2	-1.5
White	823	49.4	49.8	50.5	788	50.6	49.9	50.8	35	-1.2	-0.1	-0.3
Other	88	42.9	43.7	45.1	68	44.4	44.0	45.5	20	-1.5	-0.4	-0.4

- Based on the results from the Fall 2002 administration of the PSAT/NMSQT, the highest scores on the verbal and writing sections were achieved by the White students, 49.4 and 50.5, respectively. The highest math performance was accomplished by the Asian American students with an average math score of 51.0.
- Between the Fall 2002 and Fall 2001 administrations, none of the sophomore student groups exhibited improvement on the verbal, math, or writing sections of the PSAT/NMSQT.
- When comparing the performance of African American students with White students over the past two years, the achievement gap remained constant at 9.1 points on the writing section, but increased in math and verbal. The gap between Hispanic and White students widened over the past two years in verbal, math, and writing. The largest increases in this achievement gap was 3.8 points in verbal and 3.1 points in math so that the gap between Whites and Hispanics stands at 14.9 points in verbal and 13.1 points in math.

The performance of juniors and sophomores from the past two administrations of the PSAT/NMSQT were combined and averages were calculated for the disaggregation for specific student groups. The results from this analysis are presented in **Table 10**, and include the average scores from the Fall of 2001 and 2002 and the differences in performance between these two administrations.

Table 10: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores and Comparison Differences: Combined (Juniors and Sophomores)

	2002–03				2001–02				Difference			
	N	Verbal	Math	Written	N	Verbal	Math	Written	N	Verbal	Math	Written
Native Amer	27	42.1	43.5	45.7	11	48.8	47.2	47.8	16	-6.7	-3.7	-2.1
Asian Amer	617	48.0	53.8	50.6	612	50.0	55.1	50.9	5	-2.0	-1.4	-0.2
African Amer	2,647	39.2	40.0	42.3	2,358	40.7	40.6	42.2	289	-1.5	-0.6	0.1
Hispanic	5,330	35.7	38.1	40.5	2,925	39.8	40.7	41.3	2,405	-4.1	-2.7	-0.9
White	1,835	51.5	51.6	52.6	1,769	52.4	52.0	52.9	66	-1.0	-0.4	-0.2
Other	189	44.6	45.2	47.0	153	45.4	46.1	46.4	36	-0.8	-0.8	0.6

- Based on the results from the Fall 2002 administration of the PSAT/NMSQT, the highest scores on the verbal and writing sections were achieved by the White students, 51.5 and 52.6, respectively. The highest math performance was accomplished by the Asian American students with an average math score of 53.8.
- Between the Fall 2002 and Fall 2001 administrations, none of the student groups exhibited improvement on the verbal or math sections of the test. In writing, African Americans showed group-level improvement.
- When comparing the performance of African American students with White students over the past two years, the achievement gap was narrowed on the writing section, but increased minimally in math and verbal scores. The gap between Hispanic and White students widened over the past two years in verbal, math, and writing. The largest increases in this achievement gap was 3.2 points in verbal and 2.2 points in math so that the gap between Whites and Hispanics stands at 15.8 points in verbal and 13.5 points in math.

The results of juniors, sophomores, and these two groups combined were disaggregated by gender and analyzed. The results from the Fall 2002 and Fall 2001 administrations of the PSAT/NMSQT are presented and compared in **Table 11**.

- The performance of juniors, sophomores, and a combined-grade average indicated that in 2002-03 males outperformed females on the math section, while females had higher average scores in writing. Additionally, females performed slightly better overall on the verbal section than the male students.
- When comparing the past two years of data, for juniors, sophomores, and the combined grades, it was discovered that there was a decrease in scores for both males and females on each subject. For each group, and for each subject, the performance of males decreased more than their female cohorts.

Table 11: 2002–03 and 2001–02 PSAT Mean Verbal, Mathematics, and Writing Scores and Comparison Differences by Gender: Sophomores, Juniors, and Combined (Sophomores and Juniors)

	2002–03			2001–02			Difference		
Juniors	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**
Female	41.1	42.2	45.1	43.5	43.7	45.3	-2.3	-1.5	-0.2
Male	41.1	43.8	43.8	44.2	46.1	45.0	-3.2	-2.3	-1.3
	2002–03			**2001–02**			**Difference**		
Sophomores	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**
Female	39.2	39.9	43.4	43.6	43.1	45.4	-4.4	-3.1	-2.0
Male	38.5	41.1	41.8	44.1	45.1	44.2	-5.6	-3.9	-2.4
	2002–03			**2001–02**			**Difference**		
Combined	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**	**Verbal**	**Math**	**Writing**
Female	40.3	41.3	44.4	43.6	43.5	45.3	-3.3	-2.2	-0.9
Male	40.0	42.7	42.9	44.1	45.7	44.7	-4.2	-3.1	-1.8

Administrative District Results

The results of juniors, sophomores, and these two groups combined were examined and calculated for each HISD administrative district for the 2002-03 school year. The verbal, math, and writing average score for these districts are presented in **Table 12**.

Table 12: Administrative District PSAT Mean Verbal, Mathematics, and Writing Scores for Sophomores, Juniors, and Combined (Sophomores and Juniors): 2002-03

	Juniors			Sophomores			Combined		
Administrative District	Verbal	Math	Writing	Verbal	Math	Writing	Verbal	Math	Writing
Alternative District	46.4	46.8	49.1	45.6	45.0	47.5	46.1	46.1	48.5
Central District	51.6	52.2	52.0	49.1	49.2	49.5	50.6	50.9	50.9
East District	34.8	38.0	39.6	32.5	35.2	38.2	33.7	36.7	38.9
North Central District	34.8	37.1	39.7	32.8	35.7	38.2	33.9	36.5	39.0
North District	35.2	38.5	40.6	37.6	40.2	41.0	35.9	39.1	40.7
Northeast District	33.5	36.7	37.6	36.3	38.1	39.6	33.7	36.8	37.8
Northwest District	42.0	43.9	44.8	42.6	44.6	44.6	42.2	44.1	44.7
South Central District	35.6	36.8	39.8	32.4	34.0	37.5	34.4	35.8	38.9
South District	37.7	39.7	41.8	35.4	36.8	38.6	36.8	38.5	40.5
Southeast District	35.0	38.0	39.7	32.0	33.9	38.1	33.8	36.4	39.1
Southwest District	39.1	40.2	42.7	38.9	39.3	42.9	39.0	40.0	42.7
West Central District	54.9	55.9	57.0	51.3	53.1	53.2	53.3	54.7	55.4
West District	41.7	43.3	44.4	38.2	39.7	42.0	39.8	41.4	43.1

- The average verbal score of juniors by administrative district ranged from 54.9 in the West Central District to 33.5 at the Northest District schools. The average math score for juniors ranged from 55.9 at the West Central District schools to 36.7 in the Northeast District. In writing, the performance ranged from an average score of 57.0 at West Central schools to 37.6 at Northeast District schools.
- The average verbal score of sophomores on the PSAT by administrative district ranged from 51.3 at West Central schools to 32.0 at Southeast District schools. The average math performance of sophomores by administrative district ranged from 53.1 at West Central schools to 33.9 at Southeast District schools. On the writing section

of the PSAT, average scores by administrative district ranged from 53.2 in the West Central District to 37.5 at South Central District schools.

- For the average scores calculated for the combined group of sophomores and juniors, two administrative districts, the Central and the West Central had average scores above 50 on the verbal, math, and writing sections of the PSAT/NMSQT.

National Merit Scholarship Finalists

The number of seniors for the past two years who were National Merit Scholarship Finalists is presented by school in **Table 13**. This honor is based upon meeting the criteria established coupled with the PSAT results from their junior year. The number of National Achievement Finalists and National Hispanic Recognition Finalists are also reported.

Table 13: National Merit Scholarship Qualifying Test Finalists for HISD Seniors by Graduating Class

	National Merit Finalists		National Achievement Finalists		National Hispanic Recognition Finalists	
School	**2002**	**2003**	**2002**	**2003**	**2002**	**2003**
Bellaire	58	39	1	1	6	14
Carnegie	-	2	-	0	-	3
CLC	0	0	0	0	0	2
DeBakey	2	8	5	5	7	10
HSPVA	7	5	0	0	0	2
Lamar	9	10	4	2	4	9
Law Enforcement	0	0	0	0	0	1
Lee	0	0	0	0	0	1
Madison	0	0	0	0	1	0
Milby	0	0	0	0	2	1
Waltrip	0	0	0	0	0	1
Washington	1	1	3	2	4	6
Westbury	0	0	0	0	1	0
Westside	0	1	0	0	0	2
Total	77	66	13	10	25	52

- The number of National Merit Scholarship Finalists decreased from 77 in 2002 to 66 in 2003. In addition, the number of National Achievement Finalists decreased by 3 when comparing 2002 to 2003. Inversely, the number of National Hispanic Recognition Finalists increased from 25 in 2002 to 52 in 2003.
- Bellaire had the highest number of National Merit Scholarship Finalists for the past two years although the number decreased over that time. The number of National Merit Scholarship Finalists increased at DeBakey, Westside, and Lamar high schools. For the National Hispanic Recognition Scholarship, ten high schools exhibited an increase in the number of students awarded this honor. Expressly, the greatest increases in the number of these honorees were found at Bellaire and Lamar high schools

Longitudinal Comparison of PSAT/NMSQT Results: 1992–93 to 2002–2003

The mean mathematics and verbal scores from 1992–93 to 2002–03 were disaggregated by gender and ethnicity for all participants and presented in **Table 14**. Writing scores were not included in the analysis since this section was not implemented until 1997–98. These results include the performance of all students tested grades 8 through 12.

Table 14: PSAT Verbal and Mathematics Mean Scores for all Participants, 1992–93 to 2002–03

Verbal Mean Scores: 1992–1993 to 2002–2003

Year	Overall	Female	Male	Asian	Hispanic	African-American	White
92–93	38.5	38.2	39.0	40.4	33.9	34.8	44.0
93–94	38.5	38.3	39.0	41.7	34.4	34.5	44.7
94–95	46.4	46.0	47.1	49.6	42.0	42.4	53.1
95–96	45.3	44.6	46.3	49.3	40.8	42.0	52.1
96–97	44.4	44.2	44.8	48.5	39.8	41.4	52.6
97–98	44.8	44.5	45.2	48.7	41.4	41.2	53.1
98–99	43.9	43.5	44.5	46.9	40.2	41.4	51.5
99–00	44.6	44.0	45.6	50.4	40.2	41.1	53.5
00–01	44.1	43.7	44.6	49.5	39.5	40.4	53.6
01–02	43.6	43.4	43.8	50.1	39.8	40.6	52.4
02–03	40.1	40.3	39.9	47.8	35.7	39.1	51.4

Mathematics Mean Scores: 1992–1993 to 2002–2003

Year	Overall	Female	Male	Asian	Hispanic	African-American	White
92–93	44.3	42.4	46.7	51.9	40.1	39.0	48.8
93–94	44.0	42.3	46.6	52.5	39.9	38.7	49.7
94–95	46.1	44.4	48.6	54.3	41.8	41.1	52.1
95–96	45.8	44.0	48.4	54.4	41.3	41.3	52.3
96–97	45.3	44.1	46.9	53.7	41.1	41.7	52.1
97–98	44.8	43.7	46.3	53.4	41.2	40.6	52.5
98–99	44.9	43.6	46.8	52.4	41.5	41.1	52.0
99–00	45.8	44.5	47.7	55.1	41.2	42.0	53.0
00–01	45.7	44.6	47.4	56.4	41.6	41.5	53.6
01–02	44.2	43.3	45.5	55.2	40.7	40.5	52.0
02–03	41.8	41.2	42.6	53.5	38.1	39.8	51.4

- The overall average verbal score for all HISD students that took the PSAT, has declined steadily over the past four years. Specifically, the average verbal score has decreased 4.5 points from an average score of 44.6 in 1999–2000 to 40.1 in 2002–03.
- The average verbal performance of all six student groups included in this analysis on the PSAT/NMSQT in 2002–03 is an improvement from the scores in 1992–93. However, if the current trend of reduced scores continues, the gains in verbal performance made over the past ten years will dissipate.
- The overall math score remained relatively consistent between 44 and 46 from 1992–93 to 2001–02. However, the current performance level on the PSAT/NMSQT showed a decline in the current years testing, decreasing from a mean score of 44.2 in 2001–02 to 41.8 in 2002–03.
- Of the six student groups included in this analysis, Asian American, African American, and White students had a higher average math score in 2002–03 than they did ten years ago in 1992–93, while male, female, and Hispanic student groups exhibited lower performance.

The differential in achievement commonly found between White students and ethnic minority students was analyzed based on the performance of HISD students over the past 10 years. This information about the achievement gap and the relationship between gender performance differences are presented in **Table 15.**

Table 15: Ethnic and Gender Differential, 1992–03 to 2002–03

	Verbal Mean Score Differential			Mathematics Mean Score Differential		
Year	M/F Gender Diff.	White/ Af. Am. Diff.	White/ Hispanic Diff.	M/F Gender Diff.	White/ Af. Am. Diff.	White/ Hispanic Diff.
92–93	0.8	9.2	10.1	4.3	9.8	8.7
93–94	0.7	10.2	10.3	4.3	11.0	9.8
94–95	1.1	10.7	11.1	4.2	11.0	10.3
95–96	1.7	10.1	11.3	4.4	11.0	11.0
96–97	0.6	11.2	12.8	2.8	10.4	11.0
97–98	0.7	11.9	11.7	2.6	11.9	11.3
98–99	1.0	10.1	11.3	3.2	10.9	10.5
99–00	1.6	12.4	13.3	3.2	11.0	11.8
00–01	0.9	13.2	14.1	2.8	12.1	12.0
01–02	0.4	11.8	12.6	2.2	11.5	11.3
02–03	-0.4	12.2	15.7	1.4	11.6	13.4

- On the verbal section of the PSAT/NMSQT, the differential in scores between White students and minority groups has widened over the past ten years. The achievement gap between White and Hispanic students has increased by 5.6 points, while the gap between White and African American students has increased 3.0 points, since 1992–93.
- In 2002–03, for the first time in the years covered by this analysis, female students out performed their male cohorts. Since 1992–93, the deficit in verbal performance has been reduced from 0.8 points to a surplus of performance of 0.4 points. Expressly, the verbal performance of male and female students exhibits a minimal difference.
- Over the past ten years, the achievement gap between White students and African American and Hispanic students has increased as reflected in the group average math scores from the PSAT/NMSQT. Specifically, the differential between White and African American students increased from 9.8 points in 1992–93 to 11.6 points in 2002–03. Concurrently, the gap between White and Hispanic student math performance increased from 8.7 points in 1992–93 to 13.4 points in 2002–03.
- The gender gap in math performance on the PSAT/NMSQT has decreased over the past 10 years. On the 1992–93 administration of the PSAT, males on average out scored females by 4.3 points. In 2002–03, this differential was decreased to a scant 1.4 points.

Skills Needing Improvement

Students taking the PSAT/NMSQT in the Fall of 2002 received personalized feedback based upon their pattern of responses along with suggestions for improvement regarding their performance on the verbal reasoning, mathematics reasoning, and writing skills sections. For the verbal and mathematics sections, up to three skills are reported and for the writing section, up to two skills are reported in which the student needs to improve. The skill sets that are identified may not necessarily reflect the weakest areas. The skills identified represent those that are most attainable. This information was designed to help students improve their skill sets to succeed in college and to prepare for the SAT.

The four most frequently identified skill sets for the verbal, math, and writing PSAT/NMSQT subtests requiring improvement are summarized in **Table 16**. They are presented in decreasing order of importance based upon aggregating the data for individual student performance. The results are taken from the test scores of all students that took the PSAT/NMSQT in the Fall of 2002.

- The four most identified verbal skill sets that need improvement based on students' Fall 2002 performance were "understanding sentence or analogies that deal with abstract ideas," "understanding the exact relationship between words," "understanding tone," and "being thorough." Of these four skill sets, "being thorough" was also identified in the 2001–02 report as being one of the top four verbal skill sets that needed improvement.

Table 16: Districtwide PSAT Skills Needing Improvement, 2002

PSAT/NMSQT SKILLS LIST	N
Verbal Skills	
Understanding sentences or analogies that deal with abstract ideas	3,374
Understanding the exact relationship between words	3,176
Understanding tone	2,946
Being thorough	2,747
Mathematics Skills	
Dealing with probability, basic statistics, charts, and graphs	3,206
Recognizing patterns and equivalent forms	3,153
Creating figures or algebraic equations to help solve problems	2,958
Using basic algebraic concepts and operations to solve problems	2,839
Writing Skills	
Following conventions in writing	2,965
Understanding the structure of sentences with unfamiliar vocabulary	2,032
Using verbs correctly	2,020
Recognizing improper pronoun use	1,995

- The four most identified mathematical skill sets that need improvement based on students' Fall 2002 performance were "dealing with probability, basic statistics, charts, and graphs," "recognizing patterns and equivalent forms," "creating figures or algebraic equations to help solve problems," and "using basic algebraic concepts and operations to help solve problems." Of these four skill sets, "recognizing patterns and equivalent forms" was also identified in the 2001–02 report as being one of the top four mathematics skill sets that needed improvement. It is noteworthy that two of the four most identified skill sets in this analysis pertain to math skills used in the instruction of algebra.
- The four most identified writing skill sets that need improvement based on students' Fall 2002 performance were "following conventions in writing," "Understanding the structure of sentences with unfamiliar vocabulary," "using verbs correctly," and "recognizing improper pronoun use." Of these four skill sets, "recognizing improper pronoun use" was also identified in the 2001–02 report as being one of the top four writing skill sets that needed improvement.

Conclusion

The results of the current administration of the PSAT/NMSQT indicate the HISD schools have begun the process of meeting district mandates to increase participation. Specifically, 1,734 more sophomores and 1,133 more juniors took the test in the Fall of 2002 than in the Fall of 2001. This trend will facilitate the Superintendent's goal of getting all sophomores to take the PSAT/NMSQT in the Fall of 2003.

Although participation in the PSAT has improved for sophomores and juniors, there is a great deal of variability among campuses. For juniors the participation rates ranged from 98.0% to 13.4% while for sophomores the rate ranged from 91.2% to 0.0% . A large number of HISD students who aspire to a college education are missing out on the opportunities afforded by the PSAT/NMSQT program for scholarships and participation in the College Search Service.

As the sample of students taking the PSAT/NMSQT increases in size and diversity, it is expected that the scores will decrease, as students without extensive college preparatory backgrounds are included in the testing sample. As the district aligns its instruction and curriculum toward a more scholarly high school education, the performance of students who traditionally would not take the PSAT/NMSQT should show mark improvement.

However, there is a negative trend, that despite all the efforts by the district to decrease the achievement gap between White students and other ethnic groups, these efforts have not translated to college preparatory performance. Since these results are incongruent with the gap reduction found in other measures of academic performance employed by the district, it is recommended that the feedback provided by the test in terms of skills needing improvement be used to address areas of instruction that will facilitate improved performance on future administrations of the PSAT/NMSQT.

Although Hispanic and male students did increase their level of participation in the PSAT when compared to last year, only 46.9% of eligible males and 42.7% of eligible Hispanic students took the test. These results indicate that there are still a significant number of students who are missing the benefits afforded by this testing program.

Students taking the PSAT/NMSQT in 2001 received personalized feedback based upon their responses with suggestions for improving their performance. The information was designed to help students improve their skill sets to succeed in college and to prepare for the SAT (The College Board, 2001a). Teachers and counselors should encourage students to use the strategies suggested on their PSAT/NMSQT Score Report *Plus*.

Recommendations

1. Continue to identify successful efforts to promote participation and performance among students, especially minorities, by providing information to students and parents about the benefits of the PSAT, including eligibility for scholarships, practice for the SAT I, and entry into the college search service

2. Incorporate college preparation materials and activities in the high school curriculum to help students prepare for the PSAT and other college qualifying examinations. Utilize the data provided in this report identifying areas for improvement, and develop strategies to infuse into the curriculum starting with freshmen.

3. Promote awareness and encourage participation in Advanced Academic school based programs such as pre-AP/AP and pre-IB/IB courses to prepare students. Provide information to students and parents about the financial and educational benefits of taking advanced courses.

4. Encourage students to approach counselors and teachers for additional strategies to assist them in addressing their individual areas requiring improvement, based upon their PSAT Score Report *Plus*.

5. Schedule time for students to take practice versions of the PSAT during school hours.

References

APPENDIX A
Score Report *Plus* Skills

VERBAL SKILLS

Understanding main ideas in a reading passage
How to improve: Read the whole passage carefully and try to determine the author's overall message. Practice making distinctions between the main idea and supporting details.

Understanding tone
How to improve: When reading, consider how an author's choice of words helps define his or her attitudes. Pay attention to the way in which tone conveys meaning in conversation and in the media.

Comparing and contrasting ideas presented in two passages
How to improve: Read editorials that take opposing views on an issue. Look for differences and similarities in tone, point of view, and main idea.

Understanding the use of examples
How to improve: Authors often include examples in their writing to communicate and support their ideas. Read different kinds of argumentative writing (editorials, criticism, personal essays) and pay attention to the way examples are used. State the point of the examples in your own words. Use examples in your own writing.

Recognizing the purpose of various writing strategies
How to improve: Writers use a variety of tools to achieve their effects. While you read, look for such things as specific examples, quotations, striking images, and emotionally loaded words. Think about the connotations of specific words and why the author might have decided to use them.

Making inferences
How to improve: When you read nonfiction prose, try to determine the author's beliefs and assumptions.

Determining an author's purpose or perspective
How to improve: Authors write for a variety of purposes, such as to inform, to explain, or to convince. When you read, try to determine why the author wrote what he or she wrote.

Making connections between information in different parts of a passage
How to improve: Work on figuring out the relationship between the material presented in one part of a reading passage and material presented in another part. Ask yourself, for example, how facts presented in the beginning of a magazine article relate to the conclusion.

Distinguishing conflicting viewpoints
How to improve: When reading, practice summarizing main ideas and noting sentences that mark transition points. Learn to understand methods of persuasion and argumentation. Expand your reading to include argumentative writing, such as political commentary, philosophy, and criticism.

Resisting superficial word repetition in a passage
How to improve: Don't select an answer choice just because it contains keywords or phrases from the passage. Practice restating in your own words the ideas presented in the passage.

Being thorough
How to improve: Don't just pick the first answer choice you see that looks tempting. Be sure to evaluate all the choices before you select your answer, just as you would read an entire paragraph rather than assume its meaning based only on the first sentence.

Understanding difficult vocabulary
How to improve: Broaden your reading to include newspapers and magazines, as well as fiction and nonfiction from before the 1900s. Include reading material that is a bit outside your comfort zone. Improve your knowledge of word roots to help determine the meaning of unfamiliar words.

Understanding how negative words, suffixes, and prefixes affect sentences
How to improve: When reading, pay attention to the ways in which negative words (like "not" and "never"), prefixes (like "un"and "im"), and suffixes (like "less") affect the meaning of words and sentences.

Understanding complex sentences
How to improve: Ask your English teacher to recommend books that are a bit more challenging than those you're used to reading. Practice breaking down the sentences into their component parts to improve your comprehension. Learn how dependent clauses and verb phrases function in sentences.

Recognizing connections between ideas in a sentence
How to improve: Learn how connecting words (such as relative pronouns and conjunctions) establish the relationship between different parts of a sentence.

Recognizing words that signal contrasting ideas in a sentence
How to improve: Learn how certain words (such as "although," "but," "however," and "while") are used to signal a contrast between one part of a sentence and another.

Recognizing a definition when it is presented in a sentence
How to improve: Learn how such elements as appositives, subordination, and punctuation are used to define words in a sentence.

Understanding sentences or analogies that deal with abstract ideas
How to improve: Broaden your reading to include newspaper editorials, political essays, and philosophical writings.

Understanding and using a word in an unusual context
How to improve: Work on using word definitions when choosing an answer. Try not to be confused by an unusual meaning of a term.

Comprehending long sentences
How to improve: Practice reducing long sentences into small, understandable parts.

Choosing a correct answer based on the meaning of the entire sentence
How to improve: Make sure your answer choice fits the logic of the sentence as a whole. Don't choose an answer just because it sounds good when inserted in the blank.

Understanding the exact relationship between words
How to improve: In an analogy question, state the relationship between the first two terms in a sentence and then evaluate all the answer choices. If more than one matches your relationship sentence, formulate the relationship more precisely.

Understanding negative relationships in analogies
How to improve: In an analogy, if you establish a negative relationship between the first pair of words (relationships using words like "not," "never," "lacks"), make sure your answer choice has an identical negative relationship. Pay attention to prefixes (like "il" and "im") and suffixes (like "less") that indicate negation.

Recognizing less common meanings of words
How to improve: In an analogy question, if you can't establish the relationship between the first pair of words, identifying the parts of speech of the terms might give you a useful clue.

Recognizing a similar relationship in positive and negative contexts
How to improve: In an analogy question, state the relationship between the first two terms in a sentence and then evaluate all the answer choices. Once you establish a clear relationship sentence, don't be distracted by a shift in the connotations of the words.

Recognizing similar relationships in different fields of knowledge
How to improve: In an analogy question, state the relationship between the first two terms in a sentence and then evaluate all the answer choices. Once you establish a clear relationship sentence, don't be distracted by a shift in subject areas.

Understanding words and relationships commonly associated with science
How to improve: Read magazine articles about scientific subjects to improve your comfort level in this area.

APPENDIX A (continued)

MATHEMATICS SKILLS

Using basic concepts and operations in arithmetic problem solving
***How to improve*:** Practice solving problems involving fractions, decimals, ratio, percent, exponents, square roots, place value.

Understanding geometry and coordinate geometry
How to improve: Review geometry units in your textbook involving perimeter, area, volume, circumference, angles, lines, slope. Familiarize yourself with the formulas given at the beginning of math sections of the test.

Understanding number properties and relationships
***How to improve*:** Practice solving problems involving odd and even integers, prime numbers, multiples, divisibility, remainders, positive and negative numbers.

Dealing with probability, basic statistics, charts, and graphs
How to improve: Practice solving problems that involve basic probability, basic counting, and finding the average (arithmetic mean), median, and mode. Look for charts and graphs in newspapers and magazines, and practice interpreting the data in them.

Creating figures or algebraic equations to help solve problems
***How to improve*:** Practice solving problems by drawing or visualizing figures to help you understand the problem. Practice developing equations from verbal descriptions, figures, or numerical data.

Applying rules in algebra and geometry
***How to improve*:** Review algebra rules (such as exponents, solving equations and inequalities) and geometry rules (such as measures of angles associated with parallel lines). Become familiar with geometric formulas at the beginning of math sections of the test, and practice problems that use them.

Making connections among mathematical topics
***How to improve*:** Practice problems that require combining skills acquired in different math courses, such as problems that use combinations of arithmetic, algebra, and geometry.

Considering different cases to salve problems
***How to improve*:** Practice solving problems in which you must consider all the possibilities. In algebra, this may mean trying different types of numbers, such as negative/zero/positive, odd/even, fractions/integers/decimals, numbers between -1 and 0 or between 0 and 1. Look for ways to use this reasoning in solving quantitative comparison questions.

Organizing and managing information to solve multistep problems
***How to improve*:** Write down your steps in solving the problem. Monitor the steps as you go along, keeping in mind what the question is asking.

Recognizing patterns and equivalent forms
How to improve: Try recognizing a pattern by considering a simpler case. Try rewriting or rearranging the given expressions in a different form.

Using logical reasoning
How to improve: This can be a challenging skill that takes practice to master. Solving problems that require you to justify your answer may help you develop this skill. Problems in textbooks that ask you "Why?" often require this skill.

Searching for a solution by trying a variety of strategies
How to improve: If your first approach fails, don't give up-try a second or third approach. Rethink the problem, break it down, and look at it from different perspectives. Make adjustments in your solution strategy when things aren't going as well as they should.

Solving problems that appear unfamiliar
How to improve: These problems may not look like problems found in textbooks. Don't let the form of the question keep you from trying to answer it. Try not to panic if you are asked to do something that looks unusual-reading the problem carefully may show you that you have the skills to answer it.

Recognizing logical key words
How to improve: Pay attention to key words, such as "not," "at least," "at most," "must be," "could be," "possible," and "different." These words determine the meaning of the question and therefore must be understood to correctly solve the problem.

Using answer choices to help solve the problem
***How to improve*:** Looking at the answer choices may help you understand the problem. Sometimes the choices can help identify a strategy for solving the problem.

Deciding when a problem doesn't provide enough information to determine a single solution
How to improve: Review questions that have "It cannot be determined from the information given" as an answer choice. Considering different possibilities may indicate the answer cannot be determined. When you think there is enough information to solve the problem, double check by trying different values.

WRITING SKILLS

Being precise and clear
How to improve: Learn to recognize sentence elements that are ambiguous and confusing. In your writing, choose words carefully and connect them for clear meaning.

Following conventions in writing
How to improve: Review the chapters in a grammar book that cover grammatical conventions, such as word choice, use of noun and prepositional phrases, and sentence construction. Work with your teacher to become more familiar with the conventions of standard written English.

Recognizing logical connections within sentences and passages
How to improve: Use the writing process to help you revise your draft essays. Work with classmates and teachers to clarify meaning in your writing.

Using verbs correctly
How to improve: Make sure that you can identify the subject and verb of a sentence. Make sure you understand subject and verb agreement.

Recognizing improper pronoun use
How to improve: Learn to understand the distinction between informal, spoken pronoun usage and standard written pronoun usage. Review the way you use pronouns in your own writing. Ask your teacher to help you identify and correct pronoun errors in your own writing.

Understanding the structure of sentences with unfamiliar vocabulary
How to improve: Read material that contains unfamiliar vocabulary. Look for context clues to help you guess at the meaning of unfamiliar words as you read.

Understanding complicated sentence structures
How to improve: Refer to a grammar book to identify various sentence patterns and their effective use. Vary the sentence patterns in your own writing.

Understanding the structure of long sentences
How to improve: As you read, break long sentences into smaller units of meaning.

Understanding the structure of sentences with abstract ideas
How to improve: Read newspapers, magazines, and books that deal with subjects such as politics, economics, history, or philosophy

Understanding the structure of sentences that relate to science or math
How to improve: Focus on how something is said as well as on what is said. Write about the things you are learning in math and science classes. Read articles in the science section of newspapers and magazines so that you will feel more comfortable with scientific or math content.

Understanding the structure of sentences that relate to the arts
How to improve: Focus on how something is said as well as on what is said. Read articles in newspapers and magazines about the arts so that you will feel more comfortable with these subjects

APPENDIX A (continued)

What is reported in the "Improve Your Skills" section of the score report?

The new "Improve Your Skills" section of Score Report Plus gives students a personalized analysis of their areas of weakness as well as specific suggestions for how to improve. This information is derived from analyzing individual performance across test questions. Each test question contains a different combination of skills. Based on a student's individual performance across the questions, the score report notes up to three skills each in verbal and math and up to two writing skills in which the student needs to improve. Also referenced are test questions that contain the skills and that the student answered incorrectly. See the complete list of skills on pages 5 - 6.

Note: Group data on the skills reported in the "Improve Your Skills" section are currently not available. However, planning is under way to provide such aggregate data in the future.

Are the reported skills the student's weakest areas?

Not necessarily. Score Report Plus gives highest priority to those skills that appear most attainable. This approach gives students a better opportunity to improve, rather than overwhelming them with their shortcomings. For students who are weak in more than three verbal skills, for example, the three in which they are probably closest to being able to improve are reported. The educational importance of the skills, as determined with the advice of panels of expert educators, also plays a role in the selection.

What PSAT/NMSQT reports do schools receive?

The following basic reports are provided to all schools:

- *PSAT/NMSQT* Score Report Plus for each student tested (one for the student and one for the school)
  Score labels, summarizing the basic score information (one for each student)
- Roster of Student Scores and Plans, listing student reported information and scores for each student
- School Summary Report (provided if at least 50 of a school's juniors tested at the school), summarizing score statistics and student-reported information
- Summary Statistics Report with summary score data for each grade in which 25 or more students of the same sex tested

  PSAT/NMSQT Summary Report: National, Regional, and State Data, providing score statistics and student-reported information for juniors, including final mean scores. Reports for 2001 will be available in the spring of 2002 on www.collegeboard.com.

Several optional reports are available for a fee:

- Summary ofAnswers, aggregating student responses to each test question
- Special Summary Report, summarizing score data for schools that test fewer than 50 juniors, or for schools that have some juniors who tested elsewhere
- System Summary Report, combining score data from all schools in a system
- Electronic Data Reports, including all student-provided data as well as scores and skills (in disk format)

To order, contact the PSAT/NMSQT program.

How should schools use PSAT/NMSQT score

The PSAT/NMSQT is intended to help students evaluate skill levels in three critical academic areas; practice for SAT Program tests; compare their readiness for college level work with that of their peers; and enter scholarship programs. Score reports should be used for counseling students about educational plans.

PSAT/NMSQT scores are not for use by colleges as part of their admission criteria. Scores should not be included on student transcripts that will be reproduced and sent to colleges unless the student (age 18 or older) or parent/ guardian has granted permission. Inform students of their right to withhold these scores from admission or athletic offices, even when requested.

Questions?

Visit www.collegeboard.com for additional data on the technical characteristics of the test. Or contact the PSAT/NMSQT program at:

Mail: PO. Box 6720, Princeton, NJ 08541-6720
Phone: 888 477-PSAT (7728) (for educators only)
609 771-7070
8 a.m. to 4 p.m. eastern time

Fax: 609 530-0482

E-mail: PSAT@info.collegeboard.org