Bernards Township Schools
District Testing Report
Fall 2006

The Fall 2006 Testing Report includes the New Jersey Department of Education assessments and tests administered by the College Board to include the SAT Reasoning Test, the SAT Subject Tests, and the Advanced Placement Tests. All the tests for the statistical analysis were run for the "Total Students" category, but not for any of the subgroups. Upon recommendation of the New Jersey Department of Education, this report shows scores for large subgroups of students, (n greater than or equal to 40).

Marian Palumbo
Summary of statistics by Fern Wilson
October, 2006

New Jersey Department of Education Assessments

The New Jersey Department of Education Assessments are now administered to all students in Grades 3, 4, 5, 6, 7, 8 and 11. The scores on all state assessments range from 100 to 300 as follows. Under the No Child Left Behind Act, all students scoring 200 or above are meeting or exceeding state standards.

Partially Proficient	100-199
Proficient	200-249
Advanced Proficient	250-300

Unless otherwise stated, the charts for the New Jersey assessments display the results for 2006. The following legend is helpful to reference acronyms within the charts.

Chart Legends

NJASK – New Jersey Assessment of Skills and Knowledge – administered in Grades 3-7
GEPA – Grade Eight Proficiency Assessment – administered in Grade 8
HSPA – High School Proficiency Assessment – administered in Grade 11
GE – General education students
SE – Special education students
DFG – District Factor Group – Bernards Township is in the highest DFG (J)

NJ ASK 3 Percent At or Above State Standards

Student Population	Percent (Bernards)	Percent (DFG J)
LA (GE)	98.0	97.5
LA (SE)	85.6	79.4
LA (Total Students)	95.6	95.5
Math (GE)	98.8	97.8
Math (SE)	98.6	87.2
Math (Total Students)	98.8	96.4

NJ ASK 3 Percent At or Above State Standards by Gender

Student Population	Male	Females
LA (Total Students)	92.8	98.2
Math (Total Students)	99.5	98.2

NJASK 3 – District Mean Scale Scores By Year

Student Population	2004	2005	2006
LA (GE)	228.7	232.4	233.1
LA (SE)	216.0	214.9	222.3
LA (Total Students)	226.2	229.4	231.1
Math (GE)	247.0	248.7	250.4
Math (SE)	228.8	232.9	243.2
Math (Total Students)	243.6	245.9	249.1

NJ ASK 3 District Mean Scale Scores By Gender

Student Population	Males	Females
LA (Total Students)	226.5	235.2
Math (Total Students)	249.0	249.2

NJ ASK 3 District Mean Scale Scores By Ethnicity

Student Population	Asian	White
LA (Total Students)	238.4	230.1
Math (Total Students)	255.8	248.2

*Only reported for subgroups with n>40

.

NJ ASK 3 Mean Scale Scores by School

	OS	CH	LC	MP
LA (GE)	230.9	232.3	230.7	237.5
LA (SE)	224.1	218.9	216.1	229.1
LA (Total Students)	229.7	229.5	228.2	236.0
Math (GE)	243.5	252.6	252.9	252.3
Math (SE)	238.5	240.1	244.5	248.7
Math (Total Students)	242.7	250.0	251.5	251.6

NJ ASK 3 – Summary of Statistics

Language Arts/Literacy

- The mean score for 2006 is significantly higher than the mean score for 2005.
- There is a significant difference between the mean scores of female students and male students in Language Arts in grade 3. Females have a higher mean score.
- A 2-sample test of proportions show there are fewer females in the advanced proficient category in Language Arts in grade 3 than would be expected based on the percent of females in grade 3. This is contrary to the state statistics, where males and females in grade 3 performed equally. It also contradicts the DFG J where females out performed males.
- An ANOVA test on the 3rd grade Language Arts means of the buildings shows there is a significant difference among the buildings.
- All cluster means are at or above both DFG J and above state means.

Mathematics

- The mean score for 2006 is significantly higher than the mean score for 2005.
- There is no significant difference between the mean scores of female students and male students in Mathematics in grade 3.
- A 2-sample test of proportions show there are the expected number of females in the advanced proficient category in Mathematics in grade 3 based on the percent of females in grade 3. This is contrary to the state statistics, that is, males outperformed females in the Mathematics in grade 3. It also contradicts the DFGJ where males outperform females.
- An ANOVA test on the 3rd grade Mathematics means of the buildings shows there is a significant difference among the buildings.
- All cluster means are above both DFG J and state means

NJ ASK 4 Percent At or Above State Standards

Student Population	Percent (Bernards)	Percent (DFG J)
LA (GE)	98.9	97.4
LA (SE)	80.2	75.5
LA (Total Students)	95.6	94.4
Math (GE)	98.6	97.5
Math (SE)	86.6	79.4
Math (Total Students)	95.6	95.0

NJ ASK 4 Percent At or Above State Standards By Gender

Student Population	Male	Females
LA (Total Students)	94.8	96.5
Math (Total Students)	97.4	95.5

NJASK 4 District Mean Scale Scores By Year

Student Population	2004	2005	2006
LA (GE)	235.9	234.7	232.1
LA (SE)	217.6	217.6	213.9
LA (Total Students)	232.7	231.8	228.9
Math (GE)	246.5	247.1	257.8
Math (SE)	227.9	238.5	236.9
Math (Total Students)	243.3	245.6	254.2

NJ ASK 4District Mean Scale Scores By Gender

Student Population	Males	Females
LA (Total Students)	225.0	233.4
Math (Total Students)	256.7	251.2

NJ ASK 4 District Mean Scale Scores By Ethnicity

Student Population	Asian	White
LA (Total Students)	232.8	228.5
Math (Total Students)	266.8	252.2

*Only reported for subgroups with n>40

NJ ASK 4 Mean Scale Scores By School

	OS	CH	LC	MP
LA (GE)	233.4	232.9	229.7	232.1
LA (SE)	221.3	212.2	212.0	211.6
LA (Total Students)	231.6	230.0	226.0	227.9
Math (GE)	251.2	262.1	254.1	263.3
Math (SE)	248.9	241.9	238.3	224.5
Math (Total Students)	250.9	259.2	250.9	255.5

NJ ASK 4 – Summary of Statistics

Language Art/Literacy

- The mean score for 2006 is significantly lower than the mean score for 2005.
- There is a significant difference between the mean scores of female students and male students in Language Arts in grade 4. Females have a higher mean score.
- A 2-sample test of proportions show there are fewer females in the advanced proficient category in Language Arts in grade 4 than would be expected based on the percent of females in grade 4. This is contrary to the state statistics, where females outperformed males. It also contradicts the DFG J where females out performed males.
- An ANOVA test on the 4^{th} grade Language Arts means of the buildings shows there is no significant difference among the buildings.
- All cluster means are above state means.

Mathematics

- The mean score for 2006 is significantly higher than the mean score for 2005.
- There is no significant difference between the mean scores of female students and male students in Mathematics in grade 4.
- A 2-sample test of proportions show the number of females in the advanced proficient category in Mathematics in grade 4 is higher than was expected based on the percent of females in grade 4. This is contrary to the state statistics, that is, males outperformed females in the Mathematics in grade 4. It also contradicts the DFG J where males outperform females.
- An ANOVA test on the 4^{th} grade Mathematics means of the buildings shows there is no significant difference among the buildings.
- All cluster means are above DFG J and state means.

NJ ASK 5, 6, 7 District Mean Scale Scores

Student Population	Grade 5	Grade 6	Grade 7
LA (GE)	239.7	234.0	236.1
LA (SE)	220.5	211.0	214.3
LA (Total Students)	237.0	230.8	234.0
Math (GE)	257.8	251.0	246.6
Math (SE)	236.6	220.4	212.2
Math (Total Students)	254.6	246.9	243.2

NJ ASK 5, 6, 7 District Mean Scale Scores By Gender

Student Population	Grade 5 Male	Grade 5 Females	Grade 6 Males	Grade 6 Females	Grade 7 Males	Grade 7 Females
LA (Total Students)	236.2	237.9	229.0	232.7	229.5	238.4
Math (Total Students)	256.0	253.2	247.2	246.6	244.8	241.7

NJ ASK 5, 6, 7 District Mean Scores By Ethnicity

Student Population	Grade 5 Asian	Grade 5 White	Grade 6 Asian	Grade 6 White	Grade 7 Asian	Grade 7 White
LA (Total Students)	244.6	236.2	235.5	230.3	239.3	233.5
Math (Total Students)	266.7	253.4	254.8	245.9	255.1	241.8

*Only reported for subgroups with n>40

NJ ASK 5 Mean Scale Scores By School

	OS	CH	LC	MP
LA (GE)	235.4	242.7	239.5	240.2
LA (SE)	222.1	220.5	215.3	225.2
LA (Total Students)	233.1	239.9	236.2	238.0
Math (GE)	251.3	264.4	257.3	255.5
Math (SE)	229.3	243.0	230.4	245.4
Math (Total Students)	247.5	261.4	253.6	253.6

NJ ASK Grades 5, 6, 7 Percent of Students At or Above State Standards

Student Population	Grade 5	Grade 6	Grade 7
LA (GE)	99.7	97.3	99.5
LA (SE)	91.3	83.0	87.2
LA (Total Students)	98.5	94.9	98.0
Math (GE)	99.2	98.9	96.7
Math (SE)	89.5	75.5	71.8
Math (Total Students)	97.8	95.6	94.2

NJ ASK 5, 6, 7 Percent of Students At or Above State Standards By Gender

Student Population	Grade 5 Male	Grade 5 Females	Grade 6 Males	Grade 6 Females	Grade 7 Males	Grade 7 Females
LA (Total Students)	97.5	99.5	92.7	97.3	95.1	98.6
Math (Total Students)	97.1	98.5	93.5	97.7	93.1	97.6

NJ ASK 5, 6, and 7 – Summary of Statistics

Grade 5:

Language Arts/Literacy

- There is no significant difference between the mean scores of female students and male students in Language Arts in grade 5.
- A 2-sample test of proportions show there are less females in the advanced proficient category in Language Arts in grade 5 than would be expected based on the percent of females in grade 5. This is contrary to the state statistics, that is, females outperformed males in the state in Language Arts in grade 5. (We cannot compare to DFG J as we do not have that data.)
- An ANOVA test on the 5th grade Language Arts means of the buildings show there was is significant difference in the means among the buildings.

Mathematics

- There is no significant difference between the mean scores of female students and male students in Mathematics in grade 5.
- A 2-sample test of proportions show there are the expected number of females in the advanced proficient category in Mathematics in grade 5, as it should be based on the percent of females in grade 5. This is contrary to the state statistics, that is, males outperformed females in the Mathematics in grade 5. (We cannot compare to DFG J as we do not have that data.)
- An ANOVA test on the 5th grade Mathematics means of the buildings shows there is a significant difference in the means among the buildings.

Grade 6:

Language Arts/Literacy

- There is no significant difference between the mean scores of female students and male students in Language Arts in grade 6.
- A 2-sample test of proportions show there are less females in the advanced proficient category in Language Arts in grade 6 than would be expected based on the percent of females in grade 6. This is contrary to the state statistics, that is, females outperformed males in the state in Language Arts in grade 6. (We cannot compare to DFG J as we do not have that data.)

Mathematics

- There is no significant difference between the mean scores of female students and male students in Mathematics in grade 6.
- A 2-sample test of proportions show the percent of females in the advanced proficient category in Mathematics in grade 6 is as expected based on the percent of females enrolled in grade 6. This is contrary to the state statistics, that is, males outperformed females in the state in Mathematics in grade 6. (We cannot compare to DFG J as we do not have that data.)

Grade 7:

Language Arts/Literacy

- There is a significant difference between the mean scores of female students and male students in Language Arts in grade 7. Females had a higher mean score.
- A 2-sample test of proportions show there are less females in the advanced proficient category in Language Arts in grade 7 than would be expected based on the percent of females in grade 7. This is contrary to the state statistics, that is, females outperformed males in the state in Language Arts in grade 7. (We cannot compare to DFG J as we do not have that data.)

Mathematics

- There is no significant difference between the mean scores of female students and male students in Mathematics in grade 7.
- A 2-sample test of proportions show that the percent of female students in the advanced proficient category in Mathematics is less than what would be expected based on the percent of females in grade 7. This lines up with the state statistics, that is, males outperformed females in the state in Mathematics. (We cannot compare to DFG J as we do not have that data.)

GEPA Percent of Students At or Above State Standards

Student Population	Percent (Bernards)	Percent (DFG J)
LA (GE)	98.6	98.2
LA (SE)	70.2	67.8
LA (Total Students)	95.4	93.7
Math (GE)	95.1	95.5
Math (SE)	44.7	53.5
Math (Total Students)	89.3	89.5
Science (GE)	98.9	98.8
Science (SE)	83.0	80.6
Science (Total Students)	97.1	96.0

GEPA Percent of Students At or Above State Standards By Gender

Student Population	Male	Female
LA (Total Students)	93.2	98.0
Math (Total Students)	88.1	90.7
Science (Total Students)	97.2	96.9

GEPA District Mean Scale Scores By Year

	2002	2003	2004	2005	2006
LA (GE)	241.6	242.1	236.6	233.6	**238.2**
LA (SE)	206.9	213.7	214.0	206.5	**206.0**
LA (Total Students)	236.6	238.4	233.4	231.0	**234.5**
Math (GE)	242.5	246.8	246.6	244.8	**243.7**
Math (SE)	203.5	201.5	205.0	200.0	**198.6**
Math (Total Students)	237.1	241.2	241.8	240.7	**238.5**
Science (GE)	242.5	245.9	247.6	250.8	**247.0**
Science (SE)	224.5	215.7	225.4	222.9	**221.0**
Science (Total Students)	239.8	242.0	244.7	248.2	**244.1**

GEPA District Mean Scale Scores By Gender

Student Population	Male	Female
LA (Total Students)	230.5	239.1
Math (Total Students)	239.7	237.2
Science (Total Students)	245.9	242.0

GEPA District Mean Scale Scores By Ethnicity

Student Population	Asian	White
LA (Total Students)	241.3	234.2
Math (Total Students)	252.3	237.1
Science (Total Students)	253.4	243.0

*Only reported for subgroups with n>40

GEPA – Summary of Statistics

Language Arts/Literacy

- The mean score for 2006 is significantly higher than the mean score for 2005.
- There is a significant difference between the mean scores of female students and male students. Females had a higher mean score.
- A 2-sample test of proportions shows there are a larger percent of females in the advanced proficient category than would be expected based on the percent of females in grade 8.
- A 2-sample test of proportions showed that females students outperformed females in the both the state and DFG J
- All cluster means are at or above DFG J means and above state means.

Mathematics

- There was no significant difference between the mean score in 2006 and the mean score in 2005.
- There was no significant difference between the mean scores of female students and male students.
- A 2-sample test of proportions show there are a larger percent of females in the advanced proficient category than would be expected based on the percent of females in grade 8.
- A 2-sample test of proportions show that the male students performed equally as well as the male students in DFG J, but outperform the male students in the state.
- All cluster means are above state means**.**

HSPA Percent At or Above State Standards

Student Population	Percent (Bernards)	Percent (DFG J)
LA (GE)	99.1	99.3
LA (SE)	84.4	82.5
LA (IEP Exempt from Passing)	33.0	48.4
LA (Total)	97.2	97.0
Math (GE)	99.0	98.4
Math (SE)	65.3	66.6
Math (IEP Exempt from Passing)	16.6	24.7
Math (Total)	94.9	94.6

HSPA Percent At or Above State Standards By Gender

Student Population	Male	Female
LA (Total Students)	97.7	97.0
Math (Total Students)	95.3	94.5

HSPA District Mean Scale Scores By Year

Student Population	2003	2004	2005	2006
LA (GE)	247.1	245.1	250.7	**252.7**
LA (SE)	239.3	242.4	228.7	**228.3**
LA (IEP Exempt from Passing)	204.4	213.8	185.4	**199.1**
LA (Total Students)	243.0	242.8	246.0	**249.7**
Math (GE)	251.2	251.9	247.5	**251.2**
Math (SE)	224.7	243.4	229.2	**213.9**
Math (IEP Exempt from Passing)	201.4	207.3	197.4	**188.8**
Math (Total Students)	246.5	248.3	243.4	**246.7**

HSPA District Mean Scale Scores By Gender

Student Population	Male	Female
LA (Total Students)	247.3	251.8
Math (Total Students)	250.5	244.7

HSPA District Mean Scale Scores By Ethnicity

Student Population	Asian	White
LA (Total Students)	258.2	249.3
Math (Total Students)	264.1	246.2

*Only reported for subgroups with n>40

Summary of Statistics – HSPA

.

Language Arts

- The mean score for 2006 is significantly higher than the mean score for 2005.
- A Goodness of Fit test to determine if the percent of females in the top 25% of our Language Art scores is in line with the percent of females in our junior class was significant. We have a larger percent of females in the top 25% of our Language Art scores than expected. (This is in line with state and district factor group data, that is, females outperformed males in the state and the DFG J group in Language Arts.)
- A 2-sample test of proportions showed that RHS females outperformed females in both the state and the DFG J group in Language Arts.
- A 2-sample test of proportions showed that RHS males outperformed males in both the state and the DFG J group in Language Arts.
- All cluster means are above DFG J and state means.

Mathematics

- The mean score for 2006 is significantly higher than the mean score for 2005.
- A Goodness of Fit test to determine if the percent of females in the top 25% of our Mathematics scores is in line with the percent of females in our junior class was significant. We have a smaller percent of females in the top 25% our Mathematics scores than expected. (This is in line with state and district factor data, that is, males outperformed females in the state and the DFG J group in Mathematics.)
- 2-sample tests of proportions showed that RHS females outperformed females in the state but not in the DFG J in Mathematics. (RHS females performed same as DFG J females.)
- 2-sample tests of proportions show that RHS males outperformed males in the state and the DFG J in Mathematics.
- All cluster means are above state means.

College Board Tests

The College Board provides the district with data for tests taken by Ridge High School students. This report provides an overview of the SAT Reasoning Test (formally SAT-I), the SAT Subject Tests (formally SAT II), and the Advanced Placement Tests (AP).

The data provided by the College Board includes the last SAT Reasoning and SAT Subject scores for Ridge High School (RHS) students in the graduating class of 2006. In 2006, the SAT Critical Reading mean score for RHS was **570**, while the state mean was 496 and the national mean was **503**. In 2006, the SAT Math mean score for RHS was **597**, while the state mean was **515** and the national mean was **518**. The SAT Writing mean score for RHS was **567**, while the state mean was **496** and the national mean was **497.**

Mean, 25th and 75th Percentile SAT-Reasoning Test Scores for 2001-2006

Class of	**Mean SAT score (MATH)**	25th Percentile Score (MATH)	75th Percentile Score (MATH)	**Mean SAT score (VERBAL)***	25th Percentile Score (VERBAL)*	75th Percentile Score (VERBAL)*
2001	**585**	510	665	**563**	510	620
2002	**583**	500	660	**558**	490	640
2003	**585**	510	670	**564**	500	630
2004	**607**	540	680	**583**	520	660
2005	**609**	540	680	**583**	510	650
2006	**597**	540	660	**570**	500	640

*Note well: With the addition of the Writing section on the SAT Reasoning Test in 2006, the Verbal section was renamed "Critical Reading".

Mean, 25th and 75th Percentile SAT-I Scores for Writing 2006

Class of	**Mean SAT Score (Writing)**	25th Percentile Score (Writing)	75th Percentile Score (Writing)
2006	**567**	490	640

SAT Reasoning Means By Gender - 2006

	Male	**Female**
MATH	612	585
CRITICAL READING	571	570
WRITING	560	572

SAT Reasoning Means By Ethnicity - 2006

	Asian*	**White**
MATH	658	589
CRITICAL READING	596	568
WRITING	587	564

*n = 37

SAT Subject Tests – Mean Scores 2006

	Writing	Literature	United States History	Mathematics Level IC	Mathematics Level IIC	Biology	Chemistry	Physics
2001	610	636	557	640	687	628	604	710
2002	630	663	602	627	666	625	592	662
2003	608	576	606	631	694	621	591	696
2004	630	658	585	634	689	600	602	709
2005	640	661	597	632	699	624	628	692
2006*	650	658	615	642	692	613	645	678

*Last given in January 2005 (members of the class of 2006 would have taken it during their junior year)

Summary of Statistics – SAT

Language Arts/Literacy

- The mean score for 2006 is significantly lower than the mean score for 2005.
- There is no significant difference between the mean scores of female students and male students.

Mathematics

- The mean score for 2006 is significantly lower than the mean score for 2005.
- There is a significant difference between the mean scores of female students and male students. The male students outperformed the female students.

Advanced Placement Tests – 2006

The AP tests were administered in May 2006. Students receive a score from 1 to 5 on each test and a score of

SUBJECT	NUMBER OF STUDENTS IN CLASS	NUMBER OF TESTS TAKEN	NUMBER OF STUDENTS RECEIVING A 3 OR HIGHER	**3 OR HIGHER (%) RHS 2006**	3 OR HIGHER (%) GLOBAL 2006	3 OR HIGHER (%) RHS 2005
BIOLOGY	43	40	36	**90**	61	**100**
CALCULUS AB	87	83	73	**88**	61	**80**
CALCULUS BC	15	13	12	**92**	81	**96**
CHEMISTRY	18	16	12	**75**	58	**73**
COMP SCI A*	0	1	0	**0**	70	**100**
ECON-MAC	134	128***	113	**88**	53	**90**
ENG LANG/COMP	115	114***	106	**93**	51	**91**
ENG LIT/COMP	108	103	96	**93**	62	**100**
ENV SCIENCE	55	53	40	**75**	50	**79**
EUROPEAN HIST	37	36***	36	**100**	69	**97**
FRENCH LANG	25	22	6	**17/27****	49/55**	**100/100****
GOVT&POL US	134	132***	105	**81**	55	**76**
ITALIAN LANG	9	9	7	**60/78****	42/51**	*
LATIN-VIRGIL	16	15	15	**100**	62	**100**
PHYSICS B	69	63	63	**100**	60	**88**
PHYSICS C-E&M	25	24	23	**96**	70	**100**
PHYSICS C-MECH	25	24	24	**100**	70	**100**
SPANISH LANG	14	1	0	**0**		**57/63****
STATISTICS	40	38***	38	**100**	60	**98**
US HISTORY	63	58***	51	**87.9**	53	**86**
PSYCHOLOGY	155	156***	149	**96**	68	**96**
ECON-MIC*	0	4	4	**100**	62	**67**
GOVT&POL/COM*	0	2	2	**100**	53	**50**
HUMAN GEOGRAPHY*	0	1	1	**100**	59	**100**
WORLD HISTORY*	0	1	1	**100**	51	*

3 or higher is a passing score and may be accepted for credit at certain colleges. In 2006, approximately 385 students took one or more AP tests, 1137 tests were administered in 25 subjects, and 1013 of the scores reported were a 3 or higher (89%). The chart above represents the results of the AP tests administered in May 2006. The chart shows the number of students who received a final grade in the class, the number of AP tests taken for each of the subjects listed, the number of students receiving a score of three or higher, the percent of all students tested receiving a score of 3 or higher, and the percent of Ridge High School students receiving a score of 3 or higher.

*Class was not offered at RHS ** Standard Group/non-standards group
***Number includes students not enrolled in course during 2005/2006

Summary of Statistics – AP Exams

- Correlation between grades on the midterm exam and AP Scores is significant in all classes except Italian indicating that midterm grades are good predictors of AP Scores.
- Correlation between final grade in class and AP Score is significant in all classes except Italian indicating that AP Test is a fair evaluation of our curriculum.
- 12 mean scores went down from 2005 to 2006; 4 of the decreases were statistically significant. They were in US History, Biology, Chemistry, and French.
- 6 mean scores went up from 2005 to 2006; 3 of the increases were statistically significant. They were in European History, Latin, and Physics B.