

# Massachusetts Comprehensive Assessment System

## Results of Spring 2008

ELA (Gr.3-8 & 10) Mathematics (Gr.3-8 & 10),  
Science (Gr. 5, 8, and high school)

.....



Office of Research, Assessment and Evaluation

# THE SCHOOL COMMITTEE OF THE CITY OF BOSTON

Elizabeth Reilinger, Chairperson

Rev. Gregory G. Groover, Vice-Chairperson

Helen M. Dájer

Alfreda J. Harris

Claudio Martínez

Michael D. O'Neill

Marchelle Raynor

## SUPERINTENDENT OF SCHOOLS

Carol R. Johnson

## OFFICE OF RESEARCH, ASSESSMENT, AND EVALUATION

Kamal Chavda, Assistant Superintendent

## TABLE OF CONTENTS

<i>Executive Summary</i> .....	1
<i>Summary of Improvements</i> .....	2
<i>Results by Racial/Ethnic Groups:</i>	
<i>ELA (grades 3-8 &amp; 10)</i> .....	5
<i>Mathematics (grades 3-8 &amp; 10)</i> .....	6
<i>Science (grades 5 &amp; 8)</i> .....	7
<i>Results by Other AYP Subgroups</i>	
<i>ELA (grades 3-8 &amp; 10)</i> .....	8
<i>Mathematics (grades 3-8 &amp; 10)</i> .....	9
<i>Science (grades 5 &amp; 8)</i> .....	10
<i>Competency Determination Results</i> .....	10
<i>High School Science by Subject, Graduating Class, and Grade</i> .....	12
<i>2006-2008 MCAS Results by Subgroup for Boston Public Schools</i> .....	13
<i>Appendix: MCAS Background</i> .....	23

## Executive Summary

### *Background*

- This report presents the results of the MCAS tests administered in 2008 in English Language Arts (ELA) grades 3-8 and 10; Mathematics grades 3-8 and 10; and Science and Technology/Engineering (STE) grades 5, 8, and high school.

### *Yearly Gains*

- ELA passing rates in 2008 were generally flat or declined; the percentage of students scoring in the Proficient & Advanced categories also declined. Notable exceptions were grades 6, 8, and 10, where the percentage of students in the Proficient & Advanced categories increased significantly.
- In Mathematics, the percentage of students passing, as well as the percentage scoring Proficient & Advanced, increased or remained constant at every grade tested.

### *Comparisons with State*

- State-wide, changes in pass rates as well as percentage Proficient & Advanced in ELA were generally stagnant or declined compared to 2007, except in grade 10. BPS saw gains in grades 6, 8, and 10 in the percent Proficient & Advanced.
- In Mathematics, improvements in the percentage of BPS students passing and those scoring Proficient & Advanced exceeded or matched the state, except in grades 3, 5, and 6.

### *High School*

- Students in grade 10 made significant gains in both ELA and Mathematics: the percentage of students passing, as well as the percent Proficient & Advanced increased in both subjects. In addition, the 1-year gains made by grade 10 students exceeded state gains.
- Results of the Science & Technology/Engineering tests show that a majority of students in the class of 2010 (61%) have already met their new STE competency determination requirement. However, less than half of students with disabilities and limited English proficient students had met this requirement (27% and 38%, respectively).
- Based on the new Competency Determination requirements, 57% of the graduating Class of 2010 has passed ELA, Mathematics, and Science; 32% of them will have to fulfill an Educational Proficiency Plan (EPP), but not have to retake the MCAS, in ELA; and 25% of them will need to fulfill an EPP, but not have to retake the MCAS, in Mathematics.

### *Achievement Gap*



- The achievement gap between African American and Hispanic students and the highest performing subgroup persists, but comparisons between 2007 and 2008 show a narrowing of that gap in ELA in grades 3, 4, 8, and 10. In Mathematics, neither African American nor Hispanic students have narrowed the gap in grades 3 and 7.

## Summary of Improvements: ELA, Mathematics, and Science

### Percent Passing

#### *English Language Arts % Passing (Needs Improvement or higher)*


	BPS			State		
	2007	2008	Dif	2007	2008	Dif
Grade 3	78%	74%	-4%	91%	87%	-4%
Grade 4	75%	73%	-2%	90%	87%	-3%
Grade 5	80%	80%	0%	91%	91%	0%
Grade 6	81%	80%	-1%	92%	91%	-1%
Grade 7	82%	82%	0%	92%	92%	0%
Grade 8	85%	85%	0%	93%	93%	0%
Grade 10	87%	91%	4%	95%	96%	1%

-  Exceed or equal State gains
-  Equal to or less severe than State losses

- Compared to 2007, the percentage of students passing ELA declined or remained constant in all grades, except grade 10.
- Compared to 2007, the improvement in the grade 10 passing rate exceeded the state-wide gain. One-year changes in passing rates in all other grades were equal to, or no worse than, the state-wide changes.

#### *Mathematics % Passing (Needs Improvement or higher)*


	BPS			State		
	2007	2008	Dif	2007	2008	Dif
Grade 3	67%	68%	1%	84%	86%	2%
Grade 4	73%	77%	4%	87%	87%	0%
Grade 5	67%	67%	0%	82%	82%	0%
Grade 6	60%	61%	1%	80%	82%	2%
Grade 7	56%	56%	0%	76%	76%	0%
Grade 8	58%	60%	2%	75%	76%	1%
Grade 10	82%	84%	2%	91%	91%	0%

-  Exceed or equal State gains

- The percentage of students passing Mathematics improved across all grades, except grades 5 and 6.
- The improvements exceeded or were equal to State gains for all grades, except grades 3 and 6.

**Science and Tech/Eng % Passing (Needs Improvement or higher)**

	BPS			State		
	2007	2008	Dif	2007	2008	Dif
Grade 5	69%	63%	-6%	88%	88%	0%
Grade 8	46%	48%	2%	77%	78%	1%


 Exceed or equal State gains


- The percentage of grade 5 students passing science dropped 6 points, from 69% in 2007 to 63% in 2008.
- Despite a two-point increase, less than half of grade 8 students passed the science test.

Percent Proficient and Advanced / Above Proficient

**English Language Arts % Proficient & Advanced / Above Proficient**

	BPS			State		
	2007	2008	Dif	2007	2008	Dif
Grade 3	32%	29%	-3%	59%	56%	-3%
Grade 4	31%	25%	-6%	56%	49%	-7%
Grade 5	40%	37%	-3%	63%	61%	-2%
Grade 6	39%	43%	4%	67%	67%	0%
Grade 7	49%	48%	-1%	69%	69%	0%
Grade 8	55%	57%	2%	75%	75%	0%
Grade 10	50%	58%	8%	71%	75%	4%

 Exceed or equal State gains

 Equal to or less severe than State losses

- Compared to 2007, students in grades 6, 8, and 10 saw increases in their proficient and advanced rates in ELA. By contrast, students in the elementary grades experienced a drop in their proficient and advanced rates.
- Grade 10 students made the most gains (8%), double the gains made state-wide.

**Mathematics % Proficient & Advanced / Above Proficient**

	BPS			State		
	2007	2008	Dif	2007	2008	Dif
Grade 3	36%	36%	0%	60%	61%	1%
Grade 4	27%	30%	3%	48%	49%	1%
Grade 5	33%	33%	0%	51%	52%	1%
Grade 6	29%	32%	3%	52%	56%	4%
Grade 7	26%	28%	2%	46%	47%	1%
Grade 8	27%	34%	7%	45%	49%	4%
Grade 10	55%	59%	4%	68%	72%	4%

○ Exceed or equal State gains

- The percentage of students scoring proficient and above in Mathematics increased in all grades, except grades 3 and 5. There were no reductions in any grade in the percent proficient and advanced.
- In grades 4, 7, 8, and 10, the 1-year gains exceeded or equaled state gains.

**Science and Technology / Engineering % Proficient & Advanced**

	BPS			State		
	2007	2008	Dif	2007	2008	Dif
Grade 5	21%	17%	-4%	51%	50%	-1%
Grade 8	8%	10%	2%	33%	39%	6%

- Less than a quarter of students in grades 5 and 8 are proficient or advanced in science.

## Results by Racial / Ethnic Groups:

### English Language Arts: Percent Proficient & Advanced/Above Proficient

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap for Blacks and Hispanics Compared to Highest Performing Subgroup
<b>Grade 3</b>				
AA/Black	27%	24%	-3%	-1
Asian	46%	50%	4%	-
Latino/Hispanic	26%	23%	-3%	-1
White	54%	48%	-6%	-
<b>Grade 4</b>				
AA/Black	26%	19%	-7%	-3
Asian	52%	44%	-8%	-
Latino/Hispanic	23%	20%	-3%	-7
White	56%	46%	-10%	-
<b>Grade 5</b>				
AA/Black	32%	31%	-1%	1
Asian	60%	59%	-1%	-
Latino/Hispanic	35%	30%	-5%	5
White	61%	61%	0%	-
<b>Grade 6</b>				
AA/Black	30%	37%	7%	1
Asian	63%	71%	8%	-
Latino/Hispanic	35%	38%	3%	5
White	62%	60%	-2%	-
<b>Grade 7</b>				
AA/Black	41%	39%	-2%	5
Asian	69%	70%	1%	-
Latino/Hispanic	41%	40%	-1%	4
White	72%	75%	3%	-
<b>Grade 8</b>				
AA/Black	48%	49%	1%	-2
Asian	74%	76%	2%	-
Latino/Hispanic	48%	51%	3%	-4
White	80%	79%	-1%	-
<b>Grade 10</b>				
AA/Black	40%	48%	8%	-4
Asian	76%	80%	4%	-
Latino/Hispanic	43%	50%	7%	-3
White	74%	79%	5%	-



- In grades 4 and 5, students of all racial / ethnic groups experienced a decline in their percentage proficient and advanced in ELA. White students in grade 4 saw the largest drop (-10%) in their proficient and advanced rate.
- A larger percentage of African American, Asian, Hispanic, and White students in grade 10 scored in the proficient and advanced category compared to 2007.
- The proficiency gap for African American and Hispanic students, compared to the highest performing subgroup, decreased in all grades except grades 5, 6, and 7.

### Mathematics: Percent Proficient & Advanced/Above Proficient

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap for Blacks and Hispanics Compared to Highest Performing Subgroup
<b>Grade 3</b>				
AA/Black	31%	29%	-2%	7
Asian	64%	69%	5%	-
Latino/Hispanic	28%	29%	1%	4
White	55%	55%	0%	-
<b>Grade 4</b>				
AA/Black	18%	23%	5%	-6
Asian	64%	63%	-1%	-
Latino/Hispanic	21%	24%	3%	-4
White	52%	48%	-4%	-
<b>Grade 5</b>				
AA/Black	22%	23%	1%	-3
Asian	74%	72%	-2%	-
Latino/Hispanic	29%	25%	-4%	2
White	53%	55%	2%	-
<b>Grade 6</b>				
AA/Black	17%	22%	5%	-3
Asian	73%	75%	2%	-
Latino/Hispanic	23%	28%	5%	-3
White	51%	48%	-3%	-
<b>Grade 7</b>				
AA/Black	16%	17%	1%	7
Asian	63%	71%	8%	-
Latino/Hispanic	19%	19%	0%	8
White	45%	57%	12%	-

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap for Blacks and Hispanics Compared to Highest Performing Subgroup
<b>Grade 8</b>				
AA/Black	14%	22%	8%	-1
Asian	67%	74%	7%	-
Latino/Hispanic	20%	26%	6%	1
White	52%	57%	5%	-
<b>Grade 10</b>				
AA/Black	45%	46%	1%	2
Asian	89%	92%	3%	-
Latino/Hispanic	48%	54%	6%	-3
White	74%	80%	6%	-

- In Mathematics, the percentage of students in all racial / ethnic groups scoring proficient and advanced increased in grades 8 and 10. White students in grade 7 saw the greatest gain (12%) in their proficient and advanced rate.
- The gap between African American and Hispanic students, and the highest performing subgroup, decreased in grades 4 and 6. Increases in the proficiency gap were most pronounced in grade 7.

#### Science Technology/Engineering: Percent Proficient & Advanced/Above Proficient

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap for Blacks and Hispanics Compared to Highest Performing Subgroup
<b>Grade 5</b>				
AA/Black	13%	10%	-3%	-1
Asian	46%	42%	-4%	-
Latino/Hispanic	16%	11%	-5%	1
White	45%	39%	-6%	-
<b>Grade 8</b>				
AA/Black	4%	5%	1%	5
Asian	22%	28%	6%	-
Latino/Hispanic	4%	5%	1%	5
White	19%	24%	5%	-

- The performance of students by racial / ethnic group on the grade 5 and 8 science tests mirrors the overall student performance: in grade 5, the percent proficient and advanced dropped for all groups; in grade 8, all student groups saw gains.
- The proficiency gap was narrowed for African American students in grade 5, but increased in grade 8; the gap for Hispanic students increased in both grades.

## Results by Other AYP Subgroups:

### English Language Arts: Percent Proficient & Advanced/Above Proficient

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap Compared to All Students
<b>Grade 3</b>				
Students w/ Disab	12%	10%	-2%	-1
LEP/FLEP	26%	21%	-5%	2
Low Income	27%	25%	-2%	-1
All Students	32%	29%	-3%	-
<b>Grade 4</b>				
Students w/ Disab	7%	6%	-1%	-5
LEP/FLEP	28%	18%	-10%	4
Low Income	26%	21%	-5%	-1
All Students	31%	25%	-6%	-
<b>Grade 5</b>				
Students w/ Disab	11%	8%	-3%	0
LEP/FLEP	37%	29%	-8%	5
Low Income	36%	32%	-4%	1
All Students	40%	37%	-3%	-
<b>Grade 6</b>				
Students w/ Disab	9%	12%	3%	1
LEP/FLEP	24%	30%	6%	-2
Low Income	35%	39%	4%	0
All Students	39%	43%	4%	-
<b>Grade 7</b>				
Students w/ Disab	10%	9%	-1%	0
LEP/FLEP	26%	16%	-10%	9
Low Income	43%	42%	-1%	0
All Students	49%	48%	-1%	-
<b>Grade 8</b>				
Students w/ Disab	18%	17%	-1%	3
LEP/FLEP	18%	20%	2%	0
Low Income	50%	51%	1%	1
All Students	55%	57%	2%	-
<b>Grade 10</b>				
Students w/ Disab	12%	19%	7%	1
LEP/FLEP	23%	27%	4%	4
Low Income	45%	54%	9%	-1
All Students	50%	58%	8%	-

- The percentage of special education students, English language learners, and low-income students in the proficient and above category increased in grades 6 and 10, compared to 2007.
- The proficiency gap for ELL students increased in all grades, except grade 6.

### Mathematics: Percent Proficient & Advanced/Above Proficient

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap Compared to All Students
<b>Grade 3</b>				
Students w/ Disab	16%	19%	3%	-3
LEP/FLEP	35%	33%	-2%	2
Low Income	33%	32%	-1%	1
All Students	36%	36%	0%	-
<b>Grade 4</b>				
Students w/ Disab	10%	11%	1%	2
LEP/FLEP	29%	28%	-1%	4
Low Income	23%	26%	3%	0
All Students	27%	30%	3%	-
<b>Grade 5</b>				
Students w/ Disab	10%	10%	0%	0
LEP/FLEP	37%	30%	-7%	7
Low Income	29%	30%	1%	-1
All Students	33%	33%	0%	-
<b>Grade 6</b>				
Students w/ Disab	5%	8%	3%	0
LEP/FLEP	21%	25%	4%	-1
Low Income	25%	29%	4%	-1
All Students	29%	32%	3%	-
<b>Grade 7</b>				
Students w/ Disab	4%	4%	0%	2
LEP/FLEP	16%	13%	-3%	5
Low Income	20%	22%	2%	0
All Students	26%	28%	2%	-
<b>Grade 8</b>				
Students w/ Disab	4%	6%	2%	5
LEP/FLEP	12%	15%	3%	4
Low Income	23%	28%	5%	2
All Students	27%	34%	7%	-
<b>Grade 10</b>				
Students w/ Disab	16%	19%	3%	1
LEP/FLEP	39%	47%	8%	-4
Low Income	52%	57%	5%	-1
All Students	55%	59%	4%	-

- Students with disabilities, English language learners, and low-income students in grades 6, 8, and 10 made improvements compared to 2007.
- The proficiency gap for students with disabilities was reduced in grade 3; ELL students reduced that gap in grades 6 and 10; low-income students reduced the gap in grades 5, 6, and 10.

### Science Technology/Engineering: Percent Proficient & Advanced/Above Proficient

	2007	2008	07-08 Change in % Scoring Proficient & Above	07-08 Change in Proficiency Gap Compared to All Students
<b>Grade 5</b>				
Students w/ Disab	6%	4%	-2%	-2
LEP/FLEP	21%	14%	-7%	3
Low Income	17%	13%	-4%	0
All Students	21%	17%	-4%	-
<b>Grade 8</b>				
Students w/ Disab	1%	1%	0%	2
LEP/FLEP	3%	3%	0%	2
Low Income	5%	6%	1%	1
All Students	8%	10%	2%	-

- On the science tests, only the 8<sup>th</sup> grade low-income subgroup saw an increase in the percent proficient and advanced compared to 2007.

### Competency Determination Results

For the class of 2009 (and for students graduating in 2008 or earlier), earning a Competency Determination means that students must pass both the grade 10 English Language Arts and Mathematics tests by earning a score of 220 (*Needs Improvement*) or above.

Starting with the class of 2010, the standards to meet the Competency Determination have been enhanced. Students in the class of 2010 must meet or exceed the *Proficient* threshold scaled score of 240 on the English Language Arts and Mathematics grade 10 MCAS tests. Students who earn a scaled score between 220 and 238 in English Language Arts and Mathematics must also fulfill the requirements of an Educational Proficiency Plan\*. Students in the class of 2010 must also pass a dis-

\* An Educational Proficiency Plan (EPP) must be developed for a student who scores between 220 and 238 on the grade 10 ELA and/or Mathematics tests.

Each EPP must include, at a minimum:

- a review of the student's strengths and weaknesses, based on MCAS and other assessment results, coursework, grades, and teacher input,
  - the courses the student will be required to take and successfully complete in grades 11 and 12, and
  - a description of the assessments the school will administer on a regular basis to determine if the student is moving toward proficiency.
- For 2008–2009, the assessment options include locally developed end-of-course assessments; grade 10 MCAS test forms designed for the EPP; College Board's Accuplacer; and the Algebra II end-of-course test.

cipline- specific high school MCAS Science and Technology/Engineering test in Biology, Chemistry, Introductory Physics, or Technology/Engineering by meeting or exceeding the *Needs Improvement* threshold score of 220 on the test.

The following table displays the cumulative percentages of all students and student subgroups in the class of 2010 who took and passed the grade 10 MCAS tests in ELA, Mathematics, Science and Technology/Engineering, and in all three subjects combined, through the spring 2008 test administration.

***Class of 2010: Cumulative % of Grade 10 Students who Earned a Passing Score on ELA, Math, and STE as part of the Competency Determination Requirement<sup>1</sup>***

	ELA	Math	ELA and Math	STE	All 3 Tests
<b>All Students</b>	84%*	77%**	73%	61%	57%
<b>Race/Ethnicity</b>					
AA/Black	81%	71%	68%	53%	49%
Asian	93%	93%	91%	89%	86%
Latino/Hispanic	81%	75%	70%	55%	50%
White	90%	85%	84%	78%	75%
<b>Other AYP Subgroups</b>					
Students w/ Disab	58%	43%	39%	27%	22%
LEP/FLEP	62%	61%	53%	38%	34%
Low Income	84%	77%	73%	61%	56%

<sup>1</sup> Beginning with the class of 2010, to earn the Competency Determination, students must meet or exceed the Proficient threshold (scaled score of 240) in English Language Arts and Mathematics or earn a score of Needs Improvement (scaled score of 220–238) and fulfill the requirements of an Educational Proficiency Plan. In addition, students must meet or exceed the Needs Improvement threshold in Science and Technology/Engineering.

\*32% of students in the class of 2010 will require an EPP in ELA, but will not need to retake the MCAS test in that subject

\*\*25% of students in the class of 2010 will require an EPP in Math, but will not need to retake the MCAS test in that subject

- 73% of students in the class of 2010 passed both ELA and Math, compared to 71% for the class of 2009.
- 57% of students in the class of 2010 passed all three required subjects.
- Although there are important differences in the percentage of students who passed all three tests by racial/ethnic group, students with disabilities and ELL students are the least likely to have passed all three tests.

## High School Science by Subject, Graduating Class, and Grade

The following table displays the number and percent of students in the classes of 2010 and 2011 who took and passed a discipline-specific high school Science and Technology/Engineering test in grade 9 or grade 10.

### **High School Science & Tech/Eng Tests: % Passing STE in Grades 9 and 10: Classes of 2010 and 2011**

	<b>Class of 2010</b>	<b>Class of 2011</b>
	<b>% passing STE</b>	<b>% passing STE</b>
	(n=total test takers)	(n=total test takers)
<b>Passed STE in Grade 9</b>		
Biology	80% (1420)	80% (1017)
Chemistry	35% (122)	14% (56)
Physics	42% (2417)	58% (2370)
Tech/Eng	78% (118)	90% (146)
<b>Passed STE in Grade 10</b>		
Biology	39% (1053)	-
Chemistry	16% (307)	-
Physics	62% (209)	-
Tech/Eng	56% (34)	-

- A larger number of 9<sup>th</sup> graders in both the class of 2010 and 2011 took the Physics tests compared to other tests (2,417 students in the class of 2010, and 2,370 students in the class of 2011). The second most popular test in 9<sup>th</sup> grade was Biology, attempted by 1,420 students in the class of 2010, and by 1,017 students in the class of 2011.
- 10<sup>th</sup> graders were more likely to attempt the Biology test (1,053 students in the class of 2010).
- The percentage of students who took and passed Biology as 9<sup>th</sup> graders remained unchanged for the class of 2011, compared to the class of 2010 (80%).
- The percentage of students who passed Physics as 9<sup>th</sup> graders was notably higher for the class of 2011 (58%) than for the class of 2010 (42%).
- Less than half the students passed the Biology test when they attempted it as 10<sup>th</sup> graders (39%).

## 2006-2008 MCAS Results by Subgroup for Boston Public Schools

by Grade then Subject

GRADE 3 - READING									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	P+	P	NI	W	P+	P	NI	W	
<b>All Students</b>									
2008	6	23	45	26	15	41	33	11	
2007	5	27	46	22	14	45	32	9	
2006	6	24	48	22	18	40	34	8	
Stud. w/ Disab									
2008	1	9	39	51	3	20	42	36	
2007	1	11	41	47	3	24	44	29	
2006	2	9	44	45	5	24	47	25	
LEP/FLEP									
2008	4	17	42	37	4	22	44	30	
2007	3	23	46	28	4	25	46	25	
2006	5	20	49	26	5	22	49	24	
Low-Income									
2008	4	21	47	29	5	27	46	23	
2007	3	24	48	24	4	32	46	18	
2006	4	21	51	24	7	28	48	17	
AA/Black									
2008	4	20	48	28	6	27	45	23	
2007	3	24	49	23	5	31	47	18	
2006	3	24	50	22	7	29	49	15	
Asian									
2008	13	37	35	14	21	41	29	9	
2007	10	36	40	15	20	44	28	8	
2006	13	33	40	14	22	40	32	7	
Hispanic/Latino									
2008	3	20	46	31	4	25	45	26	
2007	3	23	47	27	4	28	46	22	
2006	3	17	52	28	5	24	50	22	
White									
2008	14	34	35	17	18	45	29	7	
2007	15	39	34	11	16	50	28	6	
2006	17	36	36	11	21	45	29	5	

GRADE 3 - MATHEMATICS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	P+	P	NI	W	P+	P	NI	W	
<b>All Students</b>									
2008	10	26	32	32	25	36	25	14	
2007	7	29	31	33	19	41	24	16	
2006	1	29	35	34	4	48	32	16	
Stud. w/ Disab									
2008	4	15	27	55	7	22	30	41	
2007	1	15	29	56	5	23	30	42	
2006	1	14	30	55	1	22	36	41	
LEP/FLEP									
2008	8	25	33	35	12	28	30	30	
2007	7	28	30	36	7	28	29	36	
2006	1	29	35	35	2	28	34	36	
Low-Income									
2008	8	24	33	35	11	30	32	27	
2007	5	28	33	35	7	31	31	31	
2006	1	27	36	36	1	30	38	31	
AA/Black									
2008	6	23	33	38	10	27	33	30	
2007	4	27	32	37	6	29	32	33	
2006	1	24	37	39	1	28	39	32	
Asian									
2008	26	43	21	10	37	36	19	9	
2007	19	45	24	12	31	39	18	11	
2006	4	58	25	13	8	55	26	11	
Hispanic/Latino									
2008	7	22	35	36	11	28	31	30	
2007	4	24	33	38	7	28	31	35	
2006	1	23	37	39	1	25	37	37	
White									
2008	19	36	25	20	28	39	23	10	
2007	16	39	27	18	22	45	22	11	
2006	5	50	29	15	5	53	31	11	



GRADE 4 - ENGLISH LANGUAGE ARTS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	W	A	P	NI	W	
<b>All Students</b>									
2008	2	23	48	27	8	41	39	13	
2007	4	27	44	26	10	46	34	10	
2006	3	23	46	28	8	42	39	12	
<b>Stud. w/ Disab</b>									
2008	0	6	34	60	1	13	44	42	
2007	0	7	37	56	1	18	47	34	
2006	-	6	35	59	1	15	48	36	
<b>LEP/FLEP</b>									
2008	1	17	49	34	1	17	48	33	
2007	3	25	43	28	3	24	46	28	
2006	4	22	43	31	2	20	46	31	
<b>Low-Income</b>									
2008	1	20	50	29	2	24	49	25	
2007	2	24	46	28	3	29	48	21	
2006	2	21	47	30	2	25	49	24	
<b>AA/Black</b>									
2008	1	18	51	29	2	23	50	25	
2007	2	24	47	28	3	29	48	21	
2006	2	18	49	31	2	25	49	24	
<b>Asian</b>									
2008	5	39	41	15	13	43	34	10	
2007	11	41	34	13	17	46	29	8	
2006	15	35	38	12	14	43	33	9	
<b>Hispanic/Latino</b>									
2008	1	19	48	31	2	21	48	29	
2007	2	21	46	31	2	26	47	25	
2006	2	19	46	33	2	22	48	29	
<b>White</b>									
2008	7	39	39	15	10	46	36	9	
2007	11	45	31	13	12	51	30	6	
2006	6	42	38	14	9	47	37	7	

GRADE 4 - MATHEMATICS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	W	A	P	NI	W	
<b>All Students</b>									
2008	9	21	47	23	20	29	38	13	
2007	8	19	46	27	19	29	39	13	
2006	8	18	47	27	15	25	45	15	
<b>Stud. w/ Disab</b>									
2008	2	9	41	48	4	14	44	39	
2007	2	8	37	53	4	13	46	37	
2006	1	8	38	52	3	12	46	39	
<b>LEP/FLEP</b>									
2008	8	20	48	24	9	19	44	29	
2007	9	20	45	26	8	18	45	29	
2006	10	19	44	28	7	15	46	32	
<b>Low-Income</b>									
2008	7	19	49	25	8	21	47	24	
2007	6	17	48	29	7	20	48	25	
2006	6	17	48	29	6	15	51	28	
<b>AA/Black</b>									
2008	5	18	50	28	7	19	48	26	
2007	4	14	48	33	6	17	50	27	
2006	3	15	50	33	4	14	52	30	
<b>Asian</b>									
2008	28	35	32	6	38	28	26	7	
2007	28	36	31	6	32	31	30	7	
2006	30	28	34	7	28	29	34	9	
<b>Hispanic/Latino</b>									
2008	6	18	50	26	8	20	45	27	
2007	5	16	49	30	6	18	48	28	
2006	6	15	48	31	5	13	49	33	
<b>White</b>									
2008	18	30	39	14	23	33	36	9	
2007	17	35	38	11	21	33	37	9	
2006	19	30	39	12	17	28	44	10	

GRADE 5 - ENGLISH LANGUAGE ARTS									
		BPS				State			
		% of Students at Each Perf Level				% of Students at Each Perf Level			
		A	P	NI	W	A	P	NI	W
<b>All Students</b>									
	2008	6	31	43	20	13	48	30	8
	2007	7	33	40	21	15	48	28	9
	2006	7	28	43	22	15	44	31	9
Stud. w/ Disab									
	2008	0	8	43	49	2	21	47	30
	2007	1	10	37	52	2	23	43	31
	2006	0	7	40	53	2	22	47	28
LEP/FLEP									
	2008	4	25	45	27	3	23	47	26
	2007	5	32	40	23	4	26	42	28
	2006	6	26	42	27	3	22	46	29
Low-Income									
	2008	4	28	46	22	4	33	46	18
	2007	4	32	42	22	4	34	43	18
	2006	5	26	45	23	4	30	47	18
AA/Black									
	2008	3	28	48	22	4	33	46	17
	2007	3	29	44	24	4	35	43	18
	2006	4	23	48	25	5	30	47	18
Asian									
	2008	17	42	30	11	22	46	25	7
	2007	14	46	32	8	23	45	25	7
	2006	18	41	30	10	22	43	27	8
Hispanic/Latino									
	2008	4	26	48	23	3	29	47	21
	2007	5	30	42	23	4	30	43	23
	2006	4	24	46	26	3	25	48	24
White									
	2008	16	45	27	12	16	53	26	5
	2007	17	44	26	13	17	53	24	5
	2006	18	44	27	11	18	50	27	5

GRADE 5 - MATHEMATICS									
		BPS				State			
		% of Students at Each Perf Level				% of Students at Each Perf Level			
		A	P	NI	W	A	P	NI	W
<b>All Students</b>									
	2008	11	22	34	34	22	30	30	17
	2007	11	22	34	33	19	32	31	18
	2006	8	17	35	40	17	26	34	23
Stud. w/ Disab									
	2008	2	8	25	65	4	14	33	49
	2007	2	8	26	64	3	14	33	50
	2006	1	4	25	70	3	11	31	55
LEP/FLEP									
	2008	10	20	36	34	9	19	34	38
	2007	12	25	32	30	8	21	33	38
	2006	9	19	36	36	7	15	32	46
Low-Income									
	2008	9	21	35	35	8	22	37	32
	2007	8	21	35	35	7	22	38	33
	2006	6	16	36	42	6	16	37	42
AA/Black									
	2008	5	18	36	41	8	20	39	33
	2007	5	17	36	42	5	20	38	36
	2006	3	12	35	49	4	14	37	44
Asian									
	2008	40	32	20	8	42	29	20	9
	2007	37	37	17	9	36	34	21	9
	2006	33	30	28	8	32	28	27	13
Hispanic/Latino									
	2008	6	19	37	37	7	20	37	37
	2007	7	22	37	35	6	20	36	39
	2006	5	16	37	42	4	14	34	48
White									
	2008	24	31	28	17	26	33	29	13
	2007	22	31	29	18	21	36	30	13
	2006	18	29	34	19	19	29	34	17

## GRADE 5 - SCIENCE AND TECHNOLOGY

	BPS				State			
	% of Students at Each Perf Level				% of Students at Each Perf Level			
	A	P	NI	W	A	P	NI	W
<b>All Students</b>								
2008	3	14	46	37	17	33	38	12
2007	4	17	48	32	14	37	37	12
2006	4	15	47	34	17	33	39	11
<b>Stud. w/ Disab</b>								
2008	0	4	33	63	4	17	45	33
2007	0	6	37	56	3	18	45	33
2006	0	5	37	58	5	18	48	30
<b>LEP/FLEP</b>								
2008	2	12	43	44	3	13	46	38
2007	3	18	48	31	3	16	46	36
2006	3	14	45	38	3	15	46	36
<b>Low-Income</b>								
2008	2	11	47	40	4	19	50	26
2007	2	15	49	34	3	21	49	26
2006	3	13	47	37	5	20	51	24
<b>AA/Black</b>								
2008	1	9	47	43	3	16	50	31
2007	2	11	50	38	2	18	50	30
2006	2	10	47	40	4	18	52	27
<b>Asian</b>								
2008	10	32	42	15	25	31	34	10
2007	10	36	43	11	23	36	32	10
2006	11	30	41	17	23	33	36	9
<b>Hispanic/Latino</b>								
2008	2	9	46	43	4	15	50	31
2007	2	14	50	34	3	17	49	31
2006	3	11	47	39	3	16	50	31
<b>White</b>								
2008	11	28	44	17	20	38	35	7
2007	10	35	39	17	17	42	34	7
2006	11	28	47	14	20	38	36	6

GRADE 6 - ENGLISH LANGUAGE ARTS									
		BPS				State			
		% of Students at Each Perf Level				% of Students at Each Perf Level			
		A	P	NI	W	A	P	NI	W
<b>All Students</b>									
	2008	6	37	37	19	15	52	24	8
	2007	4	35	42	20	9	58	25	7
	2006	4	32	42	22	10	54	28	8
Stud. w/ Disab									
	2008	0	12	42	46	2	26	42	31
	2007	0	9	44	46	1	26	45	28
	2006	0	7	40	53	1	25	46	28
LEP/FLEP									
	2008	2	28	40	30	3	28	41	28
	2007	1	23	43	34	1	26	44	29
	2006	1	17	37	45	1	23	44	31
Low-Income									
	2008	4	35	40	21	4	40	38	17
	2007	3	32	45	20	2	40	42	16
	2006	2	30	44	23	2	36	45	17
AA/Black									
	2008	2	35	42	22	5	42	37	16
	2007	2	28	48	22	3	40	43	15
	2006	2	27	47	25	3	37	44	16
Asian									
	2008	20	51	22	7	29	49	17	5
	2007	12	51	27	10	17	55	22	6
	2006	10	53	29	8	18	52	24	6
Hispanic/Latino									
	2008	4	34	40	22	4	36	39	21
	2007	2	33	43	22	2	36	42	20
	2006	2	28	44	26	2	31	45	22
White									
	2008	15	45	26	14	17	57	20	5
	2007	11	51	29	8	11	64	21	4
	2006	12	47	28	13	12	60	23	5

GRADE 6 - MATHEMATICS									
		BPS				State			
		% of Students at Each Perf Level				% of Students at Each Perf Level			
		A	P	NI	W	A	P	NI	W
<b>All Students</b>									
	2008	10	22	29	39	23	33	26	18
	2007	9	20	31	41	20	32	28	20
	2006	6	14	30	50	17	29	29	25
Stud. w/ Disab									
	2008	1	7	21	70	4	14	29	53
	2007	0	5	22	72	3	13	30	54
	2006	0	2	18	80	2	11	27	60
LEP/FLEP									
	2008	7	18	29	46	8	20	28	44
	2007	5	16	29	50	6	17	28	48
	2006	3	10	27	60	5	13	27	56
Low-Income									
	2008	8	21	30	41	9	24	32	35
	2007	7	18	32	43	7	22	33	38
	2006	4	13	31	51	5	17	32	46
AA/Black									
	2008	4	18	32	47	7	23	33	37
	2007	3	14	32	51	6	21	33	41
	2006	2	9	29	59	5	16	32	48
Asian									
	2008	43	32	16	9	45	31	15	9
	2007	40	33	19	8	40	31	19	10
	2006	28	32	26	14	32	30	22	15
Hispanic/Latino									
	2008	6	22	30	43	8	22	31	40
	2007	4	19	34	43	6	19	32	44
	2006	2	13	33	52	4	14	30	53
White									
	2008	22	26	27	25	27	36	24	13
	2007	19	32	27	21	24	36	27	13
	2006	14	23	30	33	19	33	30	18

GRADE 7 - ENGLISH LANGUAGE ARTS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	W	A	P	NI	W	
<b>All Students</b>									
2008	4	44	34	18	12	57	23	8	
2007	3	46	33	18	9	60	23	8	
2006	4	39	36	20	10	55	26	9	
<b>Stud. w/ Disab</b>									
2008	0	9	42	49	1	26	43	29	
2007	0	10	39	51	1	27	43	30	
2006	-	10	37	54	1	24	43	32	
<b>LEP/FLEP</b>									
2008	0	16	39	45	2	27	40	31	
2007	0	26	34	40	1	28	39	32	
2006	1	12	34	53	2	24	39	36	
<b>Low-Income</b>									
2008	3	39	39	20	3	43	38	16	
2007	2	41	37	20	2	44	37	16	
2006	2	35	40	22	2	39	39	20	
<b>AA/Black</b>									
2008	2	37	38	23	3	44	36	16	
2007	1	40	38	21	2	46	36	16	
2006	2	34	41	24	3	40	39	18	
<b>Asian</b>									
2008	11	59	23	7	23	55	18	4	
2007	7	62	23	9	17	58	19	6	
2006	8	54	28	10	17	53	22	8	
<b>Hispanic/Latino</b>									
2008	2	38	40	20	3	39	39	19	
2007	1	40	38	21	2	40	37	21	
2006	2	33	41	24	2	33	40	25	
<b>White</b>									
2008	9	66	18	7	15	62	19	5	
2007	7	65	18	11	11	65	19	5	
2006	12	60	20	8	12	60	22	6	

GRADE 7 - MATHEMATICS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	W	A	P	NI	W	
<b>All Students</b>									
2008	7	21	28	43	15	32	29	24	
2007	6	20	30	44	15	31	30	24	
2006	6	16	33	45	12	28	33	28	
<b>Stud. w/ Disab</b>									
2008	0	4	16	80	2	10	26	62	
2007	0	4	17	79	2	10	27	61	
2006	0	2	19	79	1	8	26	65	
<b>LEP/FLEP</b>									
2008	3	10	20	67	4	13	25	59	
2007	3	13	25	59	4	13	26	56	
2006	3	8	23	66	4	10	26	60	
<b>Low-Income</b>									
2008	5	17	29	49	4	19	32	45	
2007	4	16	32	48	4	18	33	45	
2006	4	13	34	49	3	14	33	49	
<b>AA/Black</b>									
2008	2	15	28	56	3	18	32	47	
2007	2	14	30	54	3	17	34	47	
2006	1	10	33	56	2	12	35	51	
<b>Asian</b>									
2008	32	39	19	10	32	35	21	12	
2007	28	35	25	12	32	32	22	14	
2006	22	35	29	14	28	30	26	16	
<b>Hispanic/Latino</b>									
2008	3	16	33	48	3	16	29	51	
2007	3	16	34	48	3	16	31	50	
2006	2	12	35	51	2	11	30	57	
<b>White</b>									
2008	16	41	25	19	17	37	29	17	
2007	12	33	28	27	17	35	30	18	
2006	16	30	32	22	14	32	33	20	

GRADE 8 - ENGLISH LANGUAGE ARTS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	W	A	P	NI	W	
<b>All Students</b>									
2008	5	52	28	15	12	63	18	7	
2007	4	51	30	14	12	63	18	6	
2006	5	49	30	16	12	62	19	7	
<b>Stud. w/ Disab</b>									
2008	0	17	40	43	1	35	36	27	
2007	0	18	39	43	1	35	39	25	
2006	0	16	40	44	1	34	39	27	
<b>LEP/FLEP</b>									
2008	1	19	31	49	2	30	34	34	
2007	0	18	39	43	2	28	42	29	
2006	1	15	36	48	1	28	37	35	
<b>Low-Income</b>									
2008	2	49	32	17	3	51	31	15	
2007	2	48	33	16	3	51	32	13	
2006	3	46	34	17	3	48	33	16	
<b>AA/Black</b>									
2008	2	47	33	17	4	54	29	13	
2007	2	46	36	17	4	52	32	13	
2006	3	46	34	17	3	50	33	14	
<b>Asian</b>									
2008	14	62	18	5	22	59	13	5	
2007	10	64	20	6	19	58	17	5	
2006	13	63	15	8	20	56	18	6	
<b>Hispanic/Latino</b>									
2008	2	49	31	18	3	47	32	18	
2007	2	46	33	19	3	45	35	17	
2006	2	42	37	19	2	42	35	21	
<b>White</b>									
2008	12	67	14	8	14	67	14	4	
2007	10	70	16	5	15	68	14	4	
2006	14	66	13	7	14	67	14	4	

GRADE 8 - MATHEMATICS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	W	A	P	NI	W	
<b>All Students</b>									
2008	9	25	26	40	19	30	27	24	
2007	7	20	31	42	17	28	30	25	
2006	7	16	29	48	12	28	31	29	
<b>Stud. w/ Disab</b>									
2008	1	5	18	77	2	10	26	63	
2007	1	3	16	81	2	8	26	64	
2006	0	4	13	83	1	7	24	68	
<b>LEP/FLEP</b>									
2008	5	10	19	67	5	12	23	60	
2007	2	10	20	68	4	11	24	61	
2006	2	7	21	71	3	10	23	65	
<b>Low-Income</b>									
2008	7	21	28	44	6	19	30	45	
2007	5	18	32	45	5	16	33	45	
2006	5	13	30	52	3	14	31	52	
<b>AA/Black</b>									
2008	3	19	28	49	5	19	31	46	
2007	2	12	33	52	4	15	34	47	
2006	2	12	26	60	3	14	30	54	
<b>Asian</b>									
2008	37	37	15	11	39	29	18	13	
2007	29	38	21	11	34	31	22	14	
2006	31	32	24	13	27	32	24	18	
<b>Hispanic/Latino</b>									
2008	5	21	30	44	5	17	28	50	
2007	3	17	33	48	4	14	30	52	
2006	3	11	32	55	3	12	29	57	
<b>White</b>									
2008	16	41	22	21	22	34	27	17	
2007	17	35	28	20	20	32	30	18	
2006	15	31	31	23	14	32	32	22	

## GRADE 8 - SCIENCE AND TECHNOLOGY

	BPS				State			
	% of Students at Each Perf Level				% of Students at Each Perf Level			
	A	P	NI	W	A	P	NI	W
<b>All Students</b>								
2008	0	10	38	52	3	36	39	22
2007	0	8	38	54	3	30	44	24
2006	0	8	34	58	4	28	43	25
<b>Stud. w/ Disab</b>								
2008	0	1	15	84	0	10	37	53
2007	0	1	14	85	0	7	36	56
2006	-	1	12	87	0	7	33	59
<b>LEP/FLEP</b>								
2008	0	3	18	79	0	7	27	66
2007	0	3	16	81	0	5	26	68
2006	-	1	13	86	0	4	26	70
<b>Low-Income</b>								
2008	0	6	35	59	0	14	41	45
2007	0	5	35	60	0	11	42	46
2006	0	5	32	63	0	9	40	50
<b>AA/Black</b>								
2008	0	5	34	62	0	11	40	48
2007	0	4	34	61	0	8	42	50
2006	0	4	30	66	0	8	37	55
<b>Asian</b>								
2008	1	27	48	24	5	44	34	18
2007	1	21	52	27	7	36	38	20
2006	1	18	52	28	8	31	39	23
<b>Hispanic/Latino</b>								
2008	0	5	34	61	0	11	37	52
2007	0	4	31	65	0	7	37	55
2006	0	4	28	68	0	7	35	57
<b>White</b>								
2008	0	24	50	26	3	44	40	13
2007	0	19	54	27	3	36	45	15
2006	0	23	49	28	5	34	45	17

GRADE 10 - ENGLISH LANGUAGE ARTS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	F	A	P	NI	F	
<b>All Students</b>									
2008	14	44	33	9	23	51	21	4	
2007	11	39	37	13	22	49	24	6	
2006	9	42	35	15	16	53	24	7	
<b>Stud. w/ Disab</b>									
2008	1	18	48	33	3	32	46	20	
2007	1	11	45	43	2	28	47	23	
2006	0	10	44	46	1	28	46	25	
<b>LEP/FLEP</b>									
2008	6	21	45	27	4	24	49	23	
2007	2	21	39	39	2	20	47	31	
2006	1	16	38	45	2	23	42	33	
<b>Low-Income</b>									
2008	10	44	37	10	8	45	37	9	
2007	7	38	41	14	7	41	40	13	
2006	6	39	39	16	5	41	40	15	
<b>AA/Black</b>									
2008	7	41	40	12	8	47	36	9	
2007	5	35	44	15	6	40	41	12	
2006	4	38	40	17	5	42	40	13	
<b>Asian</b>									
2008	30	50	18	3	33	44	19	4	
2007	26	50	20	4	31	43	21	5	
2006	25	51	21	3	24	49	21	6	
<b>Hispanic/Latino</b>									
2008	8	42	39	10	7	42	40	11	
2007	5	38	41	16	6	37	41	16	
2006	4	36	42	18	3	36	41	20	
<b>White</b>									
2008	29	50	15	5	27	53	17	3	
2007	28	46	19	6	25	52	19	3	
2006	23	53	16	7	18	57	20	4	

GRADE 10 - MATHEMATICS									
	BPS				State				
	% of Students at Each Perf Level				% of Students at Each Perf Level				
	A	P	NI	F	A	P	NI	F	
<b>All Students</b>									
2008	35	24	25	16	43	29	19	9	
2007	33	22	27	18	42	27	22	9	
2006	32	21	25	22	40	27	21	12	
<b>Stud. w/ Disab</b>									
2008	6	13	32	48	9	24	35	32	
2007	6	10	32	52	9	22	37	32	
2006	3	10	29	58	9	21	32	38	
<b>LEP/FLEP</b>									
2008	25	22	26	27	18	21	31	30	
2007	23	16	30	32	16	18	34	32	
2006	23	15	24	38	17	18	28	37	
<b>Low-Income</b>									
2008	31	26	27	16	22	29	30	18	
2007	29	23	29	19	21	26	33	19	
2006	28	22	27	23	19	25	31	26	
<b>AA/Black</b>									
2008	22	24	33	22	20	28	33	19	
2007	21	24	33	23	19	26	35	20	
2006	19	22	31	28	16	24	34	26	
<b>Asian</b>									
2008	78	14	6	2	65	20	11	4	
2007	77	12	7	4	64	18	13	5	
2006	79	13	5	3	63	17	14	7	
<b>Hispanic/Latino</b>									
2008	24	30	30	16	19	27	32	23	
2007	24	24	30	21	18	24	34	24	
2006	20	25	29	27	14	22	32	32	
<b>White</b>									
2008	61	19	12	9	48	30	16	6	
2007	55	19	16	11	46	29	19	6	
2006	59	17	14	10	45	28	19	8	



## GRADE 10 - SCIENCE AND TECHNOLOGY\*

\*High School Science and Technology/Engineering includes Biology, Chemistry, Introductory Physics, and Technology/Engineering tests.

	BPS				State			
	% of Students at Each Perf Level				% of Students at Each Perf Level			
	A	P	NI	F	A	P	NI	F
<b>All Students</b>								
2008	5	24	42	29	14	43	31	12
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>Stud. w/ Disab</b>								
2008	0	5	28	67	2	19	43	37
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>LEP/FLEP</b>								
2008	3	15	30	52	3	17	36	44
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>Low-Income</b>								
2008	3	20	46	31	3	28	44	26
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>AA/Black</b>								
2008	1	16	47	36	3	25	45	27
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>Asian</b>								
2008	19	47	29	6	29	39	24	8
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>Hispanic/Latino</b>								
2008	1	16	47	36	2	22	43	32
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-
<b>White</b>								
2008	11	44	31	14	16	49	28	7
2007	-	-	-	-	-	-	-	-
2006	-	-	-	-	-	-	-	-

## Appendix: MCAS Background

The Massachusetts Comprehensive Assessment System (MCAS) was developed as part of the Massachusetts Educational Reform Act of 1993. It was designed to measure how well students, schools and districts are performing on the state's learning standards that are contained in the Massachusetts *Curriculum Frameworks*. Because Boston's own *City-wide Learning Standards* are correlated with the state's *Curriculum Frameworks*, the MCAS helps educators, parents, students and the wider community know how well BPS students are doing with respect to Boston's own standards. The MCAS was first administered in May 1998 in grades 4, 8, and 10. The March/April/May 2008 testing is the eleventh annual administration of the MCAS tests. Tests were administered in ELA and Math in grades 3-8 and 10 and Science and Technology in grades 5, 8, 9 and 10. The Science and Technology/Engineering test includes Biology, Chemistry, Introductory Physics, and Technology/Engineering that became operational in 2007. In addition, a pilot test in History and Social Science/U.S. History was administered in grades 5, 7, 10 and 11.

As a part of the state's graduation requirements, students in the Classes of 2003-2009 must achieve at least the *Needs Improvement* performance in English Language Arts (ELA) and Mathematics in order to graduate. For the Class of 2010 (sophomores during school year 2007-2008) and subsequent classes, students are required to meet or exceed the minimum *Proficient* score on both the ELA and Mathematics MCAS grade 10 tests. Students who scored at the *Needs Improvement* performance level will have to fulfill the requirements of an Educational Proficiency Plan (EPP). Additionally, students in the Class of 2010 and beyond have to meet or exceed the minimum *Needs Improvement* score in a high school Science Technology/Engineering test in Biology, Chemistry, Introductory Physics, or Technology/Engineering.

No Child Left Behind (NCLB) requirements mandate that all students attain Proficient and Advanced by 2014.

The MCAS was intended by its framers to measure the performance of students, schools and districts with respect to statewide standards, and thus to be used for accountability purposes. As such, the MCAS is a criterion-referenced standardized test in which students' performance is compared to standards, not a norm-referenced test in which students are compared to other students' performance. The MCAS was also intended to improve classroom instruction both by giving detailed feedback about student performance and by providing models of effective assessment methods. In the spring of 2008, all students in grades 3-10 statewide, in all publicly funded schools, including BPS Pilot Schools and statewide charter schools were required to take the MCAS.

### What Are The MCAS Tests Like?

Content areas covered include English/Language Arts, Mathematics, Science & Technology/Engineering and History and Social Science. Testing occurs from grade 3 through 10, although not all content areas are covered at each grade.

#### MCAS Grade Levels and Content Areas Tests in 2008 – Summary Data Reported

Grade	English Language Arts	Mathematics	Science and Technology/ Engineering
3	X	X	
4	X	X	
5	X	X	X
6	X	X	
7	X	X	
8	X	X	X
9			X
10	X	X	X

The test is designed to be untimed, with the expected testing times for each test ranging from two to seven hours.

There is a mixture of question formats. Multiple choice and open response items (one to two paragraphs, a graph or a chart, as appropriate) are found on all tests. Short answer items appeared on the Mathematics test only. Finally, the English/Language Arts test included writing prompts in grades 4, 7 and 10.

The tests are designed to be rigorous. They are also intended to be cumulative of the learning standards up to the grade of testing. For example, the grade 4 tests might well contain items related to third grade learning standards from the Curriculum Frameworks.

Eighty percent of the items on each test for each grade are “common items” seen by all students in a given test. These and only these are the basis of all official summary scores. These questions will be released by the state each year after testing is complete. For the spring 2008 testing they are already on the Internet at the Massachusetts Department of Elementary and Secondary Education (MA DESE) website, including a version in Spanish (grade 10 Mathematics only).

The other 20% of the items are “matrix sampled”. These items are used to equate MCAS tests from year to year and to field test new items for future tests. These items also are used along with the common items at the school and district levels to provide subject area subscores.

## How Is Student Performance On The MCAS Scored And Reported?

### *Scoring*

Multiple choice items are all scored 0 or 1 and are scanned and scored electronically.

All others items are read and scored by trained staff, many of whom are teachers. Short-answer items on the Mathematics test are scored 0 or 1. Open-response items are scored on a 0 to 4 scale, except in grade 3 Mathematics which is scored on a 0 to 2 scale, which are scores according to rubrics developed by the Assessment Development Committees and a selection of "benchmark" responses (samples of student work representing each of the score points for each question). Compositions on the English/Language Arts test are rated on a scale of 0 to 20.

### *Reporting*

Summary scores are reported as Performance Levels, defined with respect to the State's Curriculum Frameworks. These are defined as follows:

**Advanced (Grades 4-8, 10):** Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter and provide sophisticated solutions to complex problems.

**Above Proficient (Grade 3):** Students at this level demonstrate mastery of challenging subject matter and construct solutions to challenging problems.

**Proficient:** Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.

**Needs Improvement:** Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.

**Warning/Failing:** Students at this level demonstrate a minimal understanding of subject matter and do not solve even simple problems. The term Failing is used for grade 10 only.

Students' standings on these Performance Levels are the major scores reported and compared across schools and districts. Scores are reported for each test separately; there is no overall score.

Test performance is also reported as scaled scores ranging from 200 to 280, except grade 3 where raw scores representing the total number of points a student earned are reported. The scaled scores provide information concerning students' relative standing within a Performance Level. The scaled score range corresponding to each performance level is as follows: Advanced - 260 to 280, Proficient - 240 to 258, Needs Improvement - 220 to 238, and Warning/Failing - 200 to 218.

## Testing Population

In keeping with state and federal regulations, virtually all students statewide are tested.

### *Students with Disabilities*

Students with Disabilities were defined as those who either had an Individualized Education Plan (IEP) or received instructional accommodations provided under Section 504 of the Rehabilitation Act of 1973.

Students with Disabilities were expected to take the test in accordance with the Massachusetts Education Reform Act and a 1997 amendment to the federal Individuals with Disabilities Education Act (IDEA). Testing accommodations were permitted if specified in the student's Individualized Education Plan (IEP). The state's detailed list of approved accommodations included modifications to the timing and scheduling of the test, the setting of the test, how the items were presented to the student, and how the student provided the answers. The actual test content could not be modified. Students with significant cognitive disabilities who are unable to take the standard MCAS tests even with modifications are required to take the MCAS Alternate Assessment (MCAS-Alt).

### *Limited English Proficient Students*

According to MA DESE definitions, a Limited English Proficient (LEP) student is "a student whose first language is a language other than English who is unable to perform ordinary classroom work in English." LEP students must participate in all MCAS tests administered at the grade in which he or she is enrolled that school year. In English Language Arts LEP students in their first year of enrollment in U.S. schools may be exempted according to Federal guidelines issued in February 2004. School principals may exercise discretion to excuse a LEP student from the ELA and History and Social Science/U.S. History tests in grades 3-11 under the following circumstances: the student first enrolled in school in the U.S. after the previous March 1 (prior to 2007, it was October 1); and the student's command of English is so limited that he or she could not engage meaningfully in the MCAS process. The first year LEP students, however, are required by the NCLB Law to participate in Mathematics and Science and Technology/Engineering tests scheduled for their grade.

For MCAS reporting purposes, the results of first-year LEP students in 2008 who took the English Language Arts tests was not factored into school or district performance results, nor the results of these students' Mathematics and Science and Technology/Engineer tests, in accordance with NCLB allowances.

A Spanish version of the grade 10 Mathematics test was developed for Spanish-speaking LEP students. Grade 10 Spanish-speaking LEP students who could read and write at grade 10 level or above in Spanish took the available Spanish-language Mathematics.