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# The Academic Achievement of Latino Students in Boston Public Schools

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# The Academic Achievement of Latino Students in Boston Public Schools

*Faye Karp*

April 2012

The Mauricio Gastón Institute for Latino Community  
Development and Public Policy, University of Massachusetts  
Boston



# The Academic Achievement of Latino Students in Boston Public Schools

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## INTRODUCTION

The academic achievement of Latino students has been a national concern for decades and the gap between White and Latino student achievement has not narrowed. Latino students now represent the largest and fastest-growing minority group in our nation's schools. More than one in five students in K-12 are Latino (Hemphill & Vanneman, 2011). Nationally, scores on the National Assessment of Educational Progress (NAEP) math and reading tests have increased over the past two decades for both White and Latino students but the gap has stayed the same, even when scores are disaggregated by gender and, for the most part, by income (Hemphill & Vanneman, 2011). Research indicates that this achievement gap begins as early as pre-school, where Latinos are the least likely to be enrolled in pre-school and to exhibit school readiness skills. This gap continues throughout the educational pipeline. In high school, Latino students are 2.5 times as likely as White students to drop out of school and twice as likely as Black students. An educational attainment gap is also apparent in the adult population, where Latinos have the highest proportion of adults who have earned less than a high school diploma and the lowest proportion who have attained a bachelor's degree or higher. Latino students tend to exhibit contextual factors associated with low academic achievement. Compared to their White peers, Latino students are more likely to be living in poverty; are less likely to have health insurance; are more likely to have a mother who did not graduate from college; are less likely to participate in academic clubs and other extracurricular activities; have higher mobility, suspension, and grade retention rates; and are more likely to be enrolled in hypersegregated, resource-poor schools (Aud, Fox, & KewalRaman, 2010; Gándara, 2010a, 2010b; Hemphill & Vanneman, 2011; Simon et al., 2011).

Over the past decade, while total student enrollment in both Boston Public Schools (BPS)—Massachusetts' largest public school district—and the state as a whole has declined, the number of Latino<sup>1</sup> students and proportion of Latino student enrollment have increased. In BPS, Latino students now constitute 43.0% student enrollment,<sup>2</sup> representing the largest racial/ethnic group in the district. Though Boston has the eighth largest proportion of Latino student enrollment among Massachusetts school districts, it enrolls the largest number of Latino students of any district in the state.

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<sup>1</sup> In this report the term "Latino" is used to describe Latinos of either gender rather than the more cumbersome "Latino/a." In addition, in this report, data on Latino students are reported on students identified as Hispanic or Latino, and/or, students identified as a native Spanish speaker in the Massachusetts Student Information Management System (SIMS).

<sup>2</sup> Data are from SY2012 and are available at [http://profiles.doe.mass.edu/state\\_report/enrollmentbyracegender.aspx](http://profiles.doe.mass.edu/state_report/enrollmentbyracegender.aspx). Latino here is defined as a race/ethnicity. This figure is likely to be higher if students also identified as native Spanish speakers are included.

This report seeks to answer the following research questions:

1. What is the academic achievement, as measured by MCAS, of Latino students in Boston Public Schools?
2. How has the MCAS performance of Latino students changed from SY2006<sup>3</sup> to SY2009?
3. How does the MCAS performance of Latino students compare to that of students of other races/ethnicities? In particular, what is the achievement gap between White and Latino students?
4. What is the MCAS performance of Latino students of different characteristics that are identified in the literature as associated with student achievement?

The report draws on SY2006-SY2009 data provided by Boston Public Schools as part of the collaboration between the BPS Office of English Language Learners, the Mauricio Gastón Institute for Latino Community Development and Public Policy at the University of Massachusetts—Boston, and the Center for Collaborative Education for the project *Identifying Success in Schools and Programs for English Language Learners in Boston Public Schools*.<sup>4</sup> The full results of this research are available at <http://www.umb.edu/gastoninstitute/publications/education>. A more detailed description of this dataset, as well as a definition of key terms used in this report, is available in the Appendix.

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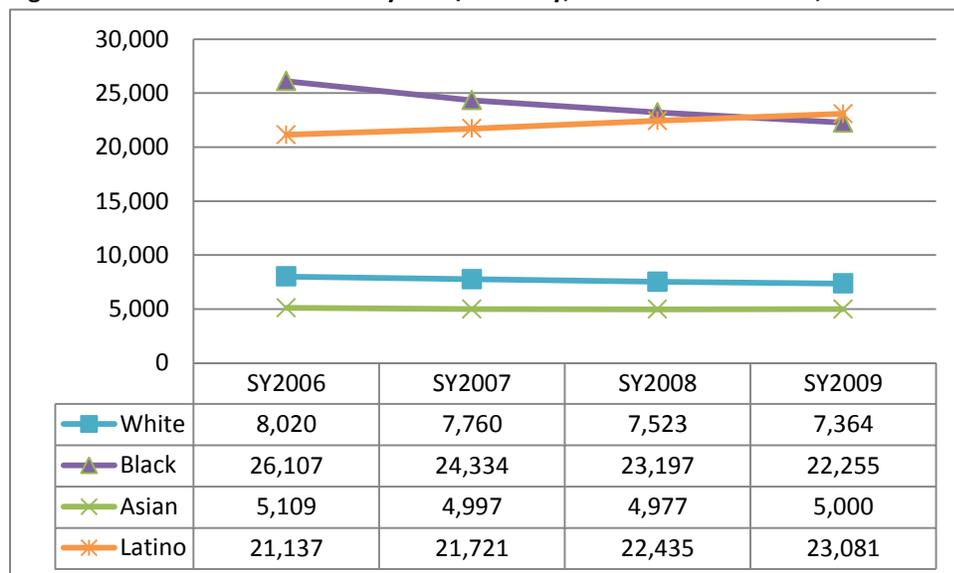
<sup>3</sup> The abbreviation of SY is used in this report to indicate the school year. For instance, SY2006 indicates the school year beginning in September 2005 and ending in June 2006.

<sup>4</sup> The author gratefully acknowledges Boston Public Schools for this use of the dataset for this report.

## ENROLLMENT OF LATINOS IN BOSTON PUBLIC SCHOOLS

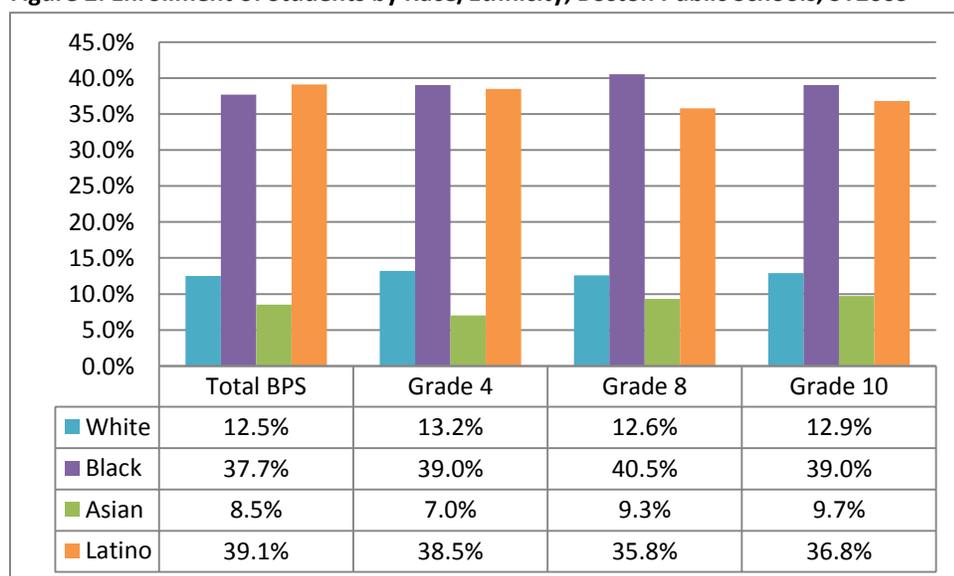
Figure 1 indicates that between SY2006 and SY2009, total student enrollment in Boston Public Schools declined by 3.9%. Latinos were the only student subgroup to see an increase in enrollment during this period; the enrollment of all other student subgroups declined. Latino student enrollment grew from 21,137 students in SY2006 to 23,081 students in SY2009, an increase of 9.2%.

**Figure 1: Enrollment of Students by Race/Ethnicity, Boston Public Schools, SY2006 to SY2009**



In SY2009, Latino students (39.1%) constituted the largest proportion of total student enrollment. However, in Grades 4, 8, and 10 (the grades for which MCAS performance is presented in this report) Latinos constituted the second largest student subgroup, with the largest represented by Black students (Figure 2).

**Figure 2: Enrollment of Students by Race/Ethnicity, Boston Public Schools, SY2009**



Examining various student characteristics reveals important differences between Latino, White, Black, and Asian students enrolled in BPS (Table 1). Most notably:

- Latino students had the highest rate of poverty, with 82.7% of students eligible for free or reduced price lunch. Latino students were more than twice as likely as White students to be low-income.
- Latino students had the highest rate of mobility, with 10.2% of students switching schools during the course of the school year. Again, this rate was more than twice that of White students.
- Almost 1 in 5 Latino students were identified as having a disability,<sup>5</sup> the second highest rate of the student groups considered here.
- Nearly 1 in 3 Latino students were chronically absent<sup>6</sup>; this was the highest rate in the district.
- Latino students had the second highest out-of-school suspension rate (5.5%, second to Black students).
- Latino students had the highest grade retention rate (8.2%), twice that of White students.
- Latino students had the second highest rate of limited English proficiency (30.9%, second to Asian students). Among Latino LEP students, only 13.9% had reached MEPA Level 5, the highest level of proficiency as measured by MEPA.

**Table 1: Student Characteristics by Race/Ethnicity, Boston Public Schools, SY2009**

	White	Black	Asian	Latino
Male	51.8%	52.2%	52.1%	51.9%
Low-income	41.0%	78.2%	75.5%	82.7%
Switched schools during school year (i.e., mobile)	4.9%	9.7%	5.6%	10.2%
Students with disabilities (SWD)	17.4%	23.5%	7.9%	19.2%
Chronically absent	21.0%	29.1%	11.6%	32.5%
Received at least one out-of-school suspension	3.2%	7.9%	1.7%	5.5%
Retained in grade between SY2008 and SY2009	4.0%	7.8%	2.9%	8.2%
Limited English Proficient (LEP)	5.3%	10.5%	34.4%	30.9%
MEPA Level 1	6.4%	11.5%	9.0%	10.9%
MEPA Level 2	12.5%	15.2%	10.1%	12.8%
MEPA Level 3	26.6%	35.3%	29.4%	40.0%
MEPA Level 4	36.0%	26.4%	30.0%	30.6%
MEPA Level 5	18.5%	11.6%	21.5%	13.9%

Note: In this table, data on disability, attendance, suspension, retention, and MEPA include students in K-12. All other data shown here include students in Pre-K and above.

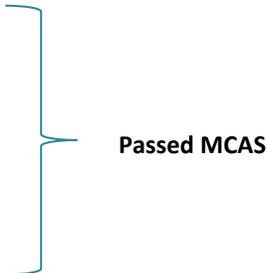
<sup>5</sup> Among Latino students identified as having a disability, about two-thirds were identified with either a communication disability or specific learning disability.

<sup>6</sup> This report uses the definition of chronic absenteeism as missing 10% or more of the school year (see, e.g., Bruner, Discher, & Chang, 2011).

## TRENDS IN MCAS PERFORMANCE OVER TIME

In Massachusetts, students are tested annually in English Language Arts (ELA, administered in Grades 3–8 and 10), Math (Grades 3–8 and 10), and Science (administered in Grades 9 and 10 depending on the subject) as part of the Massachusetts Comprehensive Assessment System. MCAS scores are categorized into four performance levels: warning/failing; needs improvement; proficient; and advanced. Students who score at “needs improvement” or above pass the exam. These performance levels are defined in Table 2. For high school students, the MCAS is a high-stakes test; students must pass the Grade 10 exams in order to receive a high school diploma. This report presents MCAS performance on the ELA and Math exams for students in Grades 4, 8, and 10.

**Table 2: MCAS Performance Level Definitions**

<p><b>Advanced</b> Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.</p>	 <p><b>Passed MCAS</b></p>
<p><b>Proficient</b> Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.</p>	
<p><b>Needs Improvement</b> Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.</p>	
<p><b>Warning (Grades 3-8)/Failing (High School)</b> Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.</p>	
<p>Source: MDESE, <a href="http://www.doe.mass.edu/mcas/tdd/pld/">http://www.doe.mass.edu/mcas/tdd/pld/</a></p>	

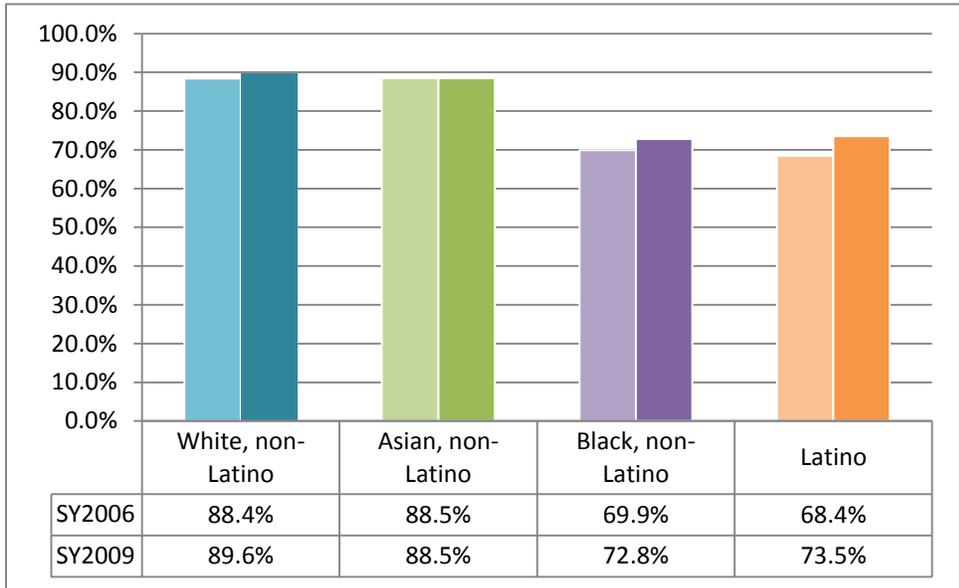
### MCAS ELA Achievement: SY2006 and SY2009

This section examines the MCAS ELA performance of students in Grades 4, 8, and 10 in SY2006 and SY2009. Latino students performed well below their White and Asian peers and comparably to their Black peers.

#### Among BPS students enrolled in Grade 4 (Figure 3):

- Students of all racial/ethnic subgroups experienced increases in the proportion that passed the MCAS ELA from SY2006 to SY2009, except that Asian students had the same high proportion in both years.
- In SY2009, White students had the highest pass rate (89.6%) and Black students had the lowest pass rate (72.8%). Latino students had the next lowest pass rate (73.5%).
- Latino students made the greatest gains, going from a pass rate of 68.4% in SY2006 to a pass rate of 73.5% in SY2009.

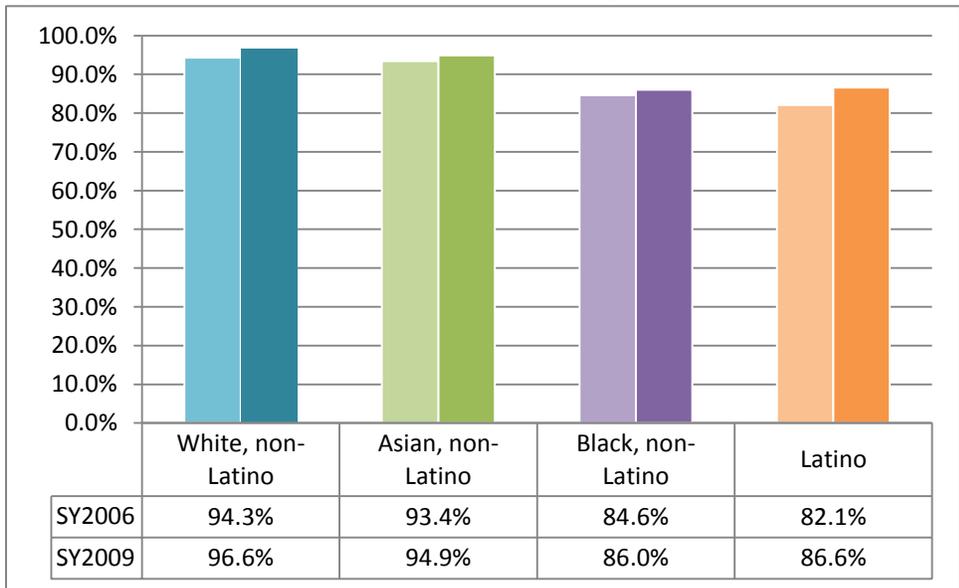
**Figure 3: Grade 4 MCAS ELA Pass Rate by Race/Ethnicity, Boston Public Schools, SY2006 and SY2009**



**Among BPS students enrolled in Grade 8 (Figure 4):**

- Students of all racial/ethnic subgroups experienced increases in the proportion that passed the MCAS ELA from SY2006 to SY2009.
- In SY2009, White students had the highest pass rate (96.6%) and Black students had the lowest pass rate (86.0%). Latino students had the next lowest pass rate (86.6%).
- Latino students made the greatest gains, going from the lowest pass rate (82.1%) in SY2006 to a pass rate of 86.6% (no longer the lowest) in SY2009.

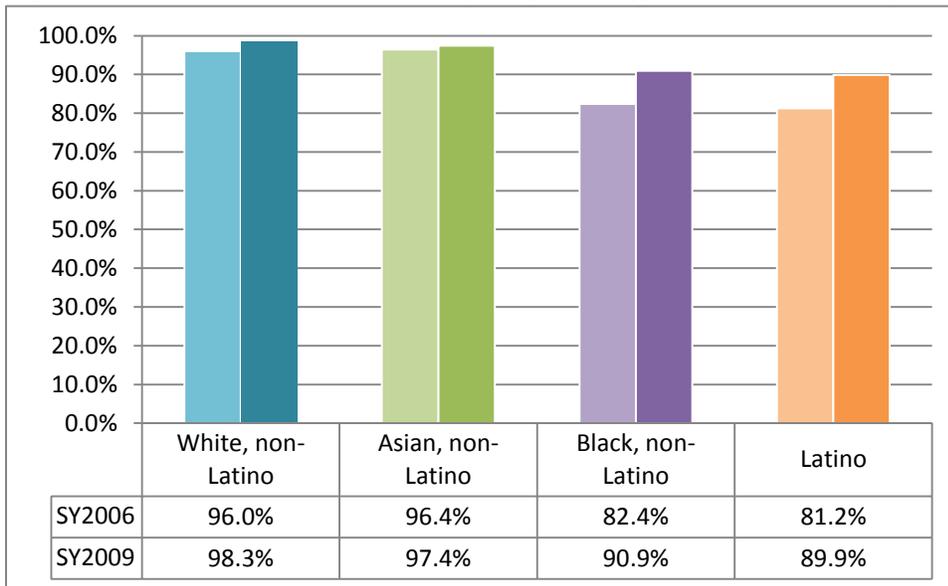
**Figure 4: Grade 8 MCAS ELA Pass Rate by Race/Ethnicity, Boston Public Schools, SY2006 and SY2009**



**Among BPS students enrolled in Grade 10 (Figure 5):**

- Students of all racial/ethnic subgroups experienced increases in the proportion that passed the MCAS ELA from SY2006 to SY2009.
- In SY2009, White students had the highest pass rate (98.3%) and Latino students had the lowest pass rate (86.0%). Latino students had the next lowest pass rate (89.9%).
- Latino students made the greatest gains, going from a pass rate of 81.2% in SY2006 to a pass rate of 89.9% in SY2009.

**Figure 5: Grade 10 MCAS ELA Pass Rate by Race/Ethnicity, Boston Public Schools, SY2006 and SY2009**



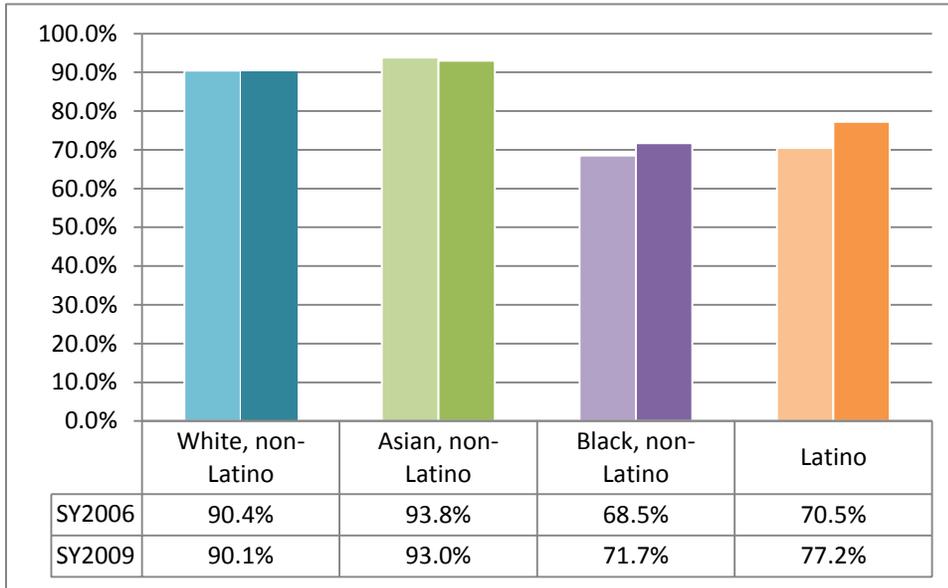
**MCAS Math Achievement: SY2006 and SY2009**

This section examines the MCAS Math performance of students in Grades 4, 8, and 10 in SY2006 and SY2009. As was seen with MCAS ELA, Latino students performed well below their White and Asian peers on MCAS Math and comparably to their Black peers.

**Among BPS students enrolled in Grade 4 (Figure 6):**

- While the MCAS Math pass rates of White and Asian students decreased slightly between SY2006 and SY2009, the pass rates of Black and Latino students increased during this period.
- In SY2009, Asian students had the highest pass rate (93.0%) and Black students had the lowest pass rate (71.7%). Latino students had the next lowest pass rate (77.2%).
- Latino students made the greatest gains, going from a pass rate of 70.5% in SY2006 to a pass rate of 77.2% in SY2009.

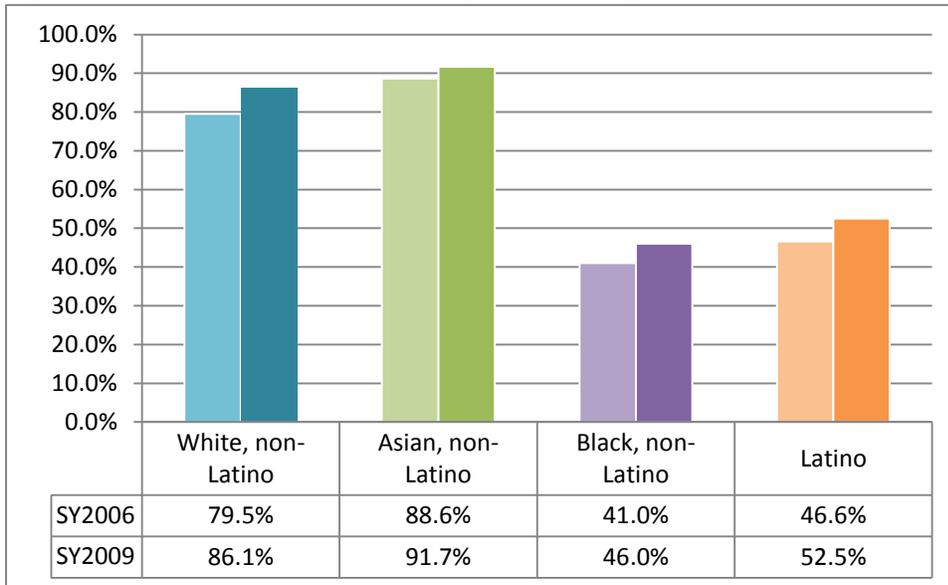
**Figure 6: Grade 4 MCAS Math Pass Rate by Race/Ethnicity, Boston Public Schools, SY2006 and SY2009**



**Among BPS students enrolled in Grade 8 (Figure 7):**

- Students of all racial/ethnic subgroups experienced increases in the proportion that passed the MCAS Math exam from SY2006 to SY2009.
- In SY2009, Asian students had the highest pass rate (91.7%) and Black students had the lowest pass rate (46.0%). Latino students had the next lowest pass rate (52.5%).
- Latino students made the greatest gains, going from a pass rate of 46.6% in SY2006 to a pass rate of 52.5% in SY2009.

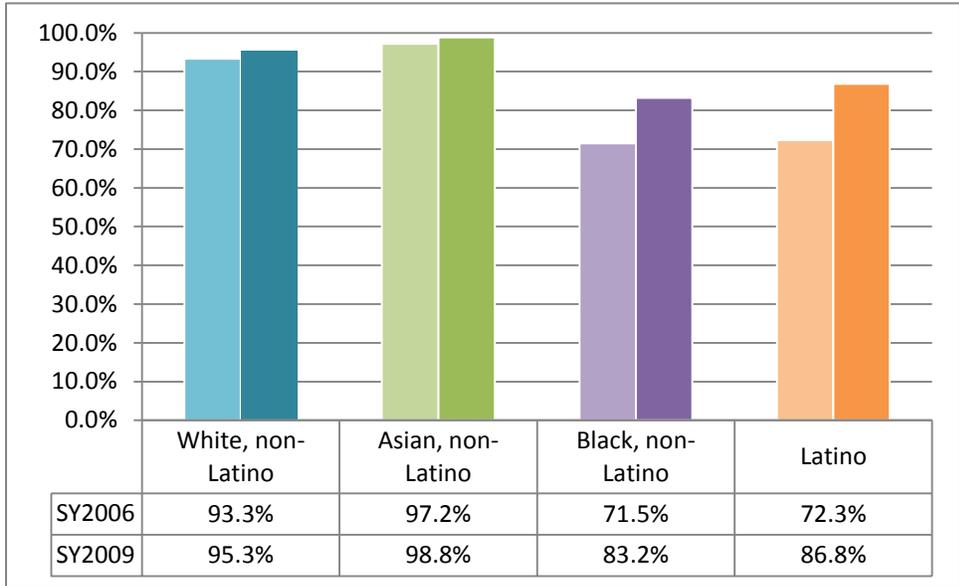
**Figure 7: Grade 8 MCAS Math Pass Rate by Race/Ethnicity, Boston Public Schools, SY2006 and SY2009**



**Among BPS students enrolled in Grade 10 (Figure 8):**

- Students of all racial/ethnic subgroups experienced increases in the proportion that passed the MCAS Math exam from SY2006 to SY2009.
- In SY2009, Asian students had the highest pass rate (98.8%) and Black students had the lowest pass rate (83.2%). Latino students had the next lowest pass rate (86.8%).
- Latino students made the greatest gains, going from a pass rate of 72.3% in SY2006 to a pass rate of 86.8% in SY2009.

**Figure 8: Grade 10 MCAS Math Pass Rate by Race/Ethnicity, Boston Public Schools, SY2006 and SY2009**



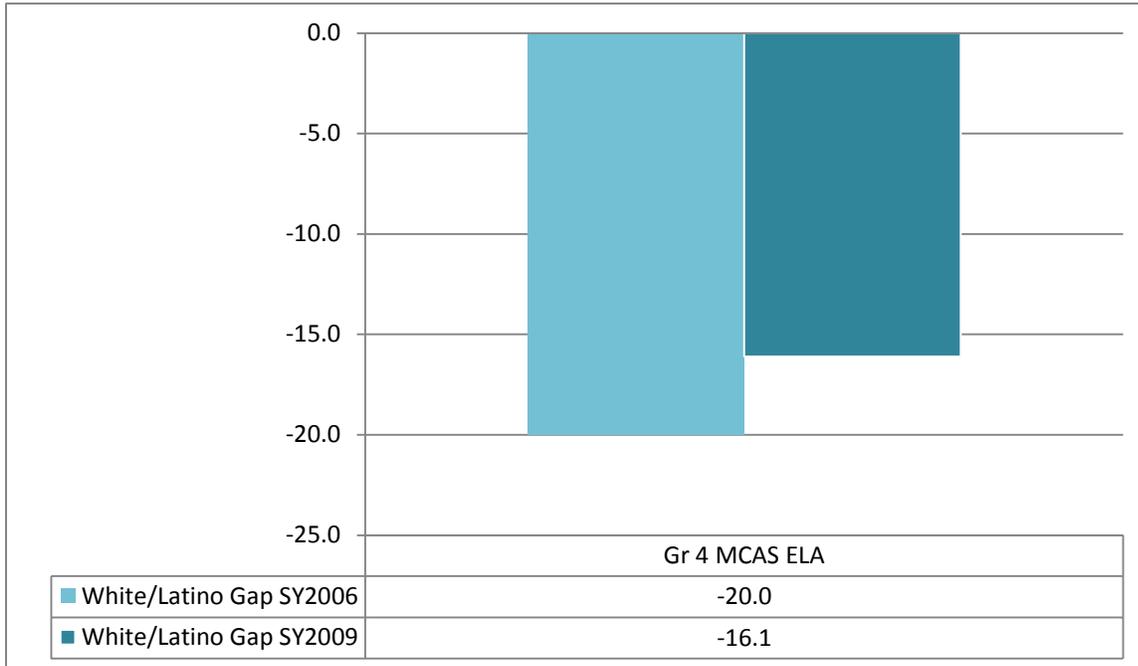
## THE WHITE/LATINO ACHIEVEMENT GAP

Latino students in Boston Public Schools are performing well below their White peers on the MCAS ELA and Math exams. Although this achievement gap has decreased from SY2006 to SY2009, the gap remained wide.

### Grade 4 MCAS ELA and Math

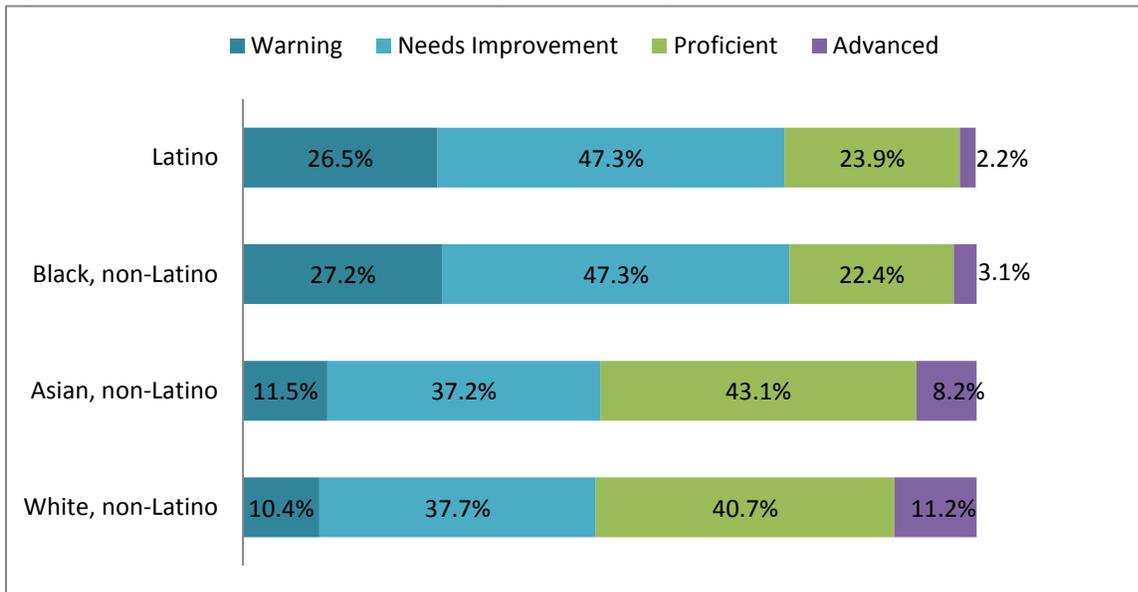
Although the MCAS ELA achievement gap between White and Latino students in Grade 4 decreased between SY2006 (a difference of 20.0 percentage points) and SY2009 (a difference of 16.1 percentage points), it remained large (Figure 9). In SY2006 White students were 1.3 times more likely than Latino students to pass the MCAS ELA; in SY2009 White students were 1.2 times more likely to pass. Put another way, Latino students were 2.7 times more likely to receive a “warning” than White students in SY2006 and 2.5 times more likely in SY2009.

**Figure 9: Grade 4 MCAS ELA Pass Rate Gap (Percentage Points) between White and Latino Students, Boston Public Schools, SY2006 and SY2009**



The achievement gap is also evident when looking at the distribution across MCAS performance levels, as seen in Figure 10. More than 1 in 4 Latino students in Grade 4 received a “warning” in SY2009 on the MCAS ELA, compared to only 1 in 10 White students. The majority of White students scored at “proficient” or higher, compared to only 1 in 4 Latino students, nearly half of whom scored at the “needs improvement” level.

**Figure 10: Grade 4 MCAS ELA Performance by Race/Ethnicity, Boston Public Schools, SY2009**



There was also a sizeable achievement gap between Grade 4 White and Latino students' MCAS Math performance (Figure 11). There was a 19.9 percentage point gap in SY2006; this was reduced to a 12.9 percentage point gap in SY2009. In SY2006 White students were 1.3 times more likely than Latino students to pass the MCAS Math; in SY2009 White students were 1.2 times more likely to pass. The relative likelihood of Latino students receiving a "warning" also decreased during this time: they were 3.1 times more likely than White students in SY2006 and 2.3 times more likely in SY2009.

**Figure 11: Grade 4 MCAS Math Pass Rate Gap (Percentage Points) between White and Latino Students, Boston Public Schools, SY2006 and SY2009**

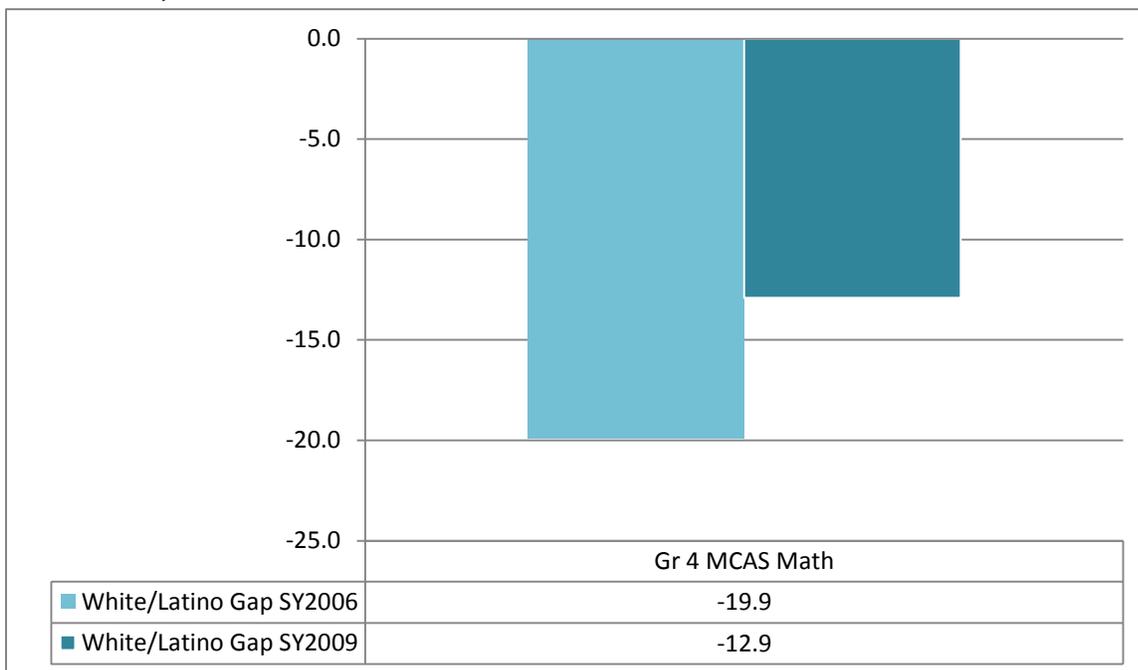
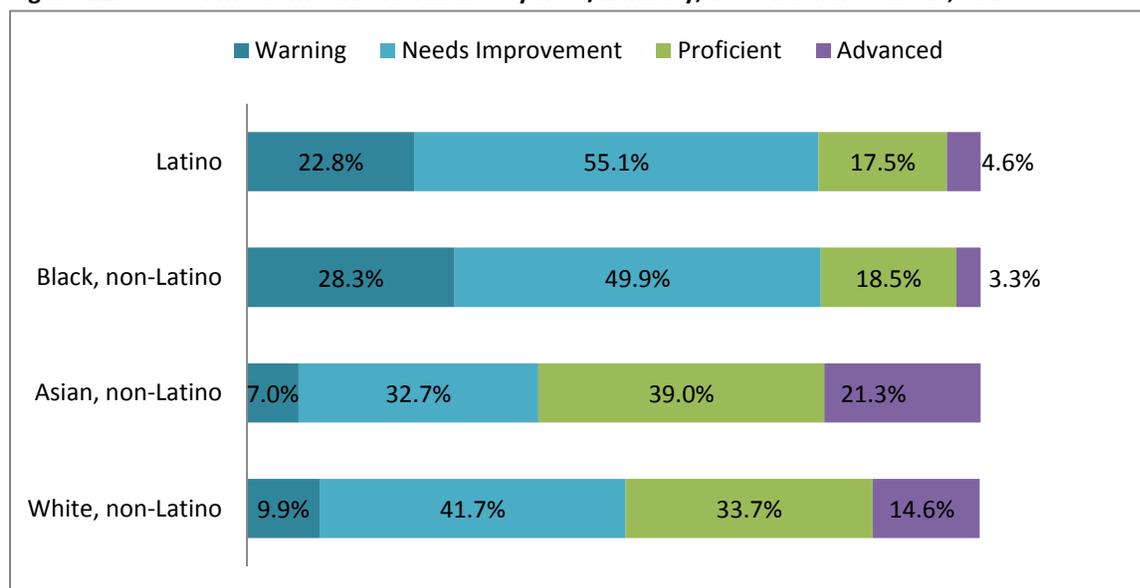


Figure 12 shows that more than 1 in 5 Latino students in Grade 4 received a “warning” on the MCAS Math in SY2009 and about 1 in 5 scored at “proficient” or higher. Conversely, only 1 in 10 White students received a “warning” and just under half scored at “proficient” or higher.

**Figure 12: Grade 4 MCAS Math Performance by Race/Ethnicity, Boston Public Schools, SY2009**



### Grade 8 MCAS ELA and Math

Although the MCA ELA achievement gap between White and Latino students in Grade 8 decreased between SY2006 (a difference of 12.2 percentage points) and SY2009 (a difference of 10.0 percentage points), it remained large (Figure 13).

**Figure 13: Grade 8 MCAS ELA Pass Rate Gap (Percentage Points) between White and Latino Students, Boston Public Schools, SY2006 and SY2009**

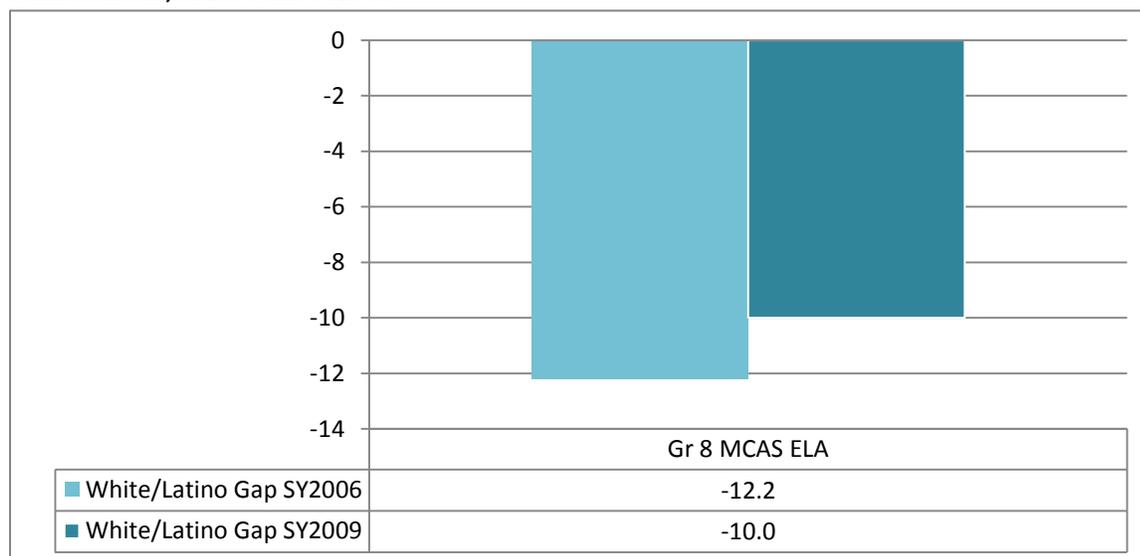
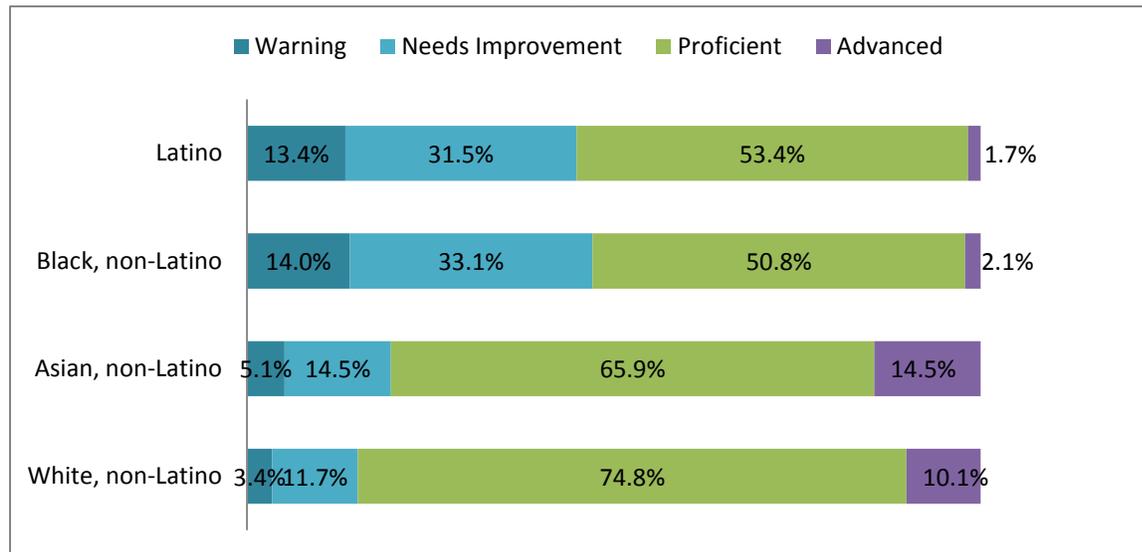


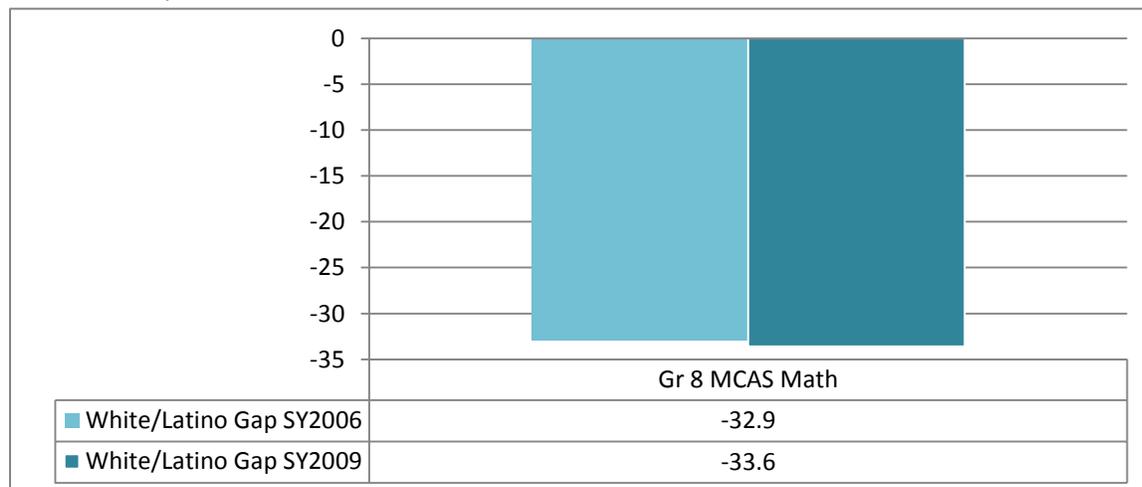
Figure 14 shows that among Latino students, 13.4% received a “warning” as compared to only 3.4% of White students. Although there was a decrease in the pass rate gap, in SY2009, Latino students were 3.9 times more likely than White students to receive a “warning,” up from 3.1 in SY2006. The difference in achievement is even more apparent when noting that while 55.1% of Latino students scored at “proficient” or above in SY2009, 84.9% of White students did so.

**Figure 14: Grade 8 MCAS ELA Performance by Race/Ethnicity, Boston Public Schools, SY2009**



The White/Latino MCAS Math pass rate gap for students in Grade 8 increased slightly from a difference of 32.9 percentage points in SY2006 to 33.6 percentage points in SY2009 (Figure 15).<sup>7</sup> In addition, Latinos were 3.4 times more likely than White students to receive a “warning” in SY2009, up from 2.9 in SY2006.

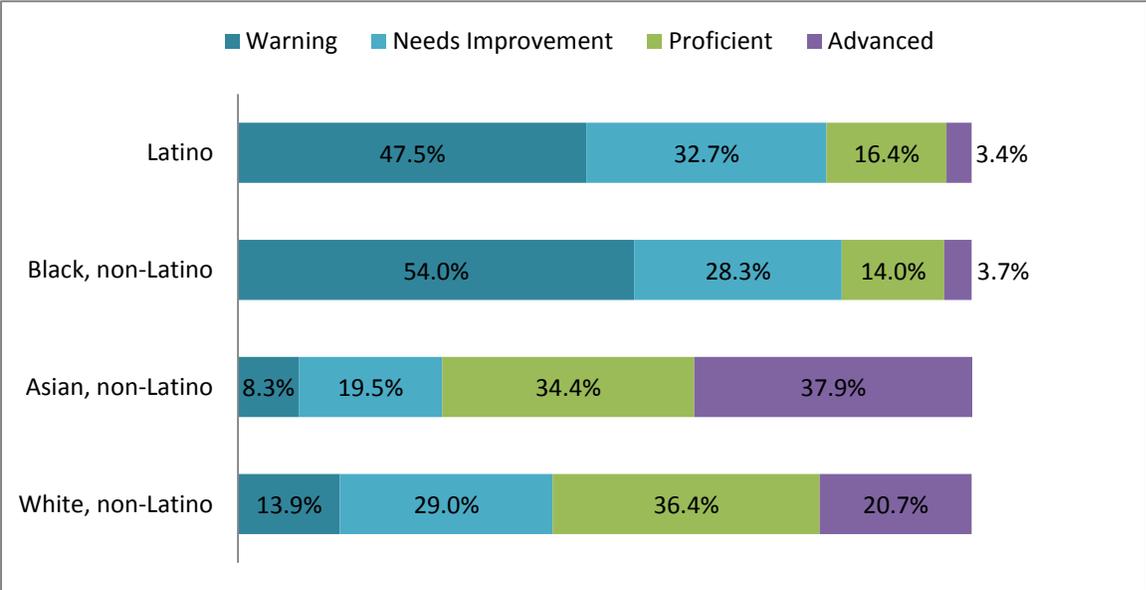
**Figure 15: Grade 8 MCAS Math Pass Rate Gap (Percentage Points) between White and Latino Students, Boston Public Schools, SY2006 and SY2009**



<sup>7</sup> Although the gap increased, the pass rate ratio decreased. In SY2006 White students were 1.7 times more likely than Latino students to pass the MCAS Math; in SY2009 White students were 1.6 times more likely to pass.

Across the board, performance on the Grade 8 MCAS Math exam was the worst of any grade/subject considered in this report. Even with the overall low performance, Latinos fared worse than their White peers. Almost half (47.5%) of Latino students received a “warning” on the MCAS Math in SY2009, as compared to 13.9% of White students (Figure 16). The difference in achievement is also evident when noting that while 1 in 5 Latino students scored at “proficient” or above, over half (57.1%) of White students did so.

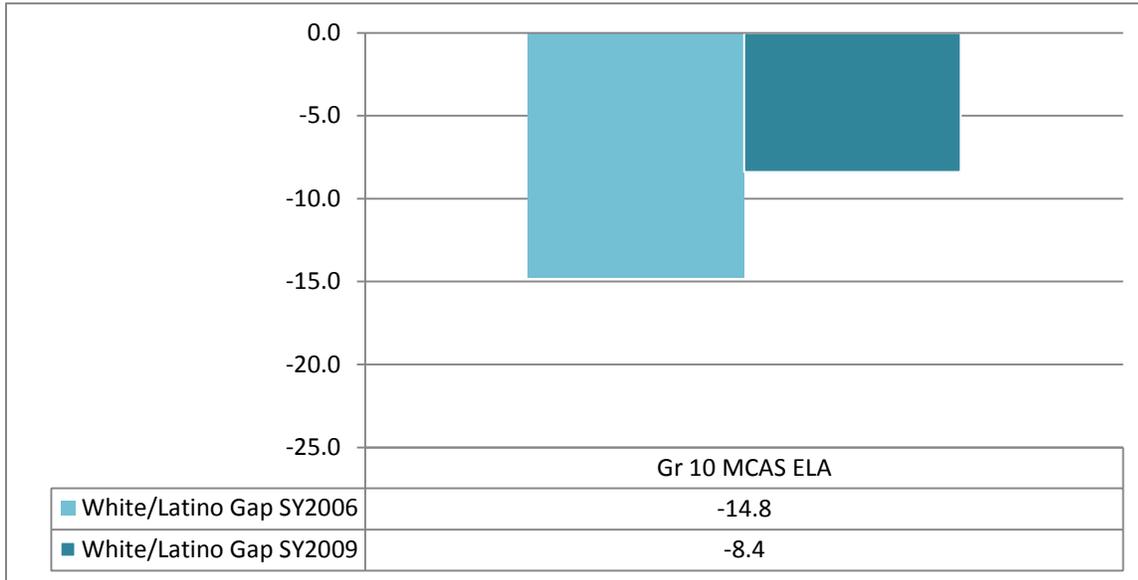
**Figure 16: Grade 8 MCAS Math Performance by Race/Ethnicity, Boston Public Schools, SY2009**



**Grade 10 MCAS ELA and Math**

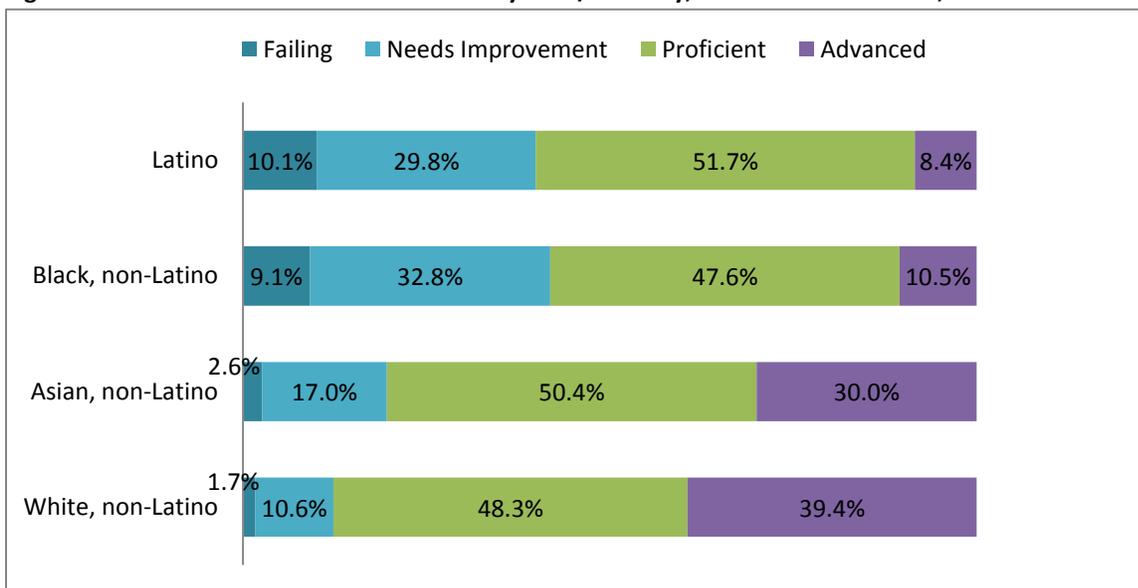
In general, students in Grade 10 had the highest pass rates and smallest pass rate gaps between White and Latino students, especially in SY2009. For instance, as displayed in Figure 17, the MCAS ELA achievement gap decreased from 14.8 percentage points in SY2006 to 8.4 percentage points in SY2009. However, despite an increase in the Latino pass rate and a narrowing of the White/Latino pass rate gap, the likelihood of Latinos receiving a “warning” relative to White students increased during this time. Latinos were 5.9 times more likely than White students to receive a “warning” in SY2009, up from 4.7 in SY2006.

**Figure 17: Grade 10 MCAS ELA Pass Rate Gap (Percentage Points) between White and Latino Students, Boston Public Schools, SY2006 and SY2009**



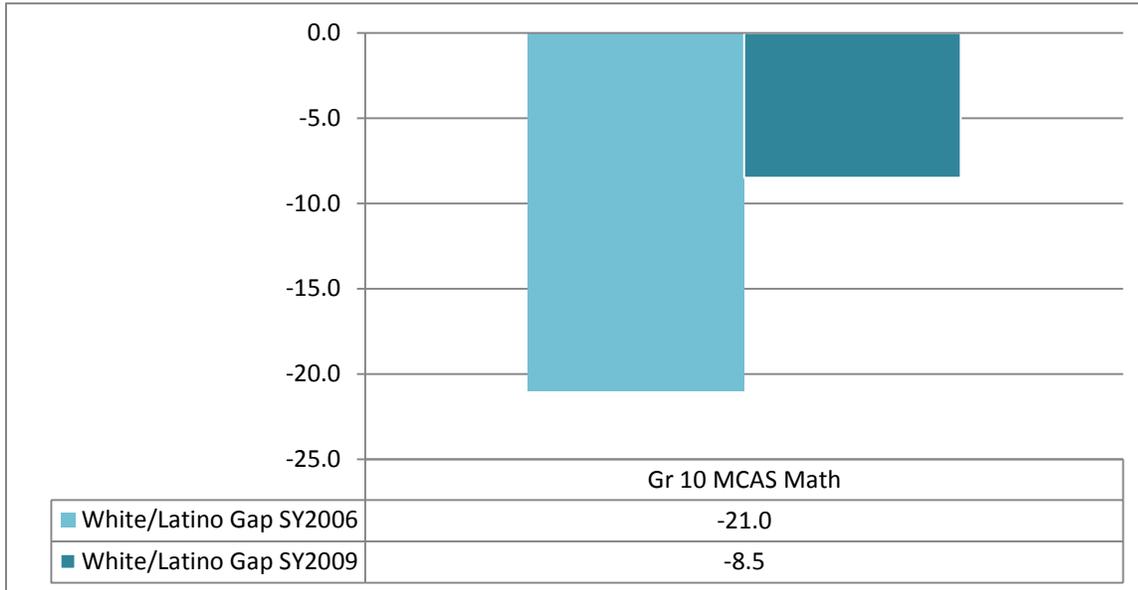
While 10.1% of Latino students failed the Grade 10 MCAS ELA exam in SY2009, only 1.7% of White students failed. While most Latino (89.9%) and White (98.3%) students passed MCAS ELA, a much larger proportion of the Latino pass rate was composed of students who scored at the “needs improvement” level (Figure 18).

**Figure 18: Grade 10 MCAS ELA Performance by Race/Ethnicity, Boston Public Schools, SY2009**



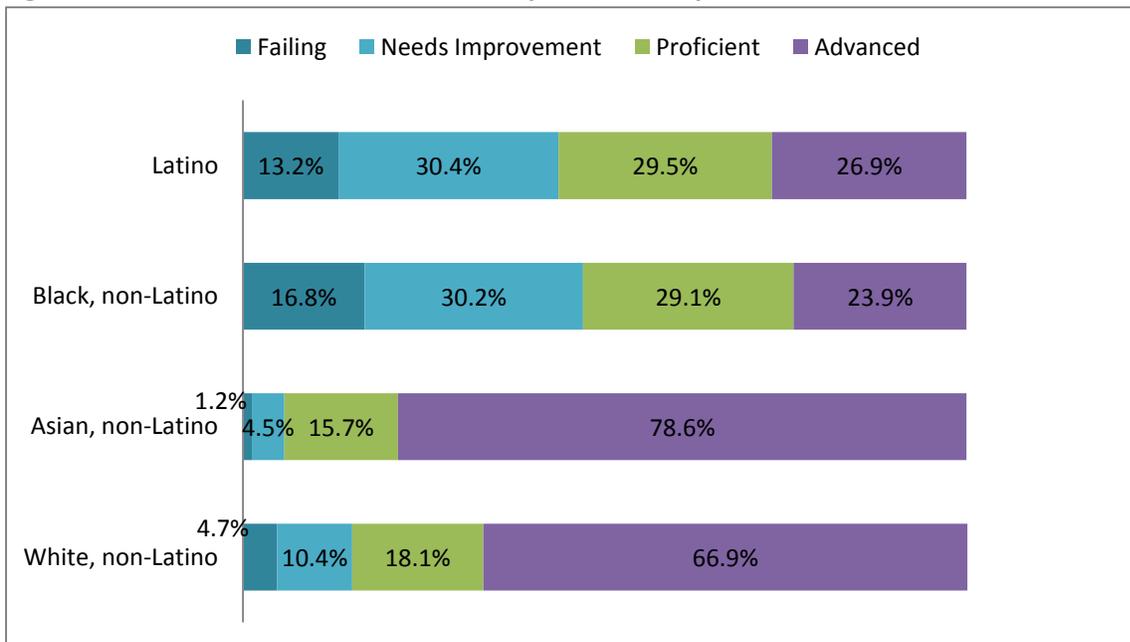
The greatest narrowing of the pass rate gap took place on the Grade 10 MCAS Math exam: from a difference of 21.0 percentage points between Grade 10 White and Latino students in SY2006 to a difference of 8.5 percentage points in SY2009 (Figure 19). Latinos went from being 4.1 times more likely than White students to fail the MCAS ELA in SY2006 to 2.8 times as likely in SY2009.

**Figure 19: Grade 10 MCAS Math Pass Rate Gap (Percentage Points) between White and Latino Students, Boston Public Schools, SY2006 and SY2009**



Finally, Figure 20 shows that while 13.2% of Latino students failed the Grade 10 MCAS Math exam in SY2009, only 4.7% of White students failed. Again, while most Latino (86.8%) and White (95.3%) students passed MCAS Math, a much larger proportion of the Latino pass rate was composed of students who scored at the “needs improvement” level. Indeed, unlike Latino students, most White students who passed MCAS Math scored at “advanced,” the highest performance level.

**Figure 20: Grade 10 MCAS Math Performance by Race/Ethnicity, Boston Public Schools, SY2009**



## MCAS PERFORMANCE OF LATINO STUDENT SUBGROUPS IN SY2009

Much of the research on student achievement considers Latino or other students of color as a monolithic group. However, substantial variety exists among Latino students, in terms of their demographic characteristics, their family and cultural backgrounds, and their own educational needs. The data obtained from Boston Public Schools allowed for the comparison of Latinos along several dimensions: by gender, race, income, mobility, disability, attendance, suspension, grade retention, and English proficiency.

### Latinos in Grade 4 (Table 3):

**Gender.** A larger proportion of female Latino students (79.5%) passed the MCAS ELA than Latino male students (67.5%). The same is true for MCAS Math, although the difference was not as pronounced: 79.4% of Latino females passed MCAS Math as compared to 75.1% of Latino males.

**Race.** A larger proportion of Latino students who are White (74.6%) passed the MCAS ELA than Latino students who are Black (69.4%). This gap was larger for MCAS Math: 79.6% of Latino students who are White passed MCAs Math as compared to 66.5% of Latinos students who are Black.

**Income.** A larger proportion of Latino students who were *not* of low-income backgrounds (85.2%) passed the MCAS ELA than Latino students of low-income backgrounds (72.0%). A similar gap was found with respect to MCAS Math: 87.0% of Latino students who were *not* of low-income backgrounds passed MCAS Math as compared to 75.9% of low-income Latino students.

**Mobility.** Latino students who switched schools during the school year were less likely to pass MCAS ELA (61.1%) than Latino students who did *not* switch schools during the school year. This was also true for MCAS Math: 66.3% of Latinos who switched schools passed MCAS Math while 78.0% of Latinos who did *not* switch schools passed.

**Disability.** Latino students *without* disabilities were twice as likely (83.6%) to pass the MCAS ELA than Latino students with disabilities (40.0%). With respect to MCAS Math, this gap was smaller but still large. While 84.4% of Latino students *without* disabilities passed MCAS Math, just a little over half (52.8%) of Latino students with disabilities passed.

**Attendance.** Latino students who were chronically absent had lower pass rates on both MCAS ELA (66.0%) and MCAS Math (67.5%) than Latinos who were *not* chronically absent (74.9% on ELA and 79.1% on Math).

**Suspension.** Latino students who received at least one out-of-school suspension had lower pass rates on both MCAS ELA (52.7%) and MCAS Math (55.4%) than Latinos who were *not* suspended (74.3% on ELA and 78.1% on Math).

**Grade Retention.** Latino students who were retained in grade between SY2008 and SY2009 had much lower pass rates (50.0% on both MCAS ELA and MCAS Math) than Latino students who were *not* retained in grade, of whom 74.2% passed MCAS ELA and 78.3% passed MCAS Math.

**English Language Proficiency.** While 80.4% of Latino students who were proficient in English passed MCAS ELA, 59.8% of Latino students of limited English proficiency passed. However, reporting the MCAS performance of LEP students in the aggregate masks the achievement of those students approaching English proficiency. In fact, when disaggregating MCAS performance by MEPA performance level, it is apparent that Latino LEP students performing at MEPA Level 5 have a higher pass rate (94.9%) than their English proficient Latino peers. This pattern also held true with respect to MCAS Math performance. Among Latino EP students, 82.1% passed MCAS Math; 67.8% of Latino LEP students passed. But, among Latino LEP students who scored at MEPA Level 5, 92.4% passed, a rate higher than that of Latino EP students.

**Table 3: Grade 4 MCAS Pass Rates of Latino Students of Selected Characteristics, Boston Public Schools, SY2009**

Grade 4		ELA Pass Rate	Math Pass Rate
<b>All Latinos</b>		73.5%	77.2%
<b>Gender</b>			
	Male	67.9%	75.1%
	Female	79.5%	79.4%
<b>Race</b>			
	White	74.6%	79.6%
	Black	69.4%	66.5%
<b>Income</b>			
	Low-income	72.0%	75.9%
	Not low-income	85.2%	87.0%
<b>Mobility</b>			
	Switched schools during school year	61.1%	66.3%
	Did not switch schools during school year	74.3%	78.0%
<b>Disability</b>			
	Students with disabilities (SWD)	40.0%	52.8%
	Students without disabilities	83.6%	84.4%
<b>Attendance</b>			
	Chronically absent	66.0%	67.5%
	Not chronically absent	74.9%	79.1%
<b>Out-of-school suspension</b>			
	Suspended	52.7%	55.4%
	Not suspended	74.3%	78.1%
<b>Grade retention</b>			
	Repeated grade	50.0%	50.0%
	Did not repeat grade	74.2%	78.3%
<b>English language proficiency</b>			
	English Proficient (EP)	80.4%	82.1%
	Limited English Proficient (LEP)	59.8%	67.8%
	MEPA L1	-	-
	MEPA L2	0%	18.2%
	MEPA L3	11.8%	37.8%
	MEPA L4	64.4%	72.5%
	MEPA L5	94.9%	92.4%

Note: Cells with dashes indicate that data have been suppressed for confidentiality reasons.

## Latinos in Grade 8 (Table 4):

**Gender.** A larger proportion of female Latino students (89.0%) passed the MCAS ELA than Latino male students (84.4%), though the gap was relatively small. The same is true for MCAS Math, albeit with many fewer students passing: 53.3% of Latino females passed MCAS Math as compared to 51.7% of Latino males.

**Race.** A slightly larger proportion of Latino students who are White (86.3%) passed the MCAS ELA than Latino students who are Black (84.4%). This gap was larger for MCAS Math: 54.0% of Latino students who are White passed MCAs Math as compared to 41.2% of Latinos students who are Black.

**Income.** A larger proportion of Latino students who were *not* of low-income backgrounds (90.2%) passed the MCAS ELA than Latino students of low-income backgrounds (86.0%), though again this gap was relatively small. A similar gap was found with respect to MCAS Math: 65.4% of Latino students who were *not* of low-income backgrounds passed MCAS Math as compared to 50.0% of low-income Latino students.

**Mobility.** Latino students who switched schools during the school year were less likely to pass MCAS ELA (81.2%) than Latinos who did *not* switch schools (87.1%). This gap was even more pronounced with respect to MCAS Math: only 38.2% of Latinos who switched schools during the school year passed MCAS Math, while 53.8% of Latinos who did *not* switch schools passed.

**Disability.** More Latino students *without* disabilities (91.4%) passed the MCAS ELA than Latino students with disabilities (68.2%). This difference was larger with respect to MCAS Math: Latino students *without* disabilities (59.2%) were twice as likely to pass MCAS Math as Latinos students with disabilities (27.0%).

**Attendance.** Latino students who were chronically absent were less likely to pass MCAS ELA (80.9%) than Latinos who were *not* chronically absent (89.2%). This gap was particularly salient with respect to MCAS Math: only 35.6% of chronically absent Latinos passed MCAS Math as compared to 60.1% who were not chronically absent.

**Suspension.** Latino students who received at least one out-of-school suspension were less likely to pass MCAS ELA (73.7%) than Latinos who were *not* suspended (88.4%). This gap was even wider with respect to MCAS Math, with Latinos who were *not* suspended being more than twice as likely to pass the exam (56.0%) as Latinos who were suspended (26.5%).

**Grade Retention.** Latino students who were retained in grade between SY2008 and SY2009 had lower pass rates on both MCAS ELA (79.4%) and MCAS Math (46.7%) than Latinos who were *not* retained (87.2% on ELA and 54.0% on Math).

**English Language Proficiency.** While 93.2% of Latino students who were proficient in English passed the MCAS ELA, 56.0% of Latino students of limited English proficiency passed. However, disaggregating the MCAS performance of LEP students by MEPA level shows that 90.3% of Latino LEP students scoring at MEPA Level 5 passed MCAS ELA, a rate comparable to that of their Latino EP peers. A similar pattern was found with respect to MCAS Math performance. Among Latino EP students, 59.0% passed MCAS Math.

Although just 23.4% of Latino LEP students passed MCAS Math, 50.0% of those scoring at MEPA Level 5 passed MCAS Math.

**Table 4: Grade 8 MCAS Pass Rates of Latino Students of Selected Characteristics, Boston Public Schools, SY2009**

Grade 8		ELA Pass Rate	Math Pass Rate
<b>All Latinos</b>		86.6%	52.5%
<b>Gender</b>			
	Male	84.4%	51.7%
	Female	89.0%	53.3%
<b>Race</b>			
	White	86.3%	54.0%
	Black	84.4%	41.2%
<b>Income</b>			
	Low-income	86.0%	50.0%
	Not low-income	90.2%	65.4%
<b>Mobility</b>			
	Switched schools during school year	81.2%	38.2%
	Did not switch schools during school year	87.1%	53.8%
<b>Disability</b>			
	Students with disabilities (SWD)	68.2%	27.0%
	Students without disabilities	91.4%	59.2%
<b>Attendance</b>			
	Chronically absent	80.9%	35.6%
	Not chronically absent	89.2%	60.1%
<b>Out-of-school suspension</b>			
	Suspended	73.7%	26.5%
	Not suspended	88.4%	56.0%
<b>Grade retention</b>			
	Repeated grade	79.4%	46.7%
	Did not repeat grade	87.2%	54.0%
<b>English language proficiency</b>			
	English Proficient (EP)	93.2%	59.0%
	Limited English Proficient (LEP)	56.0%	23.4%
	MEPA L1	8.3%	5.0%
	MEPA L2	12.1%	5.7%
	MEPA L3	45.2%	18.6%
	MEPA L4	85.9%	31.7%
	MEPA L5	90.3%	50.0%

## Latinos in Grade 10 (Table 5):

**Gender.** The gaps in pass rates between Latino females and males were relatively small. A larger proportion of female Latino students (91.5%) passed the MCAS ELA than Latino male students (88.3%). On the MCAS Math exam, 87.5% of Latino females passed as compared to 86.2% of Latino males.

**Race.** A larger proportion of Latino students who are White (91.4%) passed the MCAS ELA than Latino students who are Black (86.0%). This gap was larger for MCAS Math: 89.1% of Latino students who are White passed MCAs Math as compared to 80.6% of Latinos students who are Black.

**Income.** A slightly larger proportion of Latino students who were *not* of low-income backgrounds (90.1%) passed the MCAS ELA than Latino students of low-income backgrounds (89.3%). A similarly narrow gap was found with respect to MCAS Math: 87.0% of Latino students who were *not* of low-income backgrounds passed MCAS Math as compared to 86.2% of low-income Latino students.

**Mobility.** Latino students who switched schools during the school year were less likely to pass MCAS ELA (78.9%) than Latinos who did *not* switch schools (90.7%). This gap also existed with respect to MCAS Math: 78.1% of Latinos who switched schools during the school year passed MCAS Math while 87.5% of Latinos who did *not* switch schools passed.

**Disability.** Nearly all Latino students *without* disabilities (92.3%) passed the MCAS ELA as compared to 68.2% of Latino students with disabilities. This difference was a little less pronounced with respect to MCAS Math: 88.8% of Latino students *without* disabilities (88.8%) passed MCAS Math as compared to 73.2% of Latinos students with disabilities.

**Attendance.** Latino students who were chronically absent were less likely to pass MCAS ELA (83.5%) as compared to Latinos who were *not* chronically absent (94.3%). This gap also existed with respect to MCAS Math: 78.8% of chronically absent Latinos passed MCAS Math as compared to 92.2% who were not chronically absent.

**Suspension.** Latino students who received at least one out-of-school suspension were less likely to pass MCAS ELA (81.9%) as compared to Latinos who were *not* suspended (90.4%). This gap also existed with respect to MCAS Math, where 79.2% of Latinos who were suspended passed the exam as compared to 87.3% of Latinos who were *not* suspended.

**Grade Retention.** Wide gaps in MCAS pass rates existed between Latino students who were retained in grade from SY2008 to SY2009 and those who were not. Only 57.1% of Latino students who were retained passed MCAS ELA and only 58.9% who were retained passed MCAS Math, as compared to 91.1% and 88.8%, respectively, of those who were *not* retained.

**English Language Proficiency.** Nearly all (95.2%) of Latino students who were proficient in English passed the MCAS ELA; 66.9% of Latino students of limited English proficiency passed. However, disaggregating the MCAS performance of LEP students by MEPA level shows that Latino LEP students scoring at MEPA Level 5 had a higher MCAS ELA pass rate (98.1%) than their EP counterparts. In terms of MCAS Math, 90.5% of Latino EP students passed as compared to 70.7% of Latino LEP students.

Disaggregating the Latino LEP performance by MEPA level shows that 84.0% of Latino LEP students scoring at Level 5 passed MCAS Math, a rate which is lower than that of Latino EP students but still higher than Latino LEP students in the aggregate.

**Table 5: Grade 10 MCAS Pass Rates of Latino Students of Selected Characteristics, Boston Public Schools, SY2009**

Grade 10		ELA Pass Rate	Math Pass Rate
<b>All Latinos</b>		89.9%	86.8%
<b>Gender</b>			
	Male	88.3%	86.2%
	Female	91.5%	87.5%
<b>Race</b>			
	White	91.4%	89.1%
	Black	86.0%	80.6%
<b>Income</b>			
	Low-income	90.1%	87.0%
	Not low-income	89.3%	86.2%
<b>Mobility</b>			
	Switched schools during school year	78.9%	78.1%
	Did not switch schools during school year	90.7%	87.5%
<b>Disability</b>			
	Students with disabilities (SWD)	74.0%	73.2%
	Students without disabilities	92.3%	88.8%
<b>Attendance</b>			
	Chronically absent	83.5%	78.8%
	Not chronically absent	94.3%	92.2%
<b>Out-of-school suspension</b>			
	Suspended	81.9%	79.2%
	Not suspended	90.4%	87.3%
<b>Grade retention</b>			
	Repeated grade	57.1%	58.9%
	Did not repeat grade	91.1%	88.8%
<b>English language proficiency</b>			
	English Proficient (EP)	95.2%	90.5%
	Limited English Proficient (LEP)	66.9%	70.7%
	MEPA L1	-	-
	MEPA L2	23.8%	61.9%
	MEPA L3	53.7%	59.4%
	MEPA L4	88.9%	77.4%
	MEPA L5	98.1%	84.0%

Note: Cells with dashes indicate that data have been suppressed for confidentiality reasons.

## CONCLUSIONS

The key findings of this report are outlined below.

### **Latino students are the largest racial/ethnic student group in Boston Public Schools.**

Latino students now constitute the largest racial/ethnic student group in Boston Public Schools (43.0% in SY2012) and the only racial/ethnic group to grow in numbers from SY2006 to SY2009. In SY2009, Latino students had the highest rates of poverty, mobility, chronic absence, and grade retention in Boston Public Schools. They also had high rates of disability, suspension, and students of limited English proficiency compared to students of other races.

### **Latino students have some of the lowest MCAS ELA and Math pass rates in Boston Public Schools.**

Latino students in Boston Public Schools are achieving well below their White (and Asian) peers on the MCAS ELA and Math exams. Although this report focused on the achievement of Latino students, it is also evident that Black students in Boston Public Schools perform far below their White and Asian peers. Whereas White and Asian students tended to have similarly high MCAS ELA and Math pass rates, Black and Latino students tended to have similarly low pass rates. In SY2009, White students had the highest pass rates on the MCAS ELA exams in all three grades; Black students had the lowest pass rates in Grades 4 and 8 and Latino students had the lowest in Grade 10. With respect to MCAS Math, in all three grades, Asian students had the highest pass rates while Black students had the lowest.

Among Latinos, pass rates on the Grade 10 MCAS ELA (89.9%) and Math exams (86.8%) were the highest. Their lowest pass rates were on the Grade 4 MCAS ELA exam (73.5%) and the Grade 8 MCAS Math exam (52.5%). Latino students' performance on the Grade 8 MCAS Math exam is the most troubling, with similar proportions receiving a "warning" (47.5%) and passing (52.5%).

### **While Latino students had the largest increase in pass rates from SY2006 to SY2009, sizeable pass rate gaps remained between White and Latino students.**

MCAS pass rates for Latinos, as well as for students of other races/ethnicities, have increased since SY2006. Although Latino student pass rates were relatively low, Latinos saw the largest increases in pass rates out of all racial/ethnic student groups in the district. This was true for both MCAS ELA and Math for all three grades. Among Latinos, students in Grade 10 saw the greatest gains from SY2006 to SY2009, increasing their MCAS ELA pass rate by 8.7 percentage points and their MCAS Math pass rate by 14.5 percentage points.

However, the analysis revealed sizeable pass rate gaps between White and Latino students. In SY2009, the largest gap was found in the Grade 8 MCAS Math exam, where there was a difference of 33.6 percentage points in the pass rates of White (86.1%) and Latino (46.0%) students.

In all three grades and on both the MCAS ELA and Math exams, a much higher percentage of White students who passed the exam performed at "proficient" or above than did their Latino peers. The

Grade 8 MCAS Math exam was again the most troubling; the percentage of White students who scored at “proficient” or above was three times higher than that of Latino students.

In addition, Latino students were more likely to receive a “warning” (Grades 4 and 8) or fail (Grade 10) than their White peers. This likelihood decreased from SY2006 to SY2009 for Grade 4 test-takers, yet it increased for Grade 8 test-takers. For students in Grade 10, the likelihood increased with respect to MCAS ELA and decreased with respect to MCAS Math.

On a more positive note, there was a narrowing of the White/Latino pass rate gaps between SY2006 to SY2009 on the MCAS ELA and Math exams. The only exception was the Grade 8 MCAS Math exam, where the gap increased, albeit slightly, from a difference of 32.9 percentage points in SY2006 to 33.6 percentage points in SY2009. The largest decrease in the pass rate gap (12.5 percentage points) was on the Grade 10 MCAS Math exam.

### **Sizeable proportions of Latinos who passed MCAS performed at the “needs improvement” level.**

Examining Latino students’ pass rates more in depth revealed that Latinos, at least in the aggregate, seem to have a tenuous understanding of the academic subject matter being tested. Among Latinos who passed MCAS ELA or Math, sizeable proportions—and in some cases a majority—performed at the “needs improvement” level. This was particularly concerning for Latinos in Grade 4, where about half of all MCAS ELA and Math test-takers fell into this category. It was also troubling for Latinos in Grade 8, where only 19.8% scored at “proficient” or above on the MCAS Math exam and 47.5% (the largest proportion of test-takers in this grade) received a “warning”.

### **Among Latinos, MCAS performance varied by key student characteristics.**

Examining the MCAS performance of Latino students of different backgrounds revealed a number of disparities. This finding suggests that there is no “one size fits all” method for educating Latino students. Rather, a student-centered, culturally competent approach that takes into account each student’s own set of characteristics, family background, and prior educational experience would be most effective.

In SY2009, Latino students in Grades 4, 8, and 10 had lower pass rates on both the MCAS ELA and Math exams if they were male, Black, had a disability, had switched schools during the school year, were chronically absent, received at least one out-of-school suspension, or had been retained in grade that school year. In addition, low-income Latino students in Grades 4 and 8 had lower pass rates on MCAS ELA and Math exams; the opposite was true for Latino students in Grade 10.

Among Latinos in Grade 4, students with disabilities had the lowest pass rate on MCAS ELA and students who had been retained in grade that school year had the lowest pass rate on MCAS Math. The largest gaps in both MCAS ELA and Math pass rates in this grade were between Latinos with disabilities and Latinos without disabilities. Latinos without disabilities were twice as likely to pass MCAS ELA and 1.5 times more likely to pass MCAS Math as Latinos with disabilities.

Among Latinos in Grade 8, students with disabilities had the lowest pass rate on MCAS ELA and students who received at least one out-of-school suspension had the lowest pass rate on MCAS Math. As with

Latinos in Grade 4, the largest gaps in the Grade 8 MCAS ELA and Math pass rates were between Latinos with disabilities and Latinos without disabilities. Latinos without disabilities were 1.3 times more likely to pass MCAS ELA and more than twice as likely to pass MCAS Math as Latinos with disabilities.

Among Latinos in Grade 10, those who had been retained in grade that school year had the lowest pass rate on both MCAS ELA and MCAS Math. Unlike Latinos in Grades 4 and 8, the largest gaps in both MCAS ELA and Math pass rates in this grade were between Latinos who were retained in grade that year and those who were not. Latinos who were *not* retained were 1.6 times more likely to pass MCAS ELA and 1.5 times more likely to pass MCAS Math than Latinos who were retained.

Finally, comparing Latino students who were proficient in English (EP) to those of limited English proficiency (LEP), EP students had substantially higher pass rates than LEP students in all grades on both the MCAS ELA and MCAS Math exams. For students at lower levels of English proficiency, their MCAS performance is often more reflective of their mastery of English rather than their mastery of academic content. Accordingly, an important finding of this report is that Latino LEP students scoring at MEPA Level 5 (the highest level of English proficiency among LEP students) had *higher* pass rates than their Latino EP peers on the Grade 4 MCAS ELA and Math exams and the Grade 10 MCAS ELA exam. In terms of the Grade 8 MCAS ELA and Math exams and the Grade 10 MCAS Math exams, although Latino LEP students scoring at MEPA Level 5 had lower pass rates than their EP peers, their pass rates were more comparable than looking at Latino LEP students in the aggregate would suggest.

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## APPENDIX

The database used for this report contains student demographic data from SIMS as well as MCAS and MEPA data. The SIMS file included data for all students enrolled in BPS for the 2006-2009 school years, as of the October and June SIMS pulls for each school year. Thus, some enrollment and other data may differ from what is reported on the MDESE website as the analysis in this report includes students enrolled in BPS at any point during the school year.<sup>8</sup> In general, data from June were used to override any discrepancies with October data (e.g., if a student was listed as male in June but female in October of a given school year, the student was assigned a male gender). Variables used in this report are defined in Table A1. (For more information about this dataset, see Uriarte et al., 2011.)

**Table A1: Definition of Variables**

<b>Attendance</b>	Chronic absence is defined in this report as missing 10% or more of the school year.
<b>English Proficiency (LEP, EP)</b>	A student who is of limited English proficiency (LEP) is incapable of performing ordinary schoolwork in English. A student who is English Proficient (EP) is capable of performing ordinary schoolwork in English. This group of students includes: students who are native English speakers; students whose first language is not English but who entered school proficient in English; and students who were formerly of limited English proficiency.
<b>English Proficiency Level (MEPA)</b>	The English proficiency level of LEP students is measured by the Massachusetts English Proficiency Assessment (MEPA). Since Spring 2009, the MEPA has been scored in five categories, with Level 5 representing the highest level of English proficiency.
<b>Gender</b>	Male or female.
<b>Grade Retention Rate</b>	The proportion of students required to repeat the grade in which they were enrolled the previous year.
<b>Low-income</b>	Low-income is defined as any student who is eligible for free or reduced price lunch.
<b>MCAS Pass Rates in ELA and Math</b>	Pass rates are defined as the sum of the proportions of students scoring in the Above Proficient/Advanced, Proficient, and Needs Improvement performance categories in MCAS exams on these subjects in a given grade in a given year. In other words, the pass rate includes any student who did <i>not</i> receive a Warning/Failing on the exam. See Table 2 for performance level definitions.
<b>Mobility</b>	A mobile student is defined in this report as any student who changed schools between October and June of a given school year.
<b>Out-of-School Suspension Rate</b>	The out-of-school suspension rate is the ratio of out-of-school suspensions to the total enrollment during the year.
<b>Race/ethnicity</b>	A Latino student is defined as any student identified in SIMS as Hispanic or Latino and/or a native Spanish speaker, regardless of the student's race. In this report, data on White, Black, and Asian students do not include Latino students. The term "Black" is used in this report to denote students identified as Black or African-American. The term "Asian" does not include native Hawaiian or Pacific Islander students in this report; data for these students are not shown in this report due to their low enrollment. Data for American Indian/Alaska Native students and multiracial students are also not shown; the proportion of these students enrolled in Boston Public Schools is low.

<sup>8</sup> The analysis in this report excludes students with 0 days of attendance and 1 day of membership ("0-1" students). For SY2009, there were no "0-1" students. This was deemed to be a clerical error and instead students with 1 day of attendance and 1 day of membership were excluded for that school year only. Students with an attendance code of "555" were also removed, as this is the code SIMS uses to indicate summer events (e.g., summer graduation, summer dropouts, and summer transfers).

<b>Student with a Disability (SWD)</b>	A student with a disability (SWD) is a student participating in special education programs: full inclusion, partial inclusion, and substantially separate classrooms. Data on SWDs include students age 6+ only. The nature of the student’s primary disability may be one of the following: intellectual; sensory/hard of hearing or deaf; communication; sensory/vision impairment or blind; emotional; physical; health; specific learning disabilities; sensory/deaf and blind; autism; neurological; developmental delay; or multiple disabilities.
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**The Mauricio Gastón Institute for Latino Community Development and Public Policy** was established in 1989 at the University of Massachusetts Boston by the Massachusetts State Legislature at the behest of Latino community leaders and scholars in response to a need for improved understanding of the Latino experience in the Commonwealth. The mission of the Institute is to inform policy makers about issues vital to the state’s growing Latino community and to provide this community with information and analysis necessary for effective participation in public policy development.

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