

# *Executive Summary*

## **Strong Results, High Demand:**

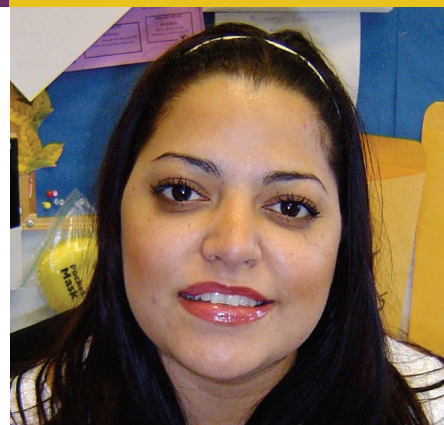
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### *A Four-Year Study of Boston's Pilot High Schools*

*November 2007*



**Center for  
Collaborative  
Education**



# Executive Summary

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New research from the Center for Collaborative Education finds that students in Boston's Pilot high schools outperform students from other non-exam Boston Public Schools on every standard measure of engagement and performance. This level of achievement holds for every racial, economic, and academic subgroup examined. Pilot high school students show better MCAS scores, higher attendance rates, higher promotion rates—and the four-year graduation rate for 2006 was more than 23 percentage points higher than the rate for BPS students, 75.7% as compared with 52.2% for BPS. ("BPS" in this report refers to non-Pilot, non-exam schools.)



The study found that Pilot high schools reflect the BPS demographics in terms of race, income, and mainstream special needs students. The report also identifies some areas in which Pilot School demographics fall short of the goal of representing the student population of the Boston school district. Pilot high schools have proportionately fewer students designated as Limited English Proficient and fewer students with moderate to severe special needs. In addition, proportionately fewer students arrive with certain other warning signs of "risk," such as low grade 8 math MCAS scores and poor attendance records in eighth grade. It is not possible to isolate how much differences in populations, in addition to the Pilot features of schools, affected differences in performance outcomes.

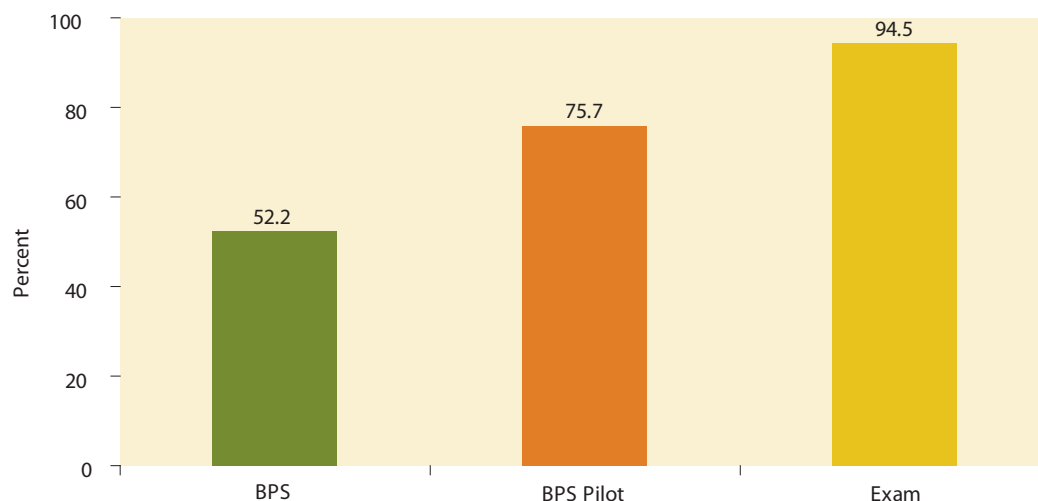
## Boston's Pilot High Schools

School Name	Grades Served	Enrollment in 2005
Another Course to College	9 to 12	248
Boston Arts Academy	9 to 12	406
Boston Community Leadership Academy	9 to 12	442
Boston Day and Evening Academy (Horace Mann Charter)	ungraded	392
Fenway High School	9 to 12	275
Greater Egleston Community High School	10 to 12	104
Health Careers Academy (Horace Mann Charter)	9 to 12	209
Josiah Quincy Upper School	6 to 12	433
New Mission High School	9 to 12	244
TechBoston Academy	9 to 12	236

However, the news from the report is that Pilot high school students in every category—including students with risk factors—performed better than their counterparts in the Boston school district.

The present study offers a review of Pilot high school student performance over the course of four years, looking at overall outcomes. It then parses the data to identify how different populations of students are being served by the Pilot Schools.

**Four-Year Cohort Graduation Rates by School Type (in percent)**



## DEFINING PILOT SCHOOLS

Pilot Schools were first created in Boston in 1995 through a unique partnership that included the mayor, the office of the school superintendent, the school committee and the teachers union. An essential characteristic of Pilot Schools is that they are freed from district mandates and union work rules to have greater control over budget, staffing, curriculum, governance, and schedule in order to provide better education for their students. Pilots are designed to serve the same student population as the district schools, and have several additional defining characteristics:

- **Pilots are accountable:** Pilot Schools and the district have developed a set of consistent benchmarks, against which performance is evaluated every five years.
- **Pilots are small and personalized:** Pilot Schools place great emphasis on creating a nurturing school culture in which teachers can attend closely to each student's learning needs.
- **Pilots are vision driven:** Every Pilot School has created a vision focused on equity and the fundamental belief in each child's potential. Pilot Schools have the power to hire teachers and staff to support the culture and vision of each individual school.



**Grade 9 Promotion Rates by School Type (in percent)**

	2001–02	2002–03	2003–04
BPS	71.5	69.8	75.5
BPS Pilot	91.7	92.1	91.7
Exam	93.3	96.0	94.2

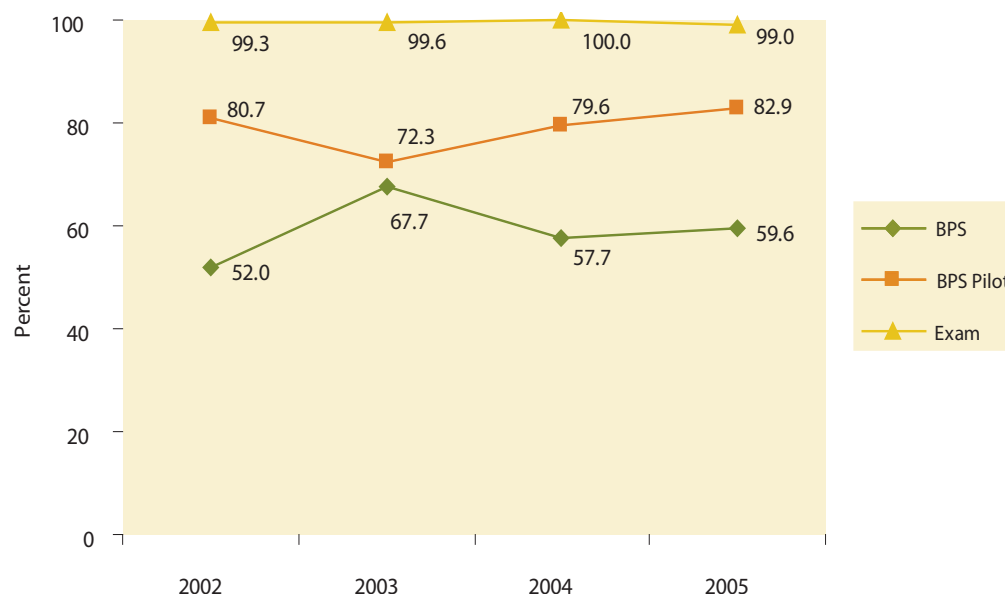
## A SUMMARY OF THE FINDINGS

Among the highlights of the report's findings are results that demonstrate the power of the Pilot School model. These include the following:

- Pilot high schools serve students well on every outcome in a wide range of measurable performance and engagement criteria.
- The four-year Pilot high school graduation rate for the most recent year was 23 percentage points higher for Pilots (75.7%) than for BPS (52.2%).
- Pilot high schools have attracted students that represent the district's racial, economic, and mainstream special education subgroups.
- Pilot high schools enroll a lower percentage of students with risk factors, independent of the student assignment process, suggesting that a disproportionate number of students without risk factors who are seeking high-performing schools choose to apply to Pilot Schools.
- Students with risk factors perform better in Pilot high schools than in district schools.
- Comparisons of the MCAS scores of students in Pilot high schools with those of like students in all subgroups in district schools show stronger performance among Pilot high school students.



Grade 10 ELA MCAS Exam Pass Rates by School Type (in percent)



## SCOPE OF THIS STUDY

This is the most comprehensive examination of Pilot high school performance to date, using data provided by the Boston School Department to examine Boston's closely watched Pilot high schools over a four-year period (2001–05). In addition to aggregate analyses, the report breaks down the numbers to discover who is attending Pilot high schools and how subgroups of the Boston student population are faring in Pilot high schools.

## LOOKING AT DEMOGRAPHIC SUB-GROUPS



The report finds that Pilot high school students as a group are doing substantially better on all measures of academic success than their peers in the district. It then breaks down the larger group into subgroups by racial, economic, and academic designations to answer two important questions:

- How comparable is Boston's Pilot high school population to the district high school population?
- How well do the specific subgroups fare in Pilot high schools in comparison to similar groupings in the district as a whole?

The study looks at grade 10 MCAS results for the three larger racial groups—Black, Latino, and White—and finds that for each group over four years the pass rates are substantially higher for Pilot School students than BPS students in both math and English language arts (ELA). Black and Latino Pilot students had higher pass rates in seven out of the eight administered tests, while White Pilot students passed at higher rates in all eight tests.

The achievement gaps—between White and Black students, and between White and Latino students—as measured by MCAS scores continued to be a problem within both Pilot and BPS schools in all four years, on both ELA and math tests. However, there is promising news for Pilot Schools: at the beginning of the period tracked in the study, the gaps were greater in the Pilot Schools; at the end they were smaller in Pilots than in BPS schools.

Looking at economic variables, the study finds comparable enrollment in Pilot and BPS schools: 68.4% of Pilot students and 69.8% of BPS students were eligible for free/reduced-price lunch, a common proxy for low-income students. In each year and on both grade 10 MCAS tests, low-income Pilot School students passed at a higher rate than their BPS counterparts—by more than 20 percentage points on five of the eight tests.

The study examines the academic history of Pilot students to see whether students with risk factors—namely, low eighth-grade

**Taken together, the student engagement and performance findings show that Pilot high school students are outperforming the district average on a range of indicators of behavior and academics.**



attendance rates; having received a warning grade on their grade 8 math MCAS exam; or being over-age first-time ninth graders—are represented proportionately to BPS schools, and how such students fare in Pilot high schools. The data show that, while there are substantial numbers of students with risk factors entering Pilot high schools, the proportion is lower than in BPS schools. However, Pilot ninth graders who received a warning on their grade 8 math MCAS performed substantially better than corresponding BPS ninth graders. They had higher ninth-grade attendance rates, higher promotion rates to tenth grade, and higher passing rates on both grade 10 MCAS exams.

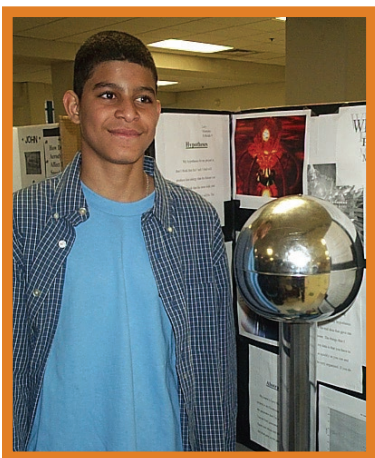
### Grade 10 Math MCAS Exam Pass Rates of Students Who Scored Warning on Grade 8 Math MCAS Exam by School Type (in percent)

	2004	2005
BPS	52.8	50.7
BPS Pilot	72.9	70.4

The study also finds that, while Pilot high schools serve similar percentages of mainstream special education students to BPS schools, they serve proportionately fewer students designated as Limited English Proficient and students who have moderate to severe special needs, although the gap has been closing in recent years for the special needs population. While the numbers for these Pilot populations were too small to analyze comparative results, the study found that the aggregate differences in MCAS pass rates between Pilot and BPS schools were not affected by the disproportionate representation of these students.

## IMPACT OF ADMISSIONS POLICIES ON PILOT HIGH SCHOOL ENROLLMENT

The ten Pilot high schools have a variety of admissions processes that often differ from BPS schools. Two admit strictly by lottery (like district schools); two accept only over-age students; one is a performing arts school with academically blind auditions; one is a pathway school that admits students from its feeder school; one is a Horace Mann School with a state-mandated lottery and application process; and three ask students to complete an application to evaluate the match between student and school.



The study finds that Pilot Schools with different kinds of admissions processes, including both application and lottery processes, end up with a lower percentage of students with risk factors than are found in BPS schools. Even though in the first year studied lottery schools had students with some risk factors in proportions that were equivalent to BPS schools, as demand shifted, the percentages of students with risk factors decreased each succeeding year. The study concludes that good schools attract the interest of a disproportionately high number of college-bound students, which would suggest a correspondingly smaller proportion of students with risk factors.

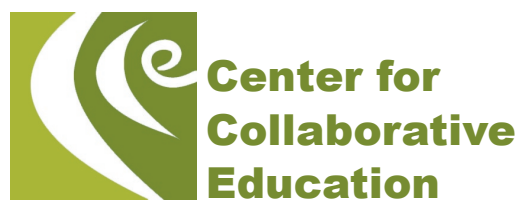
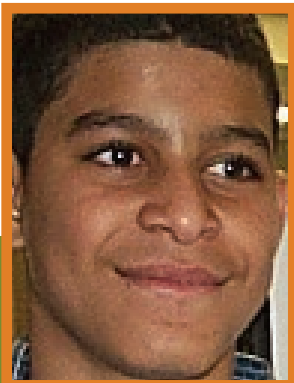
## KEY POLICY RECOMMENDATIONS

Analysis of the data in this four-year study supports the following courses of action:

- **Create more Pilot Schools.** Pilot Schools are more effective for students from all backgrounds and of all levels of achievement and are being chosen by more students than they can currently serve. While the Boston Public Schools' student population has been declining, the demand for enrollment in Pilot high schools has remained beyond capacity.
- **Revisit and strengthen the Boston Public Schools student assignment process to encourage informed choices of high schools by all students.** Students need information about the schools they are choosing so they can make informed, intentional choices. Informed students will lead to increased positive matches between students and schools. A likely outcome will be increased engagement and performance across the district's high schools.
- **Enroll representative proportions of students who are designated Limited English Proficient, as well as students with moderate to severe special needs, in Pilot Schools.** As much as possible, these schools should represent the BPS population.
- **Share the lessons of Pilot Schools.** This has always been the intent of the Pilot program—to help Boston improve education throughout the district.



As district public schools that were created to serve as laboratories of innovation, Pilot high schools are in high demand and have strong results. They are achieving the goals of equity and excellence within the public school district. The experiment in innovation that the Boston Public Schools and the Boston Teachers Union created 12 years ago has demonstrated results that suggest that the Boston Public Schools need look no further than their own Pilot Schools for examples of high-performing high schools. Families across race and income lines, and students with risk factors all seek high-performing schools. The logic presented in the creation of Boston's Pilot Schools in 1995 still holds. Demand for quality high schools exceeds supply. The challenge of the district and the teachers union is to respond by working together to create more quality school choices for Boston families.



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