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Latinos in Massachusetts Public Schools: Springfield

Michael Berardino

University of Massachusetts Boston, michael.berardino001@umb.edu

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Latinos in Massachusetts Public Schools Springfield

by Michael Berardino, MS

June, 2014

THE MAURICIO GASTÓN INSTITUTE
FOR LATINO COMMUNITY DEVELOPMENT
AND PUBLIC POLICY

Springfield

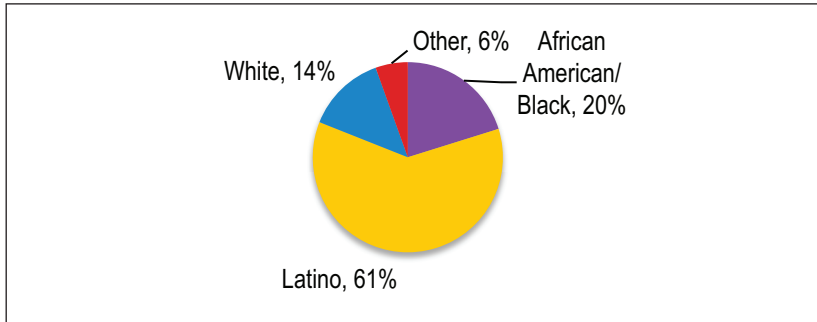
This report provides a snapshot of current educational outcomes of Latino students in the city of Springfield. It is based on publicly available data from the Massachusetts Department of Elementary and Secondary Education (MADESE) that have been analyzed by the Gastón Institute for a community meeting in Springfield. This report uses the ethno-racial categories assigned by MADESE. It focuses on the evolving demographic trends and the most recent educational outcomes of Latino students relative to other ethno-racial groups in the school district and to students statewide. The first section illustrates the demographic shift occurring in the Springfield Public Schools, with a growing Latino student population and a shrinking White and African-American/Black student population. The second section compares the performance of Latino students in Springfield on the Massachusetts Comprehensive Assessment System (MCAS) tests with the performance of all students statewide and other ethno-racial groups in Springfield. The third section shows Latino graduation, dropout, and college enrollment rates, relative to other students in the district and to all students statewide. The second and third sections show that despite persistent disparities in outcomes, the achievement gap between Latino and White students has been shrinking slightly over recent years. Latino students in Springfield have made especially large improvements on the Grade 10 ELA and Science/Technology/Engineering tests. The fourth section compares outcomes and engagement variables at the four main high schools in Springfield, demonstrating the drastic disparities in outcomes between Central High School and Putnam Vocational Technical High School on the one side and High School of Commerce and High School of Science and Technology on the other side.

Notes

¹ While analyzing and presenting the data using MADESE's ethno-racial categories, we use the term "Latino" rather than "Hispanic."

Demographics

Figure 1. Ethno-Racial Composition of Springfield Public Schools, SY2013



Source: MADESE (n.d.). *Enrollment Data*.

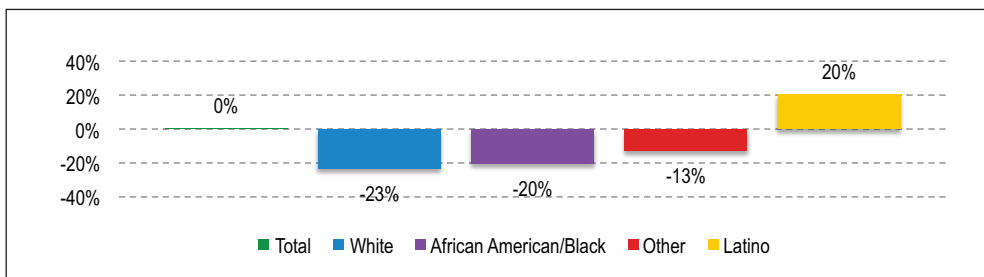
Springfield is the second largest public school district in the state with 25,283 students in SY2013.² A great majority (88%) of its students are classified as low-income, the second highest percentage among all school districts in the state. More than a quarter (26%) of students in Springfield spoke a language other than English as their first language and 17% are classified as English Language Learners (ELLs). As seen in Figure 1 above, Latino students are the largest student group: the 15,397 Latino students represent 61% of the total enrollment in Springfield. African-American/Black students are the second largest student group, representing 20% of total enrollment. White students make up 14% of the district, while other ethno-racial groups make up the remaining 6%. As seen in Figure 2, since SY2006, the overall number of students in the district has remained steady but the ethno-racial composition has shifted. There has been a 20% increase in the number of Latino students in the district, while the numbers of all other ethno-racial groups have decreased: by 23% for White students and by 20% for African-American/Black students. As a result, Latino students went from 49% of all students to 61% of all students. Approximately one-fourth (24%) of Latino students in Springfield are classified as ELLs. Latino students in Springfield are highly mobile, as evidenced by the 14% of Latino students who left the district and the 24% who changed schools in SY2013, both higher than all other ethno-racial groups in the district. While specific information about the ancestry of the Latino students in Springfield is not available, the American Community Survey estimates that 85% of Latinos in Springfield are of Puerto Rican heritage (ACS, 2012).

² SY refers to the ending year of the school year. For example SY2013 is the school year that began in September of 2012 and ends in June of 2013

³ This does not include independent charter schools, which are considered their own school districts.

⁴ The churn rate is the percentage of students who change schools during the school year.

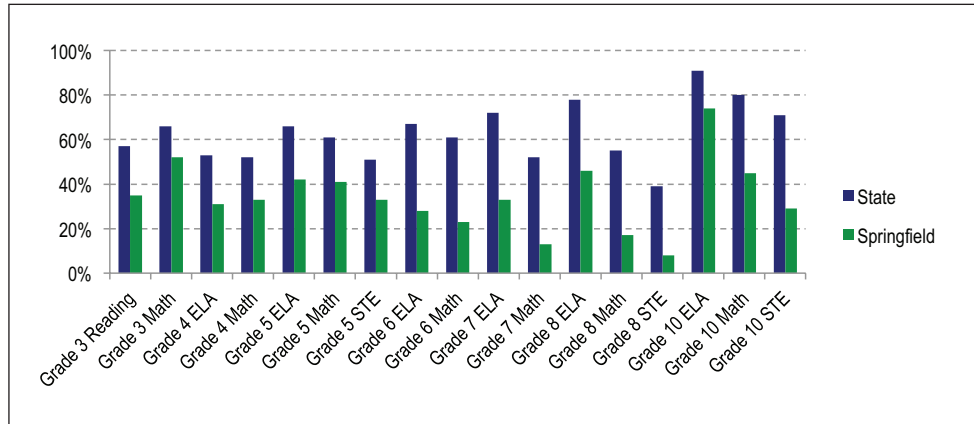
Figure 2: Change in Student Enrollment, Springfield Public Schools, SY2006 to SY2013



Source: Author's calculations based on MADESE (n.d.). *Enrollment Data*.

MCAS Performance

Figure 3: Percentage of All Students Scoring “Proficient” or Higher on MCAS by Grade and Subject, SY2013

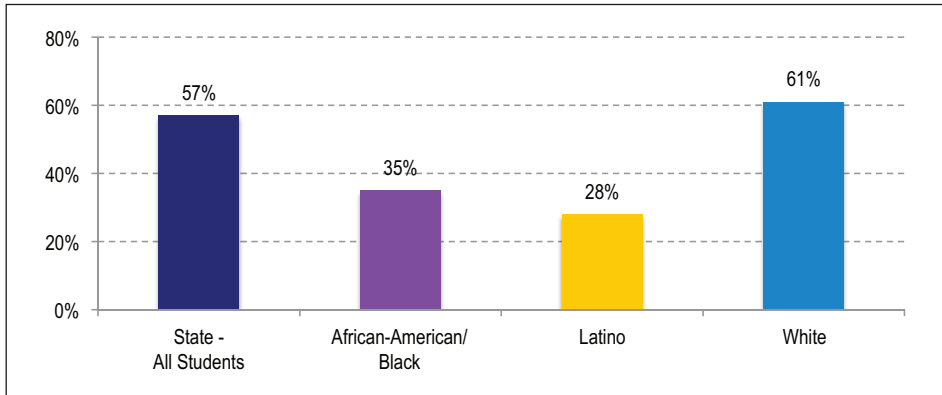


Source: MADESE (2013). *MCAS Tests of Spring 2013, Percent of Students at Each Achievement Level for Springfield.*

As evidenced by Figure 3 above, Springfield as a district performs far below statewide averages on the standardized tests in the Massachusetts Comprehensive Assessment System (MCAS). Figure 3 shows the percentage of all students in Springfield and all students statewide who passed (i.e., scored “Proficient” or higher) on the 2013 MCAS tests in English Language Arts (ELA), Math, and Science/Technology/Engineering (STE) MCAS tests. As seen, the pass rates in Springfield are far below the statewide rates across all grades. Particularly alarming is the jump in the performance gaps between Grades 5 and 6. For the ELA tests, the State-Springfield gap increases from 24 percentage points in fifth grade to 39 points in sixth grade and for the Math tests the gap increases from 20 percentage points in Grade 5 to 38 percentage points in Grade 6. This jump in the gap between fifth and sixth grade has been evident since the introduction of the Grade 5 and Grade 6 tests in SY2006. Furthermore, looking at the MCAS tests for Grades 6-10, Grade 10 ELA was the only test on which the State-Springfield gap was less than 30 percentage points. In other words, Springfield students start behind their counterparts across the state, but fall further behind starting in middle school. Comparing the pass rates for Latino students in Springfield to the pass rates for Latino students statewide shows much smaller gaps, especially in earlier grades; there is even one test (Grade 5 STE) on which Latino students in Springfield had a higher proficiency rate than Latino students statewide.

The following section highlights the performance by Latino students in Springfield on the Grade 3 Reading and Grade 10 ELA, Math, and STE tests, all important performance measures. Grade 3 Reading is considered an important measurement for academic preparation, because the end of third grade marks the time when students go from “learning how to read” to “learning from reading.” The Grade 10 MCAS tests are also an important metric of preparation for participation in post-secondary education. Furthermore, all students in Massachusetts are required to pass the Grade 10 ELA, Math, and STE MCAS tests in order to qualify for a high school diploma.

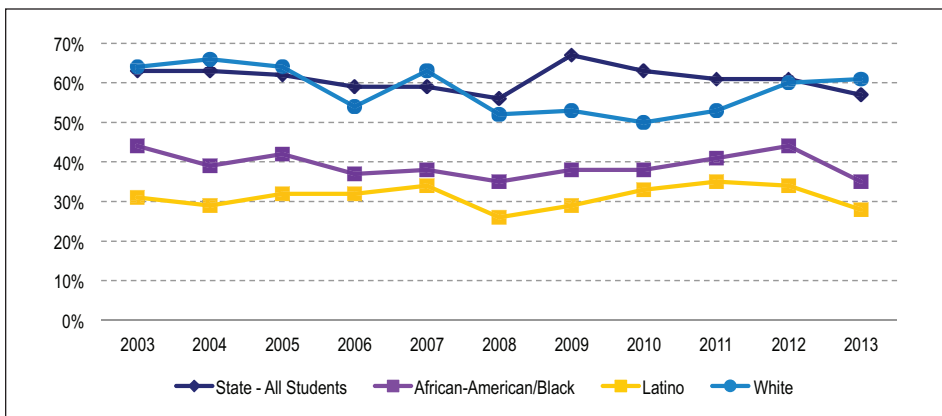
Figure 4: Percentage of Students Scoring “Proficient” or Higher on Grade 3 Reading MCAS by Race/Ethnicity, SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject*.

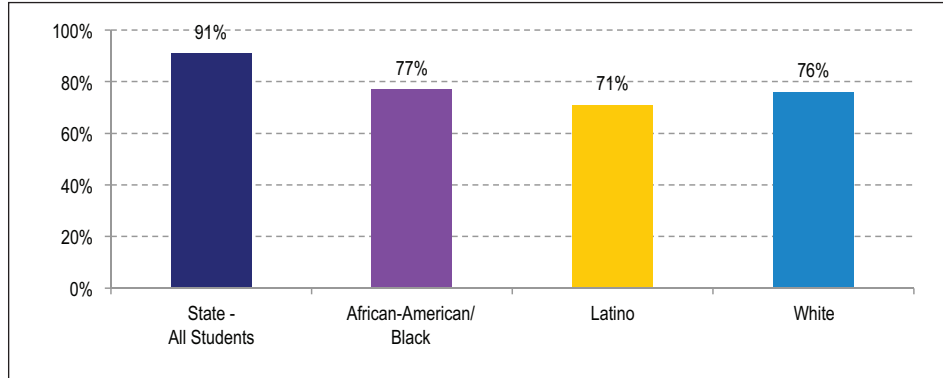
As seen in Figure 4 above, 28% of Latino students in Springfield performed at “Proficient” or higher on the Grade 3 Reading MCAS. This was the lowest among all ethno-racial groups in Springfield, 33 percentage points below the rate for White students in Springfield, and 29 points below the rate for all students statewide. Figure 5 below illustrates that the proficiency rate for Latino students has been largely stagnant since 2003 and has actually decreased over recent years. Meanwhile, the rate for White students varied markedly from one year to another, with the result that the White-Latino gap in Springfield narrowed in 2010 and 2011 but then widened once again in 2012 and 2013.

Figure 5: Percentage of Students Scoring “Proficient” or Higher on Grade 3 Reading MCAS by Race/Ethnicity, SY2003-SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject*.

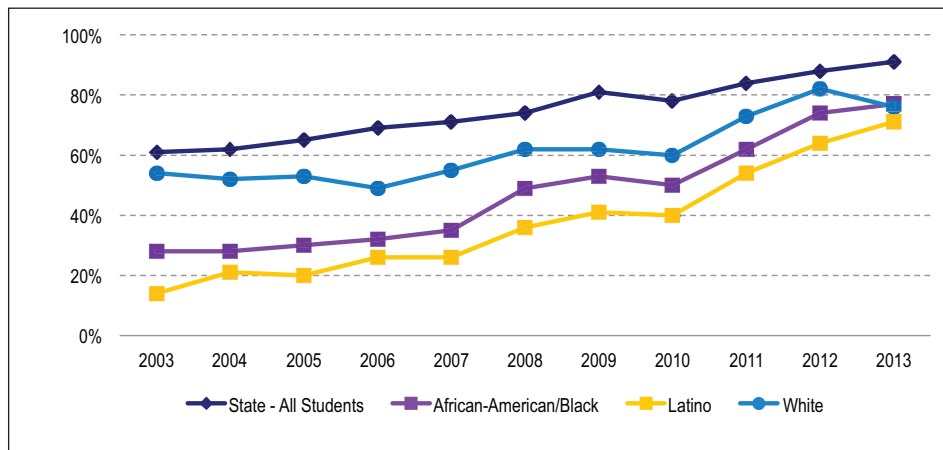
Figure 6: Percentage of Students Scoring “Proficient” or Higher on Grade 10 ELA MCAS by Race/Ethnicity, SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject*

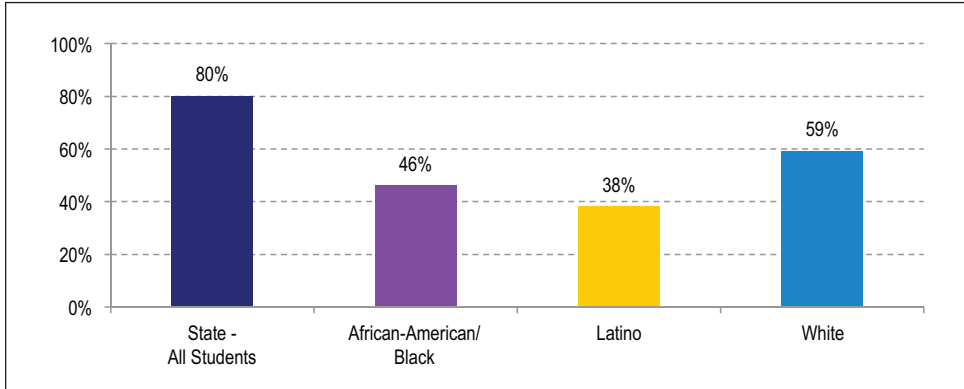
In SY2013, 71% of Latino students scored “Proficient” or higher on the Grade 10 ELA MCAS test. This pass rate was 5 percentage points lower than the rate for White students in Springfield, 6 points below the rate for African-American/Black students in the district, and 20 points below the pass rate statewide. As seen in Figure 7 below, however, this 71% is the highest pass rate for Latino students to date and marks 10 years of consistent improvement. As a result, since SY2003, Latino students have eliminated 88% of the performance gap with White students in Springfield and 55% of the gap with all students statewide.

Figure 7: Percentage of Students Scoring “Proficient” or Higher on Grade 10 ELA MCAS by Race/Ethnicity, SY2003-SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject*

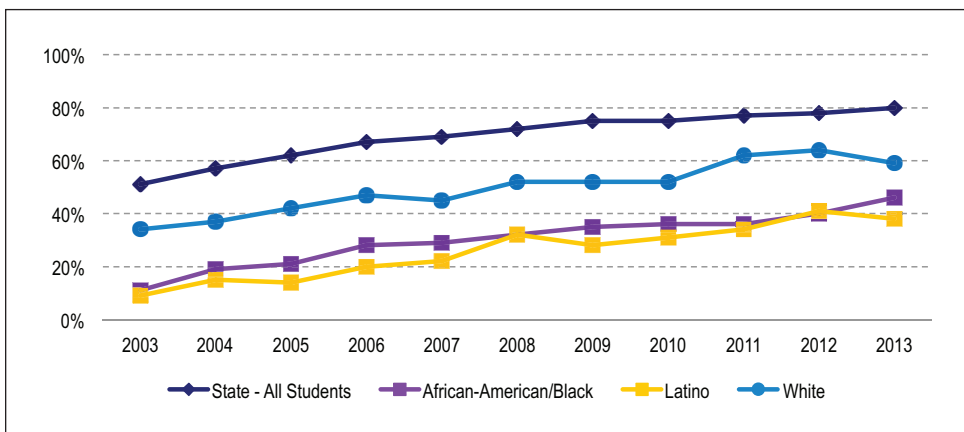
Figure 8: Percentage of Students Scoring “Proficient” or Higher on Grade 10 Math MCAS by Race/Ethnicity, SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject*.

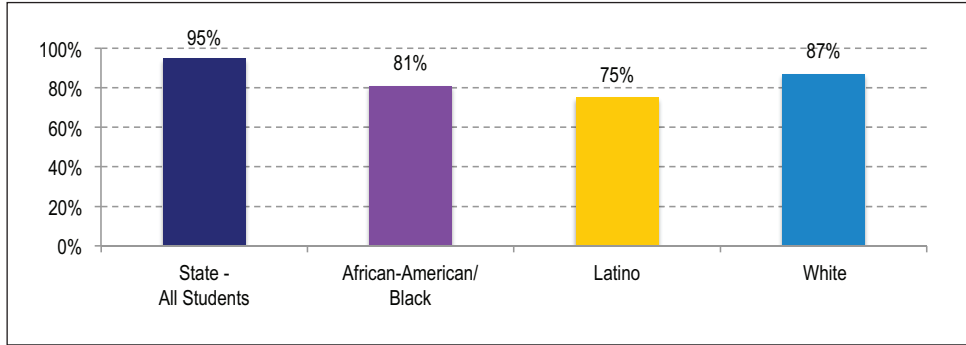
While 71% of Latino students in Springfield in SY2013 passed the Grade 10 ELA test, only 38% passed the Grade 10 Math test. As seen in Figure 8 above, this pass rate is 8 percentage points below the rate for African-American/Black students in Springfield, 21 points below the rate for White students in Springfield, and 42 points below the rate for all students statewide. As seen in the figure below, there have been large improvements in pass rates for Latino students in Springfield over the past 10 years. However, other groups have shown similar improvements over this span; the gap with White students in Springfield has narrowed only slightly and the gap with all students statewide remains unchanged at 42 percentage points.

Figure 9: Percentage of Students Scoring “Proficient” or Higher on Grade 10 Math MCAS by Race/Ethnicity, SY2003-SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject*.

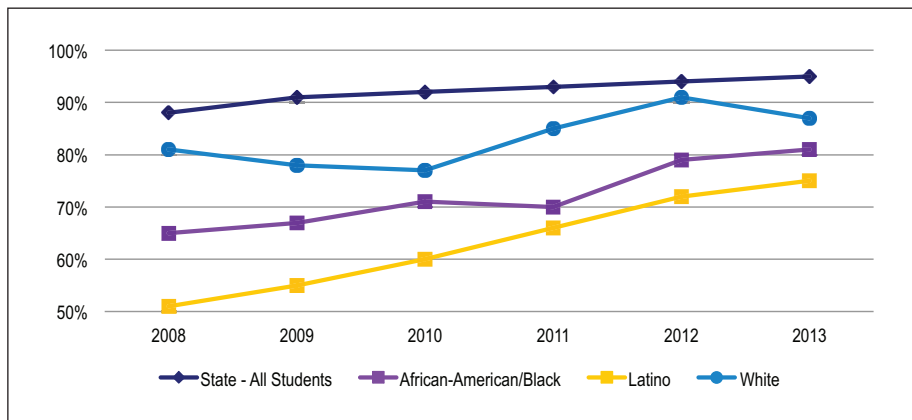
Figure 10: Percentage of Students Scoring “Needs Improvement” or Higher, Grade 10 STE MCAS by Race/Ethnicity, SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject.*

Figure 10 illustrates that Latino students in Springfield have the lowest Grade 10 STE pass rates (for the Science, Technology, and Engineering MCAS tests, passing requires a score of “Needs Improvement” or higher) of all ethno-racial groups in Springfield. The Latino rate is 6 percentage points below the rate for African-American/Black students, 12 points below the rate for White students, and 20 points below the rate for all students statewide. However, Figure 11 below shows that Latino students in Springfield have made especially strong progress on the STE tests since their introduction in SY2008, improving by 24 percentage points in only six years. This improvement has resulted in closing 60% of the gap with White students in Springfield and 46% of the gap with all students statewide.

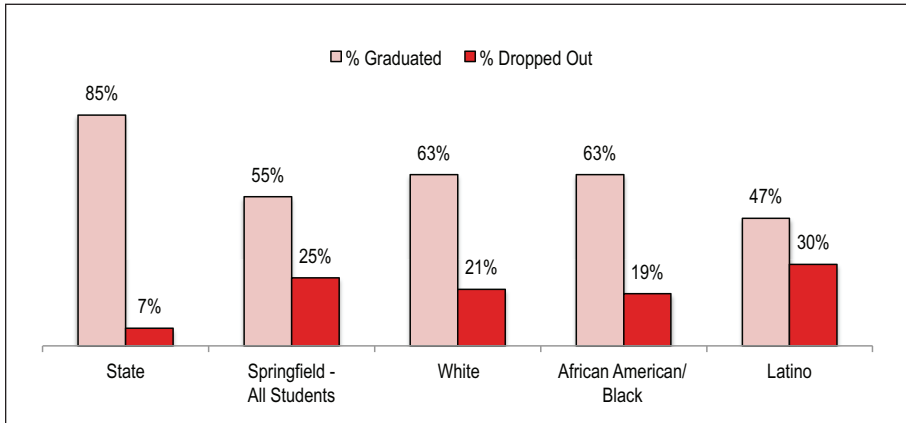
Figure 11: Percentage of Students Scoring “Needs Improvement” or Higher on Grade 10 STE MCAS by Race/Ethnicity, SY2008-SY2013



Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject.*

Graduation Rate, Dropout Rate, and College Enrollment Rate

Figure 12: Four-Year Cohort Graduation Rate and Dropout Rate by Race/Ethnicity, SY2013



Source: MADESE (n.d.). *Cohort 2013 Graduation Rates*.

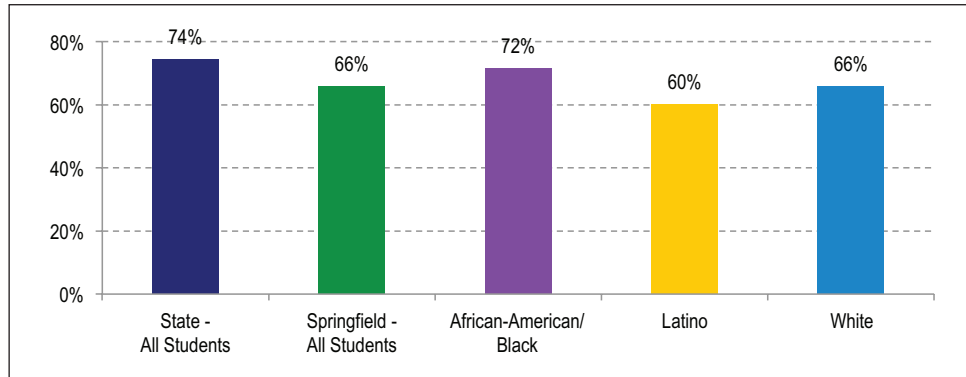
As demonstrated in Figure 12 above, Springfield struggles to graduate students within the anticipated four years of high school. In SY2013, the four-year cohort graduation rate for all students in Springfield was 55%, the second lowest rate (behind only Holyoke's 53%) among all school districts.³ Likewise, the four-year cohort dropout rate in Springfield was 25% in SY2013, the second highest dropout rate in the state among all school districts behind only Holyoke. For Latino students, the SY2013 four-year graduation rate was 47% and the dropout rate was 30%; both of these outcomes were worse than for all other ethno-racial groups in Springfield. There have been slight improvements on four-year cohort graduation and dropout rates for Latino students in Springfield over the past seven years, with the graduation rate improving from 43% to 47% and the dropout rate decreasing from 41 to 30%.

A large proportion of Latino students are still in school after four years of high school. Looking at the outcomes for the class of 2013, 14% of Latino students were still in school after four years. One explanation for this large proportion of students still in school after four years is the low percentage of first-time ninth graders who are promoted to tenth grade. In SY2012, only 73% of first-time ninth graders in Springfield were promoted to tenth grade, much lower than the rate of 91% of all first-time ninth graders statewide.

The cohort graduation rate, while important, reflects the outcomes over the past four years and does not reflect recent Springfield Public Schools dropout initiatives. An alternative measure is the annual dropout rate, which measures the percentage of students in grades 9–12 who drop out each year. In SY2013 the annual dropout rate for all students in Springfield was 7%, down from 10% in SY2009.

College Enrollment

Figure 13: Percentage of High School Graduates Attending Institutions of Higher Education within 16 Months of Completing High School, SY2011



Source: MADESE (n.d.). *2010-11 Graduates Attending Institutions of Higher Education, All Colleges and Universities*.

As shown in the figure above, among Springfield students who completed high school in SY2011, 66% of all students and 60% of Latino students enrolled in an institution of higher education within 16 months of completing high school. Latino students have the lowest college enrollment rates among all ethno-racial groups in Springfield: 6 percentage points below the rate for White students, 12 points behind the rate for African-American/Black students, and 14 points behind the statewide rate. Notably, however, the 60% Latino rate is an increase from 46% in SY2004; in those nine years, Latino students eliminated 45% of the gap with White students in Springfield and 36% of gap with all students statewide.

Upon first glance, the 66% college enrollment rate for Springfield is comparable to those of other large urban districts (e.g., 67% for Boston, 68% for Worcester). However, there is a disparity in the types of colleges that students from the various districts are enrolling in. In SY2011, 72% of the Springfield students who enrolled in an institution of higher education enrolled in a public two-year college. This is much higher than the state rate of 30%, the Boston rate of 33%, and the Worcester rate of 49%. Over three-quarters (78%) of the Springfield Latino students attending higher education are enrolled in public two-year colleges, a higher rate than for Latino students statewide (57%), Latino students in Boston (40%), and Latino students in Worcester (68%). Community colleges offer great opportunities to students, but completion rates at two-year colleges are lower than the completion rates at four-year colleges and universities. According to the Chronicle of Higher Education (2013), only 11% of first-time Latino students at Massachusetts two-year public colleges graduate within three years as compared to the 44% of Latino students at Massachusetts four-year public colleges who graduate within six years.

Spotlight on Springfield High Schools

Previous Gastón Institute research working with the Latino community in Springfield has shown drastically different perceptions of the four major high schools in Springfield. The purpose of this section is to compare key educational outcomes at the four major Springfield high schools.

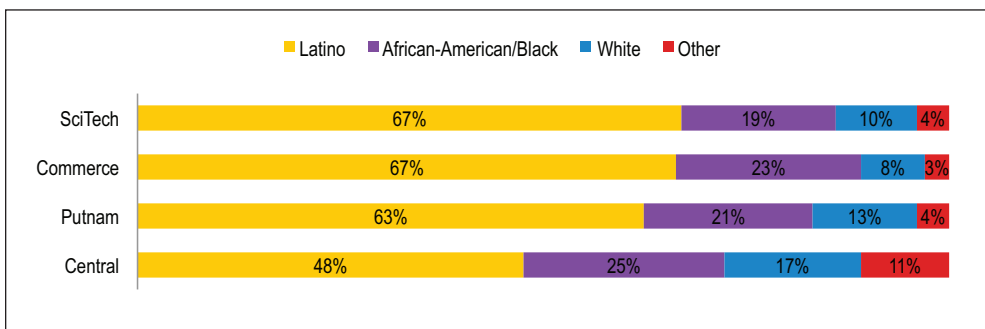
Table 1: Characteristics of Springfield High Schools, SY2013

| | Enrollment | % ELL | % Low income | % Students with Disabilities | Latino "Churn" ⁴ Rate | High School Type/Focus | Accountability Level |
|-----------------|------------|-------|--------------|------------------------------|----------------------------------|-----------------------------|----------------------|
| Central | 2,034 | 11% | 78% | 15% | 15% | Comprehensive | Level 3 |
| Putnam | 1,284 | 12% | 90% | 23% | 8% | Vocational/Technical | Level 3 |
| Commerce | 1,258 | 26% | 85% | 24% | 46% | International Baccalaureate | Level 4 |
| SciTech | 1,401 | 16% | 85% | 21% | 30% | Science and Technology | Level 4 |

Source: MADESE (2013). *Enrollment Data*; MADESE (2013). *DART for Schools*

The four largest high schools in Springfield are Central High School (Central) (2,034 students), Putnam Vocational Technical High School (Putnam) (1,284 students), High School of Commerce (Commerce) (1,258 students), and High School of Science and Technology (SciTech) (1,401). Central has the largest enrollment, but has the lowest proportion of ELLs, low-income students, and students with disabilities. Below is a figure showing the ethno-racial composition of the various high schools in SY2013. Two-thirds (67%) of all students at Commerce and SciTech are Latino students, a higher rate than the district proportion. In contrast, only 48% of students at Central are Latino.

Figure 14: Ethno-Racial Composition of Springfield High Schools, SY2013



Source: MADESE (2013). *Enrollment Data*.

The following section provides more detailed information on the performance and engagement of students in the four high schools, disaggregated by race/ethnicity. This section highlights the disparities that exist between Central and Putnam on one hand and Commerce and SciTech on the other, focusing on MCAS scores, graduation rate, dropout rate, and suspension rate. While not shown in this report, similar disparities exist when looking at attendance rates, chronic absenteeism, and participation in AP exams.

MCAS

Figure 15: Percentage of Students Scoring “Proficient” or Higher on Grade 10 ELA MCAS by Race/Ethnicity, SY2013

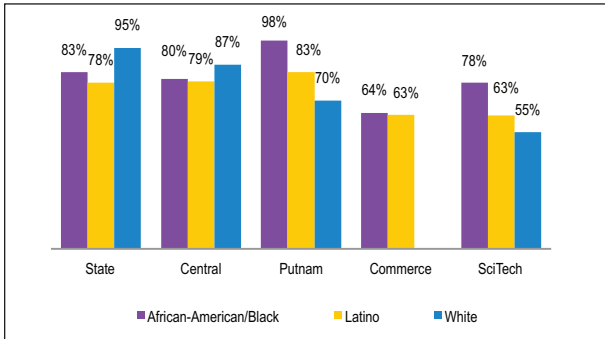
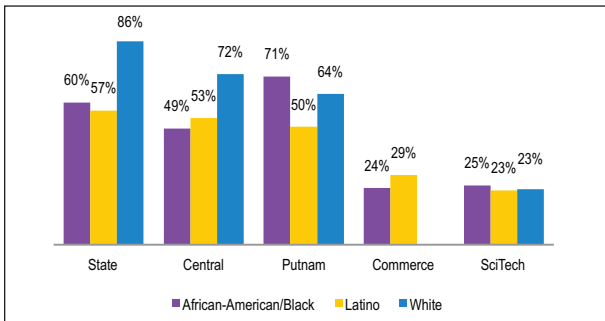


Figure 15 shows Grade 10 ELA MCAS pass rates for SY2013. Latino students at Putnam have a higher pass rate than Latino students at the other three high schools: 83%, which is four percentage points higher than at Central and 20 points better than at Commerce and SciTech. At Putnam and SciTech, Latino students have a higher pass rate than White students. The Latino pass rates at Central and Putnam are both higher than the statewide Latino pass rate.

Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject.*

Figure 16: Percentage of Students Scoring “Proficient” or Higher on Grade 10 Math MCAS by Race/Ethnicity, SY2013



As seen earlier in the report, Latino students in Springfield struggle with the Grade 10 Math MCAS test. Figure 16 shows the Grade 10 Math Latino pass rates of 53% at Central, 50% at Putnam, 29% at Commerce, and 23% at SciTech. While Latino students at Putnam had a higher pass rate than White students on the ELA test, the Latino student pass rate on the Math test is 14 percentage points lower than the White student rate and 21 points lower than the African-American/Black rate.

Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject.*

Figure 17: Percentage of Students Scoring “Needs Improvement” or Higher, Grade 10 STE MCAS by Race/Ethnicity, SY2013

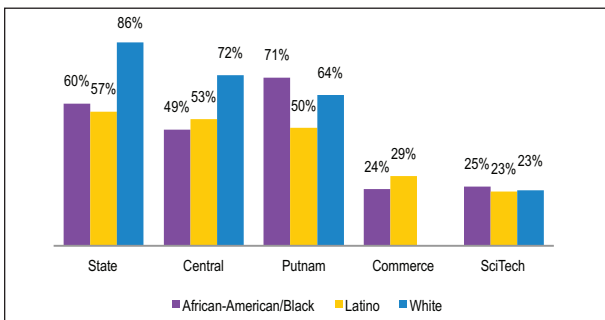
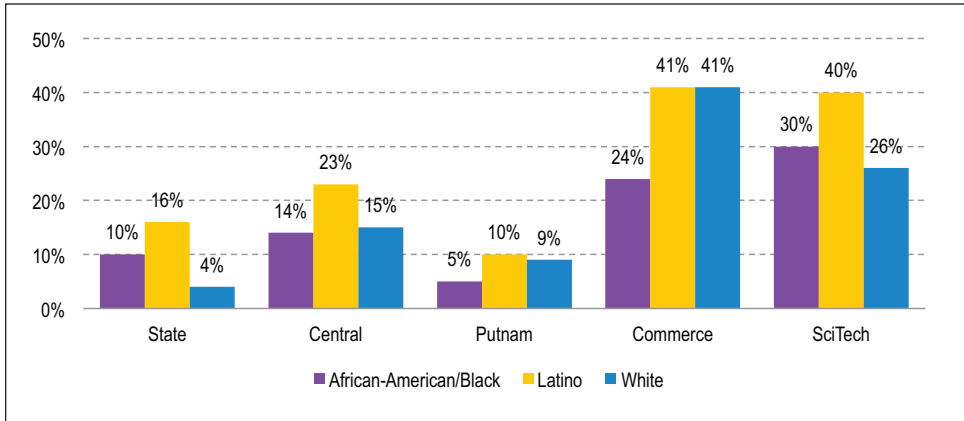


Figure 17 shows that Latino students at Putnam have a pass rate of 93% on the Grade 10 STE tests, which is 4 points above the rate for Latino students at Central, 28 points higher than the rate at SciTech, and 37 points higher than the rate at Commerce. At Putnam, a higher percentage of Latino students pass the STE test than White students, and the Latino pass rate at both Putnam and Central is higher than the statewide Latino student pass rate.

Source: MADESE (2013). *2013 MCAS Results by Subgroup by Grade and Subject.*

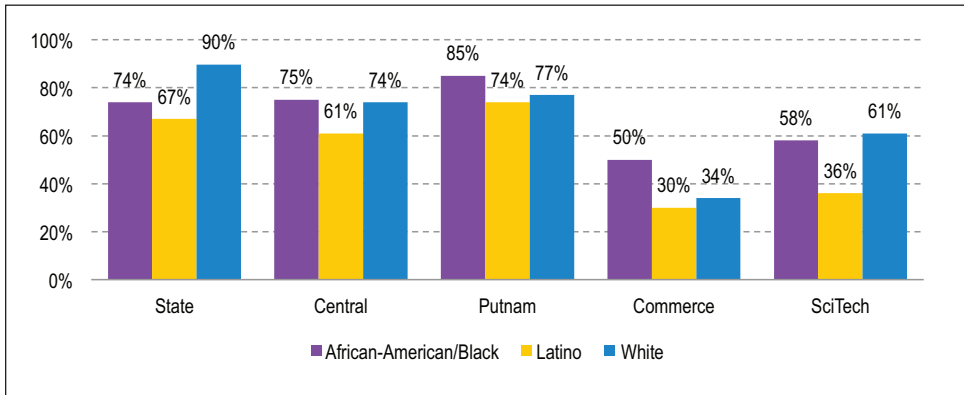
Figure 18: Four-Year Cohort Dropout Rate, State and Springfield High Schools, White, Latino, and African-American/Black Students, SY2013



Source: MADESE (n.d.). *Cohort 2013 Graduation Rates*.

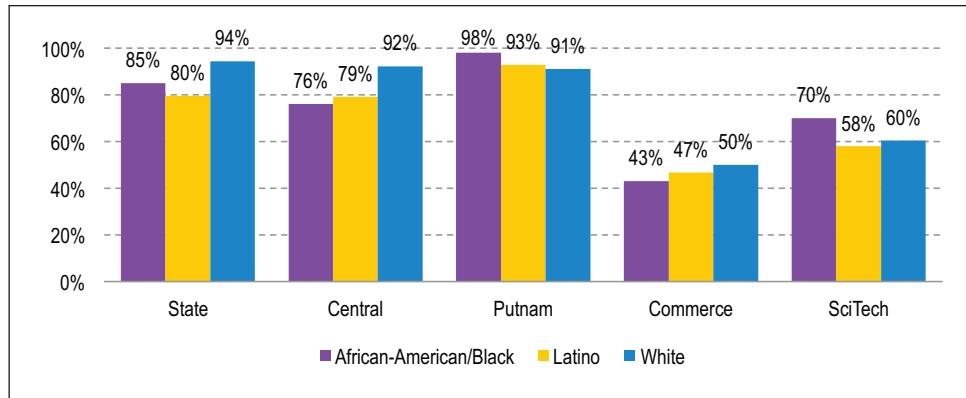
All four high schools in Springfield have four-year cohort dropout rates higher than the statewide four-year cohort dropout rate of 5%. These struggles are particularly acute for Latino and White students at Commerce and Latino students at SciTech where approximately 40% of students drop out within four years of starting high school. At 10%, the Latino student four-year cohort rate at Putnam is lower than the statewide Latino student dropout rate of 16%. As seen in Figure 19 below, there are similar and related disparities in the four-year graduation rates at Commerce and SciTech as compared to Central and Putnam. Only 30% of Latino students at Commerce and 36% of Latino students at SciTech graduated within four years, as compared to 61% of Latino students at Central and 74% of Latino students at Putnam. The Latino graduation rate at Putnam is 7 points higher than the statewide Latino graduation rate.

Figure 19: Four-Year Cohort Graduation Rate, State and Springfield High Schools, Latino and White Students, SY2013



Source: MADESE (n.d.). *Cohort 2013 Graduation Rates*.

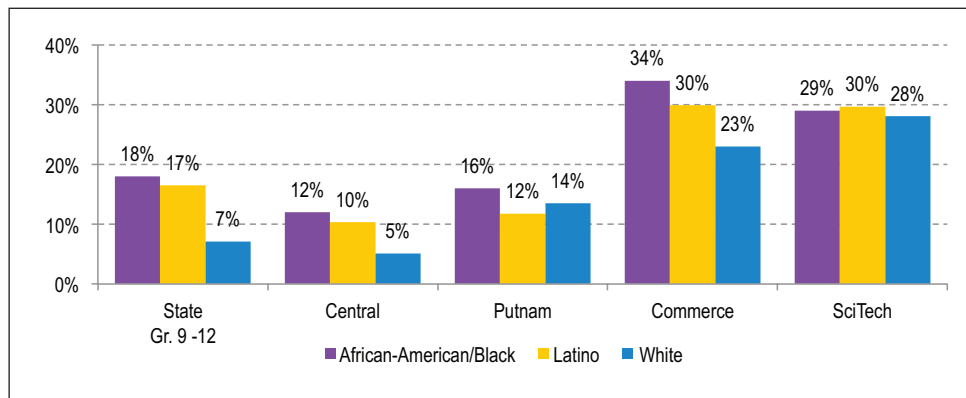
Figure 20: Ninth to Tenth Grade Promotion Rate, First Time Ninth Graders, SY2012



Source: MADESE (2013). *DART Detail: Success After High School*.

As discussed earlier in the report, one factor feeding into the low four-year cohort graduation rate is the low percentage of first-time ninth grade students who are promoted to tenth grade. Fewer than half (47%) of first-time Latino ninth graders at Commerce and 58% at SciTech are promoted to tenth grade. As seen in Figure 20, these promotion rates are far below the Latino promotion rates of 79% at Central and 93% at Putnam. The rate for Latino students at Putnam is higher than the rate for White students at Putnam and higher than the statewide Latino promotion rate, but lower than the rate for Africa-American/Black students.

Figure 21: Annual Percentage of Students Receiving at Least One Out-of-School Suspension, SY2012



Source: MADESE (2013). *DART Detail: Success After High School*.

An additional area of concern is the disparity of out-of-school suspension rates seen between the two groups of high schools. As seen in Figure 21, both Commerce and SciTech have Latino suspension rates of 30%, far above the 10% and 12% Latino suspension rates at Central and Putnam. The Latino student suspension rates at Central and Putnam are lower than the statewide Latino suspension rate of 17%, and the Latino student suspension rate at Putnam is lower than the rate for White students at Putnam.

The Mauricio Gastón Institute for Latino Community Development and Public Policy conducts research on and for the Latino population in New England. Our goal is to generate the information and analysis necessary to develop more inclusive public policy, and to improve Latino participation in the policy making process. As part of its effort to present vital information about Latinos to diverse audiences, the Gastón Institute has produced this series of demographic and educational profiles for selected cities and towns. Reports can be downloaded from www.gaston.umb.edu.

Latinos in Public Schools is a series of reports based on publicly available data from the Massachusetts Department of Elementary and Secondary Education (www.profiles.doe.mass.edu). The public school system in Massachusetts reflects the demographic shift in the diversity of the entire population. The total student enrollment has decreased over the past ten years, but during this period the state has witnessed a growing population of Latino students both in terms of overall enrollment and in proportion of total enrollment. Since the SY2006 school year, the number of Latino students in Massachusetts has increased by 30% (from

125,436 to 162,475 students) representing a jump from 13% to 17% in the Latino proportion of all students). In contrast, during the same period the number of African-American/Black students has increased by 3%, while the number of White students has decreased by 12%. This growing Latino population in the state is experiencing an achievement gap as compared to White students. They face persistently lower pass rates on the Massachusetts Comprehensive Assessment System (MCAS), the state-required standardized tests. In addition, Latino students experience the highest dropout rate and lowest graduation rate as compared to other ethno-racial groups in the state. The growing Latino student population in many Massachusetts school districts presents these districts with a changing configuration of students and with new challenges and opportunities. We hope that this series of reports will be helpful, both to school officials and to the Latino communities of these cities and towns.

About the Author

Michael Berardino holds a M.S. in Public Policy from the University of Massachusetts Boston and is currently a Research Associate at the Gastón Institute and a doctoral candidate in Public Policy at UMass Boston's McCormack Graduate School of Policy and Global Studies. His research focuses on the impacts of language instruction and high-stakes testing policies on English Language Learners, with special attention to Latino student outcomes, school discipline, and civic engagement.

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