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ISSUE BRIEF

Education

# POVERTY AND PROGRESS IN NEW YORK VII

English and Math Proficiency in NYC Schools, 2013–15

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# Table of Contents

- Executive Summary..... 3
- I. Introduction..... 4**
- II. English Proficiency..... 5**  
 2013 FRL Shares and 2015 ELA-Proficiency Levels
- III. The English-Proficiency Gap..... 8**  
 2013 FRL Shares and 2013–15 ELA-Proficiency Gains
- IV. Math Proficiency..... 11**  
 2013 FRL Shares and 2015 Math-Proficiency Levels
- V. The Math-Proficiency Gap..... 14**  
 2013 FRL Shares and 2013–15 Math-Proficiency Gains
- VI. Conclusion..... 17**
- Endnotes..... 18



# SEVENTH IN A SERIES OF REPORTS ON NYC

## Executive Summary

New York mayor Bill de Blasio assumed office in January 2014, promising to “take dead aim at the Tale of Two Cities ... [and] put an end to economic and social inequalities that threaten to unravel the city we love.”<sup>1</sup> The Manhattan Institute’s “Poverty and Progress in New York” series tracks the effects of Mayor de Blasio’s policies on lower-income New Yorkers. This paper, the seventh installment, examines educational progress in English (English Language Arts, or ELA ) and in math since 2013—when NYC adopted Common Core testing standards—in the city’s 1,800-plus public schools, which serve 1.1 million students.<sup>2</sup>

This paper finds that students in both poor and affluent NYC school districts became more proficient in ELA and in math during 2013–15;<sup>3</sup> that wealthier school districts—as measured by their lower share of students eligible for free- or reduced-price lunch (FRL share)—enjoyed a higher percentage of students proficient in the aforementioned subjects in 2013–15; and that wealthier school districts were more successful in raising their share of ELA- and math-proficient students during this period. If such trends continue, NYC’s low-income and higher-income school districts will improve, but the “proficiency gap” between them will widen in favor of the latter. Other findings include:<sup>4</sup>

- **Rising proficiency citywide.** During 2013–15, student proficiency on Common Core–aligned ELA and math exams improved, on average, by about 4 percentage points and 6 percentage points, respectively, in NYC’s 32 public school districts.<sup>5</sup>
- **Growing ELA-proficiency gap.** In 2015, 15 percent of students in NYC’s poorest school districts—defined as districts with an FRL share of 95 percent or greater—were, on average, proficient in ELA, compared with 12 percent in 2013. In NYC’s wealthiest school districts (FRL share of 55 percent or less), the figures were 54 percent (2015) and 49 percent (2013).
- **Growing math-proficiency gap.** In 2015, 17 percent of students in NYC’s poorest school districts were proficient in math, compared with 13 percent in 2013. In NYC’s wealthiest school districts, the figures were 61 percent (2015) and 54 percent (2013).
- **Asians buck the trend.** Asian students in the poorest NYC school districts represent the only exception to the aforementioned trends: during 2013–15, the former’s proficiency gap with Asian students in the wealthiest NYC school districts narrowed (ELA) or remained unchanged (math).

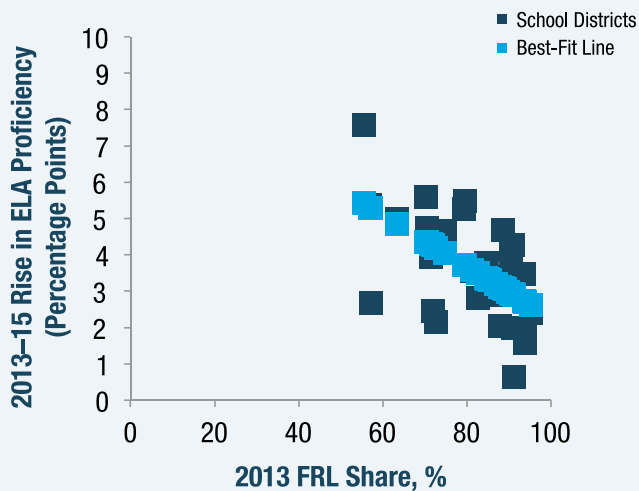


## I. Introduction

During 2013–15, student proficiency on Common Core–aligned ELA and math exams improved, on average, by about 4 percentage points and 6 percentage points, respectively, in NYC’s 32 public school districts (**Figure 1** and **Figure 2**). Despite such progress, NYC school districts’ 2013 poverty rates—as measured by their FRL share—were negatively correlated with test-proficiency levels in 2015, as well as with progress toward greater proficiency during 2013–15.

FIGURE 1.

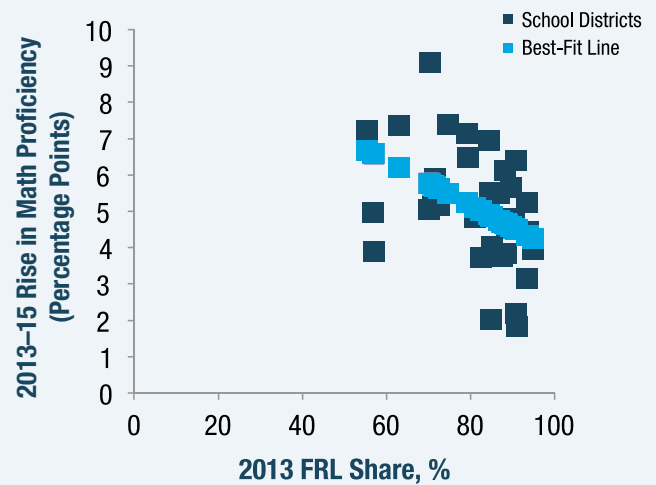
### School Districts’ 2013 FRL Shares and 2013–15 ELA-Proficiency Progress



Source: Author’s analysis of NYC Department of Education data

FIGURE 2.

### School Districts’ 2013 FRL Shares and 2013–15 Math-Proficiency Progress



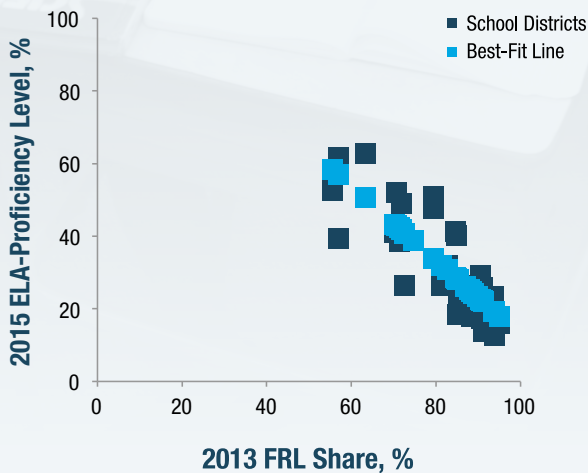
Source: Author’s analysis of NYC Department of Education data

In other words, the higher a school district’s 2013 poverty rate, the lower its share of students proficient in ELA and math in 2013 and 2015, and the slower its progress in boosting student proficiency during 2013–15. If current trends continue, student proficiency will rise in NYC’s low-income school districts—but far more slowly than in higher-income school districts.



FIGURE 3.

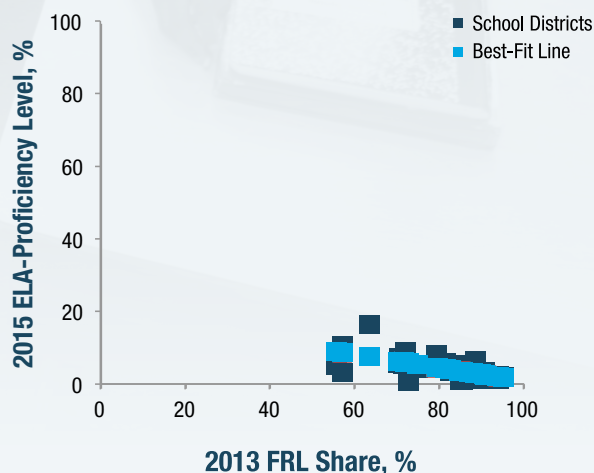
School Districts' 2013 FRL Shares and 2015 ELA-Proficiency Levels, English-Proficient Students



Source: Author's analysis of NYC Department of Education data

FIGURE 4.

School Districts' 2013 FRL Shares and 2015 ELA-Proficiency Levels, English-Language Learners



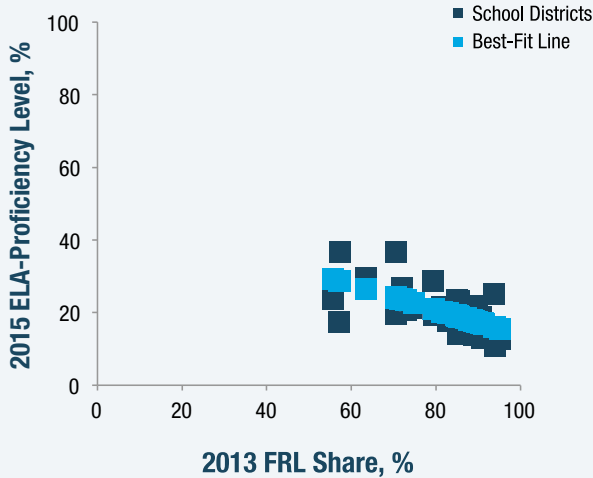
Source: Author's analysis of NYC Department of Education data

## II. English Proficiency: 2013 FRL Shares and 2015 ELA-Proficiency Levels

Using best-fit regression lines, **Figures 3–9** indicate the extent to which NYC school districts' 2013 FRL shares for various groups—English-proficient students, English-language learners, blacks, Hispanics, whites, and Asians—correlate with their respective 2015 ELA-proficiency levels. For negatively sloped best-fit lines, the steeper the slope, the greater the negative correlation; for positively sloped best-fit lines, the steeper the slope, the greater the positive correlation.

FIGURE 5.

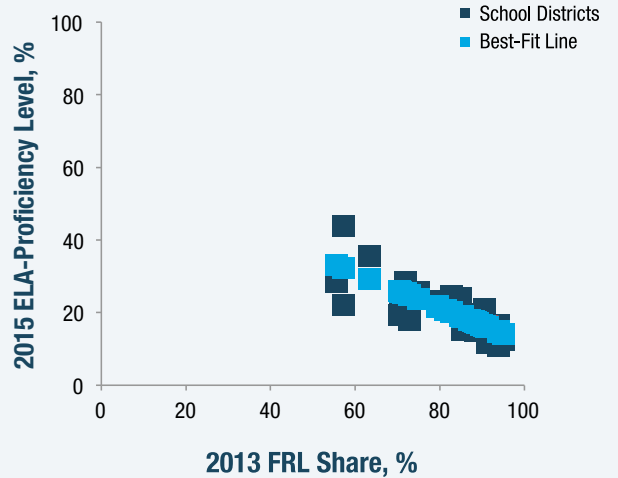
**School Districts' 2013 FRL Shares and 2015 ELA-Proficiency Levels, Blacks**



Source: Author's analysis of NYC Department of Education data

FIGURE 6.

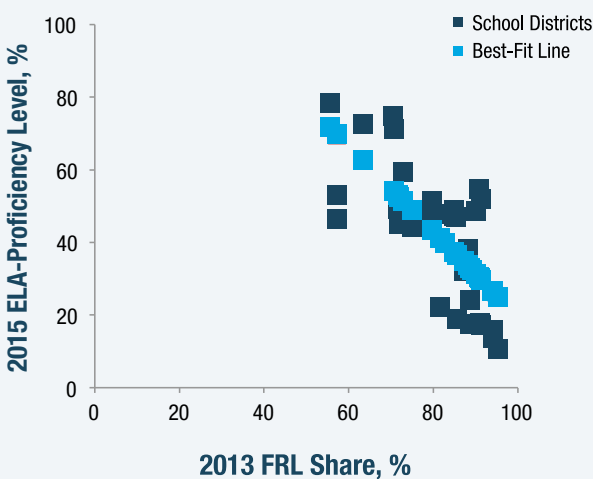
**School Districts' 2013 FRL Shares and 2015 ELA-Proficiency Levels, Hispanics**



Source: Author's analysis of NYC Department of Education data

FIGURE 7.

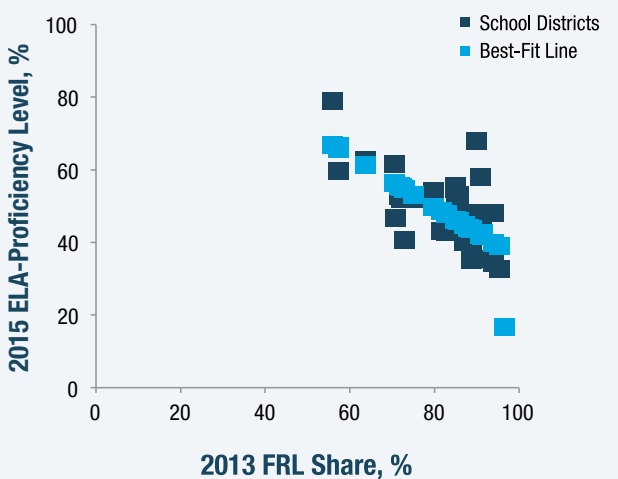
**School Districts' 2013 FRL Shares and 2015 ELA-Proficiency Levels, Whites**



Source: Author's analysis of NYC Department of Education data

FIGURE 8.

**School Districts' 2013 FRL Shares and 2015 ELA-Proficiency Levels, Asians**



Source: Author's analysis of NYC Department of Education data

Figures 3–8 reveal a negative correlation: English-proficient students, English-language learners, blacks, Hispanics, whites, and Asians in higher-income school districts all made more progress than their respective peers in low-income school districts.



FIGURE 9.

2013 FRL Shares and 2015 ELA-Proficiency Levels, All Groups (Best-Fit Lines)

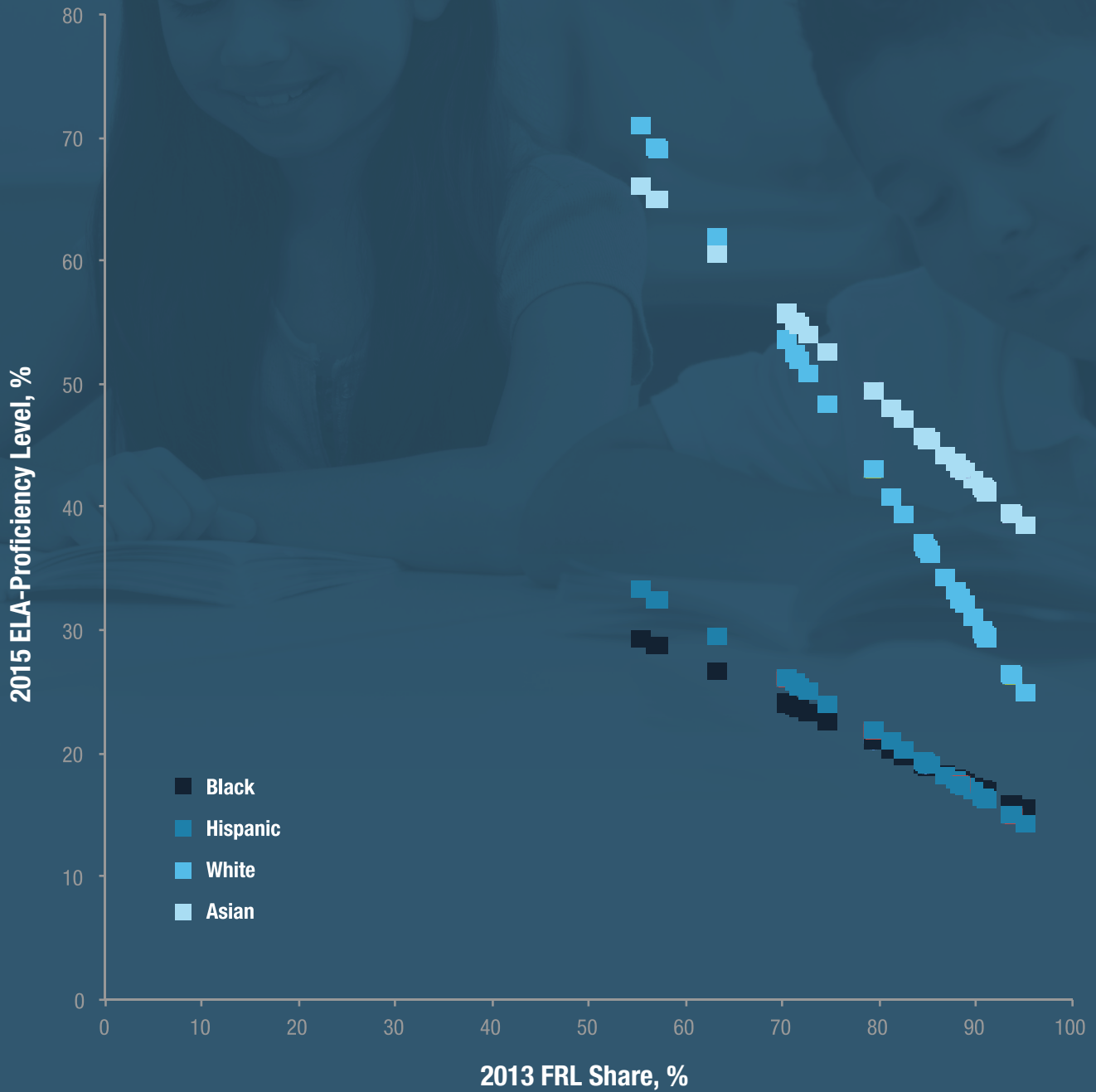


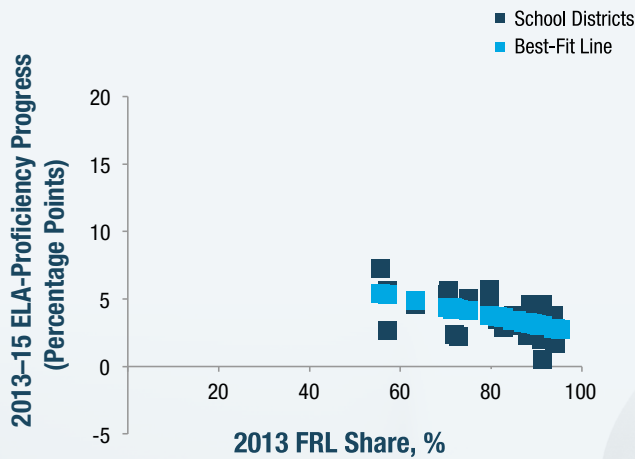
Figure 9 displays the aforementioned trends in a single graph.

### III. The English-Proficiency Gap: 2013 FRL Shares and 2013–15 ELA-Proficiency Gains

Figures 10–16 use best-fit regression lines to reveal the extent to which NYC school districts’ 2013 FRL shares for various groups—English-proficient students, English-language learners, blacks, Hispanics, whites, and Asians—correlate with their respective progress in boosting ELA-proficiency levels during 2013–15.

FIGURE 10.

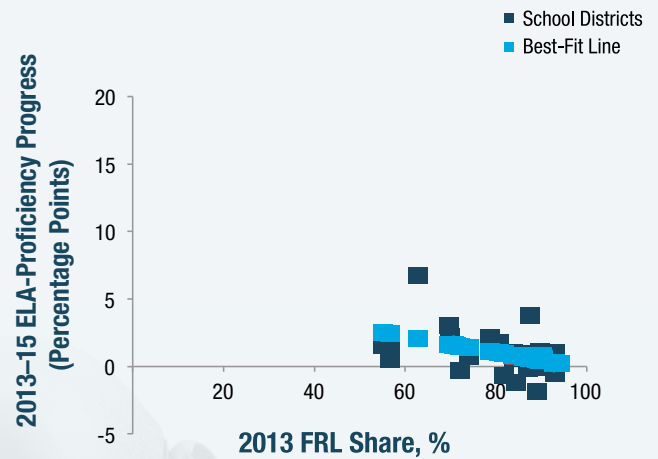
School Districts’ 2013 FRL Shares and 2013–15 ELA-Proficiency Progress, English-Proficient Students



Source: Author’s analysis of NYC Department of Education data

FIGURE 11.

School Districts’ 2013 FRL Shares and 2013–15 ELA-Proficiency Progress, English-Language Learners

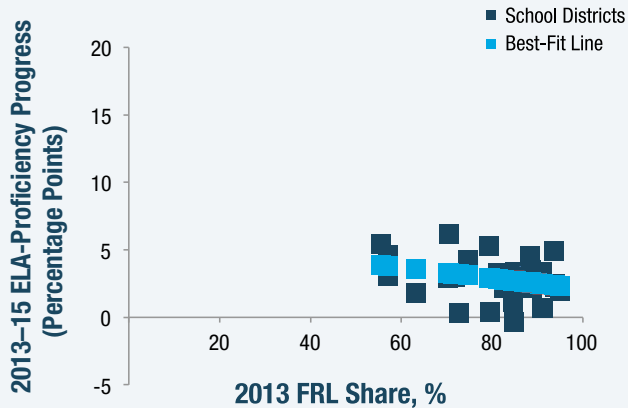


Source: Author’s analysis of NYC Department of Education data



FIGURE 12.

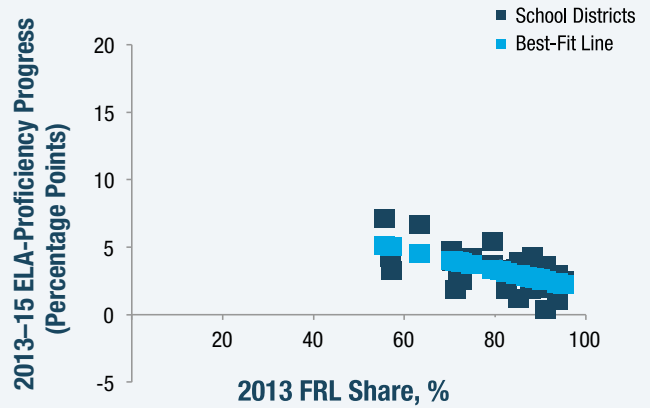
School Districts' 2013 FRL Shares and 2013–15 ELA-Proficiency Progress, Blacks



Source: Author's analysis of NYC Department of Education data

FIGURE 13.

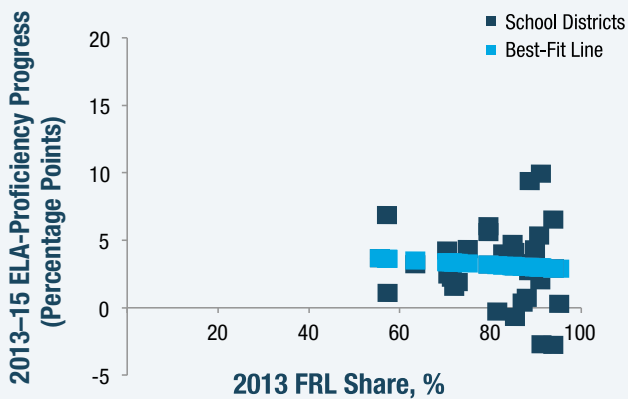
School Districts' 2013 FRL Shares and 2013–15 ELA-Proficiency Progress, Hispanics



Source: Author's analysis of NYC Department of Education data

FIGURE 14.

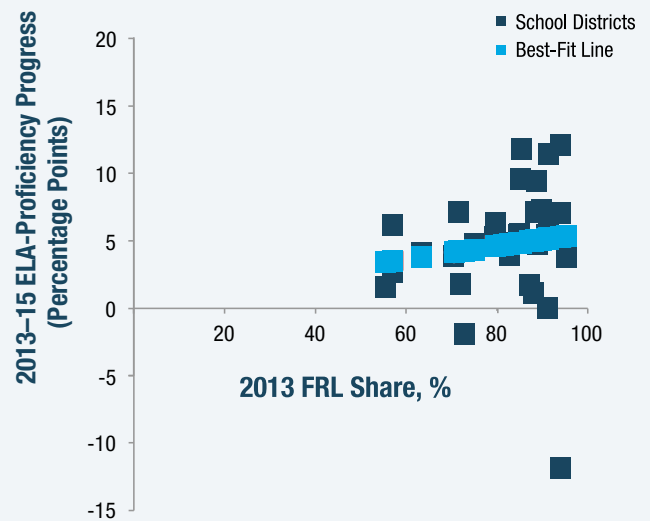
School Districts' 2013 FRL Shares and 2013–15 ELA-Proficiency Progress, Whites



Source: Author's analysis of NYC Department of Education data

FIGURE 15.

School Districts' 2013 FRL Shares and 2013–15 ELA-Proficiency Progress, Asians



Source: Author's analysis of NYC Department of Education data

Figures 10–14 indicate a negative correlation for English-proficient students, English-language learners, blacks, Hispanics and whites. Figure 15, on the other hand, shows a *positive* correlation for Asians: Asian students in low-income school districts made more progress than Asian students in high-income school districts.



FIGURE 16.

2013 FRL Shares and 2013–15 ELA-Proficiency Progress, All Groups (Best-Fit Lines)

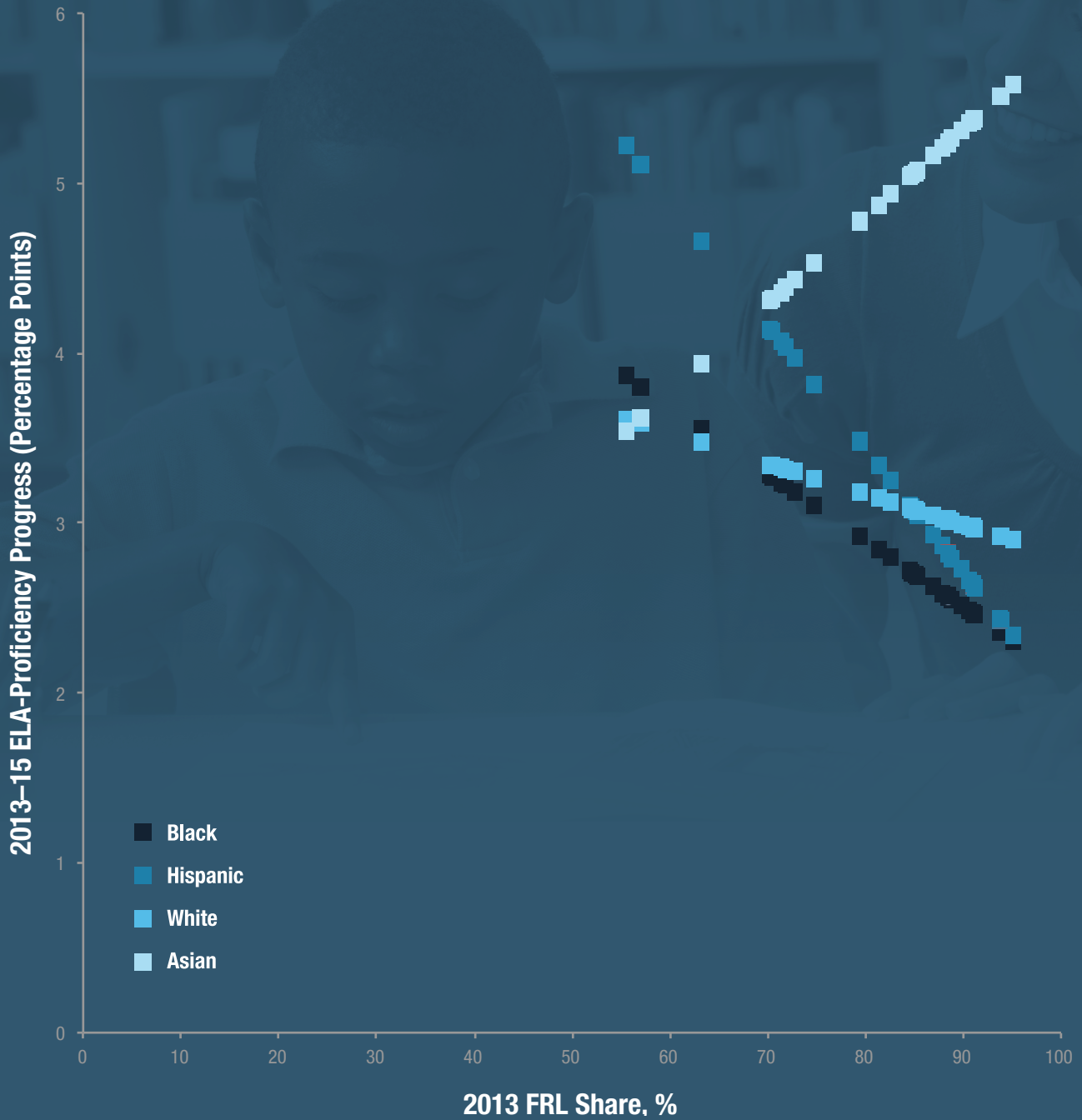


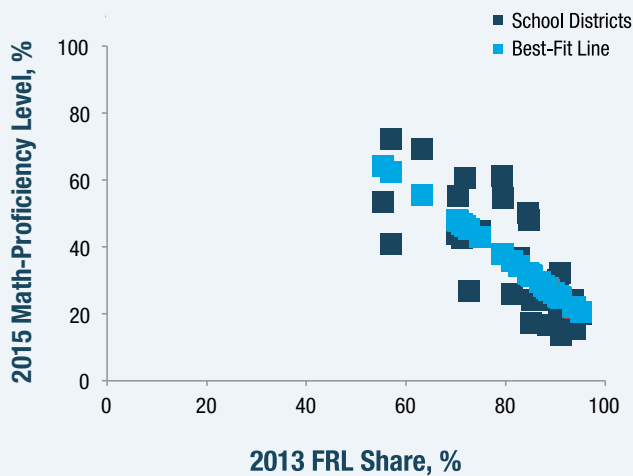
Figure 16 displays the aforementioned trends in a single graph.

## IV. Math Proficiency: 2013 FRL Shares and 2015 Math-Proficiency Levels

Using best-fit regression lines, **Figures 17–23** indicate the extent to which NYC school districts’ 2013 FRL shares for various groups—English-proficient students, English-language learners, blacks, Hispanics, whites, and Asians—correlate with their respective 2015 math-proficiency levels.

**FIGURE 17.**

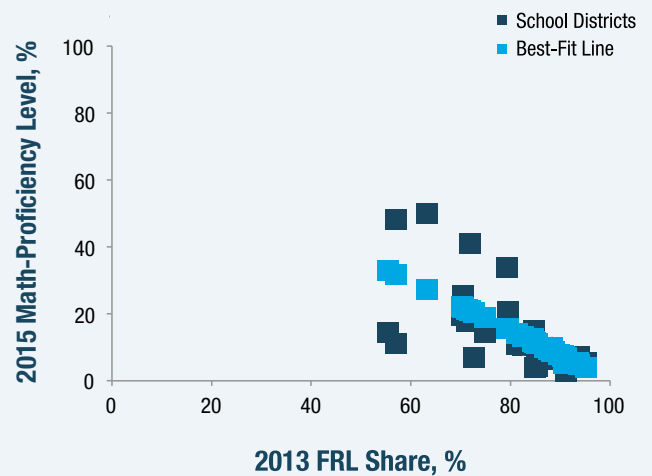
**School Districts’ 2013 FRL Shares and 2015 Math-Proficiency Levels, English-Proficient Students**



Source: Author’s analysis of NYC Department of Education data

**FIGURE 18.**

**School Districts’ 2013 FRL Shares and 2015 Math-Proficiency Levels, English-Language Learners**

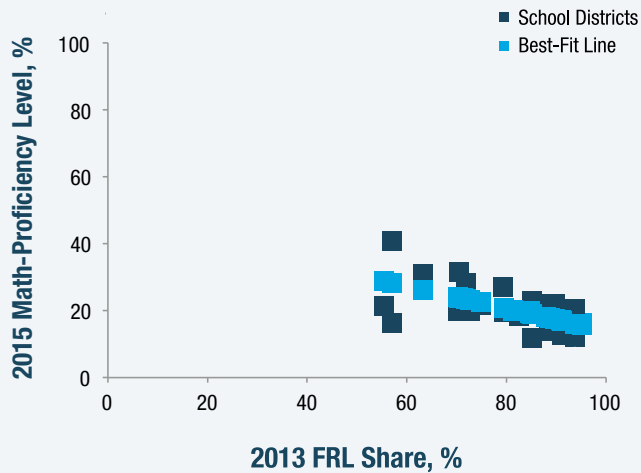


Source: Author’s analysis of NYC Department of Education data



FIGURE 19.

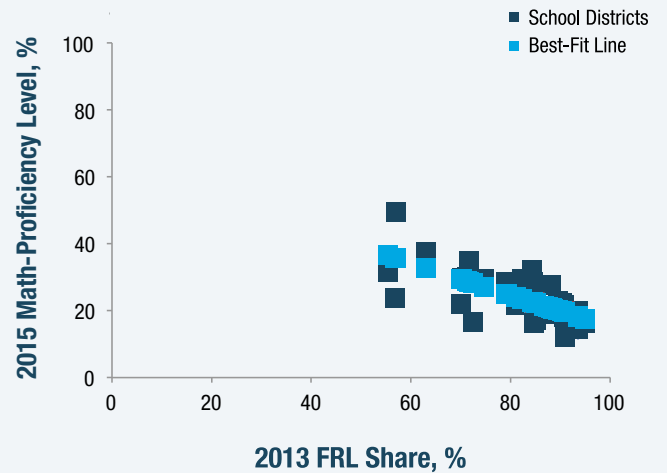
**School Districts' 2013 FRL Shares and 2015 Math-Proficiency Levels, Blacks**



Source: Author's analysis of NYC Department of Education data

FIGURE 20.

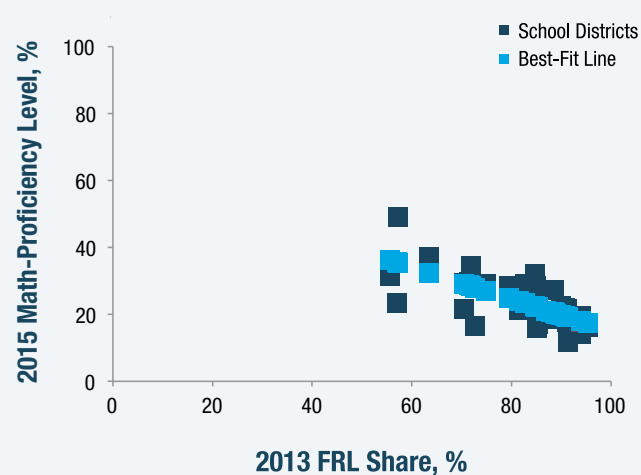
**School Districts' 2013 FRL Shares and 2015 Math-Proficiency Levels, Hispanics**



Source: Author's analysis of NYC Department of Education data

FIGURE 21.

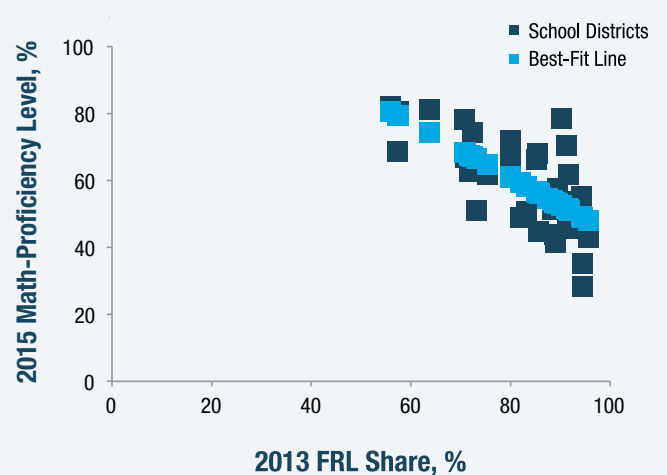
**School Districts' 2013 FRL Shares and 2015 Math-Proficiency Levels, Whites**



Source: Author's analysis of NYC Department of Education data

FIGURE 22.

**School Districts' 2013 FRL Shares and 2015 Math-Proficiency Levels, Asians**



Source: Author's analysis of NYC Department of Education data

Figures 17–22 reveal a negative correlation: English-proficient students, English-language learners, blacks, Hispanics, whites, and Asians in higher-income school districts all made more progress than their respective peers in low-income school districts.



FIGURE 23.

2013 FRL Shares and 2015 Math-Proficiency Levels, All Groups (Best-Fit Lines)

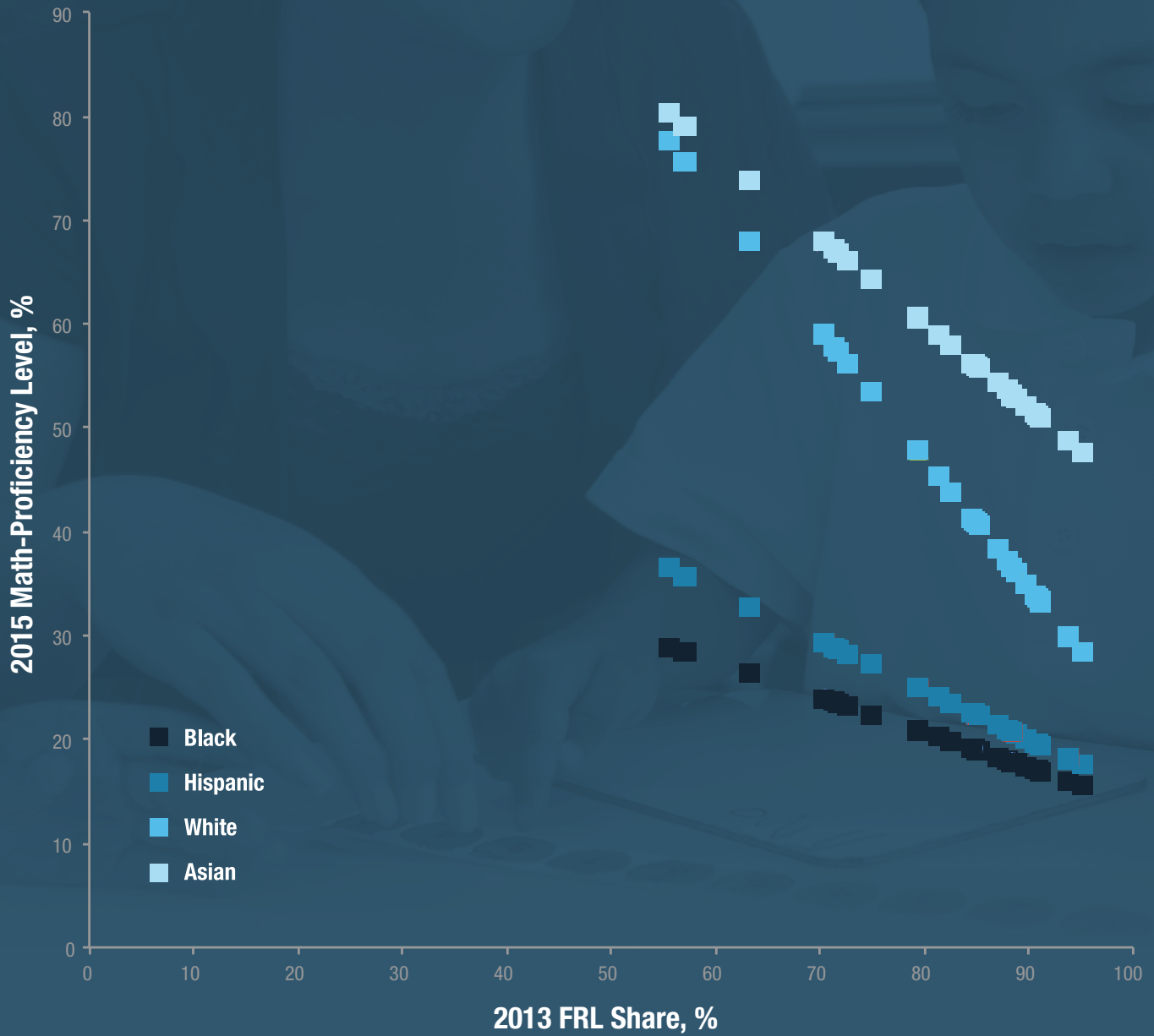


Figure 23 displays the aforementioned trends in a single graph.

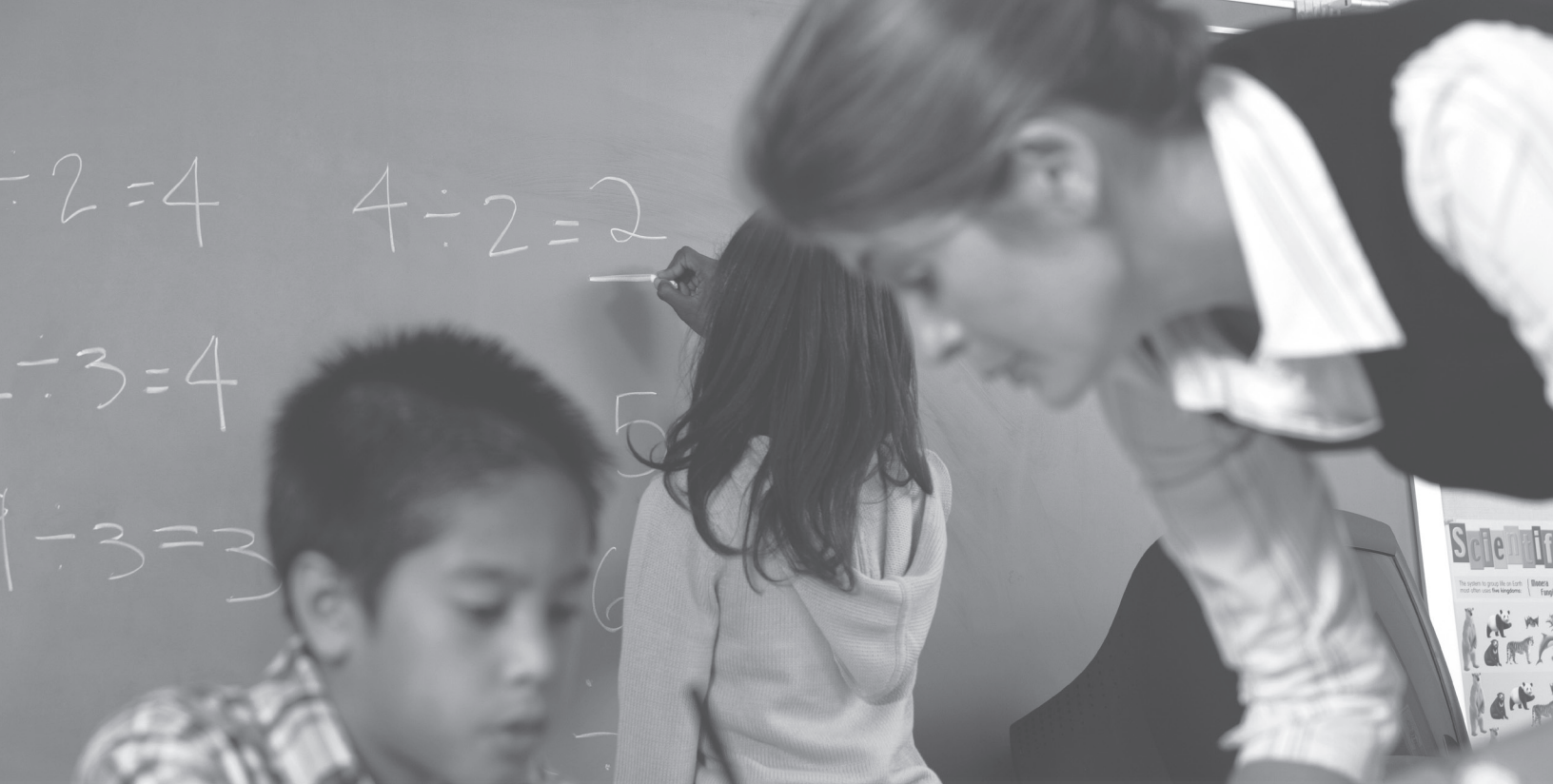
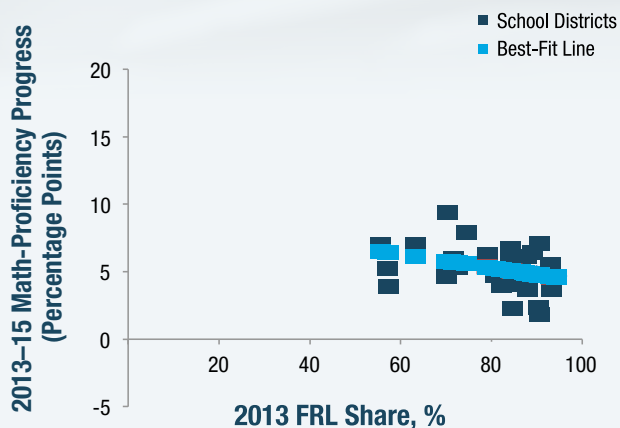


FIGURE 24.

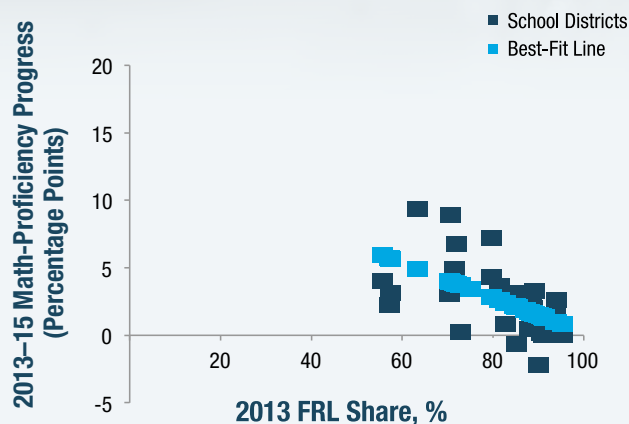
School Districts' 2013 FRL Shares and 2013-15 Math-Proficiency Progress, English-Proficient Students



Source: Author's analysis of NYC Department of Education data

FIGURE 25.

School Districts' 2013 FRL Shares and 2013-15 Math-Proficiency Progress, English-Language Learners



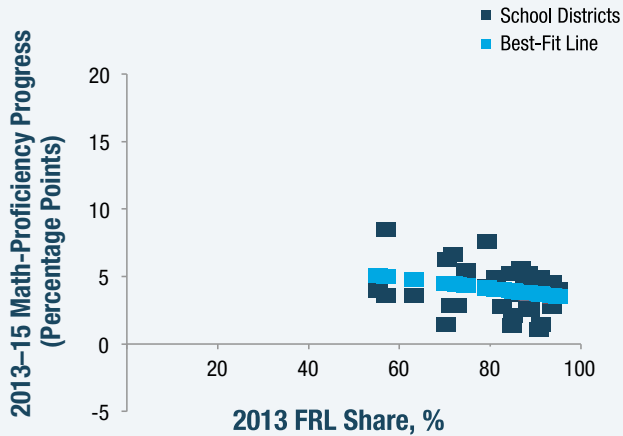
Source: Author's analysis of NYC Department of Education data

## V. The Math-Proficiency Gap: 2013 FRL Shares and 2013-15 Math-Proficiency Gains

Figures 24–30 use best-fit regression lines to reveal the extent to which NYC school districts' 2013 FRL shares for various groups—English-proficient students, English-language learners, blacks, Hispanics, whites, and Asians—correlate with their respective progress in boosting math-proficiency levels during 2013–15.

FIGURE 26.

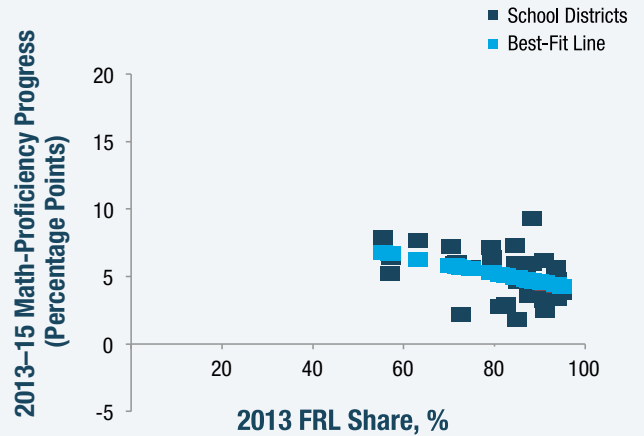
**School Districts' 2013 FRL Shares and 2013–15 Math-Proficiency Progress, Blacks**



Source: Author's analysis of NYC Department of Education data

FIGURE 27.

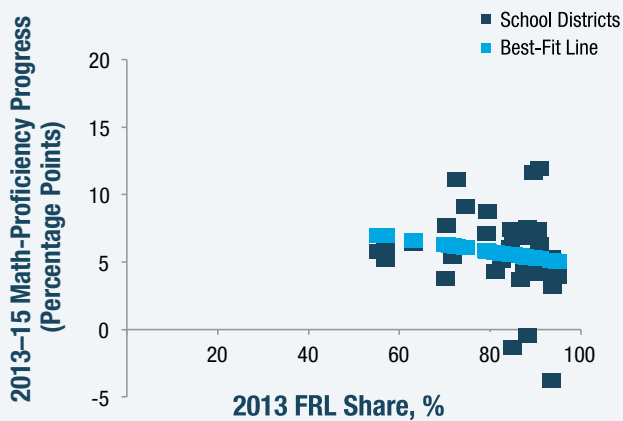
**School Districts' 2013 FRL Shares and 2013–15 Math-Proficiency Progress, Hispanics**



Source: Author's analysis of NYC Department of Education data

FIGURE 28.

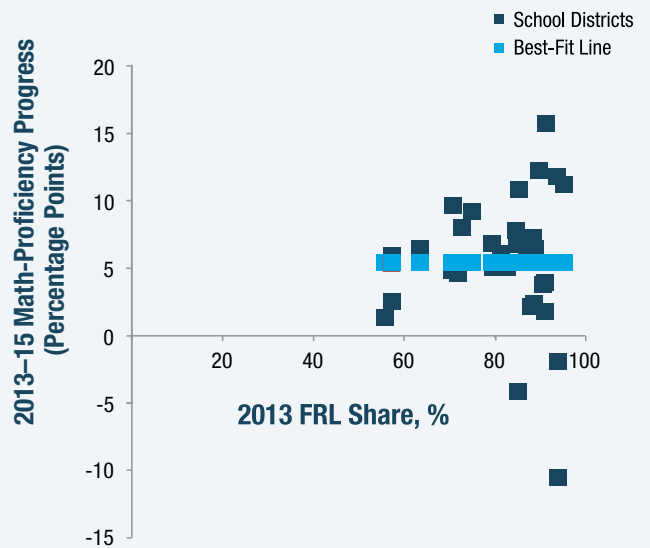
**School Districts' 2013 FRL Shares and 2013–15 Math-Proficiency Progress, Whites**



Source: Author's analysis of NYC Department of Education data

FIGURE 29.

**School Districts' 2013 FRL Shares and 2013–2015 Math-Proficiency Progress, Asians**



Source: Author's analysis of NYC Department of Education data

Figures 24–28 indicate a negative correlation for English-proficient students, English-language learners, blacks, Hispanics, and whites. Figure 29, on the other hand, shows *no* correlation for Asians: Asian students in low- and high-income school districts made similar progress.



FIGURE 30.

2013 FRL Shares and 2013–15 Math-Proficiency Progress, All Groups (Best-Fit Lines)

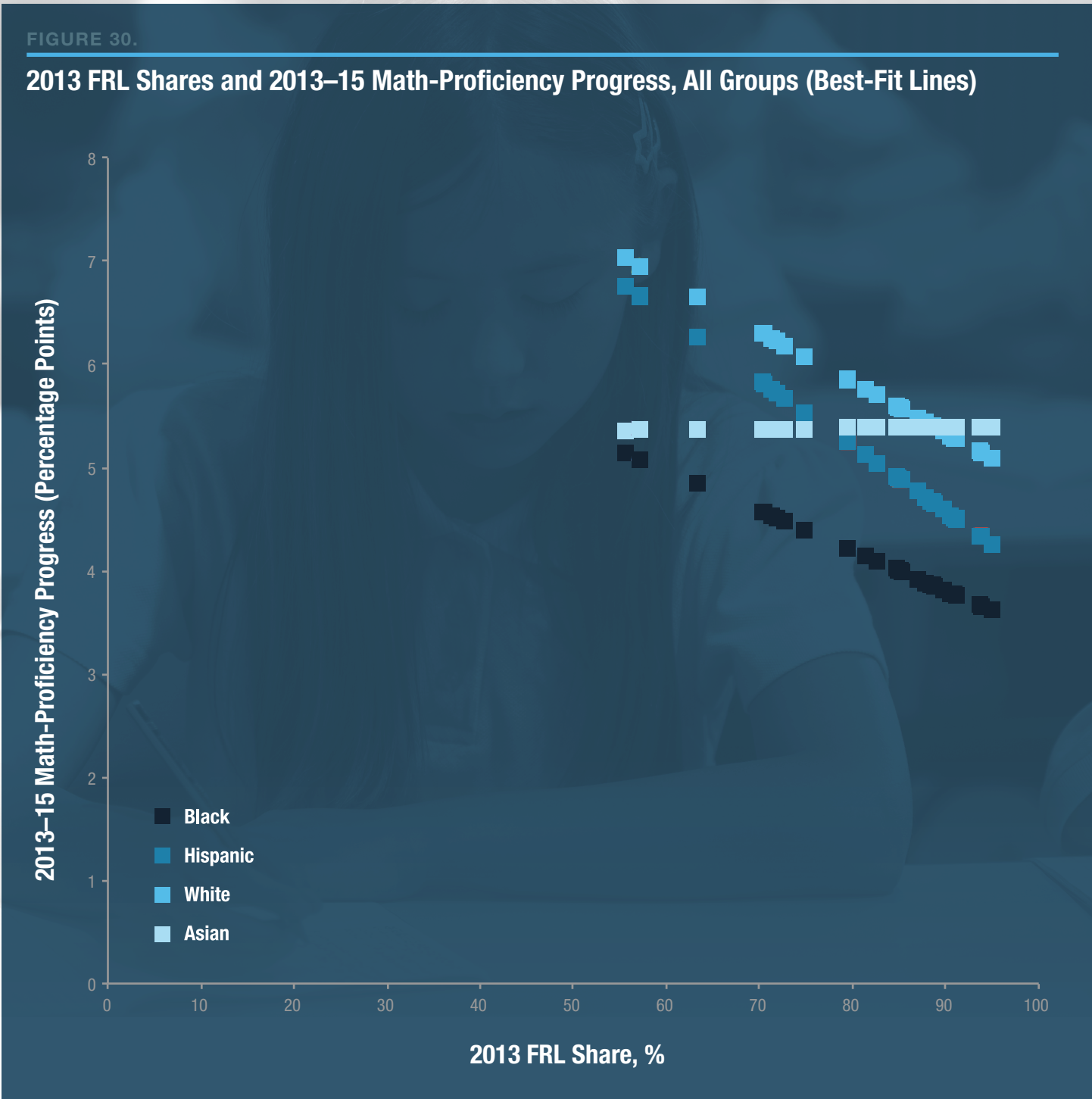


Figure 30 displays the aforementioned trends in a single graph.

## VI. Conclusion

That all NYC school districts improved their proficiency levels in English and in math from 2013 to 2015 is encouraging. The stellar performance of Asian students in low-income school districts during this period—narrowing the English-proficiency gap and keeping pace in math with their Asian peers in higher-income school districts—merits further study, too.<sup>6</sup>

Despite such positive developments, during Mayor de Blasio’s first two years in office, the large proficiency gaps between the city’s higher- and low-income school districts have, with the exception of Asian students, further widened. If Mayor de Blasio is to succeed in reducing NYC’s long-standing education disparities by significantly improving outcomes for students from low-income families, he must embrace meaningful reform—rooted in choice, competition, accountability, and innovation—and not resist it.



## Endnotes

- <sup>1</sup> See <http://www.nytimes.com/2014/01/02/nyregion/complete-text-of-bill-de-blasios-inauguration-speech.html>.
- <sup>2</sup> The Common Core–aligned New York State Assessment Program in ELA and math—and, thus, this paper’s findings—covers students in grades 3–8. See <http://www.p12.nysed.gov/irs/ela-math>; and <http://schools.nyc.gov/AboutUs/default.htm>.
- <sup>3</sup> Student test scores fall into four levels. Level 3 (“sufficient”) and Level 4 (“excel”) are considered proficient. See <https://www.engageny.org/resource/performance-level-descriptions-for-ela-and-mathematics>.
- <sup>4</sup> Author’s analysis of NYC Department of Education data. See <http://schools.nyc.gov/Accountability/data/TestResults/ELAandMathTestResults>.
- <sup>5</sup> For an interactive map of NYC’s 32 school districts, see <http://schools.nyc.gov/schoolsearch>.
- <sup>6</sup> Contributing factors may include Asian-American families’—low- and high-income alike—well-documented emphasis on educational achievement; the possibility that most Asian students in wealthier school districts are already highly proficient and thus have little room for further proficiency gains; and the possibility that higher-income, more educated Asian students are moving into lower-income neighborhoods.

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# ISSUE BRIEF 45

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