

NYC STUDENT ACHIEVEMENT:

What State and National Test Scores Reveal

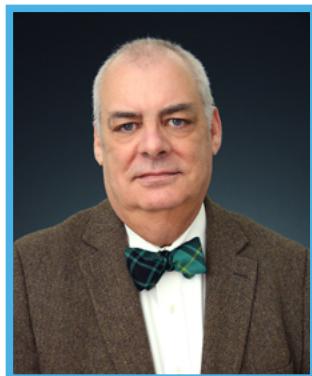
Ray Domanico

Senior Fellow and Director, Education Policy



MI

About the Author



Ray Domanico is a senior fellow and director of education policy at the Manhattan Institute. His career has spanned the public and nonprofit sectors, in research and advocacy roles. Most recently, Domanico was director of education research at New York City's Independent Budget Office, where he led a team tasked with studying and reporting on the policies and progress of America's largest public school system. Previously, he served as senior education advisor to IAF Metro NY, where he worked with local leaders and educators to design and support a small group of new district high schools and charter elementary schools. Domanico began his career in research positions in the New York City school system, and he has taught graduate-level courses in educational research and policy analysis at Brooklyn College and Baruch College.

Domanico holds an MPP (master of public policy) from the University of California, Berkeley.

Contents

Introduction.....	5
Proficiency Rates: 2019 NAEP and New York State Assessment Results	7
2019 New York State Assessment Results by Race	9
2019 New York State Assessment Results by County	13
NAEP Results, 2003–19	14
Discussion	16
Appendix.....	17
Endnotes.....	18



NYC STUDENT ACHIEVEMENT: What State and National Test Scores Reveal

Introduction

The purpose of this brief presentation of data is to examine and explain the most recent achievement results for New York City and New York State students in district and charter schools, and to put New York City's achievement levels in context.

The New York City public school system is the largest in the country, with more than 1 million students in grades prekindergarten through 12 in more than 1,600 schools. An additional 120,000 students attend 260 publicly financed charter schools within the city. The purpose of this brief is to describe how the city's schools stack up against those in the rest of the state and in the nation.

There are different ways to measure the success of the city's school system. This paper will focus on the city's overall performance, as measured by standardized test scores, relative to New York State and the rest of the nation. Within the city, outcomes vary among individual schools and across racial and ethnic groups. The source of that variation is contested, with many locating it in unequal access to good schools.¹ This was the assumption underlying education policy in New York City under the previous mayor, in which low test scores at a given school were treated as evidence either that the school needed to reform its practices, or close and be replaced. More recently, some advocates have argued that a focus on achievement gaps is itself evidence of systemic racism and an overreliance on test scores.²

Journalists sometimes use terms like "failing" or "flunking"—or falling "below" grade level—to describe the results of student achievement tests. Those terms may seem like plain language, but modern testing regimes do not use them; rather, they place students in one of four categories: the National Assessment of Educational Progress (NAEP) characterizes student scores as below basic, basic, proficient, or advanced, and New York State classifies scores as well below proficient, below proficient, above proficient, or excelling.

The city's school system is large enough, and its outcomes varied enough, to offer evidence for almost any preconception that one might have about its performance. But the full story is much more complex than any extreme narrative suggests; great failure as well as great success exists in the city's schools.

Determining how city schools stack up against those in the rest of the state and the nation is complicated. The available data—from the New York State Assessment Program³ and NAEP⁴—are somewhat contradictory and easy to misinterpret. The tables and charts presented in this brief report are meant to explain those apparent contradictions and complications and to provide the clearest possible answer.

Key Findings

- ✓ On average, the New York City public school system is not failing. It performs at a level that one would expect from a large, diverse school system. Overall, on the state assessments, students in traditional public schools in New York City score at or above the state average. However, there is clear evidence of failure in a significant number of individual schools, and the system's recent attempts to improve these schools have produced very marginal results, at best. Seventy-one New York City Department of Education (DOE) schools have English Language Arts (ELA) proficiency rates below 20%, and 100 have math proficiency rates below 16%; in both cases, that puts them among the 250 lowest-scoring schools in the state. At the same time, there are New York City DOE schools with very strong success rates.

- ✓ The results of NAEP tell a different story, with New York State scoring near the national average and New York City scoring below New York State—the opposite of what we see in the state assessments.

- ✓ While NAEP indicates that New York State performs near the national average, the Programme for International Student Assessment (PISA), an international measure, shows that students in the U.S. perform below those in other large and economically powerful countries.⁵ Thus, despite any discrepancy between NAEP and state tests, improvement efforts are still warranted in both the city and the state.

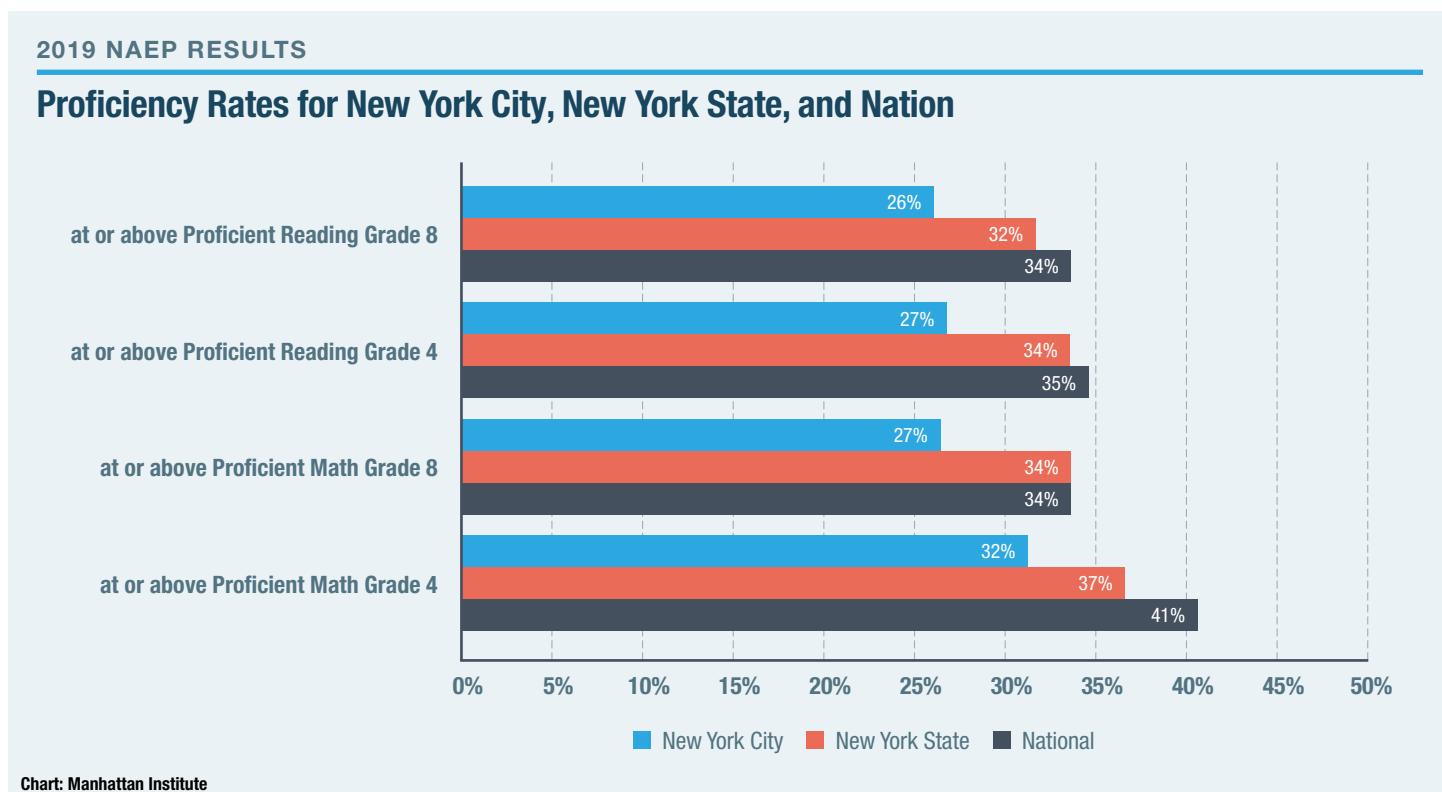
- ✓ Performance varies greatly across New York City's public schools. A significant number of New York City's traditional public schools, a.k.a. district schools, are high-scoring compared with the rest of the state. If each of the city's five counties had its own school system, four would be among the top county systems in the state, with the Bronx being the exception.

- ✓ While achievement gaps exist between black and Hispanic students and white students in the city as a whole, these gaps narrow in public charter schools.





Proficiency Rates: 2019 NAEP and New York State Assessment Results

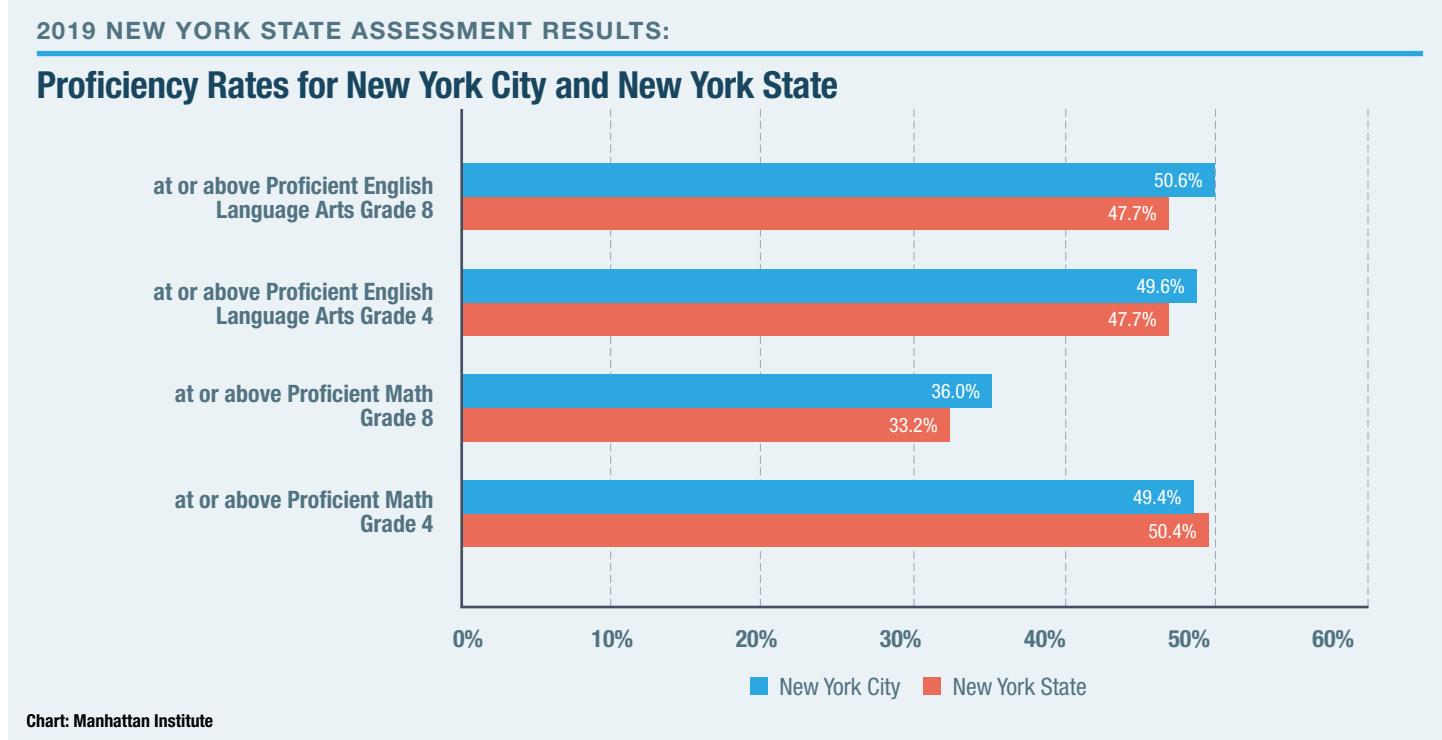


NAEP is administered to a small, randomly drawn representative sample of students every other year. It tests math and reading in the fourth and eighth grades. In 2019, the sample of students from New York State for the fourth-grade mathematics assessment had 3,100 students from 160 schools; the sample for the city had 1,800 students from 90 schools.

NAEP is considered a “low-stakes” test. It only gives results for cities, states, demographic groups, and the nation as a whole—not for individual students. Its results are not used in any decision making about individual students, teachers, or schools.

A clear pattern emerges in the 2019 NAEP results. In fourth- and eighth-grade reading and in eighth-grade math, the difference between New York State and the national average is statistically insignificant. In fourth-grade math, New York State is four points lower than the national average, and this difference is statistically significant ($p < .05$). Thus, in three out of the four grade/subject combinations, New York State’s students perform at the national average.

In all four grade/subject combinations, New York City scores below both the national and state average, and these differences are all statistically significant.



Each year, New York State administers examinations in English Language Arts (ELA) and mathematics to every student in public and charter schools in grades three through eight. In 2019, more than 170,000 students took the test in fourth grade; in eighth grade, 147,000 students took the ELA exam while 107,000 took the math exam. New York State allows high-achieving eighth-grade students to take “Regents,” or high school level, math exams in place of the exam reported here. This partially explains the much lower proficiency rate in math for eighth-graders compared with fourth-graders—high achievers were excluded.

Because these tests are administered every year to every student, teachers and students both become familiar with the format of the tests and their questions. This does not happen with NAEP, which most students and teachers never see in their school career.

In many ways, the New York State Assessments are high stakes. Student scores may be used in admissions decisions for middle and high school, and schools are annually assessed by a complex accountability system that includes student scores and growth on these exams. Teachers are no longer graded on their students’ test results.

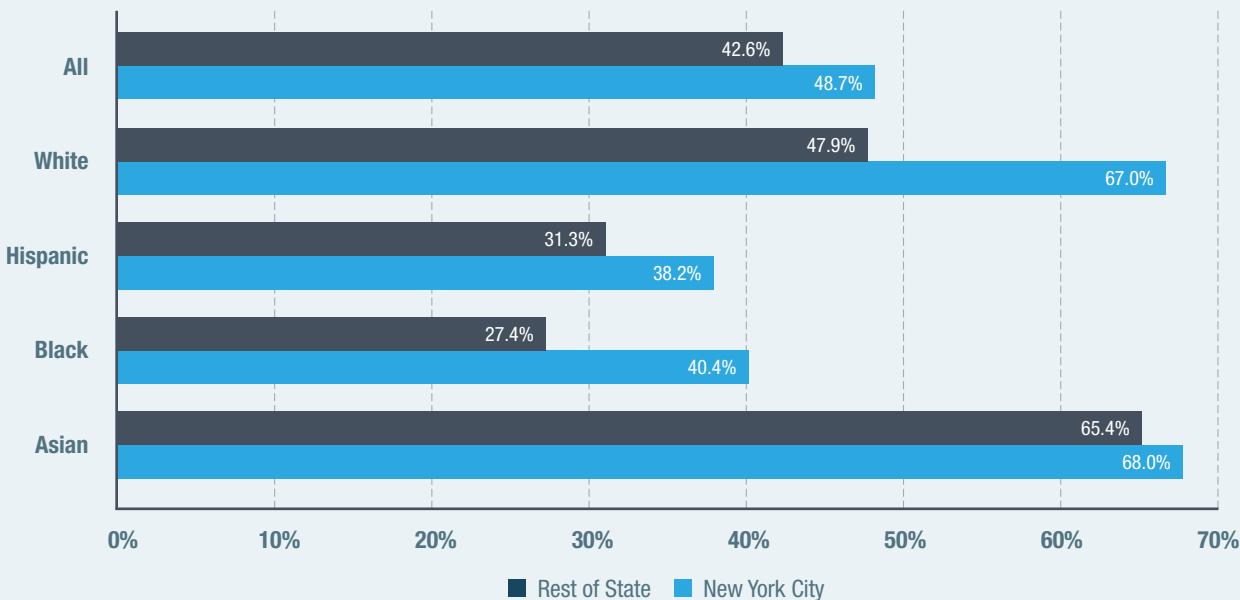
Except for eighth-grade math, the New York State Assessments estimate higher proficiency rates (48%–50%) than NAEP (32%–37%).

To complicate the picture further, in the state assessment, unlike in NAEP, the city’s students score 2–3 percentage points above the state average on all subject/grade combinations except fourth-grade math.

2019 New York State Assessment Results by Race

CHARTER AND DISTRICT SCHOOLS COMBINED

New York State Assessment of English Language Arts, Grades 3–8, 2019



New York State Assessment of Mathematics, Grades 3–8, 2019



Chart: Manhattan Institute

Students in every racial group in NYC traditional public or charter schools outperform their peers in the rest of the state. The largest NYC advantage occurs for white students: 19 points in ELA and 14 points in math. They are followed by black students: 13 points in ELA and 10 points in math.

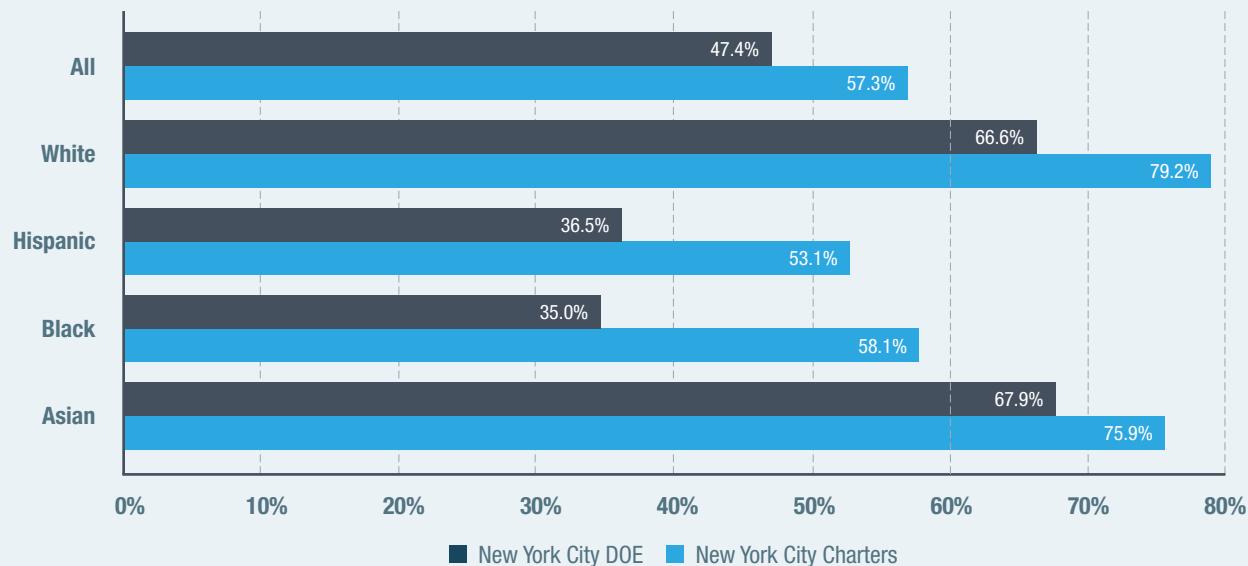
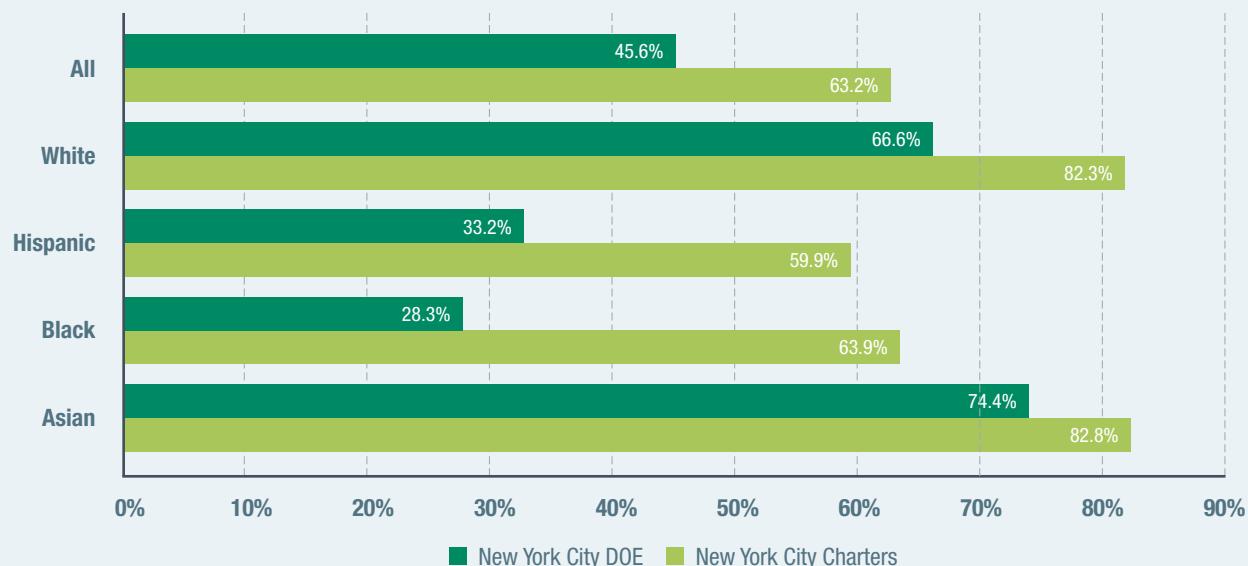
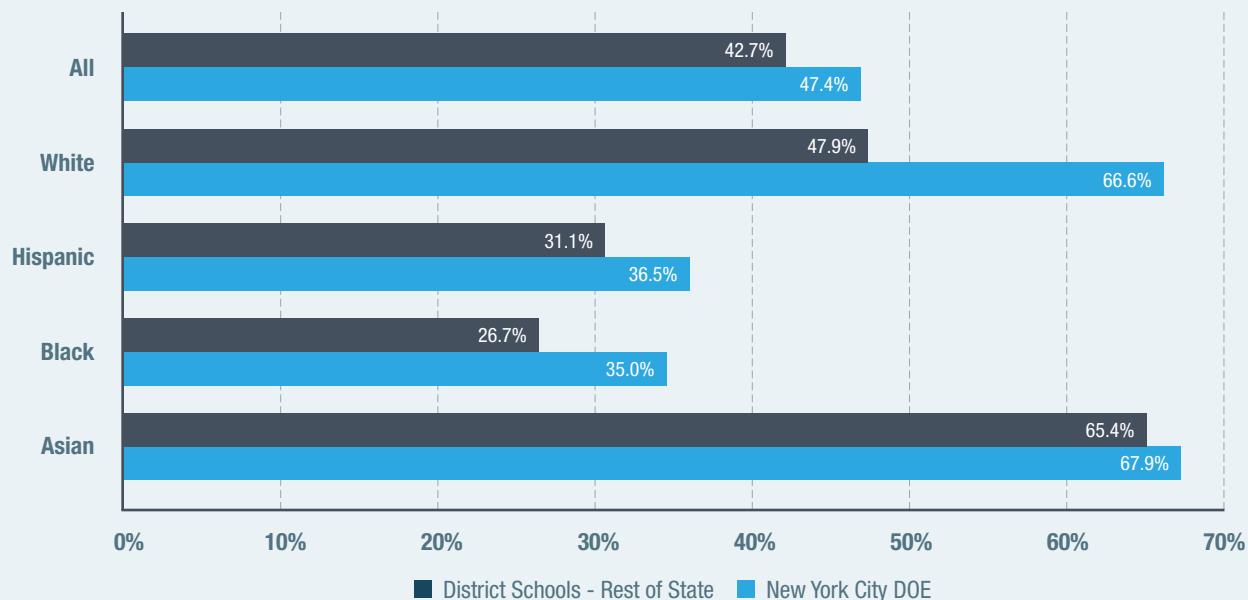
NYC DOE (DISTRICT) VS. CHARTER SCHOOLS**New York State Assessment of English Language Arts, Grades 3–8, 2019****New York State Assessment of Mathematics, Grades 3–8, 2019**

Chart: Manhattan Institute

Students in NYC's charter schools outperform those in traditional public schools. This is true for every racial group. Black students in charters outperform black students in traditional public schools by 35 points in math and 23 points in ELA. For Hispanic students, the charter advantage is 27 points in math and 16 points in ELA.

NYC DOE (DISTRICT) VS. DISTRICT SCHOOLS IN REST OF STATE

New York State Assessment of English Language Arts, Grades 3–8, 2019



New York State Assessment of Mathematics, Grades 3–8, 2019

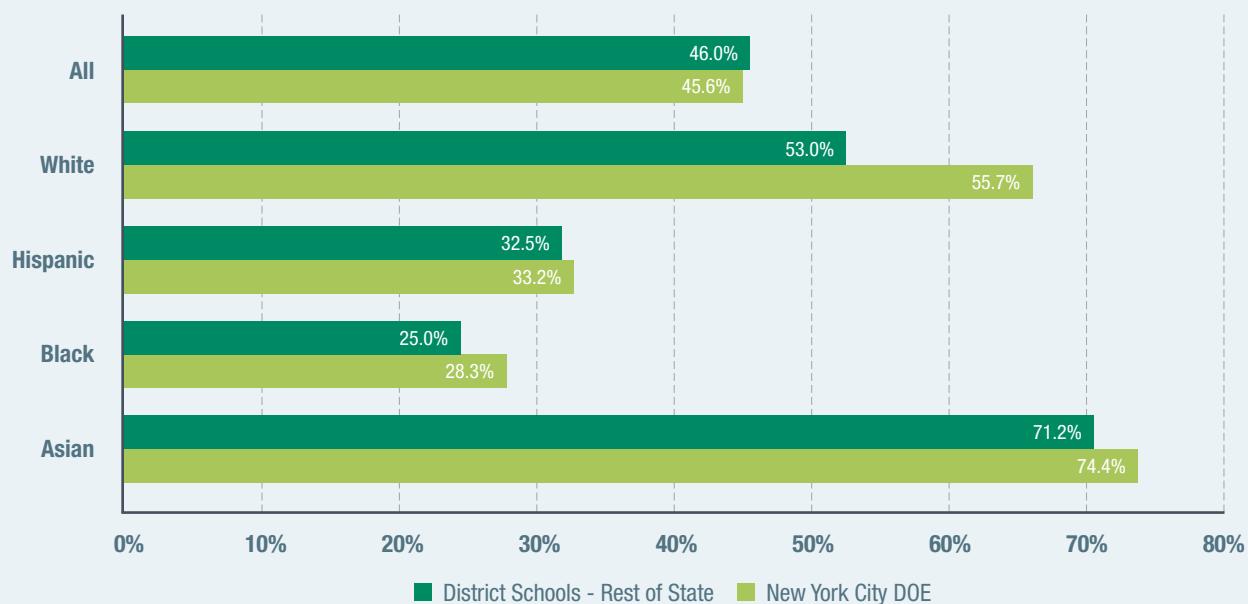


Chart: Manhattan Institute

In traditional public schools, white students in New York City score well above white students in the rest of the state. Other racial groups do better in NYC than in the rest of the state by smaller margins than white students.



2019 New York State Assessment Results by County

The tables below show how New York City's five boroughs (which are also counties) perform on the New York State Assessments compared with the other 57 counties in the state. These data combine district and charter school results for each county.

English Language Arts

County	Number Tested	ELA Proficiency Rate	ELA - Rank Among all Counties in NY
Top 10:			
NASSAU	56,633	58.5%	1
NEW YORK	60,312	56.4%	2
SARATOGA	12,715	55.5%	3
WESTCHESTER	57,460	53.0%	4
QUEENS	126,088	52.2%	5
RICHMOND	26,993	51.9%	6
KINGS	137,447	50.2%	7
WARREN	3,445	46.9%	8
PUTNAM	4,287	46.8%	9
ALBANY	15,368	44.8%	10

BRONX	99,338	36.5%	40
Bottom 10:			
OSWEGO	7,263	32.2%	53
WAYNE	5,452	32.1%	54
GREENE	2,273	30.8%	55
CHENANGO	2,549	30.7%	56
HERKIMER	3,133	30.5%	57
CHEMUNG	4,749	30.5%	58
MONTGOMERY	3,032	29.7%	59
SULLIVAN	3,827	26.2%	60
SENECA	1,570	25.9%	61
FRANKLIN	2,374	25.1%	62

Mathematics

County	Number Tested	Math Proficiency Rate	Math - Rank Among all Counties in NY
Top 10:			
SARATOGA	12,040	63.2%	1
NASSAU	52,066	62.6%	2
NEW YORK	57,441	55.8%	3
WESTCHESTER	55,718	55.3%	4
QUEENS	120,089	51.5%	5
WARREN	3,145	51.0%	6
PUTNAM	4,042	51.0%	7
KINGS	135,191	50.9%	8
RICHMOND	26,303	48.8%	9
CATTARAUGUS	4,894	48.5%	10

SCHENECTADY	7,910	36.1%	53
WAYNE	5,248	35.3%	54
CORTLAND	2,373	34.8%	55
FULTON	2,996	34.6%	56
BRONX	99,130	34.1%	57
CHEMUNG	4,496	33.6%	58
DELAWARE	1,998	33.0%	59
MONTGOMERY	2,888	29.6%	60
SULLIVAN	3,693	27.6%	61
FRANKLIN	2,266	24.6%	62

Four New York City counties—New York (Manhattan), Queens, Richmond (Staten Island), and Kings (Brooklyn)—score among the top 10 in the state. New York County is ranked second in ELA and third in math.

Students in the Bronx lag well behind students in the city's other four counties and below many counties in the rest of the state. In math, the Bronx ranks only six spots from the bottom.

NAEP Results, 2003–19

NAEP RESULTS, MATHEMATICS, 2003–19 PERCENT AT OR ABOVE PROFICIENT:

Grade 4 Mathematics



Grade 8 Mathematics



Chart: Manhattan Institute

Nationwide, NAEP scores in mathematics improved from 2003 through 2013 but have remained flat since then (some observed changes are not statistically significant).

New York State's fourth-grade math scores peaked in 2007 and have declined since. The state's eighth-grade scores have been flat since 2003.

New York City's fourth-grade scores, while lower than the state's, were up in 2019 but still lower than their peak in 2009. Eighth-grade scores for the city have been essentially flat since 2009.

READING, 2003–19 PERCENT AT OR ABOVE PROFICIENT

Grade 4 Reading



Grade 8 Reading



Chart: Manhattan Institute

■ United States ■ New York State ■ New York City

In reading, the nation's NAEP scores improved through 2017. Fourth-grade scores declined in 2019, and eighth-grade scores were unchanged. New York State's reading scores in grades four and eight have been flat since 2003, with no statistically significant change. New York City's scores improved through 2009 in fourth grade but have been flat since. In eighth grade, the city's scores reached an all-time high in 2017 and were statistically unchanged in 2019.

As with math and in contrast to the results of the New York State Assessments, the city's NAEP scores in reading are below those of New York State. Overall, NAEP results indicate that average achievement across New York State has been flat in three out of four grade/subject combinations since 2003. Fourth-grade math scores have been flat since 2007.

In fourth-grade math and eighth-grade reading, New York City has made progress. Fourth-grade reading levels and eighth-grade math scores have been flat since 2009.

Discussion

New York State's achievement levels, as measured by NAEP, have been stagnant for quite some time. Yet at three grade/subject combinations, they are statistically indistinguishable from the national average. In fourth-grade math, the state is below the national average. If the goal of the state has been improvement in student achievement, it has been failing to achieve it.

New York City's story is more complex. On NAEP, it clearly scores below the state average. Yet on the state's own assessment program, the city outscores the rest of the state. One might try to ascribe the difference in New York City's results on the two tests to the difference in stakes. The state assessments are used to determine admission to selective middle and high schools and as part of the city's and state's school assessment programs. NAEP, on the other hand, does not produce scores for individual students or schools and only produces group-level results. Therefore, students and teachers alike have an incentive to focus on the former test more than the latter, but that is true for both New York City and the rest of the state. The easiest way to reconcile the disparity, then, is simpler: different tests yield different results.

In the state assessments, charter schools in New York City are producing better results than district schools. At the same time, district schools in the city are scoring higher than district schools in other parts of the state.

New York City's system has more than 1 million students, far more than any other district in the state.

However, four out of the five counties in the city score in the top 10 of the state's 62 counties. Manhattan scores right near the top.

The Bronx is the outlier, scoring near the bottom of the state's counties. This is indicative of the challenge faced by the New York City school system. While the city has charter schools, particularly those run by Success Academy, that do as well as or better than any school in the state, as well as district schools that produce high scores, it also has schools that are failing to deliver. Many of these schools are in the Bronx, but they can be found in other parts of the city as well.

Improvement in the city's achievement and movement toward the national average on NAEP will occur only when the city's leaders develop and implement a response to very low-achieving schools. Early in its term, the de Blasio administration attempted, at great expense and ultimately unsuccessfully, to remediate low-performing schools with its "Renewal Schools" program. Recently, it has focused on changing the admissions procedures to some selective or high-performing schools, which has engendered public resistance. Throughout its time in office, this administration has resisted the process that demonstrably succeeded during the previous administration—selectively closing low-performing schools and replacing them with charter schools or new traditional public schools. With the support of the de Blasio administration, the state legislature has maintained a cap on the number of charter schools allowed to operate within the city, blocking another means of creating additional educational opportunities for those students relegated to low-performing schools.



Appendix: Definitions of Proficiency on NAEP and the State Assessments

NAEP⁶

“NAEP achievement levels are performance standards that describe what students should know and be able to do. Results are reported as percentages of students performing at or above three NAEP achievement levels (NAEP Basic, NAEP Proficient, and NAEP Advanced).

Students performing at or above the NAEP Proficient level on NAEP assessments demonstrate solid academic performance and competency over challenging subject matter. It should be noted that the NAEP Proficient achievement level does not represent grade level proficiency as determined by other assessment standards (e.g., state or district assessments).

NAEP achievement levels are set by the National Assessment Governing Board based on the collective judgments of a broadly representative panel of teachers, education specialists, and members of the general public. The authorizing legislation for the National Assessment of Educational Progress (NAEP) requires that the NAEP achievement levels be used on a trial basis until the Commissioner of the National Center for Education Statistics (NCES) determines that the achievement levels are reasonable, valid, and informative to the public (20 USC § 9622(e)(2)(C)).”

New York State Assessments⁷

NYS Level I: Students performing at this level are well below proficient in standards for their grade. They demonstrate limited knowledge, skills, and practices embodied by the New York State P–12 Learning Standards for English Language Arts/Literacy or Mathematics that are considered insufficient for the expectations at this grade.

NYS Level II: Students performing at this level are below proficient in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P–12 Learning Standards for English Language Arts/Literacy or Mathematics that are considered partial but insufficient for the expectations at this grade.

NYS Level III: Students performing at this level are proficient in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P–12 Learning Standards for English Language Arts/Literacy or Mathematics that are considered sufficient for the expectations at this grade.

NYS Level IV: Students performing at this level excel in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P–12 Learning Standards for English Language Arts/Literacy or Mathematics that are considered more than sufficient for the expectations at this grade.”



Endnotes

- ¹ Dick Startz, "The Achievement Gap in Education: Racial Segregation Versus Segregation by Poverty," Brookings Institution, Jan. 20, 2020.
- ² Ibram X. Kendi, "Why the Academic Achievement Gap Is a Racist Idea," *Black Perspectives* (blog), Oct. 20, 2016.
- ³ New York State Department of Education, "Measuring Student Proficiency in Grades 3–8 English Language Arts and Mathematics," Aug. 22, 2019.
- ⁴ U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics and Reading Assessments.
- ⁵ Organisation for Economic Co-operation and Development, "PISA 2018 Results, Combined Executive Summaries," December 2019.
- ⁶ National Center for Education Statistics, "Scale Scores and NAEP Achievement Levels."
- ⁷ New York State Education Department and Questar Assessment Inc., "New York State Testing Program 2018: English Language Arts and Mathematics Grades 3–8," 2018.



March 2020



MANHATTAN
INSTITUTE

