

TESTIMONY SUBMITTED TO THE NEW YORK STATE ASSEMBLY
STANDING COMMITTEE ON EDUCATION
MAY 10, 2019

Dear Chairman Benedetto and Members of the Committee:

Thank you for the invitation to submit testimony in advance of today's hearing on admissions to New York City's specialized high schools. Equitable access to these and other academically selective schools is a critically important policy issue facing New Yorkers, and I thank the committee for devoting attention to it.

I am an economist by training, and an Associate Professor of Public Policy and Education at Peabody College, Vanderbilt University. I was on the faculty of New York University for 13 years, until this month, and I remain an affiliate of NYU's Research Alliance for New York City Schools. One of my primary research interests is the high school admissions process in NYC, including the specialized high schools.¹ In 2018, I co-authored a peer-reviewed article examining diversity in the specialized high schools and potential reforms to admissions.² That study and related research inform my testimony below.

FACTORS AFFECTING DIVERSITY IN THE SPECIALIZED HIGH SCHOOLS

While roughly 65% of high school applicants in NYC are black or Hispanic, only 10% of specialized high school offers in 2018-19 were to black or Hispanic students. This percentage was well below 10% at the two most selective schools, Stuyvesant (4.5%) and Bronx Science (6.8%). As others have noted, only 7 of the 893 students admitted to Stuyvesant this year are black. That the city's most elite public schools are so thoroughly unrepresentative of its population is unacceptable on its face, and deserves close scrutiny.

This is also not new. Our 2018 article found persistent under-representation of low-income, black, and Hispanic students over nine recent admissions cycles (2005-2013). Less often appreciated is the under-representation of girls in the specialized schools. Over the same time period, we found girls were 5 percentage points less likely to be admitted than boys.

Our study examined several potential contributing factors to these patterns. First, we considered whether high-achieving black and Hispanic students are less aware of the specialized high school admissions test (SHSAT) or fail to take it. Our findings do not support this. In fact, we found black students are *more* likely to take the SHSAT than other students with comparable state test scores. Indeed, the vast majority of higher-achieving students of all backgrounds take the SHSAT each year. (There is some room for improvement: Hispanic students and girls are somewhat less likely to take the test than comparably-scoring students).

Second, we examined whether selective middle schools—which are also highly segregated—better prepare students for the SHSAT. An astonishingly large fraction of offers go to students in a small number of middle schools. Our study found more than half of all offers went to students in only 24 middle schools, of 536 citywide. Nearly 1 in 10 went to students in just *two* middle schools. While disconcerting, our analysis suggests this is largely a reflection of high-achieving students sorting into the most selective middle schools rather than advantages conferred by these schools. Middle school segregation is problematic for many reasons, but it does not seem to play a decisive role in access to the specialized high schools.

The third factor we considered is the most conspicuous, and the most difficult to remedy: the underlying gap in academic achievement and preparation. Large differences in school performance by race, ethnicity, and socioeconomic background emerge at an early age, long before students enter 8th grade. These gaps are strongly predictive of gaps in SHSAT scores and go a long way to explain the lack of diversity in specialized high schools.

The question is whether this is the end of the story. In fact, our study found *large differences in SHSAT scores that were not explained by other measures of academic performance*. Asian students, for example, scored 10.7 points higher on the SHSAT than white students with comparable state test scores.³ Black and Hispanic students, by contrast, scored 20 points *lower*.⁴ Eighth-grade girls have higher grades and state test scores than boys, yet significantly under-perform on the SHSAT. Remarkably, the gap on the SHSAT between girls and boys—with similar state test scores—is as large as the gap between black and white students.

These findings raise questions of what the SHSAT is measuring. It may be that the SHSAT measures different abilities than do other marks of achievement. This would explain why some students over- or under-perform relative to other measures. It is also possible these unexplained differences are driven by other factors, such as stereotype threat, intensive test preparation or comfort with high-stakes tests. As has been well-documented, many students spend years preparing for the SHSAT, and research has found that girls systematically under-perform relative to their abilities on high-stakes assessments.⁵ If the aim is to identify talented students likely to succeed in the specialized high schools—not those who happen to perform well on a single test—the city must look beyond its SHSAT-only policy.

CONSIDERING ALTERNATIVES TO THE CURRENT POLICY

Our 2018 study simulated seven alternatives to the current SHSAT-only policy, asking how each would affect diversity in admissions. We did this by applying alternative admissions rules to student data from 2008-09.⁶ While this analysis does not account for the likely behavioral responses of parents and schools to a new admissions policy, it provides a first look at the potential for other policies to improve diversity.

The figure below summarizes the main findings of our simulations, showing the change in admitted student characteristics relative to the SHSAT-only policy.⁷ A policy admitting students with the highest state test scores—potentially in combination with grades—would result in modest improvements in the share of specialized high school offers extended to

black and Hispanic students. (Such a move would significantly increase the number of girls receiving offers). These relatively small improvements reflect the stubborn gaps across other marks of achievement.

Average Characteristics of Students Offered Seats in Alternative Admissions Rule Simulations

	2009 Offers	Changes from Actual Offers in Simulations					
		Tests	Test and Grades	Tests and More Grades	Tests, Grades, and Attendance	Tests, Grades, and Proportional Representation by Borough	Top 10%
ELA standardized score ^a	1.413	+0.298	+0.080	-0.056	+0.076	+0.053	-0.027
Math standardized score ^a	1.696	+0.230	+0.046	-0.112	+0.049	-0.024	-0.122
Math grade (0-100)	93.1	+0.1	+1.0	+0.5	+1.1	+0.4	+0.3
English grade (0-100)	91.3	+0.8	+2.0	+1.7	+2.1	+1.2	+0.8
Attendance rate	97.7	-0.2	-0.1	-0.2	+0.3	-0.2	-0.5
Female	46.1	+9.3	+11.3	+10.8	+11.5	+12.8	+14.1
Asian	53.6	-8.9	-6.5	-6.0	-4.4	-12.7	-15.9
Black	7.6	+2.1	-0.5	-1.2	-0.6	+3.5	+12.8
Latino	9.4	+4.3	+3.5	+4.1	+3.0	+10.7	+12.4
White	29.2	+2.4	+3.5	+3.1	+2.0	-1.7	-9.4
Free lunch eligible	30.6	-0.3	0	+0.7	+0.5	+4.6	+12.0
Received an offer in 2009	100.0	-37.8	-43.8	-49.0	-42.9	-47.2	-57.7
Received a "Big 3" offer in 2009 ^a	75.7	-26.5	-31.4	-36.2	-30.6	-33.8	-43.3
Number of middle schools representing 50% of offers	23	+4.0	-5.0	-7.0	-5.0	-1.0	+34.0
Number of middle schools representing 85% of offers	81	+13.0	-27.0	-38.0	-26.0	+1.0	+36.0

Source: Research Alliance calculations using data provided by the NYC DOE

Notes: This brief includes six of the seven "rules" included in the full working paper. See the full working paper for simulated results for a rule based on tests and unweighted grades. ^a See note to "Tests" on previous page. ^b The "big 3" are Stuyvesant High School, the Bronx High School of Science, and Brooklyn Technical High School.

Of the rules we examined, the only one that significantly improved representation of black and Hispanic students was the "Top 10%" rule in which top-performing students in each middle school are given admissions offers.⁸ This policy would increase the share of offers to black and Hispanic students by 12 percentage points each, and increase the share of girls receiving offers by 14 percentage points. Would this policy significantly diminish the academic profile of admitted students? While admitted students under this policy would have somewhat lower average test scores than the current population of students, they would remain among the highest-achieving in the city.

The alternatives we considered in our study are not the only available options, and there are clear ways the city could do better, as I describe in the following section.

RECOMMENDATIONS

Highly selective colleges and universities—such as Harvard, Princeton, and Yale—seek to prepare future leaders from a wide variety of social backgrounds and to enrich students' learning experience by assembling a diverse class. They use multiple measures of applicants' academic and extracurricular accomplishments to achieve these aims. Many selective colleges have de-emphasized the SAT and ACT exams, and I am unaware of any selective college in the U.S. that uses a single test score for admission.

As the “crown jewels” of the NYC public school system, the specialized high schools have a mission not unlike that of our most prestigious universities. They, too, should seek a class broadly representative of the city’s population and use all available measures to identify talent. There is nothing sacred about the SHSAT, and no reason why these schools cannot continue as exemplary institutions under a reformed set of admissions criteria.

These criteria should include multiple measures and should promote diversity in admissions by recognizing achievement relative to others from similar socioeconomic circumstances. The latter could be accomplished through a Top X% plan, or by admitting top-scoring students within socio-economic “tiers,” as Chicago does for its selective high schools.⁹ As our simulations showed, it is possible to improve diversity without significantly diminishing the profile of incoming students. A minimum threshold for eligibility could be imposed to ensure all admitted students are adequately prepared for the specialized high schools.

It is not necessary to eliminate the SHSAT altogether. While our study did not examine the use of the SHSAT in conjunction with other measures, there is room for an assessment that goes beyond grade-level skills found on state tests. This performance measure should be one of several, however, and all 8th graders should take the test as a matter of course.

It goes without saying that closing long-standing achievement gaps would be the preferred way to level the playing field and improve diversity in the specialized high schools. Until that happens, the State of New York has an opportunity—and a responsibility—to remedy the current admissions method.

Respectfully,

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*Notes

1. See <http://www.nychighschooladmissionstudy.com/>
2. Corcoran, Sean P. and Christine Baker-Smith. 2018. "Pathways to an Elite Education: Application, Admission, and Matriculation to New York City's Specialized High Schools." *Education Finance and Policy* 13(2): 256-279.
3. This is approximately 0.12 standard deviation units.
4. This is approximately 0.22 standard deviation units.
5. For two examples see Cai, Xiqian, Yi Lu, Jessica Pan, and Songfa Zhong. Forthcoming. "Gender Gap Under Pressure: Evidence from China's National College Entrance Examination." *The Review of Economics and Statistics*, and Niederle, Muriel, and Lise Vesterlund. 2010. "Explaining the Gender Gap in Math Test Scores: The Role of Competition." *Journal of Economic Perspectives* 24(2): 129-44.
6. The results would look similar using more recent data. For a comparable simulation of the Mayor's current proposal, see New York City Independent Budget Office (2019), "Admissions Overhaul: Simulating the Outcome Under the Mayor's Plan For Admissions to the City's Specialized High Schools," <https://ibo.nyc.ny.us/iboreports/admissions-overhaul-simulating-the-outcome-under-the-mayors-plan-for-admissions-to-the-citys-specialized-high-schools-jan-2019.pdf>
7. Corcoran, Sean P. and Christine Baker-Smith. 2015. "Pathways to an Elite Education: Exploring Strategies to Diversity NYC's Specialized High Schools." New York City: Research Alliance for New York City Schools.
8. This rule is similar to the one proposed by Mayor DeBlasio, but differs in important ways. The Mayor's proposal uses 7% instead of 10%, and would not admit *all* students through this mechanism. Additionally, admitted students would be required to score above a minimum threshold on the state test to be considered eligible. Our simulated rule simply admitted the Top 10% in every school.
9. See Ellison, Glenn, and Parag A. Pathak. 2016. "The Efficiency of Race-Neutral Alternatives to Race-Based Affirmative Action: Evidence from Chicago's Exam Schools." National Bureau of Economic Research Working Paper No. 22589.