

March 20, 2019

UPDATE ON THE ALUMNI FOUNDATION'S WORK ON THE ADMISSIONS PROCESS

The Bronx Science Alumni Foundation Board of Directors and the Bronx Science Parents Association Executive Board would like to share an update on the work the Alumni Foundation has been doing regarding the admissions process to Bronx Science.

Mission

In the current debate over the SHSAT (the admissions test) it is important to remember why Bronx Science exists. Bronx Science was established in 1938 with the express aim of being a school with a focus on science and math education for gifted and talented students. In Dr. Morris Meister's 1975 obituary in the New York Times, it stated "In the Bronx High School of Science, which he served as principal for 20 years from its founding in 1938, Dr. Meister created a world-renowned center of secondary scientific education that offered a maximum challenge to the brightest students in the public school system." That mission holds true today and as alumni and parents, promoting the overall mission of Bronx Science is our most important goal.

Admissions Background

In 1971, a state law was passed, known as the Hecht-Calandra Act, which mandated that the only admissions criterion to Bronx Science, Stuyvesant and Brooklyn Tech was one's score on an entrance exam.¹ The admissions test (known as the SHSAT) had been used for many years prior to 1971 but the state law was passed to standardize the admissions process at the state level and establish the Discovery program to give additional opportunities for entry.

The state law only applies to Bronx Science, Stuyvesant and Brooklyn Tech. In 2002, the city added five new specialized high schools: the High School of American Studies at Lehman College; the High School of Math, Science and Engineering at City College; Staten Island Tech; Brooklyn Latin; and the Queens High School for the Sciences at York College. The city decided to use the same admissions test for these five schools but was under no obligation under the state law to do so.

There are more than 400 high schools in New York City and only eight specialized high schools. The specialized high schools enroll a total of about 15,000 students. In total, the five new specialized high schools added approximately 3,000 additional spots for students. Overall, the specialized high schools enroll a very small number within the New York City school system of 1.1 million children, including more than 300,000 high school students.²

In June of 2018, Mayor de Blasio proposed eliminating the Hecht-Calandra Act and replacing the admissions test with a plan that would take the top 7% of students at each middle school. His proposal passed the Assembly Committee on Education but never made it to the full Assembly

¹ Note: The Hecht-Calandra Act also applies to LaGuardia High School for Music & Art and Performing Arts. As it uses an audition process and not an admission exam, it is not included in our discussion.

² Enrollment numbers are from <https://data.cityofnewyork.us/Education/2013-2018-Demographic-Snapshot-School/s52a-8aq6>

nor to the State Senate for a vote. The legislative session ended in June 2018 so the process had to start again for the 2019 legislative session.

History of Demographics at the Specialized High Schools

A common theme at the specialized high schools has been that the schools have long attracted immigrants and children of immigrants. For these families, Bronx Science and the other specialized high schools represented a path to upward economic mobility. New York City was a post-war haven for many European immigrants, many who were Jewish, and the make-up of Bronx Science from the 1940s-1970s reflected those groups. In the 1980s and 1990s, Bronx Science was predominantly East Asian with many students coming from China and Korea. Today, the student body is predominantly Asian but with many students hailing from the Indian subcontinent, southeast Asia and China.

In the 1980s and 1990s, the specialized high schools had their highest percentages of Black and Latinx students. Brooklyn Tech's student body was more than 50% Black and Latinx. Bronx Science's student body was 22% Black and Latinx. Today, Bronx Science's student body is 9% Black and Latinx. At Brooklyn Tech, the student body is 13% Black and Latinx. Among specialized high schools, the High School for Math, Science and Engineering at City College has the highest percentage of Black and Latinx students at 26%.³

Accounting for the Current Racial Disparities

It is fair to ask why the numbers of underrepresented students have declined. By identifying the reasons, we are best equipped to help solve the problem. The student body of the New York City school system is approximately 70% Black and Latinx; it is simply unacceptable for Black and Latinx students to be so underrepresented at the specialized high schools.

It is difficult to identify the admissions exam as the sole cause given the demographics of Bronx Science, Stuyvesant and Brooklyn Tech in the 1980s and 1990s. The admissions test had long been in place by then and was producing a diverse student body. We must look deeper to identify what contributing factors are affecting enrollment at the specialized high schools.

Starting in about year 2000, several aspects of the New York City school system changed.

School Choice

Historically, students in New York City attended what was known as their zoned schools. Where they lived indicated what elementary, middle and high school they attended. The specialized schools were the exception as students had to be admitted from a citywide pool. At the turn of the 21st century, the New York City Department of Education largely eliminated zoned schools and replaced them with a system called School Choice. Students now apply for middle schools and high schools; their address no longer dictates their school options.

³ Data is from <https://data.cityofnewyork.us/Education/2013-2018-Demographic-Snapshot-School/s52a-8aq6>

Honors Programs

Historically, many students had been in an SP program before they came to Bronx Science. SP or Special Progress was an honors program found at nearly every public middle school in New York City. The curriculum was accelerated and it offered all students access to honors programs regardless of where they went to middle (or junior) high school. There was no formal assessment but rather teachers identified students and put them into SP programs. SP meant that regardless of how well performing a middle school was, there was an academically challenging environment for students who sought out a tougher curriculum. It was a tremendous feeder program to the specialized high schools. SP programs are only offered now in very few schools.

Private Schools

Private or independent schools have historically not sent many students to the specialized high schools as most of their students elect to remain within their private school for high school. In the early 2000s, private schools made diversity a greater emphasis of their student body and began recruiting and funding low income students to attend their schools. For example, Prep for Prep's mission is to identify New York's City's most promising students of color and prepare them for success at independent schools throughout the Northeast. That program began in 1978 but has grown exponentially. It begins working with students in elementary school. It is just one example of private schools' increasing commitment to having underrepresented students in their student body.

Charter Schools

Charter schools were permitted under law beginning in 1998 and the past two decades have seen incredible growth in charter schools in New York City. Like private schools, we are seeing that students often stay within their charter network for the entirety of their schooling and are unlikely to move back into a traditional public school. Today, charter schools in New York City have more than 235,000 students across 236 schools.⁴

Gifted and Talented Programs

The New York City Department of Education has opened five gifted and talented citywide schools that enroll students for elementary and middle school. Joining the Anderson School that was established in 1987, the city has created the NEST+M school (opened in 2001); TAG School for Young Scholars (opened in 2004); the Brooklyn School of Inquiry (opened in 2009) and Q300 (opened in 2014). Three of these schools are in Manhattan, one in Brooklyn and one is in Queens. Families must have their children tested in kindergarten to third grade (note: many schools do the testing in school, during school hours) and students must score at least in the 97th percentile. Busing is very limited to these schools and not available from all boroughs despite all being citywide schools. There are more students who qualify than the number of seats available.

Access

Students must take the SHSAT in 8th grade. Parents must sign-up their children online through the MySchools Portal, using a passcode that is physically mailed to them. Registration can be a barrier for families that don't have a computer at home or simply don't know about the process. The exam is given on specific weekends and in very few locations. Bronx Science, for example,

⁴ Charter school data is from the NYC Charter Schools:
<https://www.nyccharterschools.org/sites/default/files/resources/NYC-Charter-Facts.pdf>

is the only testing location in the Bronx. It can be difficult for many children to get to the test site on the weekend if their parents work or to travel across the entire borough to an unfamiliar location. Seventy-one percent of Asian American students take the SHSAT and only 23 percent of Black and Latinx students take the SHSAT.⁵

Outcomes

Together, these factors paint an educational landscape that is much more competitive than in the past and that offers families many more choices. One of the outcomes we have seen from school choice is that, in the absence of SP or similar programs, families have clustered themselves in particular schools and have made certain schools feel like an “honors” middle school. To get there requires understanding of how to navigate a complex system. There is significant geographic disparity in the gifted and talented programs and the lack of a Citywide G&T school in the Bronx is a real challenge for families who would like an academically challenging environment closer to home. Families without the resources to send their middle school aged children to a different borough for middle school have had to seek out local options, such as charter schools. Similarly, charter schools are geographically concentrated as well. There are 72 charter schools in the Bronx but only 22 in Queens. For low-income families in the Bronx, who are predominantly Black and Latinx, there are significant barriers to attending a citywide gifted and talented school but charter schools are locally accessible. For low-income families in Queens, who are predominantly Asian, charter schools are less available and there is a greater reliance on making the traditional public school system work. We believe that improving access to the SHSAT by giving the exam during the school day and to all students will result in dramatic changes in the numbers of Black and Latinx students admitted as so few of them take the test today.

Mayor Bill de Blasio’s Proposal

In June 2018, Mayor de Blasio introduced a proposal that would eliminate the admissions exam and replace it with a system that admitted the top 7% of students at each middle school. His stated objective is to improve the numbers of Black and Latinx students at the specialized high schools.

His proposal has been re-introduced by Assemblyman Charles Baron to the New York State Assembly for 2019.⁶ The bill has not yet been voted on in committee. For the admissions process to change, the bill would have to be approved by the State Senate, the State Assembly and Governor Cuomo.

Concerns with Mayor de Blasio’s Proposal

Mayor de Blasio’s proposal is a quota system. It predetermines how many gifted students are at each school annually without any regard for the actual make-up of the student body. For example, if a middle school has 100 8th graders, every year they will be able to send 7 students to

⁵ <https://www.schools.nyc.gov/about-us/reports/doe-data-at-a-glance>

⁶ https://nyassembly.gov/leg/?default_fld=&leg_video=&bn=A02173&term=2019&Summary=Y&Text=Y

the specialized high schools. No school is the same from year to year – in some years, there may be many academically talented students, in other years, fewer. It defeats the purpose of gifted and talented education to have such a fixed number.

Our greatest concern is the academic preparation of the students. By the city’s own admission, all middle schools are not performing at the same academic level and certainly all students are not performing at the same academic level. To fulfill its mission, Bronx Science and the other specialized high schools must enroll the top academic performers.

New York City’s Independent Budget Office, a nonpartisan watchdog agency whose primary focus is to review city budgets, decided to do a statistical simulation.⁷ They applied Mayor de Blasio’s plan to the previous year’s data to see what students would be admitted. ***They found that at least 500 students would have a 1 or a 2 on the state math exam, the lowest possible scores.*** A Level 1 score is defined as “well below proficient in standards for their grade. They demonstrate limited knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered insufficient for the expectations at this grade.” Similarly, a level 2 score is defined as being “partially proficient in standards for their grade. They demonstrate knowledge, skills, and practices embodied by the New York State P-12 Common Core Learning Standards for Mathematics that are considered partial but insufficient for the expectations at this grade. Students performing at Level 2 are considered on track to meet current New York high school graduation requirements but are not yet proficient on Common Core Learning Standards at this grade.” ***Similarly, at least 400 students would have a 1 or 2 on the state ELA (English Language Arts) exam.*** By the city’s own standards, these students are below grade level. That is unacceptable academic preparation for a specialized high school.

Currently, almost all Bronx Science students receive a 4 on their state math exam and a 3 or 4 on their state ELA exam in middle school, with 4 being the highest possible score. A level 4 is defined as “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 Common Core Learning Standards for Mathematics that are considered more than sufficient for the expectations at this grade.”

Bronx Science would be unable to fulfill its mission of educating gifted and talented students if such a significant percentage of the student body were not performing at the highest academic level. Our goal is to challenge students academically. Bronx Science cannot do that if students are barely meeting academic standards.

Alternatives to Mayor de Blasio’s plan

We believe that the best way to improve the number of Black and Latinx students attending the specialized schools is to improve elementary and middle schools, thus enhancing the academic pipeline for gifted and talented students. Many lawmakers have proposed additional pieces of legislation to help make this happen.

⁷ <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>

A4818/S3878 (Colton and Addabbo): Requires the New York City Department of Education to create more gifted and talented programs and classes in all school districts.⁸

A. 3944 (Hyndman): Requires the New York City Department of Education to study and report on students who would likely pass the Specialized High Schools Admissions Test.⁹

S. 1018 (Persaud): Provides test preparation for students in the seventh grade having scored no higher than a four on either the English language arts or mathematics test intending to apply to take the specialized high school admissions test.¹⁰

As these proposed pieces of legislation indicate, there are many approaches that the city can take to improve the number of Black and Latinx students at the specialized high schools while still maintaining strong academic rigor.

Our Approach

We have been working closely with state lawmakers to help with possible solutions. We are focused on building strong relationships with state representatives. In particular, we have taken guidance from three Bronx Science alumni who also serve as State Senators – Senator Jamaal Bailey '00, Senator John Liu '85 and Senator Toby Stavisky '56. In our discussions, we have focused on making sure lawmakers understand our concerns about Mayor de Blasio's proposal as well as our ideas on how best to fix the gifted and talented pipeline. We have focused on the following initiatives:

- **Identify and Cultivate Talent**
 - Expansion of Gifted and Talented schools; there must be at least one Citywide Gifted and Talented school in each borough.
 - Expand district wide gifted programs; there should be at least one gifted program in every school district
 - Bring back the SP program or similar programs at every middle school and allow the school to identify students with high academic potential.
 - Identify all Black and Latinx students in fifth grade who get a 4 on the state math exam. Work closely with these families to identify and enroll their children in gifted programs.
 - Ensure that there are enough spots in gifted and talented programs, at the borough and district levels, for all students who qualify.
- **Access to the SHSAT**
 - Expansion of the SHSAT offered during the school day at middle schools – this helps eliminate one of the barriers to access and ensures that all students have an opportunity to take the exam.

⁸ https://nyassembly.gov/leg/?default_fld=&leg_video=&bn=A04818&term=2019&Summary=Y&Text=Y

⁹ https://nyassembly.gov/leg/?default_fld=%0D%0A&leg_video=&bn=A03944&term=2019&Summary=Y&Text=Y

¹⁰ https://nyassembly.gov/leg/?default_fld=%0D%0A&leg_video=&bn=s1081&term=2019&Summary=Y&Text=Y

- Students are likely to perform better taking the exam at their own school where they are comfortable. Traveling to an unfamiliar testing site on a weekend can be stressful for many students.
- The DOE ran a pilot program where it offered the SHSAT during the school day at seven middle schools. At those schools, the number of offers it received to a specialized high school increased by 50%.
- Offer a practice SHSAT in 6th grade and 7th grade.
- **Specialized High School Expansion**
 - The specialized high schools were last expanded more than a decade ago. There are clearly many talented students but insufficient seats. Adding more specialized high schools would help meet the demand.
- **Expansion of the DREAM Program**
 - The DREAM program is run by the NYC Department of Education. It identifies talented students and provides them with enrichment opportunities as well as helps prepare them for the SHSAT. Seventh graders meet every Saturday, four days a week over the summer and then when 8th grade begins, they meet on Saturdays as well as during the week. The program is incredibly successful but there are very limited spots.
 - Students are eligible if they meet federal income guidelines and have scored at least 3 on both the state ELA and state math exams.
 - Ensure every student who qualifies is offered a spot.
 - According to the NYC DOE paper “Equity and Excellence,” participants in the DREAM program represented 6 percent of Black and Latinx testers, but 26 percent of SHSAT offers to Black and Latinx testers.¹¹ The DREAM program works but it needs to grow in order to offer more opportunities to students.
- **Additional Transportation Options**
 - The travel time to the specialized high schools is a barrier for many capable students. The DOE should pay for school buses to get to the specialized high schools, reducing both the time for the students and any ancillary costs to their families.

There is much that can be done to address the problem. We would like to see many of these solutions put into place before considering eliminating the SHSAT. Mayor de Blasio’s proposal risks reducing the academic rigor of the specialized high schools, resulting in a lack of service and support to our highest achieving students, who deserve our resources and attention as much as all students do. The Mayor’s proposal would make it impossible for Bronx Science to fulfill its mission of educating gifted and talented students.

We share Mayor de Blasio’s goal of increasing the number of underrepresented students at the specialized high schools. We believe we can have both diversity and academic excellence by implementing our common sense solutions. Mayor de Blasio’s proposal risks reducing the academic rigor of the specialized high schools.

¹¹ <https://www.schools.nyc.gov/docs/default-source/default-document-library/diversity-in-new-york-city-public-schools-english>