

## MEMO

To: MS54 Equity Team

From: Judy Scott-Clayton

Re: Summarizing available data relevant for Equity team efforts – REVISED/EXPANDED

Date: January 7, 2018

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The purpose of this memo is to compile highlights from the data circulated to the Equity Team in November, in an effort to establish a baseline level of knowledge to ground subsequent conversations, as well as to indicate areas where we may be lacking the data we'd like to have.

This memo provides a number of graphs/charts followed by associated “takeaways” which I have tried to keep as factual as possible. This memo is slightly revised and expanded from a preliminary version prepared in December (this version fully supplants the prior version, for those who saw it). The memo has five sections:

1. Booker T. demographics compared to other district 3 schools
2. Academic performance relative to expectations, overall and by subgroup
3. Performance gaps by race/ethnicity
4. Admissions at Booker T. versus other selective schools (*includes new data on District 3 test scores by race*)
5. Open questions and concluding thoughts

For ease of reference, I have also included some of the District 3 screened schools' admissions rubrics at the end of this document.

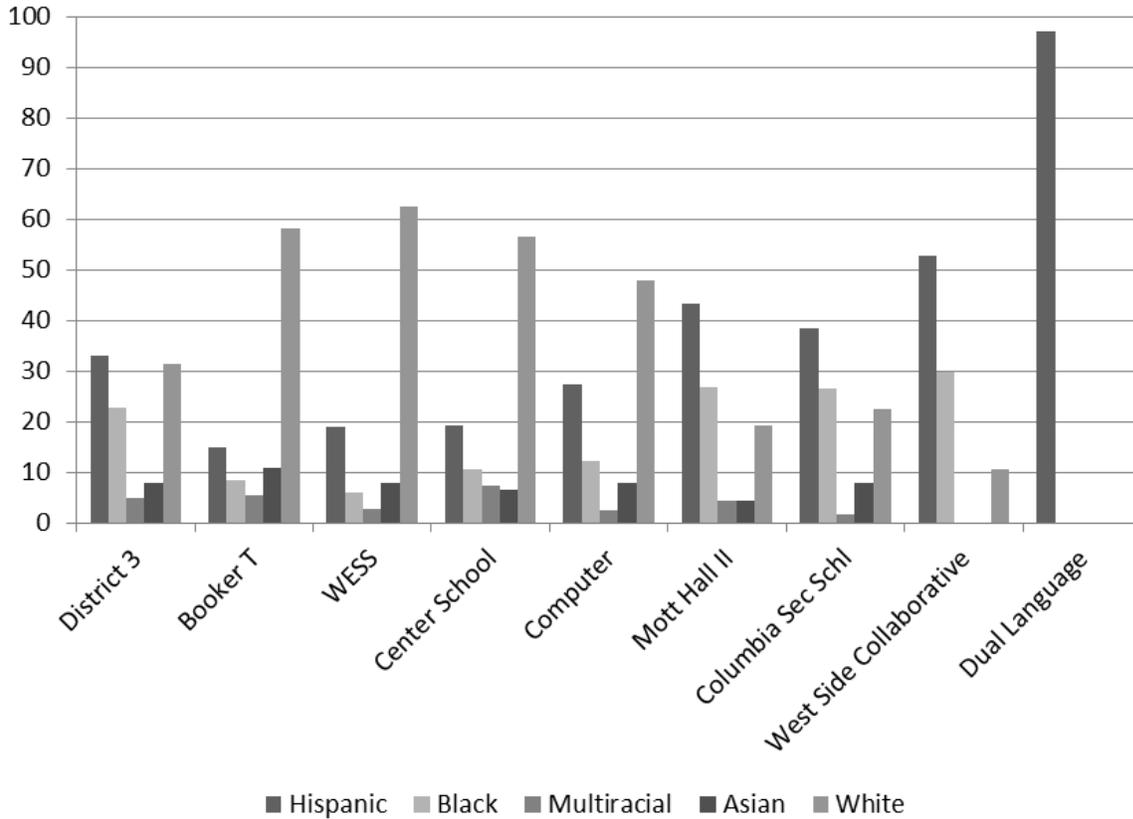
Please note, this document was prepared as a service to the school community; any errors of computation or interpretation are my own. I am happy to answer any questions about how I compiled this. I hope this is useful for our upcoming conversation.

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**I. Booker T. demographics compared to other district 3 schools**

One of the main factors driving the public conversation and concern around selective middle school admissions has been the resulting patterns of demographic segregation. Figures 1 and 2 (see next page) take data from the 2017-18 School Quality Guide to compare the demographic composition of Booker T to District 3 overall and to selected other comparison schools.<sup>1</sup> Figure 1 examines racial/ethnic diversity while Figure 2 examines students in need of additional support (students with economic need, students with disabilities, and English language learners).

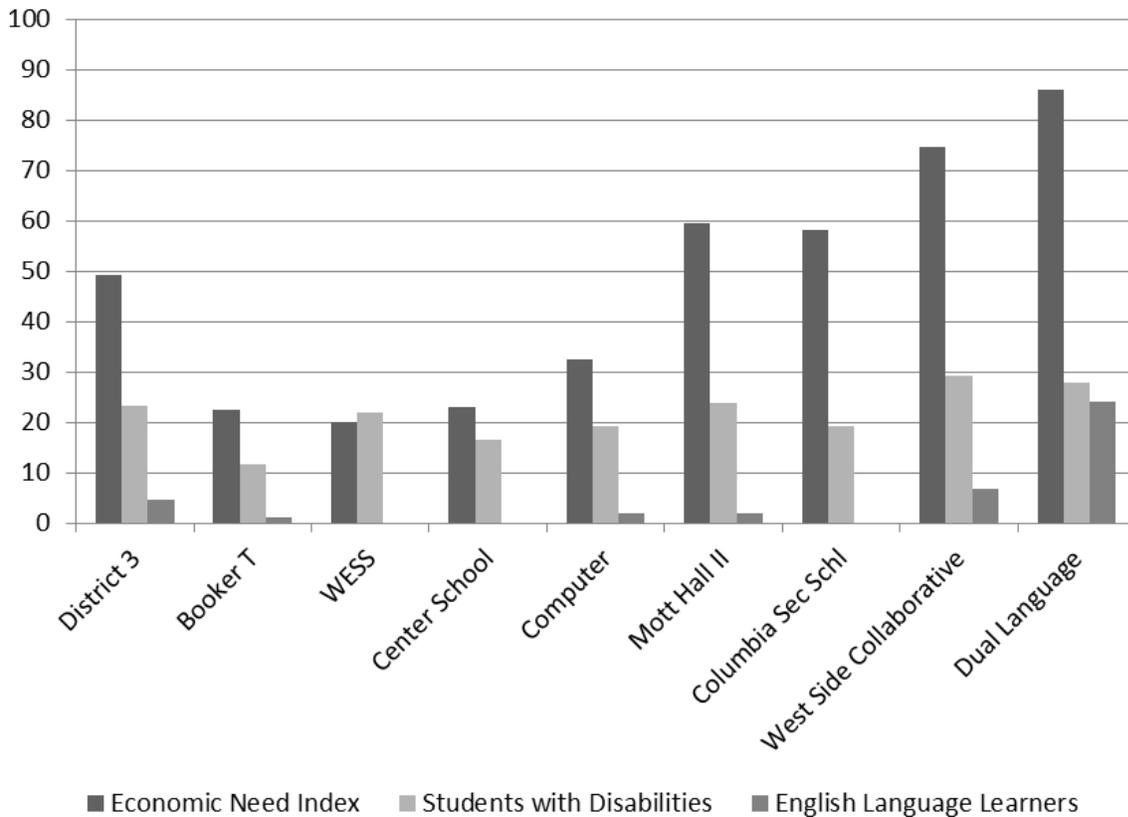
**Figure 1. Racial/ethnic composition of selected schools, 2017-18.**



Source: School-level data is taken from 2017-18 School Quality Guide. District-level information is taken from D3 Demographic Analysis. Data bars follow the same order left-to-right as legend.

<sup>1</sup> Note: Columbia Secondary School is a District 5 school that draws from Districts 3, 5 and 6, so it faces a different applicant pool than purely District 3 schools. I include it here as an example of another academically-selective school that District 3 students may consider alongside Booker T during the middle school application process.

**Figure 2. Students in need of additional supports**



Source: Compiled from 2017-18 School Quality Guide. Data bars follow the same order left-to-right as legend.

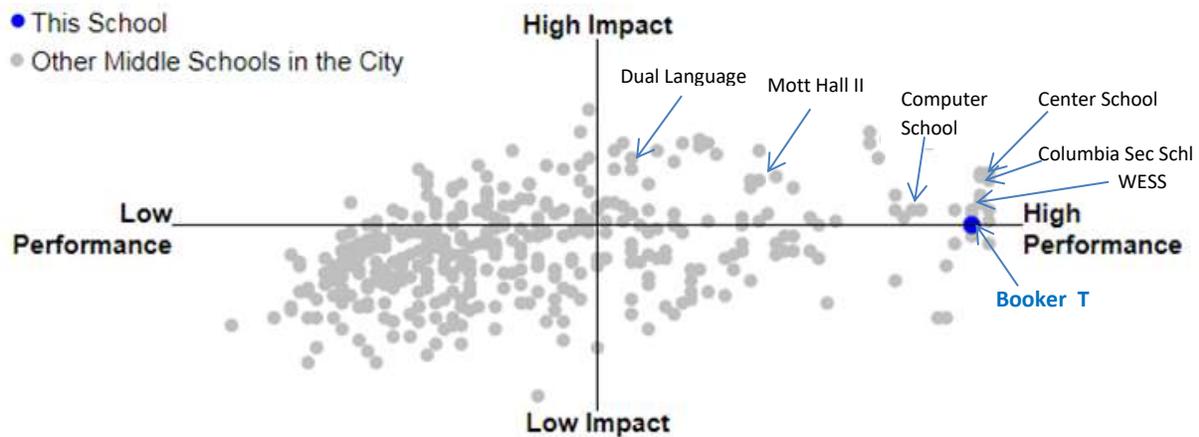
→ **Takeaway:** Booker T’s demographic composition is extremely unrepresentative of District 3 overall and appears skewed even in comparison to other selective schools in the district. For example, Booker T has the lowest percentage of Hispanic students (15%) in this comparison set, less than half the percentage of the overall district (33%). The combined percentage black, Hispanic, or multiracial is the second-lowest (29%, slightly higher than 28% at WESS) of this comparison set, and again is less than half the percentage of the overall district (61%). Only 23% of Booker T students are classified as having economic need, and only 12% are classified as students with disabilities. Both of these percentages are less than half than the District 3 average and are either the lowest or near the lowest of any school in the district. There appear to be at least some academically selective schools with significantly more diverse populations (e.g. Computer School, Mott Hall II, Columbia Secondary School).<sup>2</sup>

<sup>2</sup> Note that Columbia Secondary School also draws from Districts 4, 5, and 6.

## II. Academic Performance Relative to Expectations, Overall and for Subgroups

The charts below (taken directly from the NYC dashboard) plot schools along two dimensions: *Performance* is unadjusted performance on all student achievement metrics while *Impact* measures the school against expected outcomes, adjusted for incoming student factors.

**Figure 3. Performance relative to expectations (based on incoming student factors)**



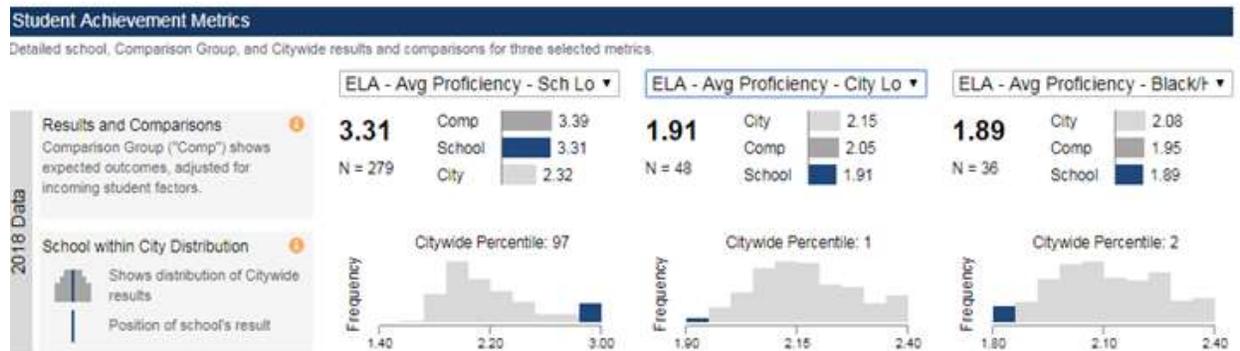
Source: 2017–18 School Performance Dashboard.

→ **Takeaway:** Booker T is an exceptionally high performing school both among District 3 and among the city as a whole; this is clearly a defining characteristic. On the other hand, it is only about average in terms of its “impact,” or how well students perform relative to incoming expectations (note: the chart does *not* indicate a zero impact; it simply indicates that the school’s impact is in the middle of the distribution if we rank schools based on impact).

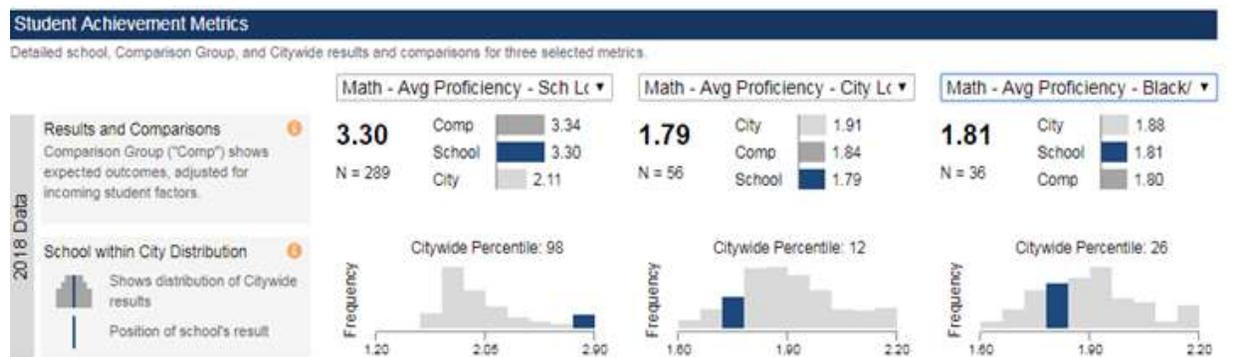
One possible interpretation is that students at Booker T may be performing so near the top of the scale that it is difficult for this metric to pick up an impact; it is quite possible that Booker T would perform better on a different metric that measured performance over a higher range. Still, there are some schools, including WESS, Center, and Columbia Secondary, that are measured as having equal or higher performance, but higher impact than Booker T.

The School Performance Dashboard also enables us to explore how certain subgroups at the school are performing relative to expectation (note: the “comparison group” is a composite of academically & demographically similar students citywide). Below, I examine ELA proficiency of Booker T students for the school’s lowest third of performers (first column), the schools’ students who are in the city’s lowest third (middle column), and the school’s black/Hispanic males who are in the city’s lowest third (far right column). These Booker T students are then compared to similar students and to all students in the relevant category citywide.

**Figure 4. Proficiency for Selected Booker T Student Subgroups and City Comparisons**  
**Panel A. ELA**



**Panel B. Math**



→ **Takeaways:** Students in the lowest third of Booker T’s ELA and Math performance distribution (first column of Figure 4) are doing well at Booker T, relative to the bottom third of students citywide. This is good news. But this is largely due to the fact that Booker T’s bottom third is a higher-scoring group than the bottom third of students citywide; when compared against *academically & demographically similar* students, Booker T’s bottom third performs no better than would be expected (3.31 versus 3.39 in ELA, 3.30 versus 3.34 in Math).

Moving to the second column, the first thing to note is that out of the 279 students in Booker T’s bottom third in ELA (or 289 in bottom third in Math), only 48 in are in the bottom third of the *citywide* ELA distribution (or 56 in Math). The majority of this group are black males (see final column), so the second and third columns are very similar. Students in these subgroups at Booker T actually perform significantly worse than students in the relevant group citywide. But when comparing against *academically & demographically similar* students, Booker T’s students in the bottom third of the citywide distribution perform slightly worse or about as well as would be expected (1.91 versus 2.05 in ELA, 1.79 versus 1.84 in Math).

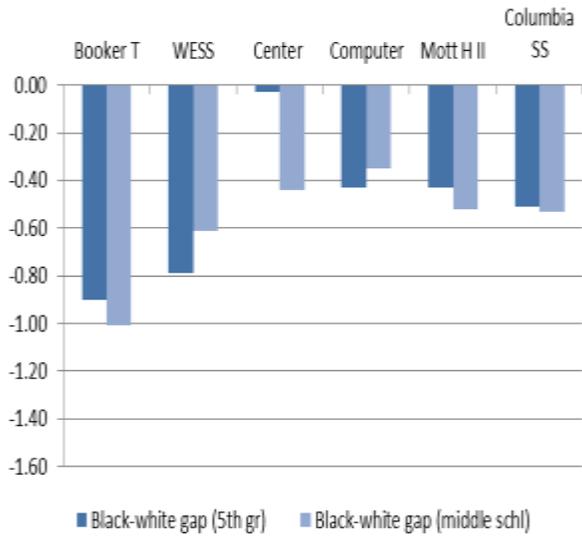
An additional observation to draw from this is the bifurcated nature of Booker T’s student population, even looking within the bottom third of test-scorers. The bottom ~280 students at Booker T are still a relatively high-scoring group, but the ~50 students at Booker T who are in the *citywide* bottom third are lower-scoring than average even among this low-scoring group.

### III. Performance gaps by race

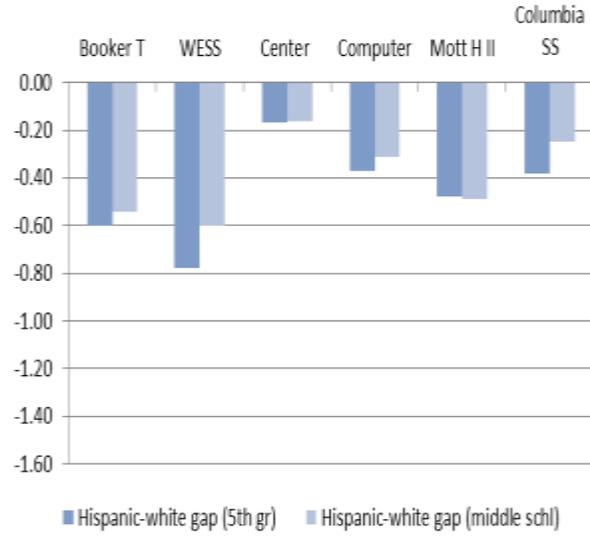
The charts below compile data from the 2017-18 School Quality Guide Online Edition.<sup>3</sup> I took the data on ELA and Math scores by race/ethnicity, for 5<sup>th</sup> grade and middle school test scores, and computed the resulting gaps. So, for example, at Booker T the average 5<sup>th</sup> grade ELA score for White students is 3.87 and for Black students it is 2.97, so the gap is -0.9. Figure 5 provides the resulting Black-White gaps and the Hispanic-White gaps, based on 5<sup>th</sup> grade and middle school scores, for Booker T and selected comparison schools.

**Figure 5. Performance gaps in 5<sup>th</sup> grade (incoming) and middle school test scores, by school**

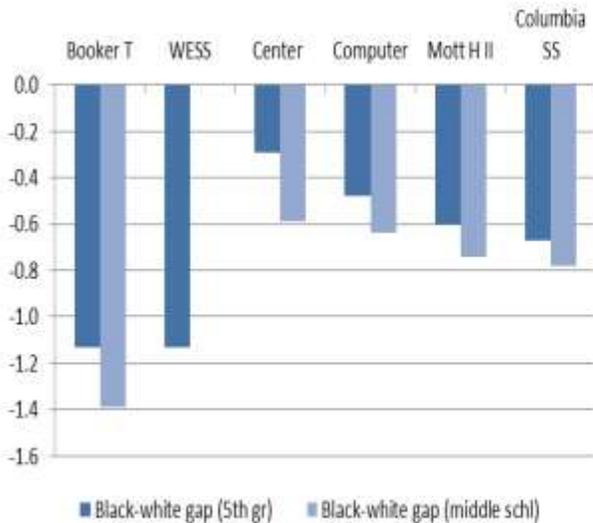
*Panel A. ELA black-white gap*



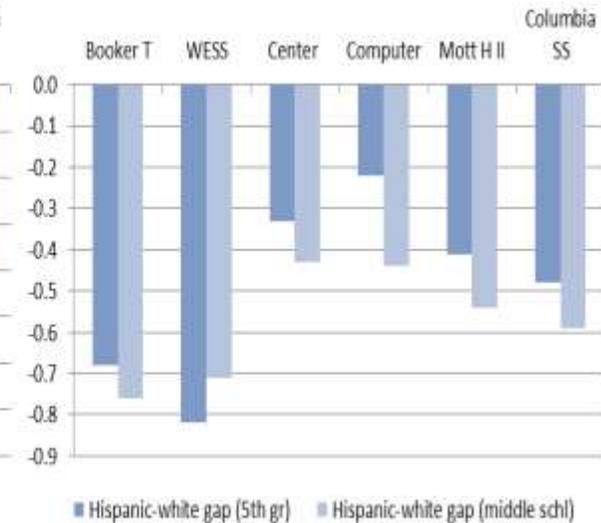
*Panel B. ELA Hispanic-white gap*



*Panel C. Math black-white gap*



*Panel D. Math Hispanic-white gap*



<sup>3</sup> These data are not particularly easy to find. They are under the “Student Achievement Outcomes” tab, scroll down to expand the “Additional Information” section, then select “non-overlapping Race/Ethnicity” data.

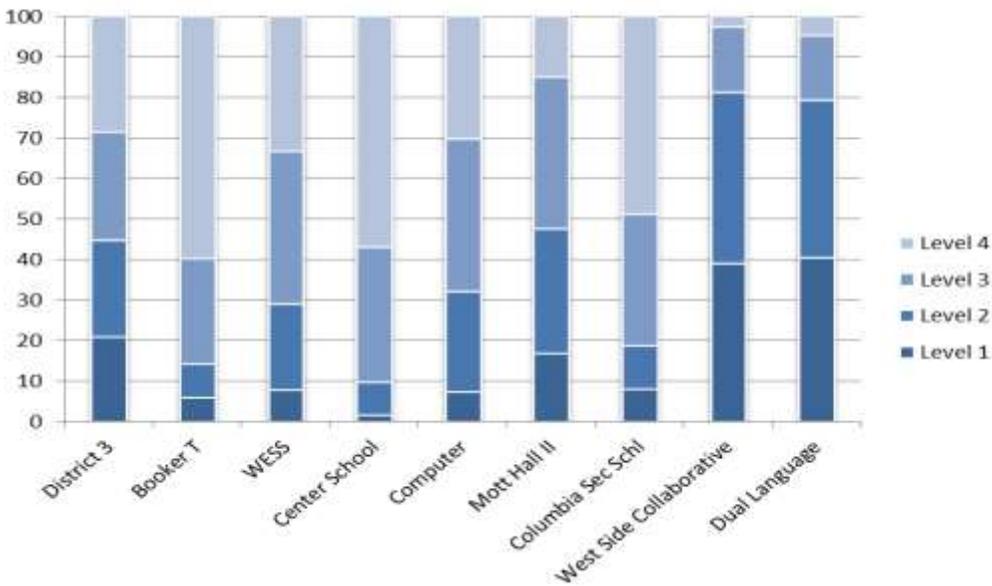
→ **Takeaway:** Performance gaps are hardly unique to Booker T. But the black-white gaps at Booker T in both ELA and Math, and Hispanic-white gaps in Math, are particularly pronounced even when compared against other selective schools in the area. These gaps mostly already exist in 5<sup>th</sup> grade – before students enter Booker T – so this may say more about differences in admissions policies rather than in how gaps evolve after admission. However, the black-white gap particularly in Math seems to grow even larger after admission.

#### IV. Admissions at Booker T. Versus other selective schools

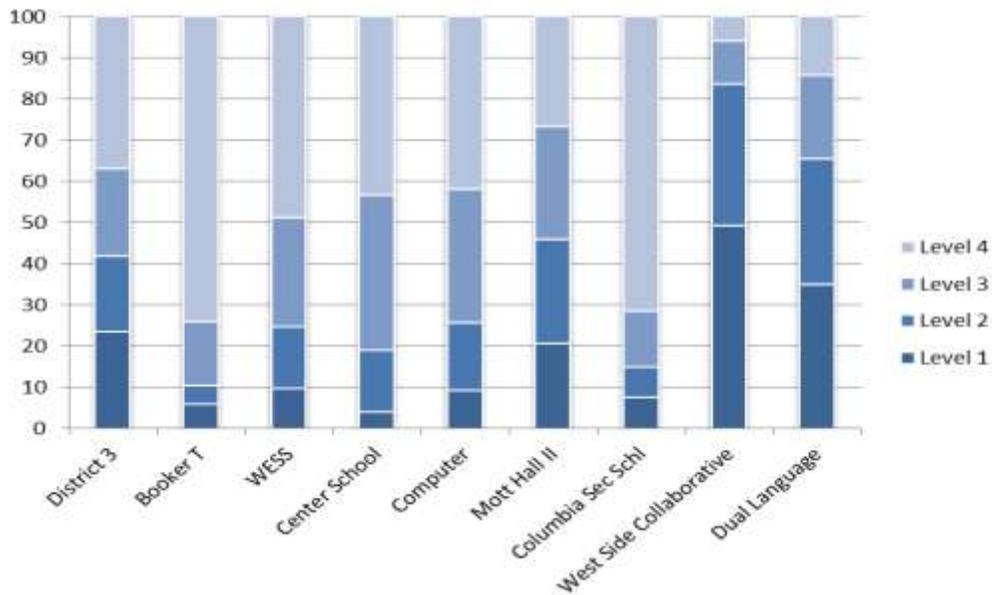
A better understanding of Booker T’s admissions criteria is necessary in order to understand the drivers of some of the patterns shown above. For reference, the current admissions rubric for Booker T is 80% test score based, with half of that coming from the Booker T exam. None of the other selective schools analyzed above place as high a weight on test scores (admissions rubrics for Booker T and selected other schools are provided at the end of this document). This admissions emphasis is reflected in Figure 6 below, which plots the distribution of 5<sup>th</sup> grade test scores among incoming Booker T students (2018) and for selected comparison schools.

**Figure 6. Incoming (5<sup>th</sup> grade) test scores for Booker T and selected other schools**

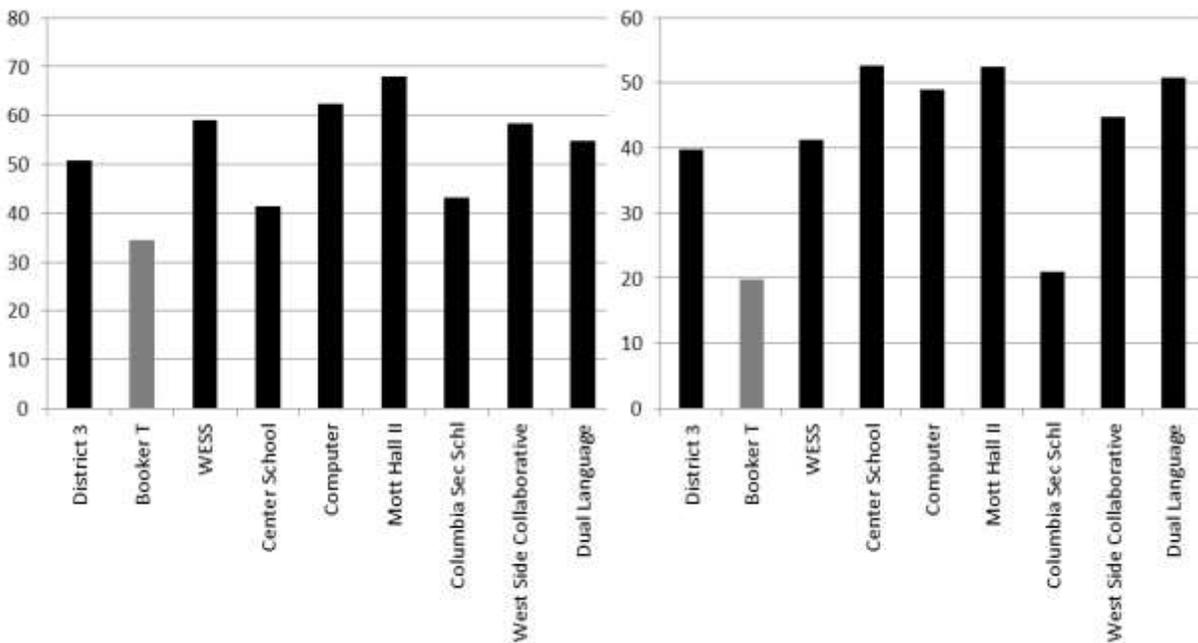
*Panel A. ELA*



**Figure 6 (continued). Incoming (5<sup>th</sup> grade) test scores**  
*Panel B. Math*



**Figure 7. Proportion of mid-scoring students (Levels 2 and 3) by school**  
*Panel A. ELA* *Panel B. Math*

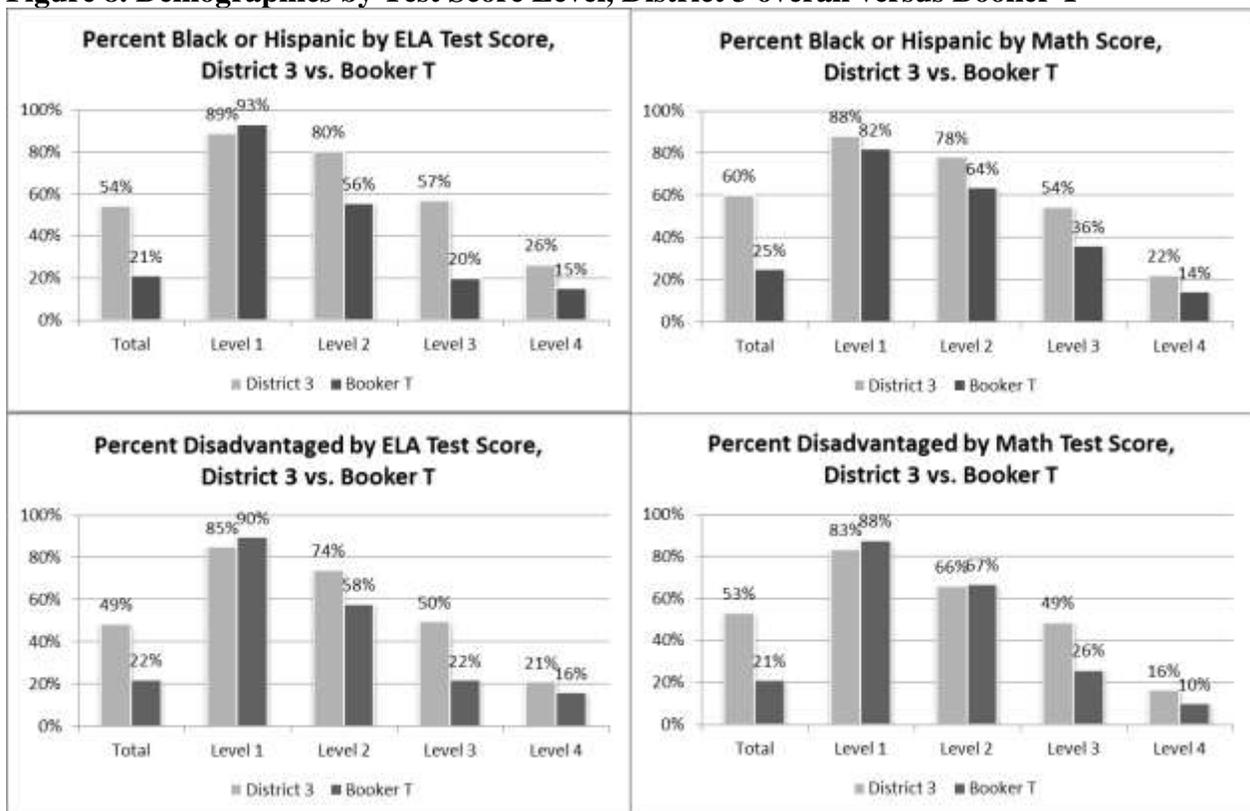


→ **Takeaways:** The charts above indicate that Booker T is the most academically selective overall (with the highest proportion in both ELA and Math of students scoring Level 4, and lowest proportion of students scoring in Levels 1 and 2, with the exception of Center School in ELA). Figure 7 also indicates that Booker T has a “missing middle”: it has a lower proportion of students scoring in the middle two test levels (levels 2 and 3) than any other of the schools analyzed (though Columbia Secondary School comes close in Math).

(\*\*New since December version\*\*) It's clear from the analysis above that Booker T is highly selective and less diverse than the District as a whole. It's also clear that school selectivity has implications for diversity, given underlying achievement gaps by race and income. Still, an unanswered question is to what extent there is room to improve diversity within Booker T's current academically-selective model.

One way to examine this is to look at demographic composition at Booker T versus the District overall, *within* a given test score level. The panels of Figure 8, below, show the percent of students that are black or Hispanic (or economically disadvantaged) within a given test score level. The figures indicate that the racial composition at Booker T is unrepresentative of the district even after conditioning on test scores.<sup>4</sup> For example, district-wide, 26% of Level 4 ELA students and 22% of Level 4 Math students are black or Hispanic, compared to just 15% and 14% respectively at Booker T. The disparity is much more pronounced for students scoring at Level 3.

**Figure 8. Demographics by Test Score Level, District 3 overall versus Booker T**



Source: Author's calculations using data from NYSED 2018 ELA and Math Researcher File, supplemented with data from the School Performance Dashboard Appendix File (due to data suppressions in the researcher file for 6<sup>th</sup>/8<sup>th</sup> grade math by race). Tabulations above include grades 6-8. Note that fewer students are tested in math: Booker T sample sizes are 818 (ELA) and 601 (Math).

<sup>4</sup> Note, of course, that there may be differences in average test scores even among students scoring at the same broad level, so this analysis does not hold test scores completely constant, only the general proficiency level.

In terms of raw numbers, this means that of the 399 black or Hispanic students who scored at Level 4 in ELA in 2018 and who currently attend grades 6-8 in District 3 middle schools, only 87 (22%) are attending Booker T. In contrast, among white or Asian students who scored at Level 4 in ELA, 441 out of 1014 (43%) attend Booker T. The pattern is even more stark among students scoring at Level 3 in ELA: 28% of white/Asian middle schoolers at this level attend Booker T, compared to just 5% of black/Hispanic middle schoolers at this level.

Similarly, among Level 4 scoring students in grades 6-8 in District 3, only 29% of those with economic disadvantage attend Booker T, compared to 41% of those without disadvantage. Among those scoring Level 3, Booker T enrolls only 7% of those who are economically disadvantaged, compared to 24% of Level 3 students without such disadvantage.

#### V. Open questions and concluding thoughts

Booker T is obviously a very high performing school. Yet it does not reflect the diversity of the district, and in many ways seems like an outlier even in comparison with other academically selective schools. Are there ways to expand access to Booker T while still honoring its mission of rigorous academics?

It would be very useful to analyze Booker T admissions elements to determine which components are most important and how they influence the diversity of the school, and how alternative rubric criteria (which could still emphasize academic preparedness) might perform. This is impossible to assess based on the rubric information alone. In addition, what is the role of the other, unscreened admissions process and how do these interact? If Booker T has not already done such an analysis, I think this is one of the highest-priority areas for further study.

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This summary is based on the following sources:

- District 3 Middle School Admissions Rubric Weights – November 2018: <http://www.ps166.org/wp-content/uploads/District-3-Middle-School-Admissions-Rubrics-November-2018-002.pdf>; 2017-2018
- School Quality Guide: [https://tools.nycenet.edu/guide/2018/#dbn=03M054&report\\_type=EMS](https://tools.nycenet.edu/guide/2018/#dbn=03M054&report_type=EMS); 2017-2018
- School Quality Snapshot: <https://tools.nycenet.edu/snapshot/2018/03M054/EMS/#SA>;
- District 3 demographic analysis: [https://docs.wixstatic.com/ugd/a806f4\\_6021da8e119a497aae35063cdd77bf70.pdf](https://docs.wixstatic.com/ugd/a806f4_6021da8e119a497aae35063cdd77bf70.pdf);
- New York State Report card: <https://data.nysed.gov>, Grades 3-8 ELA and Math Researcher File (csv spreadsheet)
- School Performance Dashboard: Booker T Washington Appendix: [https://www.nycenet.edu/OA/SchoolReports/2017-18/Dashboard\\_Appendix\\_2018\\_M054.pdf](https://www.nycenet.edu/OA/SchoolReports/2017-18/Dashboard_Appendix_2018_M054.pdf)

# APPENDIX – ADMISSIONS RUBRICS FOR BOOKER T AND OTHER SCHOOLS

## Booker T. Admissions Policies and Procedures 2018-2019

### **Process**

Tours will be held on select Tuesdays and Thursdays in October and November. Sign up is available for these tours via our website [www.ms54.org](http://www.ms54.org) starting on Friday, October 12<sup>th</sup>, 2018 at 10:00am. Two Open Houses will be held. The first will be on Thursday, October 25<sup>th</sup> from 6:00-7:00pm. The second will be held on Tuesday, November 6<sup>th</sup> from 8-9:00am. No RSVP is necessary for either Open House. TOUR AND/OR OPEN HOUSE ATTENDANCE IS NOT A REQUIREMENT FOR ADMISSION.

We will invite all students who have ranked us to take the Booker T. Test. This assessment will be given mid-late January. Emailed invitations will be sent to families. Letters will be mailed to all applicants without email addresses, and one make-up date will be provided for students who are unable to attend their assigned date.

Our admissions committee will evaluate all of the following and assign points: 4<sup>th</sup> grade report card, Booker T. test, teacher recommendations from the Middle School Choice Application, and NY State ELA/Math combined 4<sup>th</sup> grade scores. Students who have not taken the NY State ELA or Math will be asked to submit alternate 4<sup>th</sup> grade standardized achievement test scores, and these scores will be converted accordingly. Students who do not submit standardized test scores will receive a doubled Booker T. Test score.

Teacher Recommendation is defined as the Work Habits, etc. scores from the final 4<sup>th</sup> grade report card. No further writing from teachers will be requested or considered.

In the event that grades are missing from a student's report card or a student does not have a report card, we will reach out to the elementary school to provide us with the necessary report card information.

Students who do not attend the Booker T. test will be given a point value of zero.

Once points and weights have been calculated, students will receive an overall score, which will be translated into the student's rank for SEMS.

### **Admissions Criteria**

<b>Selection Criteria component</b>	<b>Weight</b>
Booker T. Test	40 %
ELA/MATH	40 %
Report Card	10 %
Teacher Recommendation	10 %
	<b>100%</b>

**03M245 The Computer School  
Admissions Rubric  
2018-19**

Students will be ranked on a points system. Depending on the number of total applicants, priority groupings will be established based on score thresholds. These thresholds will be determined after reviewing the candidate pool. For example, all scores at or above a certain score (e.g., 75) would all receive a ranking of 1, then all scores in the next highest priority grouping (for example, 65-74 points) would receive a ranking of 2, etc. The number of students in each descending pool may vary. Points for each applicant will be determined as follows:

**Sending school info from SEMS: 40 points**

Individual academic achievement: 20 Points

Personal behaviors, academic habits, collaboration: 20 points

**NYS Test scores: 40 points**

Scores will be translated to a 40-point max scale based on scaled score.

**Attendance: 20 points**

Students will be evaluated on a 20-pt scale. An absence will have double the weight of a lateness.

Extenuating circumstances will be considered and scores adjusted when justified.

**Students without complete information in SEMS**

In cases when there is incomplete or missing test scores, or missing or incomplete academic, behavioral or attendance information in SEMS, we will work with students and parents to derive scores via portfolios, in-house assessment, and/or interviews.

**Sibling preferences**

Siblings of current or former students will be given preferred consideration.

**Students with ICT or 12:1 services:**

As per DOE/CSD3 policy, a fixed number of seats are set aside for students receiving either ICT or 12:1 services. These students will receive separate consideration during the admissions process; in other words, they will only be compared to students with IEPs mandating these services, regardless of which priority pool.

**CSD3 Diversity in Admissions Initiative**

25% of seats will be prioritized for those who are designated as eligible for two subgroups based on criteria established by CSD3 and the DOE. Qualifying students will match to these seats according to their ranking relative to others students in their subgroup.

**MOTT HALL II ADMISSIONS RUBRIC for ENTRY SEPTEMBER 2019**

Student Name: \_\_\_\_\_ School: \_\_\_\_\_ Gender: \_\_\_\_\_

Gen Ed \_\_\_\_\_ SETSS \_\_\_\_\_ ICT \_\_\_\_\_ 12:1:1 \_\_\_\_\_

Component	Weighting							Points
NY State Exam ELA Raw Score	60	60	48	36	24	12	0	
		343-416	320-342	309-319	298-308	287-297	<287	
Math Raw Score	60	60	48	36	24	12	0	
		341-397	314-340	304-313	294-303	283-293	<283	
4 <sup>th</sup> Grade Report Card		95-100 A	90-94 3+ MA B+	85-89 3 MT B	80-84 2+ C+	75-79 2 MP C	<75 1 MB D	
ELA	30	30	20	15	10	5	0	
Math	30	30	20	15	10	5	0	
Science	30	30	20	15	10	5	0	
Social Studies	30	30	20	15	10	5	0	
Diagnostic Assessment Reading (Online Assessment)	50	20 >6.0	16 5.0-6.0	12 4.6-4.9	8 4.3-4.5	4 4.0-4.2	0 <4.0	
Learning Preferences Survey (Online Survey)	30	20 91-100	16 85-90	12 81-84	8 75-80	4 50-74	0 <50	
Academic and Personal Behaviors	50	50 -20 All E	40 20	30 18-19 All C	20 15-17	10 10-14 All S	0 <10 <5	
Attendance	20	20 0-2	16 3-5	12 6-8	8 9-10	4 11-12	0 >12	
Punctuality	10	10 0-1	8 2-3	6 4-5	4 6-7	2 8-9	0 >9	
<b>Total</b>	<b>400</b>							



**West End Secondary School**  
Jessica Jenkins, Founding Principal

**Wonder, Compassion, Creativity, Resilience**

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Manhattan, NY 10023  
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[www.westendsecondary.com](http://www.westendsecondary.com)

**Middle School Admissions Criteria**

- Test Scores: 40%
- Grades: 20%
- Work Habits: 20%
- School Attendance (including punctuality): 20%