

IMPACT Data Trends - Equity and Mitigating Implicit Bias

DCPS is committed to becoming an anti-racist organization. To do so, we must be intentional in examining and disrupting the ways that our education system perpetuates systemic racism. In keeping with that commitment, DCPS examined IMPACT data with an anti-racist lens. We are not surprised to see racial gaps persist within IMPACT assessments as we know that systemic racism permeates virtually every institution and system in our society. We cannot truly make progress unless we acknowledge these truths.

Note: The data on race and ethnicity used in this memo are self-reported to HR by DCPS staff at the point of hire. Per federal reporting guidelines, there are not separate fields used for race and ethnicity (for example, Hispanic/Latino teachers are considered an equivalent racial/ethnic group to Black and white teachers, when the reality is much more nuanced). In addition, staff only have a binary choice between male and female when they are prompted to self-report their gender. As such, some of the stories of Hispanic/Latino, multi-racial, and non-binary staff members (amongst others) may be masked in the data as currently available.¹

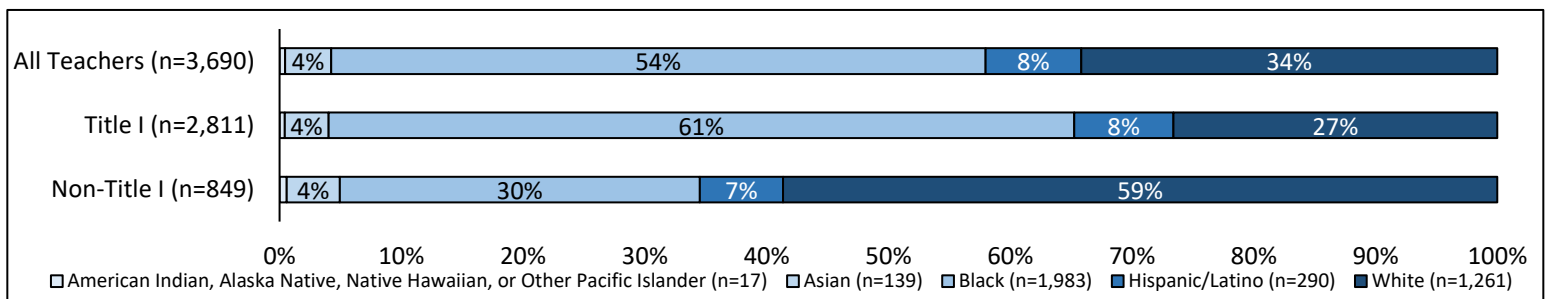
Section 1: Demographic Overview

Key Findings:

- Black teachers, who are 54% of all teachers in DCPS whose race/ethnicity is known or reported, comprise a disproportionately high number of teachers at Title I schools (61%) and a disproportionately low number of teachers at Non-Title I schools (30%). [Figure 1]
- 70% of assessors are Black; over three times more than white assessors (23%). [Figure 2]
- 63% of white teachers are aged between 21 and 35, versus 52% of Hispanic/Latino teachers, 40% of Black teachers and 35% of Asian teachers. [Figure 3]
- The largest two teacher groups by gender and race/ethnicity are Black female teachers (41%) and white female teachers (26%). 75% of teachers in the district are female. [Figure 4]
- The overall share of Hispanic/Latino teachers in DCPS has tripled from 2009-10 to 2020-21. [Figure 5]

Figure 1: What is the distribution of teachers by race/ethnicity across DCPS and between Title I and Non-Title I schools?

In 2018-19, Black teachers comprised a disproportionately high number of teachers, whose race/ethnicity is known or reported, at Title I schools (61%) and a disproportionately low number of teachers at Non-Title I schools (30%).² DCPS is intentional about its focus on recruiting, hiring, and retaining Black educators across the city, particularly in schools with high populations of Black students. The research is clear that teachers who share a similar identity as their students can make a profound additional impact on student achievement.



¹ Throughout this memo, n sizes by teacher and assessor race/ethnicity refer to the total distribution of teachers with known or reported races/ethnicities. Some teachers and assessors do not choose to report data on their race/ethnicity, or these data are missing (7% of all teachers in 2018-19). In addition, except for Figure 1, data in this memo relating to teachers whose race was reported as American Indian, Alaska Native, Native Hawaiian or Other Pacific Islander, are not included due to this group's comparatively small n size.

² Most data in Sections 1 and 2 refer to 2018-19 data, unless otherwise specified. Throughout this memo, the sum of teachers at Title I and Non-Title I schools does not equal 100%. The missing group may be comprised of Program/Itinerant teachers who work across different schools (however, these teachers are included in the total amount).

Figure 2: What is the distribution of assessors by race/ethnicity across DCPS?

In 2018-19, 70% of assessors whose race/ethnicity was reported or known were Black; over three times more than white assessors.

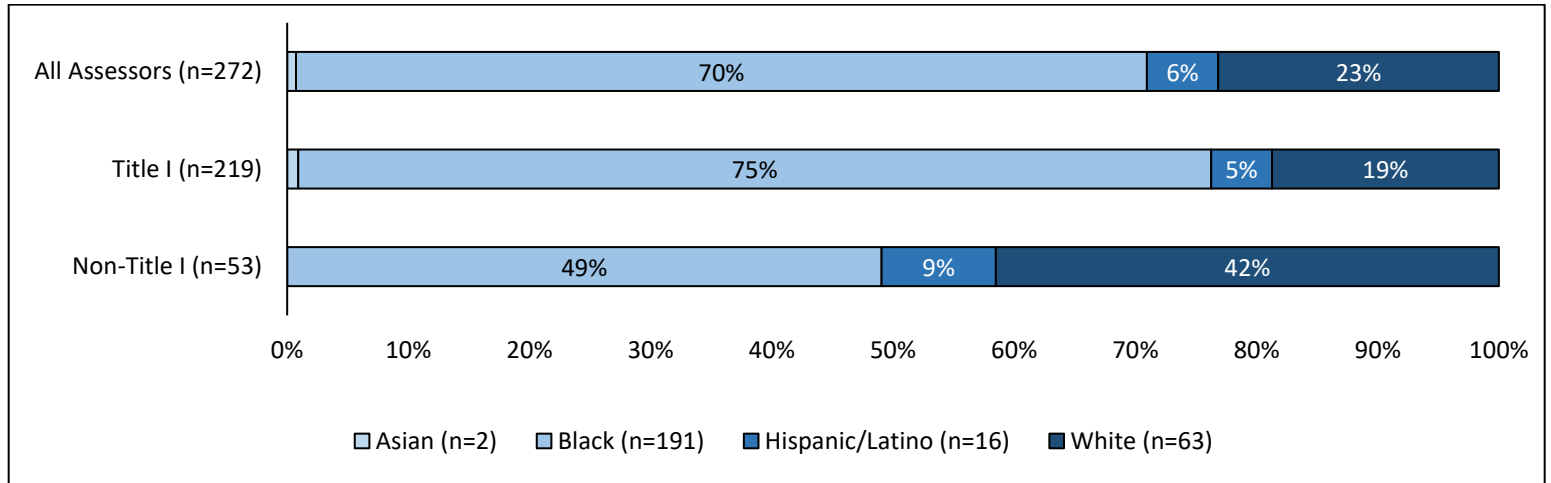


Figure 3: What is the distribution of teachers across DCPS by age and race/ethnicity?

In 2018-19, 63% of white teachers were aged between 21 and 35, versus 52% of Hispanic/Latino teachers, 40% of Black teachers and 35% of Asian teachers. Percentages below are rounded and may not total 100% as a result.

Teacher Age Band	Share of Teacher Population by Age Band and Race/Ethnicity					Number of Teachers in Each Age Band
	Asian	Black	Hispanic/Latino	White	All Teachers	
21-25	6%	4%	12%	9%	6%	244
26-30	19%	17%	19%	29%	21%	788
31-35	9%	19%	21%	24%	21%	764
36-40	18%	15%	14%	13%	15%	541
41-45	13%	15%	13%	6%	12%	444
46-50	15%	11%	9%	5%	10%	340
51-55	8%	7%	6%	4%	6%	221
56-60	6%	6%	3%	4%	5%	189
61-65	4%	4%	2%	2%	3%	112
66+	1%	1%	1%	1%	1%	47
All Teachers	100%	100%	100%	100%	100%	3,690

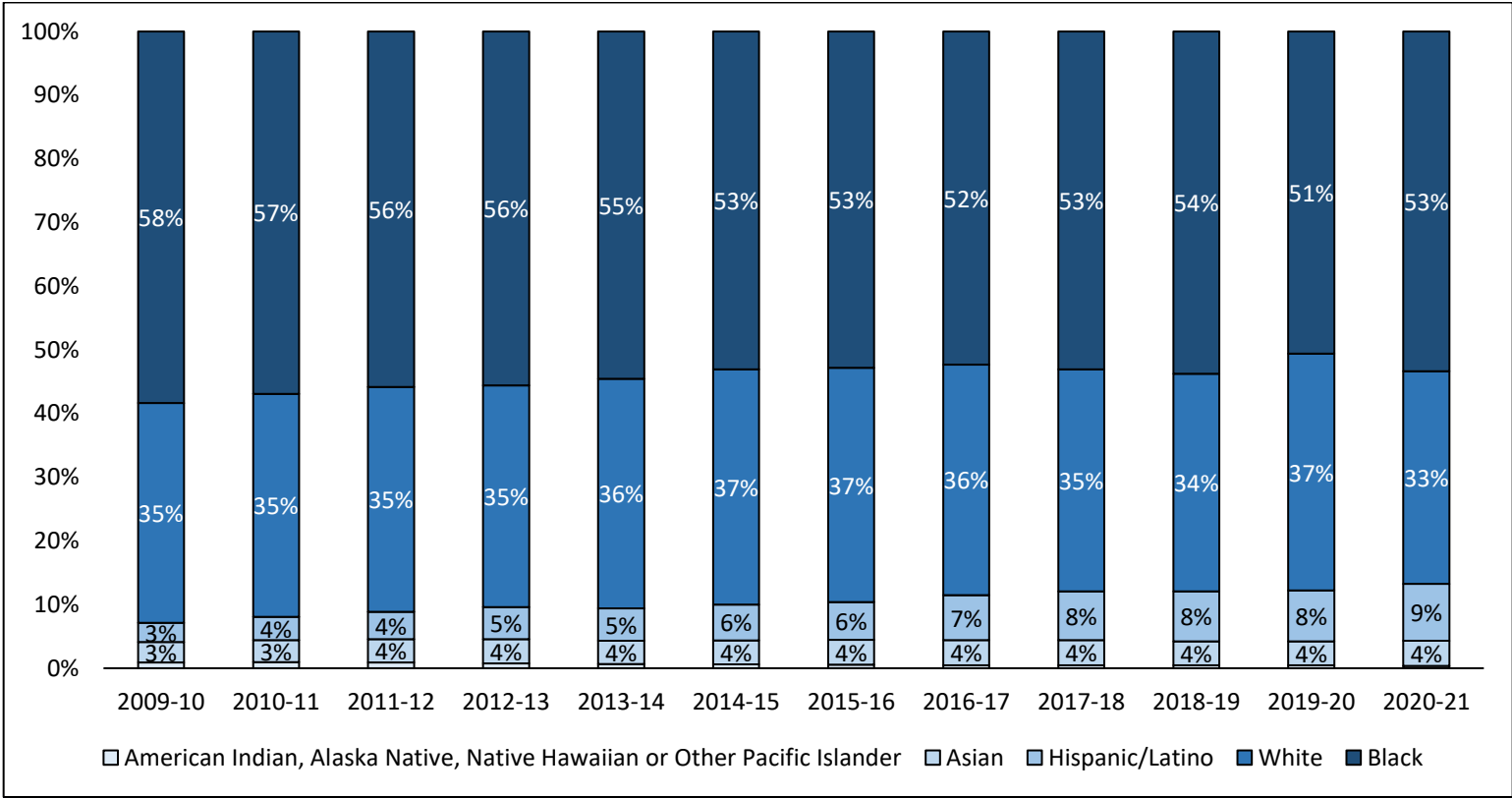
Figure 4: What is the distribution of teachers across DCPS by gender and race/ethnicity?

In 2018-19, the largest two teacher groups by gender and race/ethnicity were Black female teachers (41%) and white female teachers (26%). 75% of teachers in the district were female.

Gender	Teacher Race				
	Asian	Black	Hispanic/Latino	White	All Teachers
Female	3% (n=108)	41% (n=1,499)	6% (n=204)	26% (n=944)	75% (n=2,768)
Male	1% (n=31)	13% (n=484)	2% (n=86)	9% (n=317)	25% (n=922)
Total	4% (n=139)	54% (n=1,983)	8% (n=290)	34% (n=1,261)	100% (n=3,690)

Figure 5: How has the distribution of DCPS teachers changed since the first year of IMPACT (2009-10)?

The share of Black teachers (and to a lesser extent, white teachers) decreased between 2009-10 and 2020-21. During the same time, the percentage share of Hispanic/Latino teachers has tripled.



Section 2: Race/Ethnicity and Equity in IMPACT Results

Key Findings:

- White teachers, on average, receive higher scores and ratings within IMPACT relative to Black and Hispanic/Latino teachers:
 - In 2018-19, white teachers' average IMPACT final score was 17 points higher than Black teachers; 14 points higher than Hispanic/Latino teachers; and 9 points higher than Asian teachers. [Figure 6]
 - White teachers are rated Highly Effective at a higher rate (54%) than the district (43%) or other groups. [Figure 7]
 - White teachers are separated at lower rates (1.5%) than the district average (2.7%) or other groups. [Figure 12]
 - White teachers receive higher scores than other groups on the Essential Practices (EP), Commitment to the School Community (CSC), and Teacher-Assessed Student Achievement Data (TAS) components. Scores for Student Surveys of Practice (SSP) are similar by race. White teachers' Individual Value-Added (IVA) scores are higher than Black teachers' IVA scores on average, and lower than those for Hispanic/Latino and Asian teachers. [Figure 8]
 - Black teachers receive two and a half times as many Core Professionalism (CP) deductions as white teachers, and over twice as many as Hispanic/Latino teachers. [Figure 9]
- Teachers at Non-Title I schools, on average, experience higher IMPACT scores and ratings than teachers at Title I schools. [Figures 10, 11, 12, 13, and 14]
- The differing IMPACT outcomes by race appear to be in part related to differing distributions *across* school poverty, and in part related to differences still experienced *within* school poverty levels. [Figure 10]
- Despite significant variation in the percentage of teachers being rated Highly Effective, performance-based compensation dollars are largely distributed proportionally by race. [Figure 15]
- Highly Effective and Effective Black and Hispanic/Latino teachers are retained at a higher rate (94%) than the district average (93%) or white teachers (92%). [Figure 16]

Figure 6: What is the difference between IMPACT final scores by race/ethnicity?

In 2018-19, white teachers' average IMPACT final score was 17 points higher than Black teachers (.42 standard deviations); 14 points higher than Hispanic/Latino teachers (.36 standard deviations); and 9 points higher than Asian teachers (.23 standard deviations).

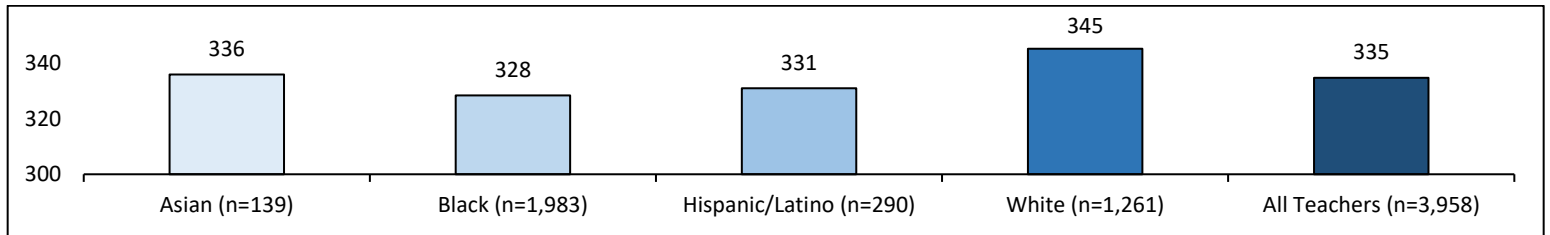


Figure 7: How does the distribution of IMPACT ratings differ by race/ethnicity?

In 2018-19, white teachers were disproportionately rated Highly Effective (54%) compared to the district average (43%) and all other groups.

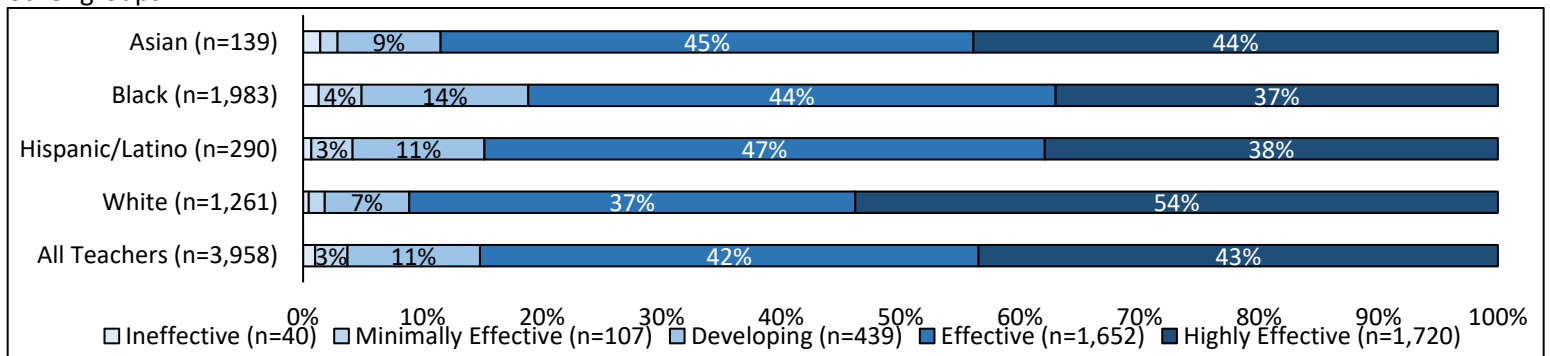


Figure 8: How do teachers' scores on different IMPACT components differ by race/ethnicity?

In 2018-19, white teachers scored above the district average—and above all other groups—on the Essential Practices (EP), Commitment to the School Community (CSC), and Teacher-Assessed Student Achievement Data (TAS) components. However, the disparities between scores for white teachers and other groups is lowest for Student Surveys of Practice (SSP) and Individual Value-Added Student Achievement Data (IVA).

Teacher Race	Average Teacher Scores by IMPACT Component				
	Essential Practices (EP)	Commitment to the School Community (CSC)	Teacher-Assessed Student Achievement Data (TAS)	Student Surveys of Practice (SSP)	Individual Value-Added Student Achievement Data (IVA)
Asian	3.31 (n=139)	3.62 (n=139)	3.46 (n=130)	3.06 (n=66)	3.52 (n=17)
Black	3.26 (n=1,983)	3.52 (n=1,976)	3.39 (n=1,873)	3.21 (n=915)	3.08 (n=302)
Hispanic/Latino	3.25 (n=290)	3.64 (n=287)	3.42 (n=282)	3.21 (n=149)	3.22 (n=38)
White	3.43 (n=1,261)	3.72 (n=1,250)	3.54 (n=1,207)	3.20 (n=587)	3.15 (n=192)
<i>Standard Deviation</i>	<i>0.40</i>	<i>0.39</i>	<i>0.74</i>	<i>0.54</i>	<i>0.57</i>
All Teachers	3.32 (n=3,958)	3.60 (n=3,934)	3.45 (n=3,760)	3.20 (n=1,848)	3.13 (n=594)

Figure 9: How do Core Professionalism (CP) deductions differ by race/ethnicity?

This figure shows the distribution and total number of Cycle CP assessments in 2018-19. Black teachers received two and a half times as many CP deductions (8.5% of all CP assessments) as white teachers (3.5%). Percentages below are rounded and may not total 100% as a result.

Core Professionalism Deduction	Teacher Race/Ethnicity				
	Asian (n=280)	Black (n=3,961)	Hispanic/Latino (n=593)	White (n=2,504)	All Teachers (n=7,911)
Meets Standard	95% (n=266)	92% (n=3,626)	96% (n=568)	97% (n=2,417)	94% (n=7,414)
Slightly Below Standard	3% (n=9)	5% (n=190)	3% (n=17)	2% (n=56)	4% (n=298)
Significantly Below Standard	2% (n=5)	4% (n=145)	1% (n=8)	1% (n=31)	3% (n=199)

Figure 10: How do final scores differ by race/ethnicity and school Title I status?

In 2018-19, white teachers received higher final scores than the district and other groups at Title I schools and Non-Title I schools.

School Title I Status	Teacher Race/Ethnicity				
	Asian	Black	Hispanic/Latino	White	All Teachers
Title I	336 (n=101)	326 (n=1,721)	327 (n=229)	340 (n=748)	331 (n=3,024)
Non-Title I	340 (n=37)	341 (n=251)	346 (n=58)	352 (n=498)	348 (n=899)
Total	336 (n=139)	328 (n=1,983)	331 (n=290)	345 (n=1,261)	335 (n=3,958)

Figure 11: How does the distribution of IMPACT final ratings differ by race/ethnicity between Title I and Non-Title I schools?
 In 2018-19, white teachers had the highest percentage of Highly Effective teachers at both Title I and Non-Title I schools.

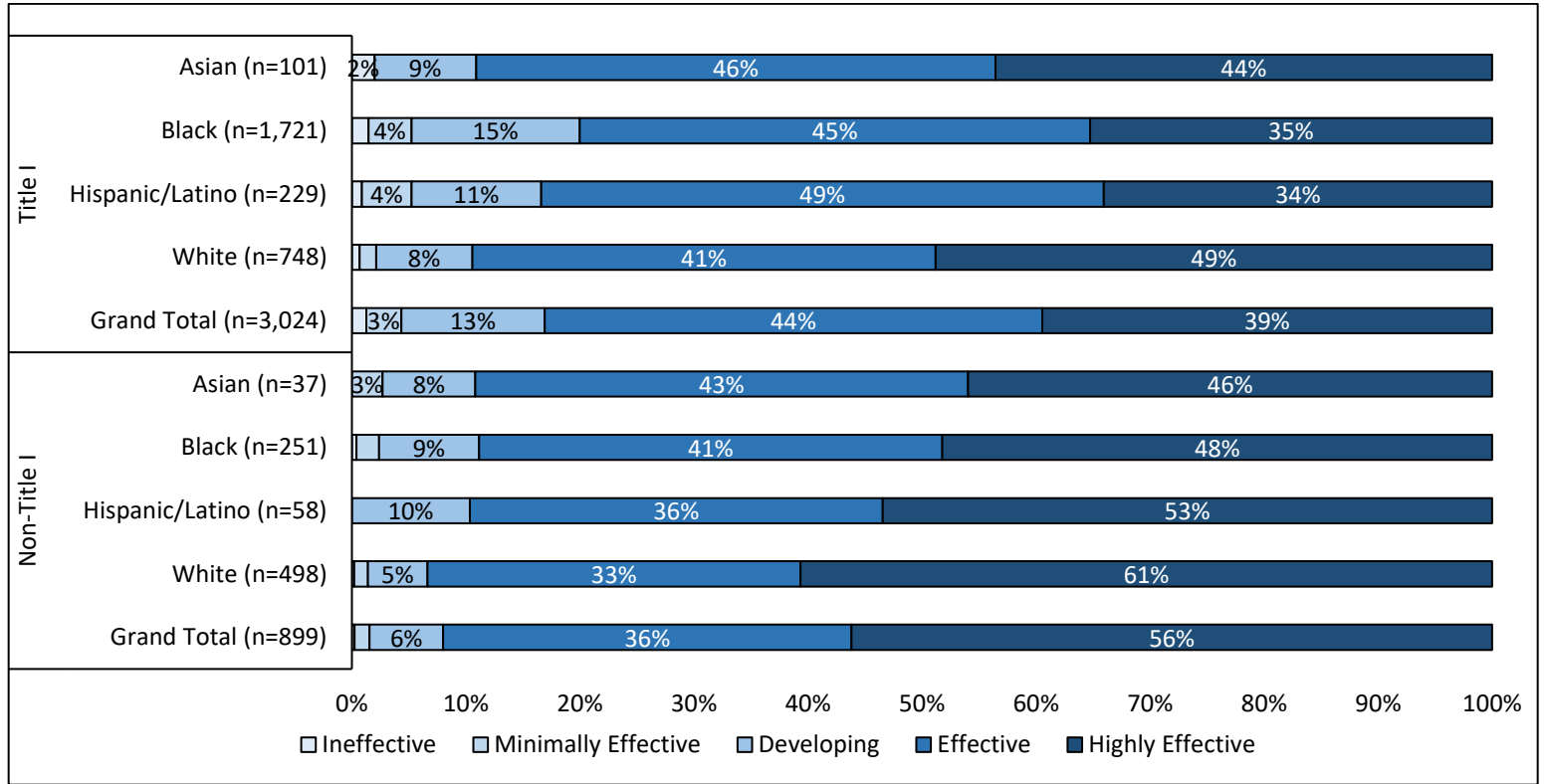


Figure 12: How do teacher separation rates differ by race/ethnicity and between Title I and Non-Title I schools?
 In 2018-19, a disproportionately low percentage of white teachers were separated at both Title I and Non-Title I schools.

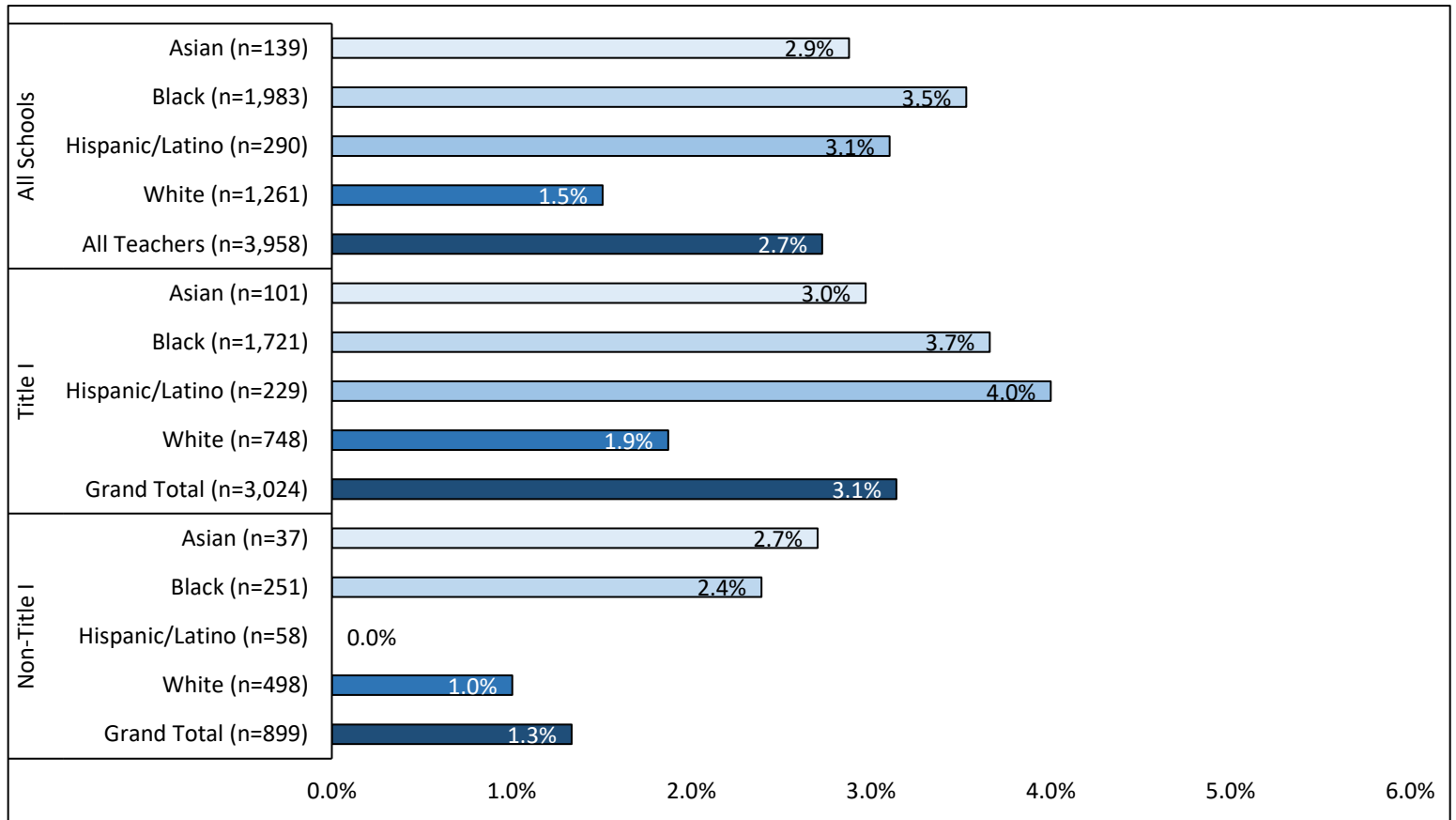


Figure 13: How does the rate of Below Effective teachers who left DCPS voluntarily differ by race/ethnicity?

The chart below shows the percentage of non-separated Below Effective teachers who decided to voluntarily leave DCPS between the 2018-19 and 2019-20. Black and Hispanic/Latino teachers had the lowest rates of attrition during this period.

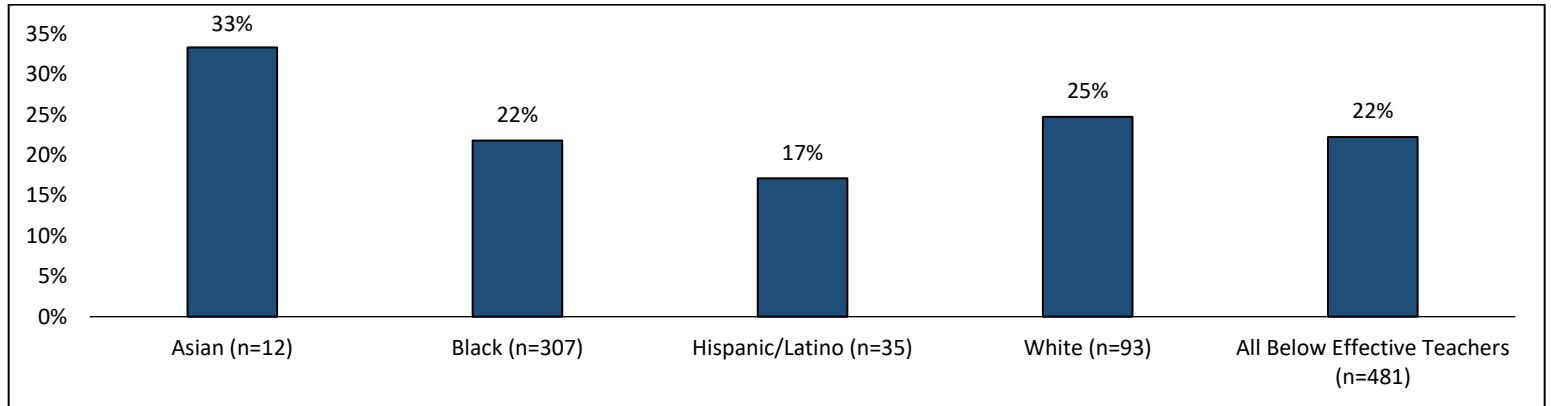


Figure 14: How do teachers' scores on different IMPACT components differ by race/ethnicity and school Title I status?

In 2018-19, teachers at Non-Title I schools received higher scores than those at Title I schools on the EP, CSC, and TAS components. On the SSP and IVA components, teachers at Title I schools received higher scores than those at Non-Title I schools. Both IVA and SSP components are normed measures that take students' characteristics and school composition into account.

School Title I Status	Average Teacher Scores by IMPACT Component				
	Essential Practices (EP)	Commitment to the School Community (CSC)	Teacher-Assessed Student Achievement Data (TAS)	Student Surveys of Practice (SSP)	Individual Value-Added Student Achievement Data (IVA)
Title I	3.27 (n=3,024)	3.56 (n=3,024)	3.41 (n=2,869)	3.24 (n=1,387)	3.14 (n=448)
Non-Title I	3.49 (n=899)	3.75 (n=899)	3.57 (n=862)	3.09 (n=461)	3.10 (n=146)
Standard Deviation	0.40	0.39	0.74	0.54	0.57
All Teachers	3.32 (n=3,958)	3.60 (n=3,934)	3.45 (n=3,760)	3.20 (n=1,848)	3.13 (n=594)

Figure 15: What is the distribution of IMPACTplus dollars by race/ethnicity?

Between 2016-17 and 2018-19, Black teachers received 55% of IMPACTplus bonus payments despite being 54% of the teaching population (whose race/ethnicity is known or reported) and being rated Highly Effective at a lower rate (37%).

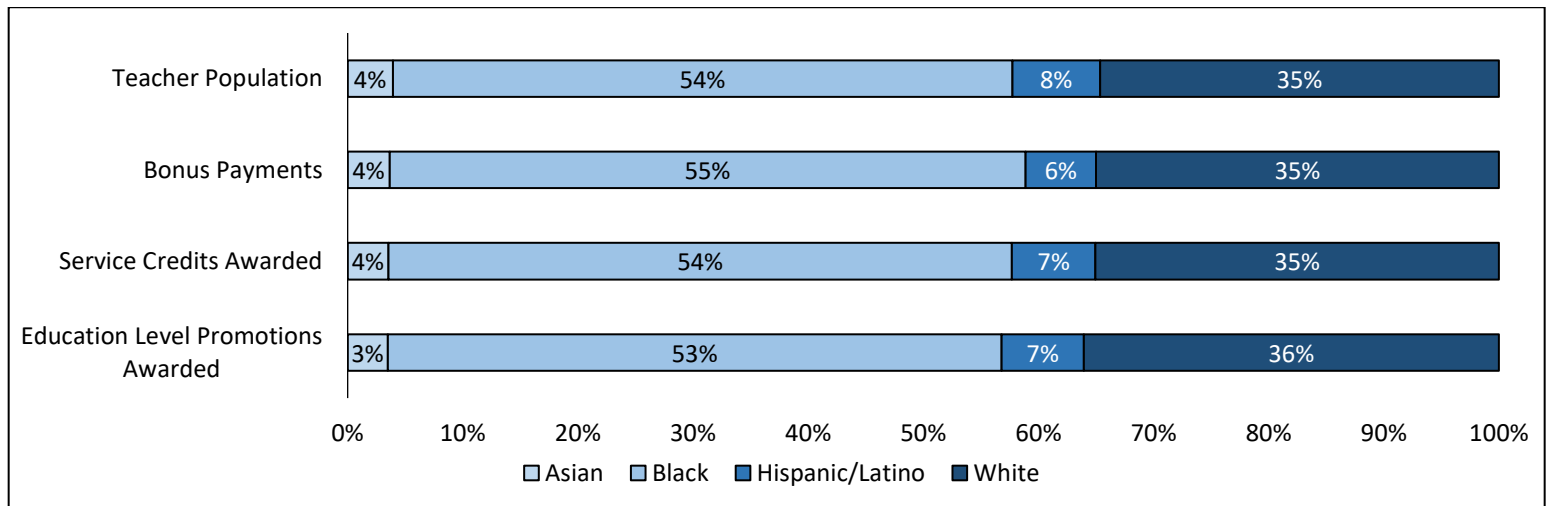


Figure 16: How does teacher retention differ by race/ethnicity?

Between 2018-19 and 2019-20, Highly Effective and Effective Black and Hispanic/Latino teachers were retained in the district at a higher rate (94%) than the district average (93%) and white teachers (92%).

Teacher Race/Ethnicity	Cohort 1 – District Retention – 2017-18 to 2018-19		Cohort 2 – District Retention – 2018-19 to 2019-20	
	Highly Effective and Effective Teachers	All Teachers	Highly Effective and Effective Teachers	All Teachers
Asian	91% (n=111)	87% (n=124)	89% (n=110)	84% (n=118)
Black	95% (n=1,443)	90% (n=1,720)	94% (n=1,505)	88% (n=1,745)
Hispanic/Latino	95% (n=204)	91% (n=247)	94% (n=231)	90% (n=260)
White	92% (n=1,031)	89% (n=1,118)	92% (n=1,057)	89% (n=1,127)
DCPS Average	94% (n=3,006)	90% (n=3,450)	93% (n=3,130)	88% (n=3,504)

Figure 17: How do IMPACT final scores change when teachers move between Title I and Non-Title I schools?

Between 2016-17 and 2019-20, teachers who move from a Title I school to a Non-Title I school saw their IMPACT score, on average, increase by 12 points (or .20 standard deviations) and decrease by 4 points (or 0.10 standard deviations).³

Average IMPACT Final Scores: Differences Shown by Teacher Movement Between Different School Title I Status			
Teacher Movement Between Years by School Title I Status		Title I to Non-Title I	Non-Title I to Title I
Cohort 1: From 2016-17 to 2017-18	2016-17	330 (n=72)	317 (n=13)
	2017-18	347	312
	<i>Difference</i>	17	-6
Cohort 2: From 2017-18 to 2018-19	2017-18	324 (n=31)	332 (n=19)
	2018-19	330	332
	<i>Difference</i>	6	0
Cohort 3: From 2018-19 to 2019-20	2018-19	330 (n=35)	331 (n=31)
	2019-20	344	325
	<i>Difference</i>	14	-6
Average Difference		12	-4

³ Differences in Figure 17 reflect differences between averages by year, in their un-rounded forms. Therefore, the difference shown may differ slightly from how the averages appear in the table.

Section 3: Race/Ethnicity and Equity in Classroom Observations

For a refresher on the Essential Practices (EP), [click here](#).

Regression analysis was used in Figures 24 to 28 to examine EP observation scores across both 2017-18 and 2018-19. A similar analysis was also completed with Commitment to School Community (CSC) assessment data across 2017-18 and 2018-19, and with 2012-13 to 2015-16 Teaching and Learning Framework (TLF) assessment data; the observation rubric used by DCPS prior to Essential Practices (both those completed by school administrators and by central office-based Master Educators). Regression results tables and a brief methodology can be found in the appendix. If you have any additional questions, you may reach out to the IMPACT Team and we can provide further details.

Key Findings:

- When school-level differences and other teacher characteristics are held constant, white teachers remain associated with higher EP scores: a .07 difference between white teachers and Black teachers and a .14 difference between white teachers and Hispanic/Latino teachers. A .10 difference would be equivalent to getting scored one level higher on a single Essential Practices element; the standard deviation for EP assessment scores is 0.46. [Figure 24]
- The race of the assessor matters, although seemingly not as much as the race of the teacher:
 - Assessors of all races are associated with higher EP scores for white teachers. Whether the assessor is Black or white, white teachers score .08 higher than Black teachers. When both groups have Hispanic/Latino assessors, white teachers score .18 higher than Black teachers.⁴ [Figure 24]
 - Teachers with assessors of the same race/ethnicity are associated with .02 lower EP scores than teachers with assessors of a different race. [Figure 24]
 - Teachers with white or Hispanic/Latino assessors are associated with .04 lower EP scores than those with a Black assessor. [Figure 24]
- Similar score differences by race are seen in SY12-13 through SY15-16 within the Teaching and Learning Framework (TLF), the observation rubric that pre-dated the Essential Practices; those differences seemed to exist at similar rates for both school leader assessor and Master Educator assessors. This changes in SY15-16 when the Master Educator difference between scores for white teachers and Black teachers decreased from .06 in SY12-13 through SY14-15 to not being statistically significant at all in SY15-16. Master Educators went through a multi-session anti-bias training going into SY15-16. [Figure 27]
- The variation seen in EP scores by race vary depending on each EP element. For instance, there is no statistical difference for *EP 1.A. Supportive Community* between white teachers and Black teachers, while white teachers are associated with a lower score for *EP 1.B Student Engagement* by .02. For all other EP elements, there is a .07 to .11 score increase associated with white teachers relative to Black teachers. [Figure 28]
- Similarly, the difference in EP scores between Title I and Non-Title I schools varies by element, with the differences in *EP 1.A-Supportive Community* and *EP 1.B Student Engagement* being the smallest (.12 and .09, respectively), and *EP 2-Rigorous Content* being the largest (.31). [Figure 21]
- Beyond race and school Title I status, there are also other notable differences within EP scores:
 - Female teachers on average receive EP scores .13 higher than male teachers. [Figure 22]
 - Black and Hispanic/Latino male teachers are the lowest rated race-gender combination, and the differences between the average EP scores of female teachers of the same race is greater than for white or Asian males. [Figure 22]
 - Teachers in their 30s are associated with EP scores that are .04 higher than those in their 40s, .05 higher than those in their 20s, and .13 higher than those older than 50. [Figure 24]
- White teachers are associated with Commitment to School Community (CSC) scores that are .14 higher than Black teachers; twice that seen for EP scores (.07). [Figure 28]

⁴ A previous version of this memo said “Assessors of all races are associated with higher EP scores for white teachers, with Black and Hispanic/Latino assessors being associated with a bigger difference between white teachers and Black teachers (.08 and .12) than white assessors (.04). [Figure 24]”. This bullet has been updated to better clarify the data shown in Figure 24.

Figure 18: How does the distribution of Essential Practices (EP) scores differ by race/ethnicity?

This figure shows the distribution of Cycle EP assessment scores by teacher race/ethnicity combined across 2017-18 and 2018-19. White teachers receive a disproportionately high number of EP observation scores in the Highly Effective range (3.50 to 4.00) compared to other groups.

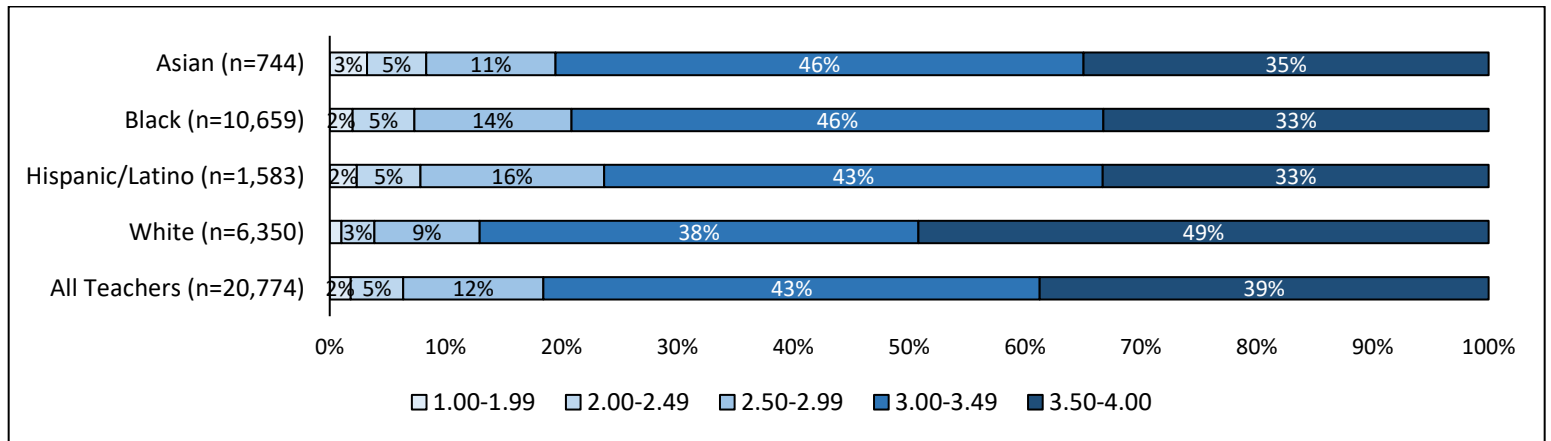


Figure 19: How do EP scores differ by teacher and assessor race/ethnicity?

This figure shows the average score and number of EP assessment scores by unique teacher/assessor race combination, combined across 2017-18 and 2018-19. White teachers, on average, receive higher EP scores than teachers of other races/ethnicities: .16 higher than Black teachers and .18 higher than Hispanic/Latino teachers.

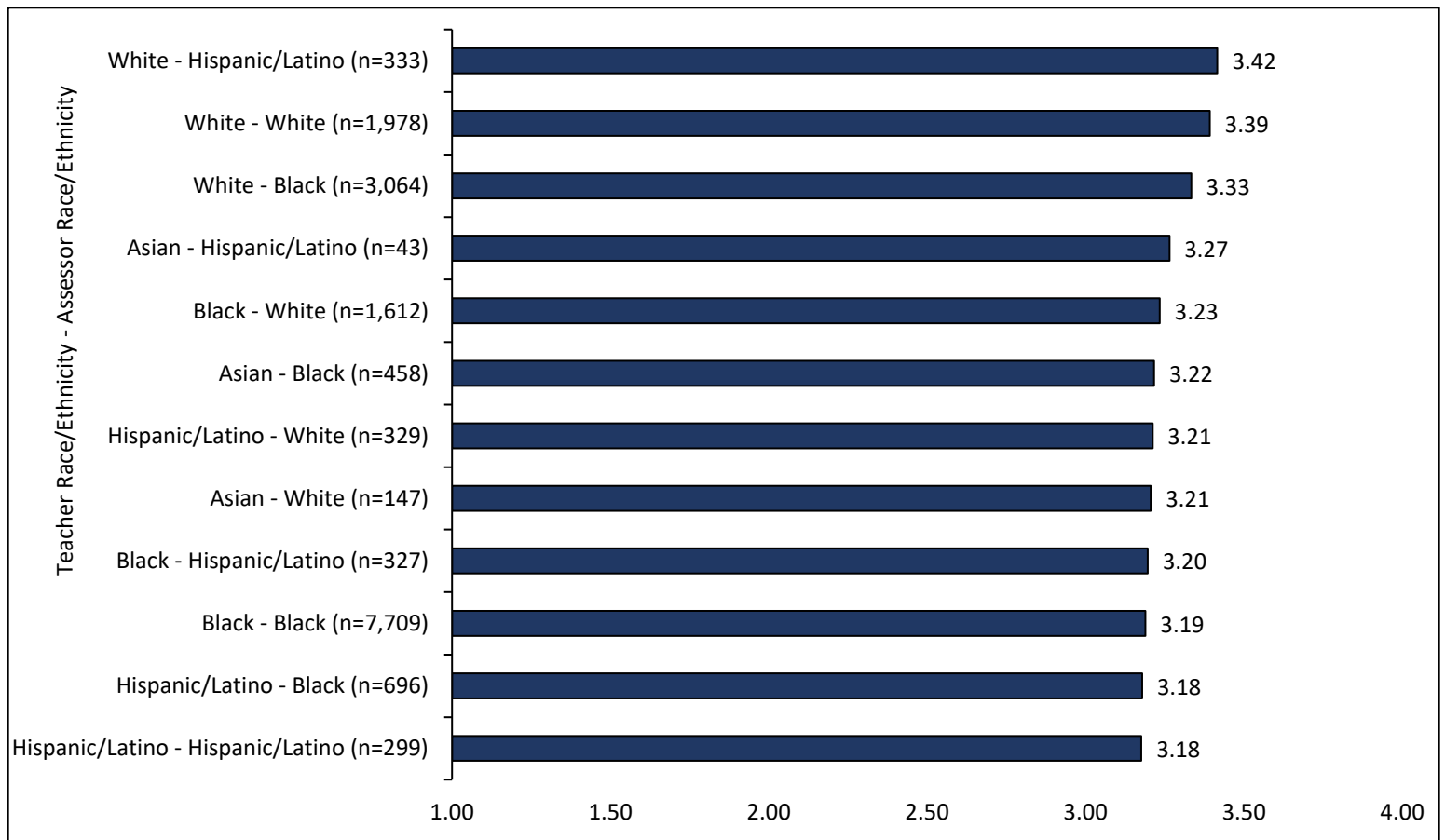


Figure 20: How do EP scores change when teachers move between Title I and Non-Title I schools?

Teachers who move between Title I and Non-Title I schools (and vice versa) see larger movement in their EP scores than their final scores (see Figure 17). Those who move from a Title I school to a Non-Title I school see their EP scores increase by 0.20 (or .38 standard deviations). Similarly, when a teacher moves from a Non-Title I school to a Title I school, their EP scores decrease by .07 (or 0.18 standard deviations).⁵

Average Essential Practices Scores: Differences Shown by Teacher Movement Between Different School Title I Status			
Teacher Movement Between Years by School Title I Status		Title I to Non-Title I	Non-Title I to Title I
Cohort 1: From 2016-17 to 2017-18	2016-17	3.27 (n=72)	3.08 (n=13)
	2017-18	3.51	3.12
	<i>Difference</i>	<i>0.24</i>	<i>0.03</i>
Cohort 2: From 2017-18 to 2018-19	2017-18	3.14 (n=31)	3.34 (n=19)
	2018-19	3.29	3.21
	<i>Difference</i>	<i>0.14</i>	<i>-0.13</i>
Cohort 3: From 2018-19 to 2019-20	2018-19	3.20 (n=35)	3.30 (n=31)
	2019-20	3.42	3.20
	<i>Difference</i>	<i>0.22</i>	<i>-0.10</i>
Average Difference		0.20	-0.07

Figure 21: How do EP scores differ by EP element between Title I and Non-Title I schools?

Across both 2017-18 and 2018-19, teachers at Title I schools received EP scores .22 lower than teachers at Non-Title I schools. The biggest difference was for EP 2: *Challenge students with rigorous content* (.31) and the smallest differences was for EP 1: *Cultivate a responsive learning community, 1.B Student Engagement* (.09).

Average Essential Practices Assessment Scores by Element and School Title I Status, 2017-18 and 2018-19					
Total (n=20,774)		School Title I Status			All Schools
		Title I (n=16,374)	Non-Title I (n=4,248)	<i>Difference</i>	
Essential Practices, Overall		3.20	3.43	<i>0.22</i>	3.25
EP 1: Cultivate a responsive learning community	1.A Supportive Community	3.50	3.62	<i>0.12</i>	3.52
	1.B Student Engagement	3.44	3.53	<i>0.09</i>	3.46
EP 2: Challenge students with rigorous content	2.A Rigorous Content	3.11	3.41	<i>0.31</i>	3.17
EP 3: Lead a well-planned, purposeful learning experience	3.A Skillful Design	3.25	3.50	<i>0.24</i>	3.30
	3.B Skillful Facilitation	3.21	3.42	<i>0.21</i>	3.26
EP 4: Maximize student ownership of learning	4.A Cognitive Work	3.15	3.43	<i>0.28</i>	3.21
	4.B Higher-Level Understanding	2.93	3.20	<i>0.27</i>	2.99
EP 5: Respond to evidence of student learning	5.A Evidence of Learning	3.18	3.44	<i>0.26</i>	3.24
	5.B Supports and Extensions	3.17	3.32	<i>0.15</i>	3.20

⁵ Differences in Figure 20 reflect differences between averages by year, in their un-rounded forms. Therefore, the difference shown may differ slightly from how the averages appear in the table.

Figure 22: How do EP scores differ by teacher race/ethnicity and gender?

Across 2017-18 and 2018-19, female teachers received higher EP scores than male teachers (by .13). White female teachers receive EP scores .14 higher than Black female teachers and white male teachers receive scores .19 higher than Black male teachers.

Teacher Race/ethnicity	Teacher Gender	
	Female	Male
Asian	3.23 (n=593)	3.14 (n=151)
Black	3.24 (n=7,906)	3.10 (n=2,753)
Hispanic/Latino	3.25 (n=1,088)	3.04 (n=495)
White	3.38 (n=4,717)	3.29 (n=1,633)
Total	3.29 (n=15,382)	3.16 (n=5,392)

Figure 23: How do EP scores differ by teacher race/ethnicity and between Title I and Non-Title I schools?

Across 2017-18 and 2018-19, Black and white teachers at Title I schools received EP scores .18 lower than teachers of the same race/ethnicity at Non-Title I schools. However, the difference between the average scores for white and Black teachers was .11 when holding school Title I status constant, for both Title I and non-Title I schools.

School Title I Status	Teacher Race/Ethnicity				
	Asian	Black	Hispanic/Latino	White	All
Title I	3.17 (n=558)	3.18 (n=9,399)	3.14 (n=1,265)	3.29 (n=4,004)	3.20 (n=16,374)
Non-Title I	3.37 (n=181)	3.36 (n=1,215)	3.35 (n=300)	3.47 (n=2,280)	3.43 (n=4,248)
Total	3.21 (n=744)	3.20 (n=10,659)	3.18 (n=1,583)	3.36 (n=6,350)	3.25 (n=20,774)

Data Appendix

Table of Contents

- Figure 24: Regression Analysis Results: Essential Practices (EP) Observations by Race/Ethnicity, 2017-18 and 2018-19
- Figure 25: Regression Analysis Results: Essential Practices (EP) Cycle Scores by Element and Race/Ethnicity, 2017-18 and 2018-19
- Figure 26a and 26b: Regression Analysis Results: Teaching and Learning Framework (TLF) Observations by Race/Ethnicity, 2012-13 to 2015-16
- Figure 27: Regression Analysis Results: Variation in Teaching and Learning Framework (TLF) Scores by Assessment Year and Assessor Type, 2012-13 to 2015-16
- Figure 28: Regression Analysis Results: Variation in Commitment to the School Community (CSC) Scores by Element, 2017-18 and 2018-19

Figures 24 through 28: Regression Analysis Results

The IMPACT Team completed an independent regression analysis to examine Essential Practices (EP) observation scores across 2017-18 and 2018-19 in order to determine whether, if we hold multiple other factors constant, race/ethnicity still matters when it comes to variation in EP scores.

A similar analysis was completed with 2017-18 and 2018-19 Commitment to School Community (CSC) assessment data and 2012-13 to 2015-16 Teaching and Learning Framework (TLF) assessment data; the observation rubric used by DCPS prior to Essential Practices. TLF observations were completed either by school administrators, or by central office-based Master Educators.

Alongside data on EP scores and race/ethnicity, the following characteristics were held constant:

- **Teacher characteristics** (the year the observation took place in, gender, age band, teacher type⁶)
- **Race/ethnicity characteristics** (including teacher race/ethnicity, assessor race/ethnicity, and whether the assessor's race/ethnicity was different or not from that of the teacher). In addition, in the EP analysis, we also looked at unique teacher/assessor race relationships.
- **School-Level characteristics:** An individual variable for each school was used and tries to control for any variation (known or unknown) that might be caused by all unique school-level differences (these results are not shown but are included in the analysis).

In Figures 24 to 28, the number in each cell calls out the potential difference in score associated with each variable. To aid with interpretation, and because this analysis examines multiple moving parts, each set of variables also makes use of a reference group to compare against. Green cells indicate a potential positive relationship with variation in EP scores; red cells indicate a negative relationship. *For example, Figure 24 shows us that male teachers are associated with an EP score that is 0.10 lower on average than female teachers (the comparison group).* Data on race/ethnicity were incorporated in two separate ways: looking at teacher and assessor race/ethnicity separately and looking at unique teacher/assessor race relationships.

Only statistically significant effects are shown in the regression tables. A blank cell indicates a result that was not statistically significant unless it is otherwise called out as such. Not all results of each regression are shown (for example, 'unknown' or 'not reported' categories were included in the analysis, but not shown below). In other cases, some results are not shown because of small n sizes (for example, teacher/assessor race relationships with Asian assessors).

⁶ Teacher type was the only variable included in EP and CSC analysis that was not included in the TLF analysis.

Figure 24: Regression Analysis Results: Essential Practices Observations by Race/Ethnicity, 2017-18 and 2018-19

Essential Practices (EP) 2017-18 and 2018-19 - (n=20,774)		Essential Practices (EP) 2017-18 and 2018-19 - (n=20,774)	
Teacher Characteristics		Unique Teacher/Assessor Race Relationship	
Comparison group	Variation in Cycle EP Scores on 1-4 scale	Comparison group	Variation in Cycle EP Scores on 1-4 scale
Year of assessment - 2017-18		Black Teachers with Black Assessors	
2018-19	0.04	Asian-Black	Not Statistically Significant
Gender - Female teachers		Asian-White	-0.10
Male	-0.10	Black-Hispanic/Latino	-0.06
Teacher Age Band - 30s		Black-White	-0.04
20s	-0.05	Hispanic/Latino-Black	Not Statistically Significant
40s	-0.04	Hispanic/Latino-Hispanic/Latino	-0.13
50 +	-0.13	Hispanic/Latino-White	-0.08
Teacher Type - Core Teachers		White-Black	0.08
Inner Core	-0.02	White-Hispanic/Latino	0.12
ECE	0.04	White-White	0.04
ELL/ESL	Not Statistically Significant		
SPED	Not Statistically Significant		
Other	Not Statistically Significant		
Race			
Teachers with Assessors of a Different Race			
Same Race	-0.02		
Race/Ethnicity - Black Teachers			
Asian	Not Statistically Significant		
Hispanic/Latino	-0.07		
White	0.07		
Race/Ethnicity - Black Assessors			
Hispanic/Latino	-0.04		
White	-0.04		

Figure 25: Regression Analysis Results: Essential Practices Cycle Scores by Element, 2017-18 and 2018-19

Variation in Essential Practices Cycle Scores by Element										
2017-18 and 2018-19 - (n=20,774)										
	Essential Practices, overall, 2017-18 and 2018-19	EP 1: Cultivate a responsive learning community		EP 2: Challenge students with rigorous content	EP 3: Lead a well-planned, purposeful learning experience		EP 4: Maximize student ownership of learning		EP 5: Respond to evidence of student learning	
		1.A Supportive Community	1.B Student Engagement	2.A Rigorous Content	3.A Skillful Design	3.B Skillful Facilitation	4.A Cognitive Work	4.B Higher-Level Understanding	5.A Evidence of Learning	5.B Supports and Extensions
Teacher Characteristics										
Comparison group	Variation in Cycle EP Scores on 1-4 scale									
Year of Assessment - 2017-18										
2018-19	0.04	0.06	0.04		0.04	0.05	0.06	0.05	0.03	0.04
Teacher Age Band - 30s										
20s	-0.05	-0.05	-0.06	-0.05	-0.05	-0.04	-0.06	-0.05	-0.06	-0.06
40s	-0.04	-0.03	-0.03	-0.03	-0.06	-0.05	-0.07	-0.03	-0.03	-0.04
50+	-0.13	-0.11	-0.13	-0.09	-0.18	-0.15	-0.15	-0.11	-0.11	-0.14
Gender - Female Teachers-										
Male	-0.10	-0.07	-0.10	-0.07	-0.13	-0.12	-0.10	-0.11	-0.13	-0.11
Teacher Type - Core Teachers										
Inner Core	-0.02	-0.08					-0.05			
ECE	0.04	0.10	0.07			0.05	0.03		0.05	0.05
ELL/ESL		0.04	0.11			0.05				0.05
SPED		0.04	0.09	-0.07	-0.06	0.05	-0.08			0.12
Other			0.05	-0.05						
Race										
Teachers with Assessors of a Different Race										
Same Race	-0.02				-0.03	-0.05		-0.03		-0.03
Race/Ethnicity - Black Teachers										
Asian		-0.09	-0.12	0.06		-0.08				
Hispanic/Latino	-0.07	-0.08	-0.13		-0.05	-0.08	-0.11	-0.08	-0.05	-0.05
White	0.07		-0.02	0.09	0.11	0.06	0.07	0.07	0.09	0.11
Race/Ethnicity - Black Assessors										
Hispanic/Latino	-0.04		-0.07	-0.09				-0.05		
White	-0.04	-0.04	-0.09		-0.05		-0.07	-0.06		

Figure 26a and 26b: Regression Analysis Results: Teaching and Learning Framework (TLF) Observations by Race/Ethnicity, 2012-13 to 2015-16

Figure 26a

Teaching and Learning Framework (TLF) –Assessed by School Administrators	
2012-12 to 2015-16 (n=26,382)	
Teacher Characteristics	
Comparison group	Variation in Cycle TLF Scores on 1-4 scale
Evaluations taking place in 2012-13	
2013-14	Not Statistically Significant
2014-15	Not Statistically Significant
2015-16	Not Statistically Significant
Gender - Female teachers	
Male	Not Statistically Significant
Teacher Age Band - 30s	
20s	-0.02
40s	-0.03
50+	-0.12
Race	
Teachers with Assessors of a Different Race	
Same Race	0.02
Race/Ethnicity - Black Teachers	
Asian	Not Statistically Significant
Hispanic/Latino	-0.07
White	0.07
Race/Ethnicity - Black Assessors	
Hispanic/Latino	0.05
White	Not Statistically Significant
Unique Teacher/Assessor Race Relationship	
Black Teachers with Black Assessors	
Asian-Black	Not Statistically Significant
Asian-White	Not Statistically Significant
Black-Hispanic/Latino	Not Statistically Significant
Black-White	Not Statistically Significant
Hispanic/Latino-Black	Not Statistically Significant
Hispanic/Latino-Hispanic/Latino	-0.11
Hispanic/Latino-White	-0.11
White-Black	0.05
White-Hispanic/Latino	0.07
White-White	0.06

Figure 26b

Teaching and Learning Framework (TLF) –Assessed by Master Educators	
2012-12 to 2015-16 (n=22,936)	
Teacher Characteristics	
Comparison group	Variation in Cycle TLF Scores on 1-4 scale
Evaluations taking place in 2012-13	
2013-14	Not Statistically Significant
2014-15	-0.05
2015-16	Not Statistically Significant
Gender - Female teachers	
Male	Not Statistically Significant
Teacher Age Band - 30s	
20s	-0.03
40s	-0.06
50+	-0.16
Race	
Teachers with Assessors of a Different Race	
Same Race	0.02
Race/Ethnicity - Black Teachers	
Asian	Not Statistically Significant
Hispanic/Latino	-0.04
White	0.05
Race/Ethnicity - Black Assessors	
White	Not Statistically Significant
Unique Teacher/Assessor Race Relationship	
Black Teachers with Black Assessors	
Asian-Black	Not Statistically Significant
Asian-White	Not Statistically Significant
Black-White	Not Statistically Significant
Hispanic/Latino-Black	-0.11
Hispanic/Latino-White	Not Statistically Significant
White-Black	0.04
White-White	0.07

Figure 27: Regression Analysis Results: Variation in Teaching and Learning Framework (TLF) Scores by Assessment Year and Assessor Type, 2012-13 to 2015-16

Teaching and Learning Framework (TLF) - 2012-13 to 2015-16								
n size	6,170	5,635	6,381	5,748	6,625	5,523	7,153	5,981
Comparison group	Variation in Cycle TLF Scores on 1-4 scale							
	2012-13		2013-14		2014-15		2015-16	
	Administrator	Master Educator	Administrator	Master Educator	Administrator	Master Educator	Administrator	Master Educator
Teacher Characteristics								
Gender - Female teachers								
Male	-0.10	-0.08	-0.09	-0.11	-0.09	-0.09	-0.13	-0.09
Teacher Age Band - 30s								
20s						-0.05		
40s		-0.05	-0.06			-0.05		-0.07
50+	-0.12	-0.16	-0.15	-0.16	-0.08	-0.14	-0.10	-0.17
Race								
Teachers with Assessors of a Different Race								
Same Race			0.05					
Race/Ethnicity - Black Teachers								
Asian								
Hispanic/Latino			-0.09	-0.11			-0.06	-0.08
White	0.07	0.06	0.05	0.07	0.06	0.06	0.09	
Race/Ethnicity - Black Assessors								
Hispanic/Latino		<i>Small n size</i>		<i>Small n size</i>		<i>Small n size</i>		<i>Small n size</i>
White	-0.05	-0.07						0.13

Figure 28: Regression Analysis Results: Variation in Commitment to School Community (CSC) Cycle Scores by Element, 2017-18 and 2018-19

Regression Results Showing Variation in Commitment to School Community (CSC) Cycle Scores by Element						
2017-18 and 2018-19 - (n=15,520)						
Comparison group	Commitment to the School Community (CSC) Overall	CSC 1: Support of the Local School Initiatives	CSC 2: Support Special Education and ELL Programs	CSC 3: High Expectations	CSC 4: Partnership with Families	CSC 5: Instructional Collaboration
Teacher Characteristics						
Variation in Cycle EP Scores on 1-4 scale						
Year of assessment - 2017-18						
2018-19	0.03	0.03	0.04		0.05	
Gender - Female teachers						
Male	-0.13	-0.12	-0.12	-0.12	-0.17	-0.12
Teacher Age Band - 30s						
20s	-0.04	-0.03	-0.05	-0.03	-0.03	-0.05
40s	-0.02		-0.05			-0.04
50 +	-0.04	-0.04	-0.04	-0.03		-0.09
Race						
Teachers with Assessors of a Different Race						
Same Race						
Race/Ethnicity - Black Teachers						
Asian	0.04					0.06
Hispanic/Latino	0.04		0.08		0.10	
White	0.14	0.13	0.15	0.11	0.14	0.15
Race/Ethnicity - Black Assessors						
Hispanic/Latino						
White			0.04			-0.03
Teacher Type - Core Teachers						
Inner Core	-0.03	0.03	-0.06		-0.06	-0.03
ECE	0.03	0.03			0.12	
ELL/ESL	0.06	0.05	0.19		0.06	
SPED	0.04	-0.02	0.30	-0.04		-0.05
Other	-0.05	-0.06	-0.10			-0.08

If you are interested in obtaining additional data, information, or seeing other analyses, please contact the IMPACT team at IMPACT.dcps@K12.dc.gov.