

Issue Brief: Anchor Goal 3

Demographic Characteristics of Teachers in the School District of Philadelphia, 2018-19

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Research Questions

Research has shown that students can benefit academically when their teachers are of the same race, ethnicity, and/or gender and that teachers of color are underrepresented in schools across the United States.¹ In light of the evidence supporting these claims, this brief looks at gender and race/ethnicity data for active, full-time teachers in District elementary, middle, and high schools, as well as Career and Technical (CTE) high schools and Alternative schools, as of October 31, 2018. This brief also uses student race/ethnicity and gender data based on the October 1, 2018 snapshot to compare the racial/ethnic and gender make-up of students and teachers across District schools.²

The specific research questions include:

- 1. What are the racial/ethnic and gender demographic characteristics of SDP teachers?
- 2. Are these demographic characteristics consistent across school types?
- 3. How do teacher demographic characteristics compare to student characteristics?

Findings

We used teacher data from the October 31, 2018 Employee Snapshot, which included teachers from 221 schools.³ All active full-time teachers (including special education teachers) were included in the sample (n=8,132).⁴ As of October 31, 2018, across the 221 District schools, almost three quarters (74%, n=6,045) of teachers were female. About half of all teachers (49%, n=3,995) were White females, and 19% (n=1,546) were Black/African American females. Of the male teachers

¹ Boser, U. (2011). *Teacher diversity matters: A state-by-state analysis of teachers of color*. Washington DC: Center for American Progress.

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Egalite, A. J., Kisida, B. and Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review*, 45, 44-52.

Hansen, M. and Quintero, D. (2018, August 15). Teachers in the US are even more segregated than students. *Brown Center Chalkboard*, Retrieved from <u>https://www.brookings.edu/blog/brown-center-chalkboard/2018/08/15/teachers-in-the-us-are-even-more-segregated-than-students/</u>

² The October 31 snapshot is aligned with the business practice by the Office of Talent, while the October 1 snapshot follows the business practice from the Data Performance Office.

³ The teacher sample does not include charter schools, contracted Alternative schools, or Pre-K centers, but it does include District-operated Alternative schools.

⁴ Only teachers with an employee status code of 1 were included.

(n=2,087), about one in five (19%, n=1,562) was White, and about one in 20 (5%, n=367) was Black/African American. Less than one percent of teachers in SDP schools as of October 31, 2018 were Asian males or Hispanic/Latino males (Table 1).

	Fem	ale	Ma	ale	Total	
Race/Ethnicity	# of all teachers	% of all teachers	# of all teachers	% of all teachers	# of all teachers	% of all teachers
White	3,995	49.1%	1,1562	19.2%	5,557	68.3%
Black/African American	1,546	19.0%	367	4.5%	1,913	23.5%
Hispanic/Latino	204	2.5%	69	<1%	273	3.4%
Asian/Pacific Islander	158	1.9%	50	<1%	208	2.6%
Other	82	1.0%	19	<1%	101	1.2%
Native American	13	<1%	<10	<1%	19	<1%
Prefer not to disclose	47	<1%	14	<1%	61	<1%
Total	6,045	74.3%	2,087	25.7%	8,132	100.0%

Table 1. Almost half of full-time teachers in SDP as of October 31, 2018 were white and female

Source: October 31, 2018 Employee Snapshot

How to read this table: The percentages in this table represent the percentages of teachers in each racial and gender category out of the total number of teachers. The totals in the bottom row represent the number and percentage of male and female teachers overall, and the totals in the final two columns represent the number and percentage of teachers in each racial and gender category out of the total number of teachers. The other cells display the numbers and percentages of teachers in combined gender-race/ethnicity categories. For example, 23.5% of all teachers were Black/African American, with 19% of all teachers being Black/African American females while 4.5% of all teachers were Black/African American males.

We next examined the demographic composition of teachers across school types, which included High Schools (grades 9-12), Career and Technical Education (CTE) High Schools (grades 9-12 with CTE curriculum), Middle Schools (grades 6-8), Elementary Schools (grades K-2, K-5, K-6, and K-8), and District-operated Alternative schools. Teacher demographic characteristics across school types in October 2018 were consistent with the overall trends in Table 1. The majority of teachers were White (ranging from 57% to 69% depending on school type) and female (ranging from 53% to 83%) (Tables 2 and 3).

	School Type									
Race/ CTE High School		h School	High School		Middle School		Elementary		Alternative	
Ethnicity	icity (n=6)		(n=47)		(n=14)		School (n=148)		Schools	
									(n=6)	
	# of teachers	% of teachers	# of teachers	% of teachers	# of teachers	% of teachers	# of teachers	% of teachers	# of teachers	% of teachers
White	185	65.6%	1,294	68.8%	343	65.0%	3,693	68.8%	42	56.8%
Black/African American	66	23.4%	399	21.2%	147	27.8%	1,278	23.8%	23	31.1%
Hispanic/ Latino	14	5.0%	64	3.4%	16	3.0%	174	3.2%	5	6.8%
Asian/ Pacific Islander	9	3.2%	79	4.2%	12	2.3%	106	2.0%	<5	2.7%
Other	6	2.1%	23	1.2%	<5	<1%	67	1.2%	<5	1.4%
Native American	0	0.0%	8	<1%	0	0.0%	11	<1%	0	0.0%
Prefer not to disclose	<5	1.0%	13	<1%	6	1.1%	39	<1%	<5	1.4%
Total	282	100%	1,880	100%	528	100%	5,368	100%	74	100%

Table 2. As of October 31, 2018, the racial/ethnic make-up of teachers was consistent across school types

Source: October 31, 2018 Employee Snapshot

How to read this table: The percentages in this table represent the percentage of teachers of each race/ ethnicity by school type. The final row shows the total number of teachers at each school type.

		School Type								
Gender	Elementary		Middle School		High School		CTE High School		Alternative Schools	
	School (n=148)		(n=14)		(n=47)		(n=6)		(n=6)	
	# of teachers	% of teachers	# of teachers	% of teachers	# of teachers	% of teachers	# of teachers	% of teachers	% of teachers	# of teachers
Female	4,454	83.0%	377	71.4%	1,027	54.6%	148	52.5%	39	52.7%
Male	917	17.0%	151	28.6%	853	45.4%	134	47.5%	35	47.3%
Total	5,368	100%	528	100%	1,880	100%	282	100%	74	100%

Table 3. More than 8 in 10 elementary school teachers were female

Source: October 31, 2018 Employee Snapshot

How to read this table: The percentages in this table represent the percentage of teachers of each gender by school type. The final row shows the total number of teachers at each school type.

Using school-level demographic data for students from the School District of Philadelphia's <u>Open</u> <u>Data website</u>, we examined the percentages of student and teachers of each racial/ethnic group across the District and at each school. Across the 214 District schools included in Open Data dataset,⁵ 48% of students were Black/African American compared to 24% of teachers. Similarly, there was a larger percentage of Hispanic/Latino students (22%) compared to Hispanic/Latino

⁵ Student enrollment data for Alternative schools is not included in the Open Data files, so those schools (N=6) are excluded from this part of the analyses.

teachers (3%). In contrast, 14% of students were White, while 68% of teachers were White (Table 4).

(1)	(2)	(3)	(4)	
Race/Ethnicity	Percent of Students	Percent of Teachers	Percentage Point	
	(n=126,443)	(n=8,132)	Difference	
White	14.3%	68.3%	-53.0	
Black/African American	48.4%	23.5%	24.9	
Hispanic/Latino	21.7%	3.4%	18.3	
Asian/Pacific Islander	9.0%	2.6%	6.4	
Multi-racial/Other	6.3%	1.2%	5.1	
Native American	<1%	<1%	0	
Total	100%	100%	n/a	

Table 4. As of October 2018, the percentage of Black/African American students was about two times the percentage of Black/African American teachers

How to read this table: This table displays a comparison of the percent of students in each racial/ethnic category (column 2) to the percent of teachers in that same racial/ethnic category (column 3). The percentage point differences are in column 4. When the difference is negative, that means there is a higher percentage of teachers of that race/ethnicity compared to the percentage of students. When the difference is positive, the reverse is true.

While there were slightly more male than female students in SDP schools as of October 1, 2018, there were nearly three times as many female teachers as male teachers (74.4% and 25.6%, respectively) (Table 5).

(1) Gender	(2) Percent of Students (n=126,443)	(3) Percent of Teachers (n=8,524)	(4) Percentage Point Difference
Female	48.4%	74.3%	-25.9
Male	51.6%	25.7%	25.9
Total	100%	100%	

Table 5. As of October 2018, the percentage of male teachers was about half the percentage of male students

How to read this table: This table displays a comparison of the percent of female and male students (column 2) to the percent of female and male teachers (column 3). The percentage point differences between the columns are in column 4. When the difference is negative, that means there is a higher percentage of teachers of that gender compared to the percentage of students. When the difference is positive, the reverse is true.

Conclusion

Using snapshots of student enrollment and teacher employment from October 2018, we found that the race/ethnicity and gender distribution of teachers differs from the race/ethnicity and gender distribution of students. The percentage of Black/African American students is about two times the percentage of Black/African American teachers (48% compared to 24%, respectively). In terms of gender, 48% of students are female compared to 74% of teachers.

To explore the data used for these analyses, visit: <u>https://philasd.org/opendata</u>.