



A PACER Policy Brief

New Data on Teacher Diversity in Pennsylvania

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Introduction

In April 2018, RFA published [*Patching the Leaky Pipeline: Recruiting and Retaining Teachers of Color in Pennsylvania*](#), which highlighted research about the benefits of a diverse teaching staff and summarized promising strategies to increase diversity along the teacher pipeline—high school, college, teacher preparation, certification, hiring, and retention. We also examined available data to identify “leaks,” where PA schools appear to be losing potential teachers of color (TOCs).¹

However, the data available for that report were not recent and only accessible at the state, county, and large city levels, not by district or school. In addition, the data did not permit reliable disaggregation by racial subgroup, limiting our analysis to white teachers vs. all teachers of color.

New Data on Teacher Race and Gender

Recently, the Pennsylvania Department of Education provided new data for 2016-2017 that include the race and gender of the 155,854 teachers in Pennsylvania’s public schools.² In this report, we present the results of our analysis of this new data, including the following high-level findings:

- Only 5.6% of Pennsylvania’s teachers are persons of color.
- Pennsylvania’s gap between students of color (33.1%) and TOCs remains among the most disparate in the country.
- Fifty-five percent of Pennsylvania’s public schools and 38% of all school districts employed only white teachers in 2016-17.
- Elementary schools employed black teachers at higher rates than secondary schools.
- Philadelphia and Allegheny counties employed 63% of all the state’s teachers of color.
- Teacher/student race disparities in the Philadelphia and Allegheny county charter school sectors are similar to those of their closest school districts, with some notable exceptions.
- Women comprised 73% of all teachers. This gap is consistent across all racial groups. Men of color comprised only slightly more than 1% of teachers in the state.

Below, we discuss our analyses in more detail. We also make available for [download](#) spreadsheets containing RFA’s calculations of the teacher and student race and gender demographics for each public school, district, and county in Pennsylvania, and for the state overall.

¹ We use the term “of color” to describe students and teachers that are not reported as non-Hispanic white.

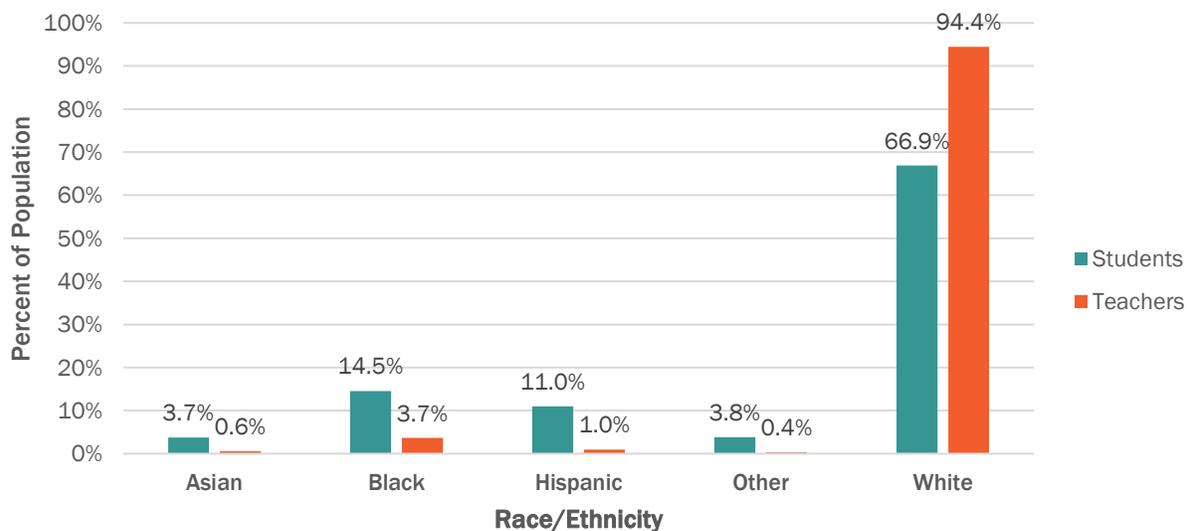
² Our sample was limited to the 2,988 schools for which both teacher and student demographics are available.

Pervasive Disparities Across Pennsylvania

As documented in *Patching the Leaky Pipeline*, there are large racial disparities between students and teachers across the entire nation. Approximately 48.3% of the nation's students are persons of color, compared to only 18.1% of teachers, a disproportionality rate of 2.62 (i.e. the percentage of students of color divided by the percentage of teachers of color).

Figure 1 shows that the disparities are significantly larger in Pennsylvania's schools.

Figure 1. Teacher and Student Population by Race: Pennsylvania Public Schools 2016-17



SOURCE: Pennsylvania Department of Education, Pennsylvania Information Management System, *Professional Personnel Individual Staff Report Data* with the addition of race, 2016-17; Pennsylvania School Performance Profile, *School and District Fast Fact Data*, 2016-17.

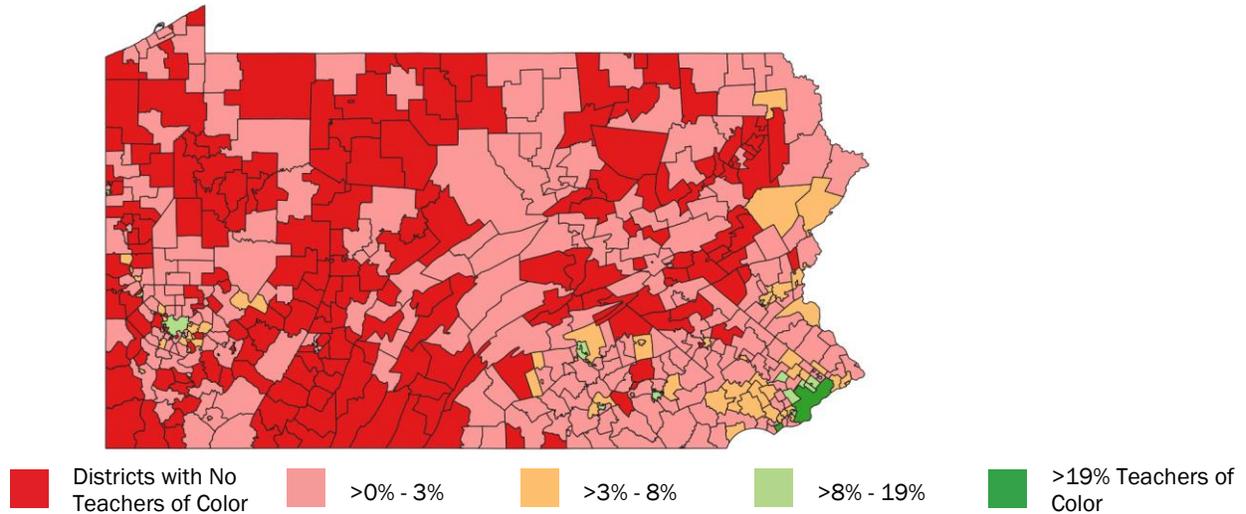
In Pennsylvania's public schools, 33.1% of students are persons of color, compared to only 5.6% of teachers. This yields a disproportionality rate of 5.91, which places Pennsylvania as one of the most disparate states in the country.³ The gap between black students (14.5%) and black teachers (3.7%), while smaller than other racial subgroups, remain large with a 3.92 disproportionality rate. Only 0.6% of teachers are Asian, compared to 3.7% of students, a disproportionality rate of 6.16. The disparity for Hispanic students is the most extreme: 11.0% of students are Hispanic compared to only 1.0% of teachers, a disproportionality rate of 11.0.

³ In *Patching the Leaky Pipeline*, we referenced 2011-12 data from the National Center for Education Statistics which found 29.4% students of color and 4.0% teachers of color in Pennsylvania for a disproportionality ratio of 7.3. It is likely that both student and teacher demographics have changed slightly since 2012. However, the NCES data included teachers and students in private schools, which are not included in the PDE data. This may also explain the difference. Meanwhile, new data from NCES show an increase nationally to 51% students of color and 20% teachers of color, yielding a lower disproportionality ratio of 2.55. Geiger, Abigail. "America's Public School Teachers Are Far Less Racially and Ethnically Diverse than Their Students." *Pew Research Center Fact Tank*, August 27, 2018. <https://pewrsr.ch/2P2Wgf6>.

Distribution of Teachers of Color

The 5.6% of teachers who are persons of color (6,461 teachers) are not evenly distributed across Pennsylvania. Figure 2 maps the concentration of TOCs for all 499 school districts. The 10 districts with the highest representation of teachers of color are Chester-Upland (40.5%), Philadelphia (31.0%), William Penn (19.0%), Cheltenham (18.6%), Harrisburg (15.9%), York City (15.8%), Pittsburgh Public Schools (15.1%), Farrell Area (12.9%), Aliquippa (12.8%), and Abington (12.7%).

Figure 2. Concentration of Teachers of Color by District: Pennsylvania 2016-17



School-level disparities are even more stark. As shown in Figure 3 and Table 1, 55% of Pennsylvania's public schools employ zero teachers of color. These 1,637 schools serve 766,027 students, including 55% of Pennsylvania's white students and 21% of its students of color. Additionally, 82% of schools employ a teaching workforce that is between 92-100% white.

Figure 3. Concentration of Teachers of Color by School: Pennsylvania 2016-17

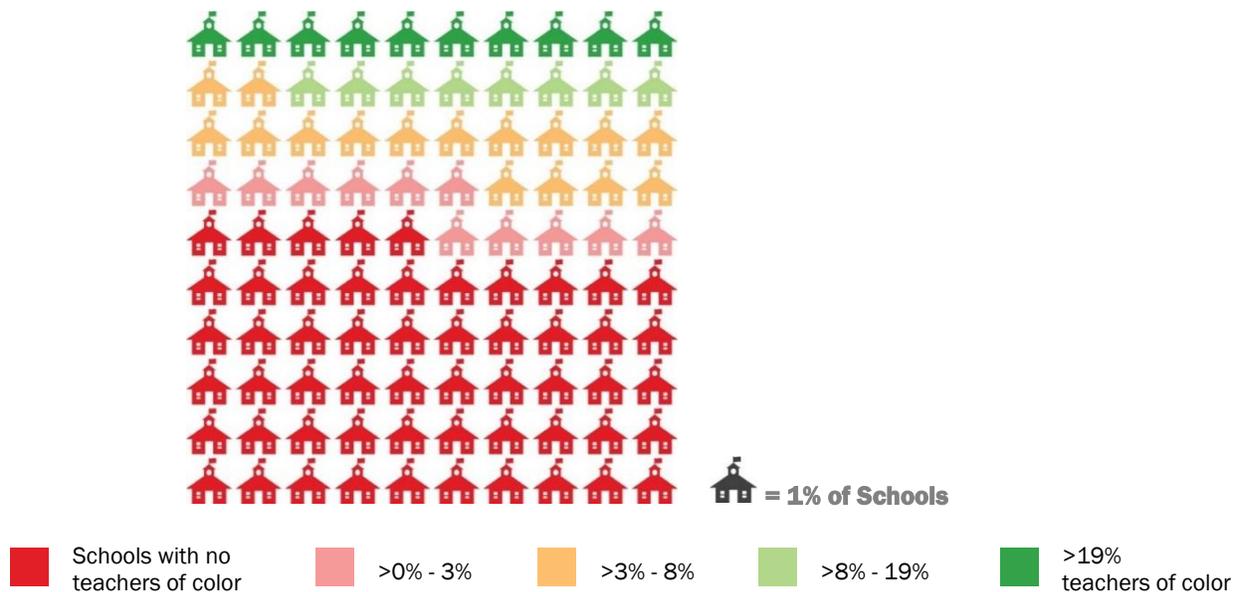


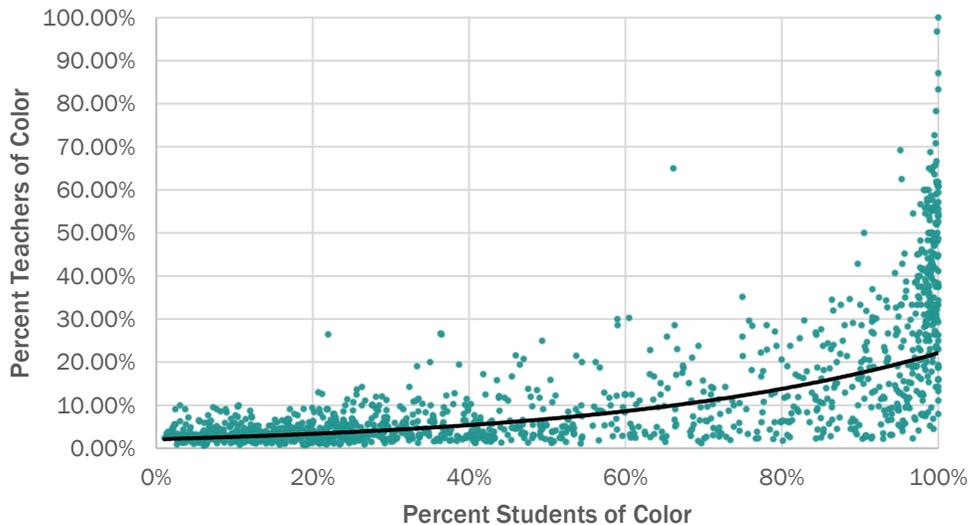
Table 1. Schools and Districts by Percentage of Teachers of Color: Pennsylvania 2016-17

	0%	>0 – 3%	>3 – 8%	>8 – 19%	>19%
Percent of Districts	38%	47%	12%	2%	<1%
Percent of Schools	55%	12%	16%	8%	10%

SOURCE: Pennsylvania Department of Education

Teachers of color constitute a majority in only 2% of Pennsylvania schools. Those schools generally serve few white students, because **Pennsylvania’s teachers of color are typically concentrated in schools with higher percentages of students of color** (see Figure 4).

Figure 4. Percent Teachers of Color by Percent Students of Color: Pennsylvania Public Schools with at Least One Teacher of Color 2016-17



SOURCE: Pennsylvania Department of Education

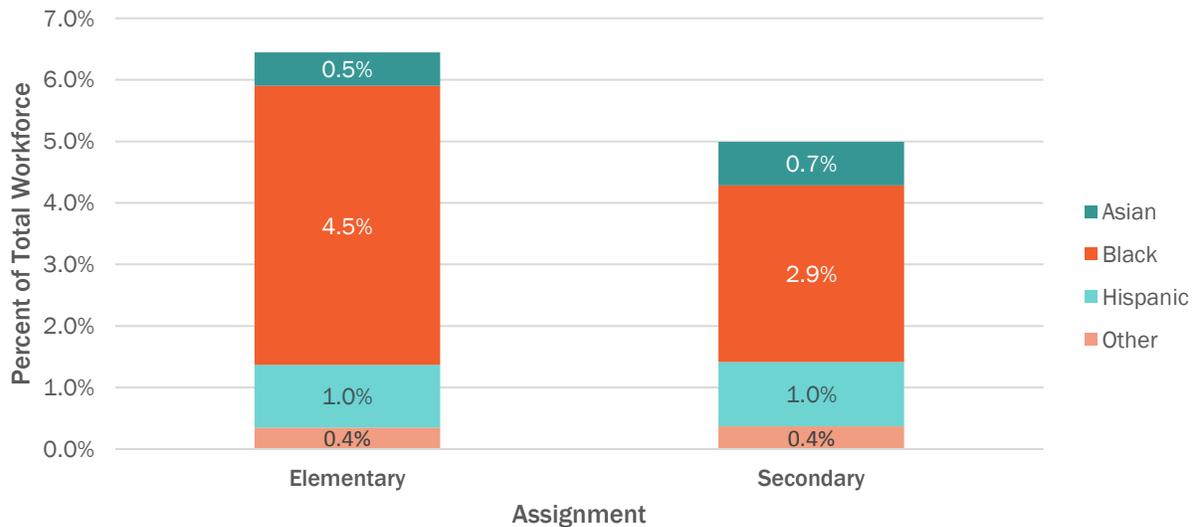
These data show that, while students of color have access to few teachers of color, Pennsylvania’s white students are even more unlikely to ever receive instruction from a teacher of color. As discussed in *Patching the Leaky Pipeline*, the benefits of exposure to teachers of color may be particularly salient for students of the same race, but a diverse teacher population benefits all students.⁴

⁴ Wells, Amy Stuart, Lauren Fox, and Diana Cordova-Cobo. "How racially diverse schools and classrooms can benefit all students." *The Education Digest* 82, no. 1 (2016): 17. For a recent summary of the benefits of diverse teachers for students of color, see, Cain Miller, Claire. "Does Teacher Diversity Matter for Students’ Learning?" *New York Times* September 10, 2018, <https://www.nytimes.com/2018/09/10/upshot/teacher-diversity-effect-students-learning.html>.

Race Disparities by School Assignment

Teachers of color are not only unequally distributed throughout the state—they are also unequally distributed between elementary/middle and high schools (Figure 5).

Figure 5. Teacher Workforce by Race and School Assignment: Pennsylvania Public Schools 2016-17



SOURCE: Pennsylvania Department of Education

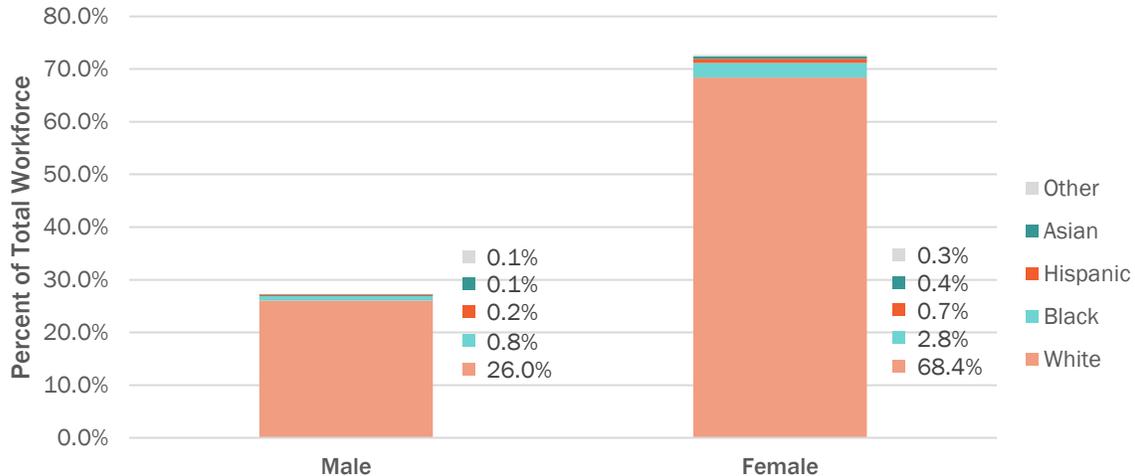
A greater percentage of teachers of color teach in elementary grades. Teachers of color make up 6.4% of elementary education teachers compared to 5.0% of secondary education teachers. This disparity is found primarily among black teachers. Teachers of color are also underrepresented in special education (not displayed), totaling only 4.5% of all special education teachers. Research has consistently documented that students of color receive special education at higher rates than white students, so these data may indicate even larger disparities for students and teachers of color in special education.⁵

⁵ Maydosz, Ann S. 2014. Disproportional representation of minorities in special education: Review. *Journal for Multicultural Education* 8 (2): 81

Teacher Race and Gender Disparities

Figure 6 displays disparities in the teacher workforce by race and gender.

Figure 6. Teacher Workforce by Race and Gender: Pennsylvania Public Schools 2016-17



SOURCE: Pennsylvania Department of Education

The overwhelming majority of Pennsylvania’s public-school teachers are white and female.

Gender-based gaps in teaching exist for all race groups. Among the 155,854 teachers in our analysis, 72.7% are women and 68.4% are white women.

The lack of male teachers of color is especially acute. **Together, men of color make up only 1.2% of Pennsylvania’s teacher workforce.** In the entire state, there are only 980 black men, 260 Hispanic men, 170 Asian men, and 103 men of other races teaching in public schools.

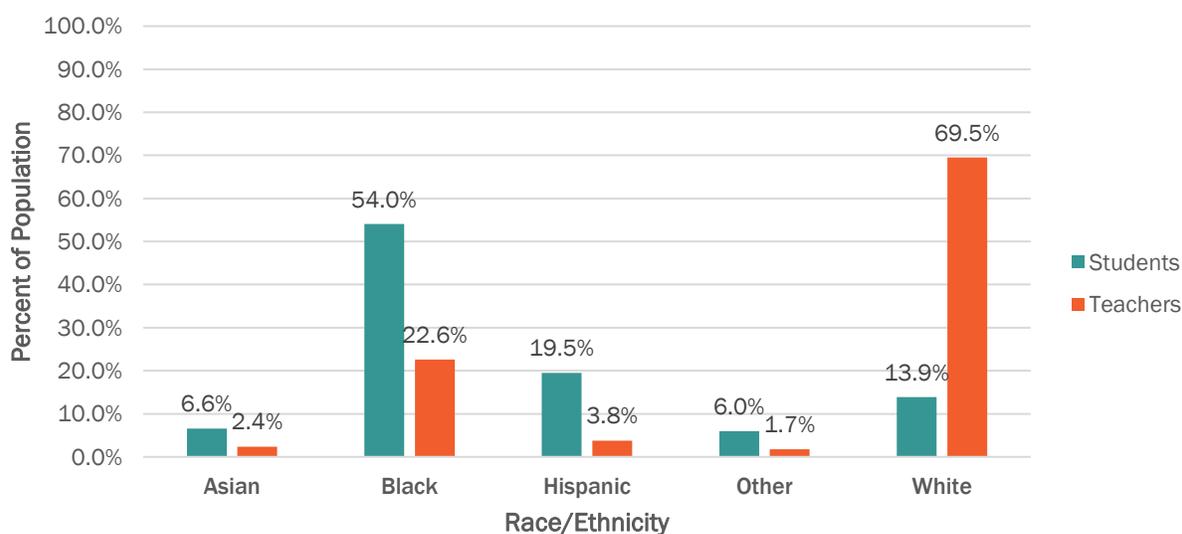
A Deeper Dive into Philadelphia and Allegheny Counties

Together, Philadelphia and Allegheny counties employ over 63% of the state’s teachers of color. These counties also house the state’s two largest school districts, the School District of Philadelphia (SDP) and Pittsburgh Public Schools (PPS), and are home to the largest number of charter schools in the state. Below, we examine the racial demographics of teachers in each county, including how each city’s school district compares to its respective charter school sector.

Philadelphia

The School District of Philadelphia is the only school district in Philadelphia County, and it is by far the largest in the state. Philadelphia public schools serve nearly 200,000 students, with nearly one-third of those students enrolled in charter schools. As shown in Figure 7, Philadelphia’s teaching population does not reflect its student population.

Figure 7. Teacher and Student Population by Race: Philadelphia 2016-17



SOURCE: Pennsylvania Department of Education

Over 86% of Philadelphia’s students are persons of color, compared to only 30.5% of teachers, yielding a disproportionality rate of 2.82. This is among the lowest in the state, but still higher than the national average. More than half of all Philadelphia students are black (54.0%), and black teachers make up 22.6% of the workforce, a disproportionality rate of 2.39. Hispanic students comprise 19.5% of the student body, but only 3.8% of teachers are Hispanic, resulting in a disproportionality rate of 5.13. Asian students comprise 6.6% of all students, but only 2.4% of teachers are Asian, leading to a disproportionality rate of 2.75.

Teacher Race and Gender in Philadelphia County

Table 2 shows that the gender-based disparities in Philadelphia are similar to those across the state.

Table 2. Teacher Race and Gender: Philadelphia County 2016-17

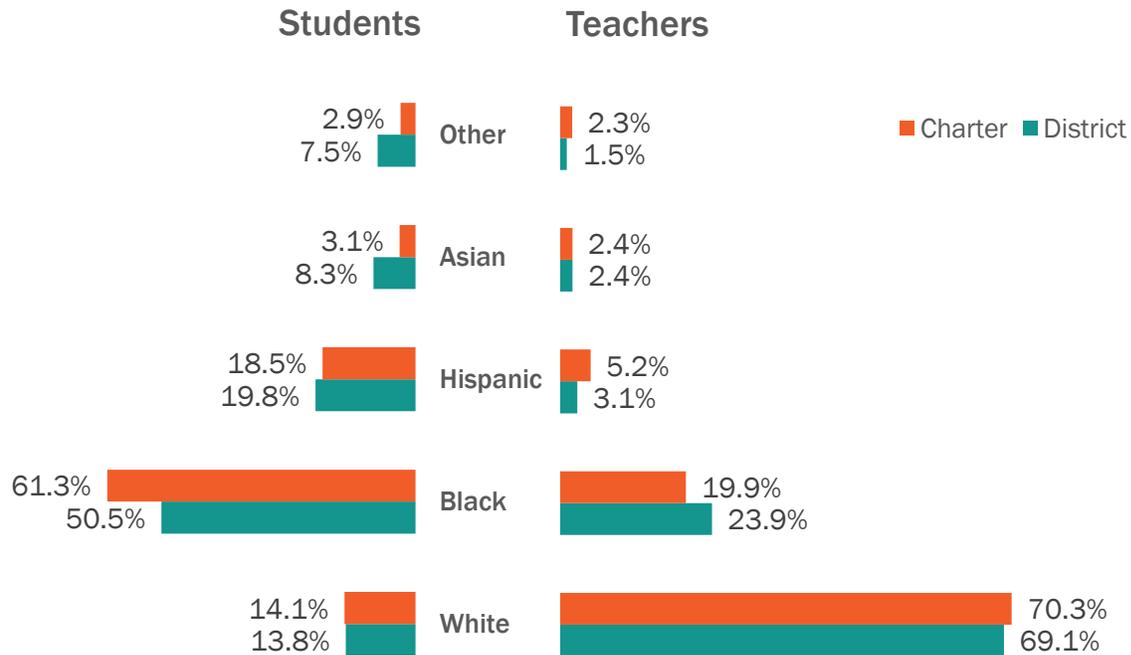
Race/Ethnicity	Number of Men	Men - % of Workforce	Number of Women	Women - % of Workforce
Asian	75	0.6%	206	1.7%
Hispanic	96	0.8%	352	3.0%
Black	573	4.8%	2109	17.8%
White	2331	19.7%	5901	49.8%
Other	49	0.4%	158	1.3%

Black men make up a larger percentage of teachers in Philadelphia than in any other county, but they still comprise only 4.8% of the total teaching workforce. [The Fellowship: Black Male Educators for Social Justice](#) set the goal of increasing the number of black male teachers in Philadelphia to 1,000 by the year 2025. With 573 teachers in 2016-17, even with 100% retention, Philadelphia will need to recruit over 50 new black male teachers every year to meet that goal. Adding to the challenge, potentially for reasons explored in *Patching the Leaky Pipeline*, only 29 black men graduated from Pennsylvania’s teacher preparation programs in 2014.

Comparing Student and Teacher Racial Demographics in Philadelphia District Schools and Philadelphia Charter Schools

Figure 8 shows that Philadelphia’s district and charter sectors serve a similar percentage of white students and employ a similar percentage of white teachers. However, there are key differences between the black, Hispanic, and Asian populations in each sector.

Figure 8. Student and Teacher Race: Philadelphia School District vs. Philadelphia Charter Schools 2016-17



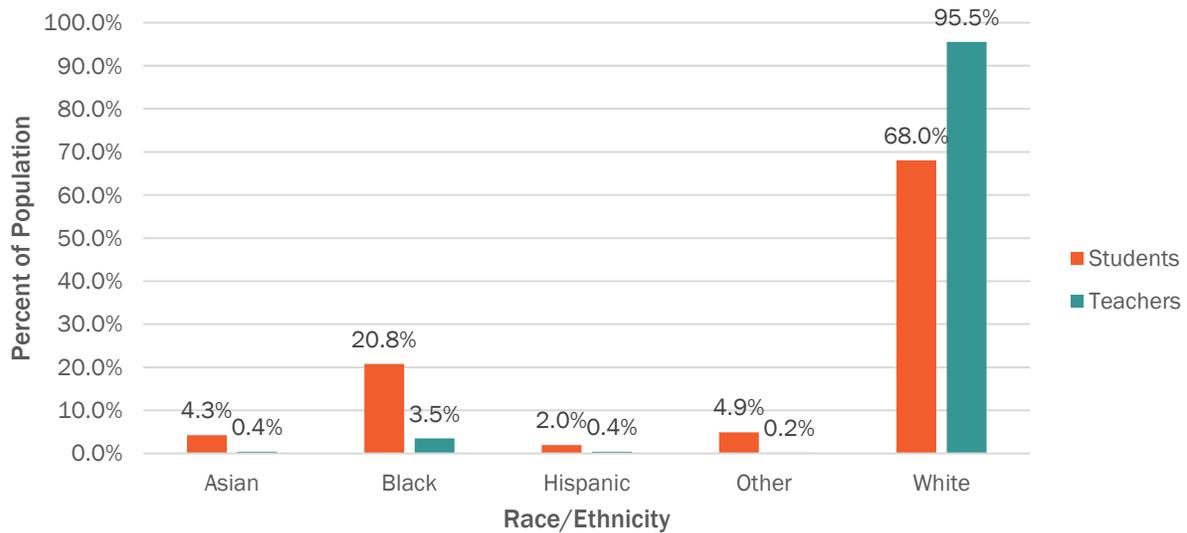
SOURCE: Pennsylvania Department of Education

Black students account for a greater percentage of enrollment in Philadelphia’s charter schools (61.3%) than in the city’s district schools (50.5%). Black teachers, however, make up a greater percentage of the workforce in the district (23.9%) than in the charter sector (19.9%) indicating that the disproportionality rate for black students and teachers is greater in the charter sector. In contrast, there are larger percentages of Asian and Hispanic students in district schools than in the charter sector, while the district has a smaller percentage of Hispanic teachers and an equal percentage of Asian teachers. This indicates that the disproportionality rates for these groups are greater in Philadelphia’s district sector.

Allegheny County

Whereas Philadelphia County contains only one school district with nearly 90 charter schools, Allegheny County contains 43 separate school districts and 22 charter schools. Figure 9 compares the demographic distribution of student and teacher populations within Allegheny County. Thirty-two percent of students and 4.5% of teachers in the county are persons of color; yielding a disproportionality rate that, at 7.11, exceeds that of the state. Black students make up the second largest student group at 20.8%, but only 3.5% of teachers are black, yielding a disproportionality rate of 5.94. Together, Asian, Hispanic, and other races account for 11.2% of students and only 1.0% of teachers.

Figure 9. Allegheny County Public School Teacher and Student Population by Race

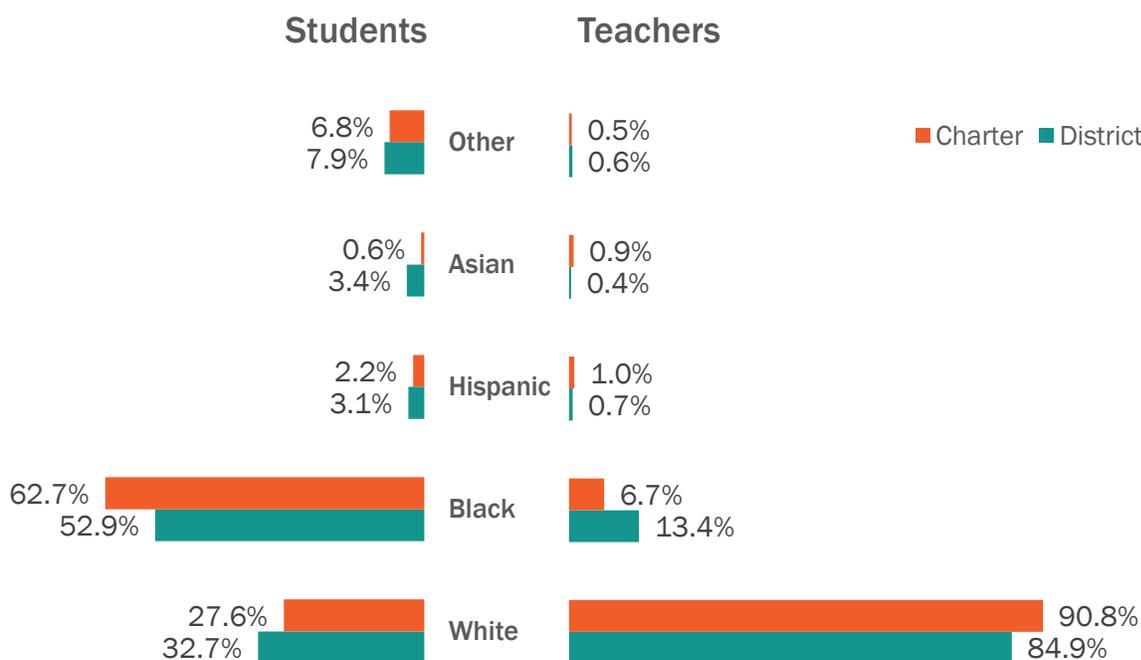


SOURCE: Pennsylvania Department of Education.

These findings mask significant variation among districts in the county. For example, eight school districts in Allegheny County serve more than 50% students of color, while 11 districts serve fewer than 10% students of color. Meanwhile, only three school districts employ more than 5% teachers of color and, of those, the only district that employs more than 10% is Pittsburgh Public Schools, with 15% teachers of color.

Pittsburgh Public Schools (PPS) is the largest district in Allegheny County—and the second-largest in the state—with 1,743 teachers and over 22,000 students. In addition, nearly half of the students in the 22 Allegheny charter schools are residents of Pittsburgh Public Schools. The teacher and student racial demographics of PPS and the Pittsburgh charter school sector are compared in Figure 10.

Figure 10. Public School Teacher and Student Population by Race: PPS and Allegheny County Charters



SOURCE: Pennsylvania Department of Education

Allegheny County’s charter sector enrolls a greater percentage of students of color compared to PPS, but the percentage of teachers of color is greater in the Pittsburgh Public School District. Like Philadelphia, Allegheny County’s charter sector enrolls a greater percentage of black students and a smaller percentage of Hispanic students than PPS. However, black teachers account for a greater percentage of the district’s teacher workforce than the charter sector’s workforce, while the opposite is true for Hispanic teachers. This indicates that the disproportionality rate for black students and teachers is greater in Allegheny’s charter sector, while the disproportionality rate for Hispanic students and teachers is greater in Pittsburgh Public Schools. Meanwhile, all other Allegheny County school districts of residence to the Allegheny County charter sector employ lower rates of teachers of color, overall, than the charter sector and Pittsburgh Public.

Conclusion

As we noted in *Patching the Leaky Pipeline*, data on student demographics are typically much more accessible to the public than data on teacher demographics. The new PDE data, compiled by RFA at the school, district, and county levels and made available for download to the public, allows for the first time a clear and detailed view into Pennsylvania public school teacher racial demographics. The picture confirms that schools across the state and in every sector are far from ensuring that all students in Pennsylvania, and particularly students of color, are provided the benefits of a diverse teaching staff. PDE has prioritized the need to reduce these disparities. Collecting and reporting the data is an important first step, but much more work is needed to expand access to teachers of color for all students.

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