



Educator and Student Diversity in Washington State: Gaps and Historical Trends

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Introduction and National Context

It has been well documented—including in recent reports from Washington State (Professional Educator Standards Board, 2014) and several large districts across the country (Albert Shanker Institute, 2015)—that the public teaching workforce is far less racially and ethnically diverse than the student body in U.S. public schools. For instance, **Figure 1** shows a scatterplot of the percent of non-White, non-Hispanic (“minority”) students (on the *x*-axis) and the corresponding percent of minority teachers (on the *y*-axis) in each state represented in the 2011–12 Schools and Staffing Survey. The dashed line represents the points where these percentages are equal and illustrates that *every state* in the country has a lower (and, in most cases, dramatically lower) percentage of minority teachers than percentage of minority students.

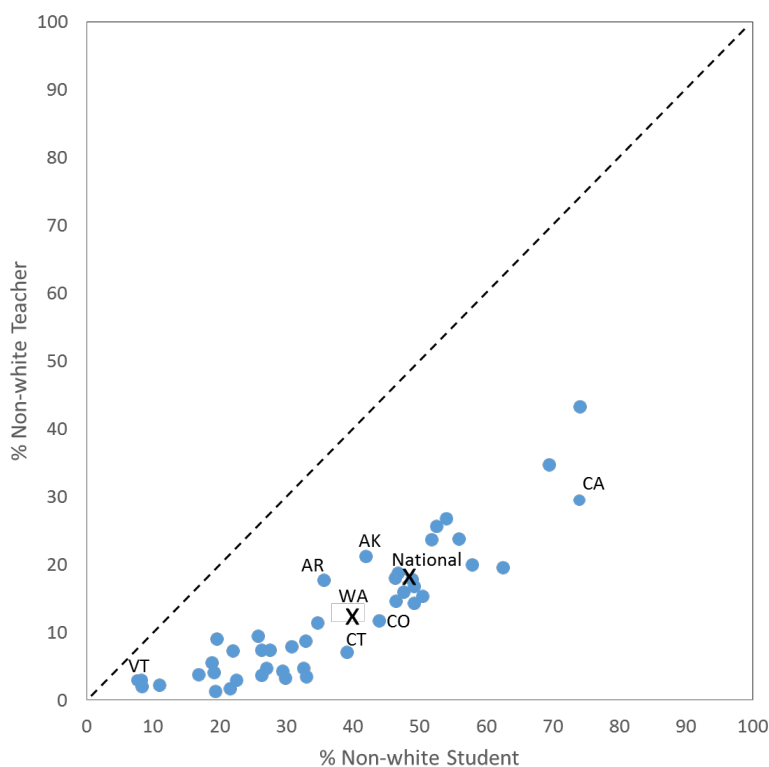


Figure 1. State-Level Percentages of Non-White Students and Non-White Teachers, 2011–12 School Year

Washington State, the focus of this report, is no exception.¹ As shown in Figure 1, Washington public schools have over three times as many minority students (39.3%) as non-White teachers (13.0%), which is potentially problematic given both theoretical arguments and empirical evidence suggesting that minority students might benefit from a more diverse teaching workforce (see companion report Goldhaber, Theobald, & Tien, 2015). That said, Figure 1 also illustrates that Washington is near the median in terms of educator diversity among states with a

¹ Increasing the diversity of the state’s teaching workforce is a priority of Washington’s Professional Educator Standards Board. See <https://script.google.com/a/macros/pesb.wa.gov/s/AKfybyHN1924OerepuM4FNUgy29wY5ZNF3KRYQyXzFGIwebfHqCfoo/exec>

similar percentage of minority students. Specifically, of the four states with the most similar percentages of minority students (all labeled in Figure 1), Arkansas and Alaska have *higher* percentages of minority teachers, while Connecticut and Colorado have *lower* percentages.

In this report, we first provide a “snapshot” of the current state of educator and student diversity in Washington State public schools, focusing specifically on teacher/student diversity gaps for three underrepresented minority (URM) groups: American Indian, Black, and Hispanic. We then provide some historical context by investigating trends in educator and student diversity in Washington State over the past 25 years and conclude with some broad takeaways.

Current Teacher/Student Diversity Gaps

Figure 2 summarizes the percentages of URM teachers and students in three types of public schools: all public schools across the country (first set of bars), all public schools in Washington State (second set of bars), and four individual school districts in Washington State (last four sets of bars).² The height of each bar represents the total percentage of URM students or teachers, while the segments of each bar break this percentage into Black, Hispanic, and American Indian. Finally, the bracket within each group represents the “raw” teacher/student diversity gap, which we define as the difference between the percentage of URM students and the percentage of URM teachers. Figure 2 illustrates that the raw gap in Washington State (20.2%) is smaller than the national gap (26.0%).

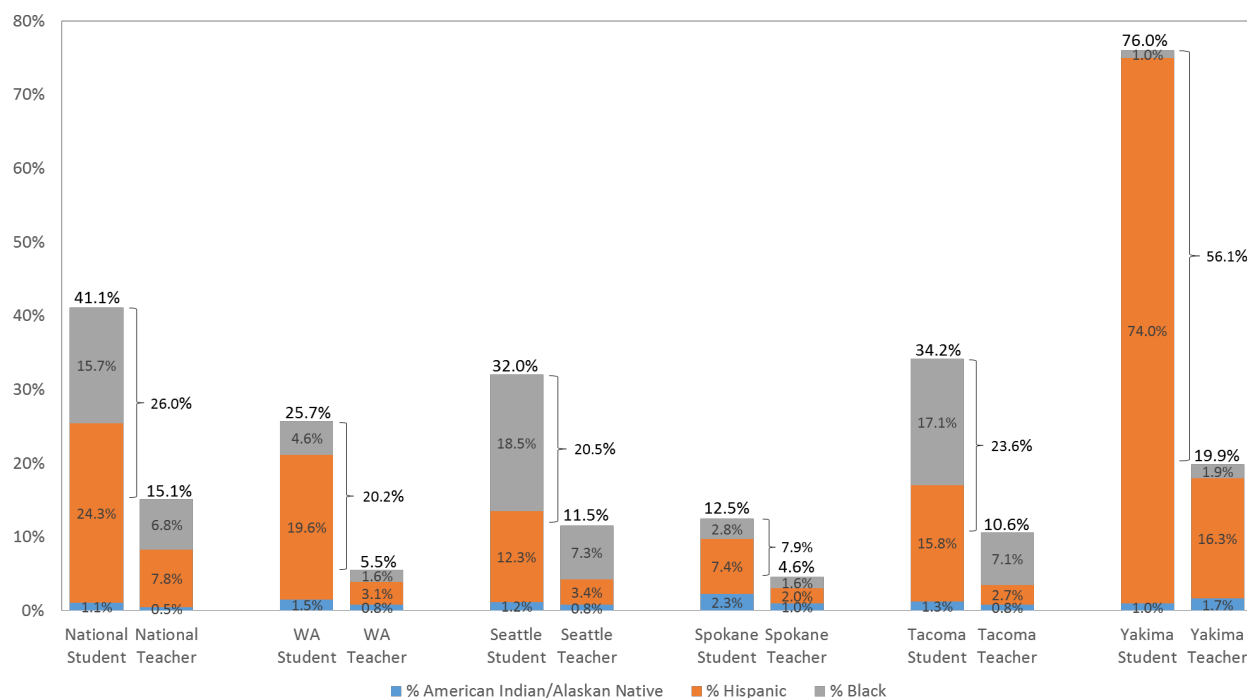


Figure 2. Disaggregated Percentages of URM Teachers and Students in National, Washington State, and Select District Public Schools, 2011–12 School Year

² These data (and all data in this subsection) are from the 2011–12 school year, which is the most recent year in which nationally representative teacher data are available (from the Schools and Staffing Survey).

However, there is no agreed-upon way to measure diversity gaps in public schools, and different measures can give a different picture of how Washington compares to the national figures. For example, when these gaps are represented as ratios, the gap in Washington State is actually much larger than the national gap; specifically, while the percentage of URM students in the country is roughly 2.5 times the percentage of URM teachers, the comparable ratio in Washington State is close to 5. Focusing on the specific racial/ethnic groups in Washington State, this disparity is clearly driven by Hispanic teachers and students, as the percentage of Hispanic students (19.6%) is over six times greater than the percentage of Hispanic teachers in the state.

There is considerable variability across the four districts highlighted in Figure 2, but substantial teacher/student diversity gaps exist in each district. To put the magnitude of these gaps in context, if Seattle Public Schools wanted to hire enough Black teachers so that the percentage of Black teachers in the district equaled the percentage of Black students, they would need to hire 387 new Black teachers (or 48.8% of all Black teachers in the state working outside of Seattle). Likewise, if Yakima Public Schools wanted to hire enough Hispanic teachers to eliminate the gap between the percentage of Hispanic students and teachers in the district, they would need to hire 558 new Hispanic teachers (or 28.9% of all Hispanic teachers in the state working outside of Yakima).

As shown in **Figure 3**, teacher/student diversity gaps exist in nearly every single district in Washington State. Figure 3 plots the percentage of URM teachers against the percentage of URM students in each district in the state, and (as in Figure 1) the dashed line represents the points where these percentages are equal. With the exceptions of 3 districts above this line (all of which have fewer than 400 students), Washington State school districts tend to follow the trend of having a far less diverse teaching workforce than student body.

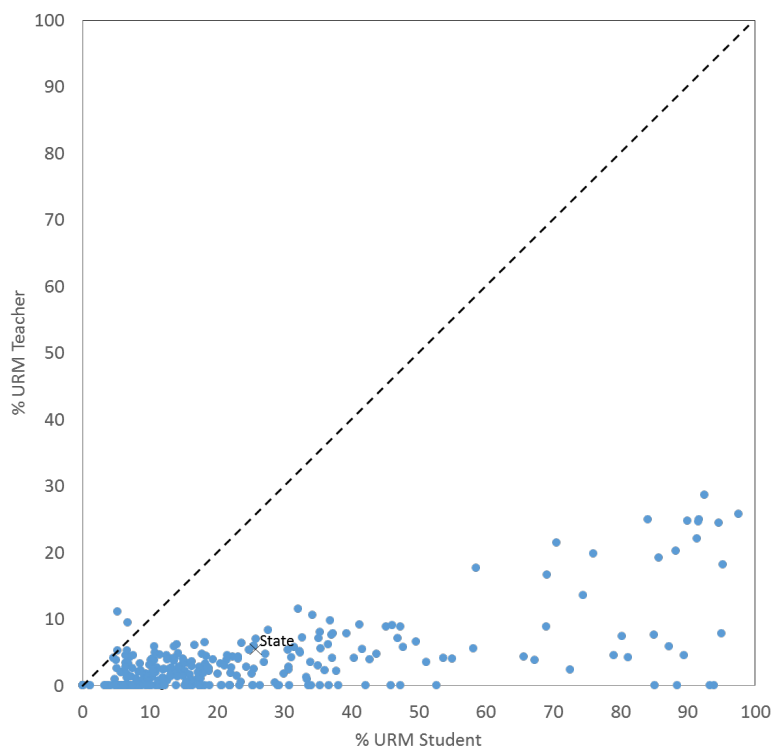


Figure 3. District-Level Percentages of URM Students and URM Teachers, 2011–12 School Year

In Figure 3, the vertical distance between each point and the dashed line is the raw teacher/student diversity gap. We explore the district-level factors that predict the size of this gap and find that larger districts and districts with a high percentage of American Indian students tend to have a higher teacher/student diversity gap than districts that are similar in other ways. Interestingly, the level of student poverty in the district appears not to be predictive of the teacher/student diversity gap once we control for the racial/ethnic composition of the district.³

From a student’s perspective, of course, the percentage of URM teachers in the district matters far less than the probability of being assigned to specific classroom teachers. For instance, minority students in a district could conceivably be assigned disproportionately to minority teachers within the district, thereby reducing the “student-level” diversity gap. To explore this, **Figure 4** relies on the student and teacher data from the Washington State Office of Superintendent of Public Instruction from 2011–12 to calculate the probability that different students are *actually taught* by different teachers. Figure 4A illustrates the probability that students of different races will be taught by a teacher of different races in mathematics, while Figure 4B gives the same probabilities for reading.

Figure 4 illustrates that there is some nonrandom sorting of students and teachers along racial lines; that is, relative to students of other races, White students are more likely to be taught both mathematics and reading by a White teacher, Hispanic students are more likely to be taught mathematics and reading by a Hispanic teacher, Black students are more likely to be taught mathematics and reading by a Black teacher, and American Indian students are more likely to be

³ These linear regression estimates are available from the authors upon request.

taught mathematics by an American Indian teacher. Of course, students of all races are more likely to be taught by a White teacher than a teacher of a different race.

These patterns could be due to nonrandom sorting across schools (e.g., Black students are more likely to attend schools with more Black teachers than other students) or within schools (e.g., American Indian students are more likely to be assigned to an American Indian teacher than other students *in the same school*). When we reproduce Figure 4 using school-level means (i.e., the average percentage of teachers of different races in the schools attended by students of different races), the results are very similar to those in Figure 4, suggesting that nonrandom sorting across schools is largely responsible for the patterns in this figure.⁴

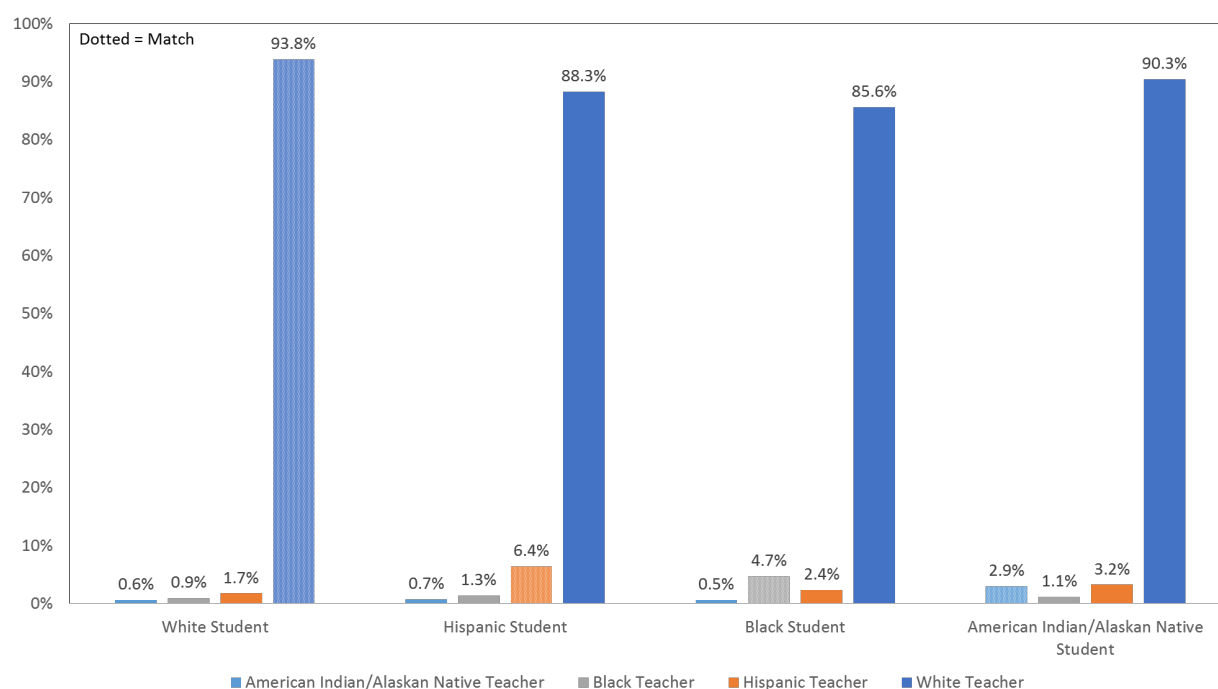


Figure 4A. Student-Teacher Race Matches in Mathematics Courses, 2011–12 School Year

⁴ If the patterns in Figure 4 were due to nonrandom sorting of students to teachers within schools, the average percentage of Black teachers in the schools attended by Black students would be lower than the probability that a Black student is actually assigned to a Black teacher. These figures are available from the authors upon request.

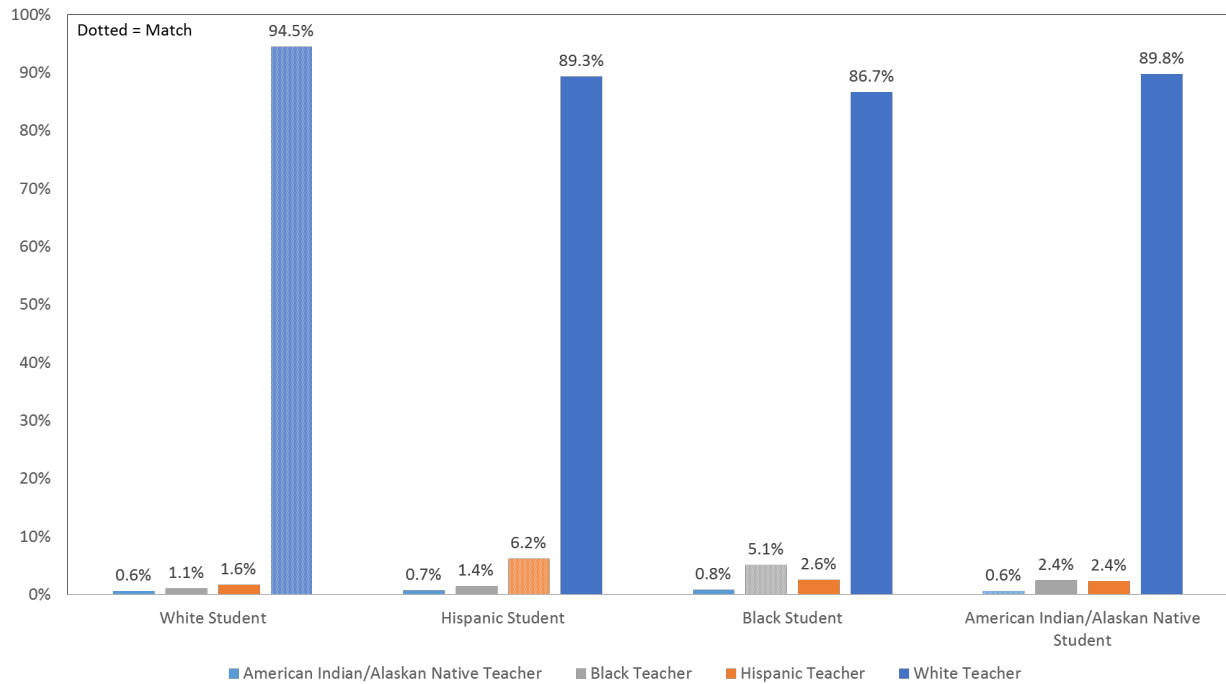


Figure 4B. Student-Teacher Race Matches in Reading Courses, 2011–12 School Year

Historical Trends in Educator and Student Diversity

The figures and discussion in the previous section emphasized the considerable mismatch between the diversity of the student body and (lack of) diversity of the public teaching workforce in Washington State. In this section, we explore these trends over the last 25 years (going back to 1988, the first year that student demographic data are available from the Public Elementary/Secondary School Universe Survey, published by the National Center for Education Statistics [NCES]).⁵ As a starting point, **Figure 5** plots the percentage of URM students (green solid line) and URM teachers (green dashed line) in Washington State public schools since 1988 (the green shaded area represents the teacher/student diversity gap over time). Over the past 25 years, the percentage of URM students has increased over 16 percentage points, while the percentage of URM teachers has increased by less than 2 percentage points. Put another way, while the percentage of URM teachers has increased by about 50% of its value in 1988, the percentage of URM students has increased by more than 150% over the same time period.

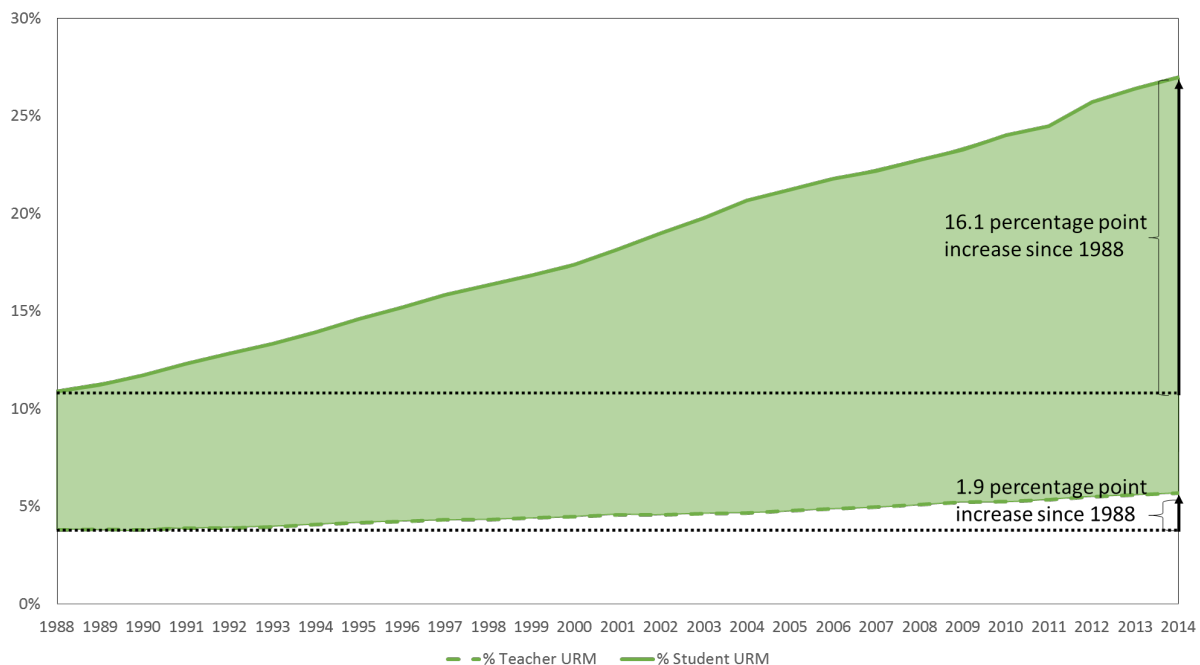


Figure 5. Historical Trends in State-Level Percentages of URM Teachers and URM Students

Clearly, the modest increases in the diversity of the teaching workforce in Washington State are not keeping up with the corresponding increases in the diversity of the state's students. To understand the sources of this expansion, **Figure 6** breaks down the percentages in Figure 5 by racial/ethnic category. It is quickly apparent from Figure 6 that the gaps in Figure 5 are driven by a rapid increase in the percentage of Hispanic students in the state. Because of this, when we plot the teacher/student diversity gap by racial/ethnic category in **Figure 7**, it is the gap between the percentages of Hispanic students and Hispanic teachers that has grown dramatically over the past 25 years, while the gaps for Blacks and American Indians have remained relatively constant (and even narrowed somewhat over the past 5 years).

⁵ See <https://nces.ed.gov/ccd/pubschuniv.asp>

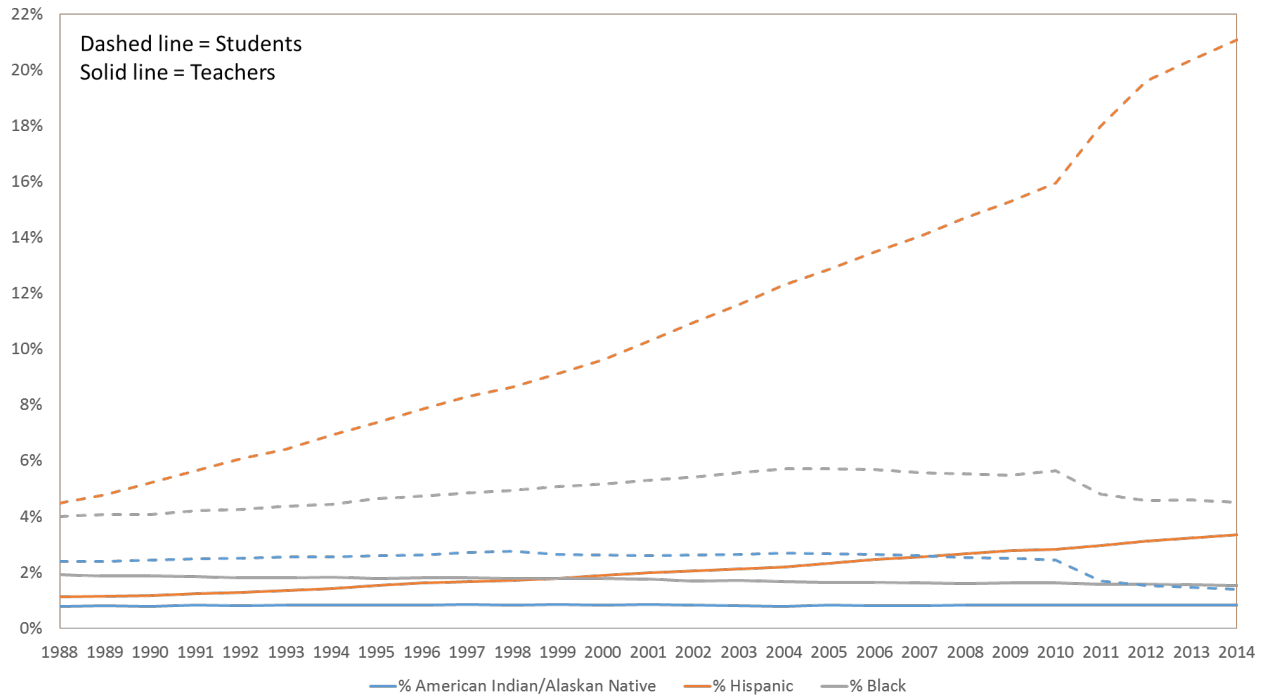


Figure 6. Historical Trends in State-Level Disaggregated Percentages of URM Teachers and URM Students

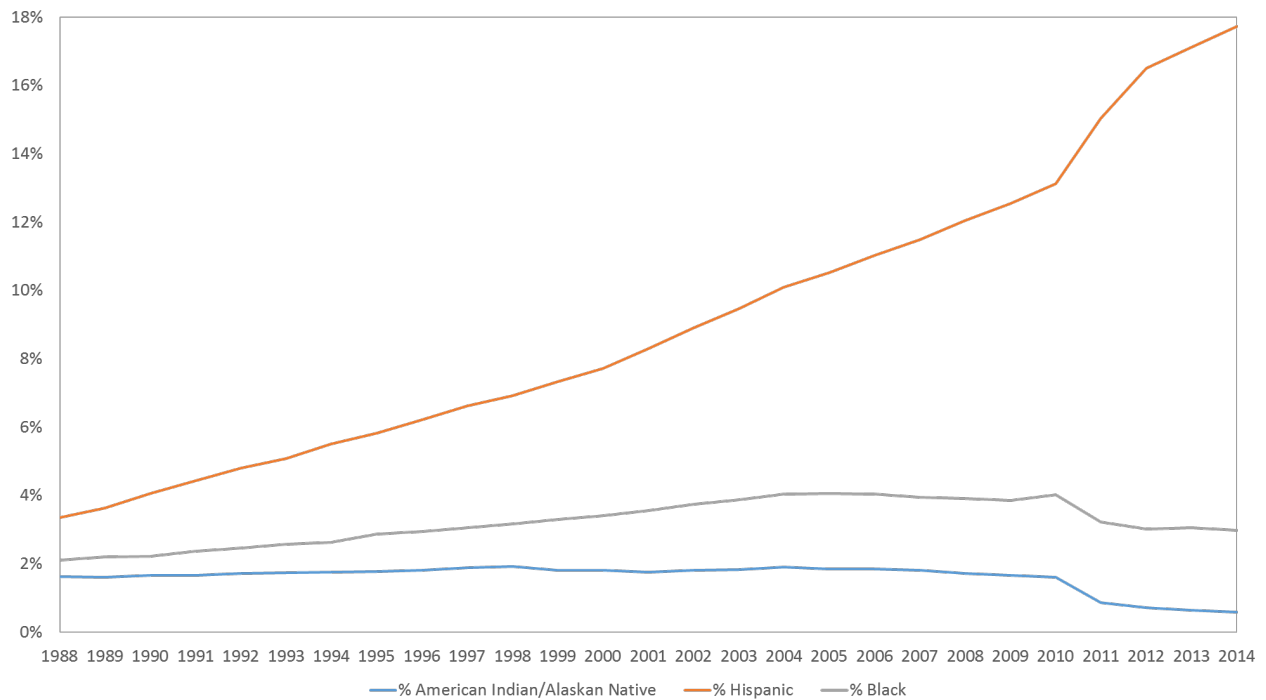


Figure 7. Historical Trends in State-Level Teacher/Student Diversity Gaps

Figure 6 also illustrates the sources of the modest increases in the diversity of the teaching workforce and shows that the percentage of Hispanic teachers in the state has increased steadily over the past 25 years (although not nearly at the rate of the percentage of Hispanic students). This increase is a direct function of two processes: teacher hiring (i.e., the number of teachers who enter the workforce) and teacher attrition (i.e., the number of teachers who leave the workforce). **Figure 8** plots hiring and attrition rates by racial/ethnic group over the past 25 years; a solid fill illustrates periods in which the percentage of hired teachers in that group was higher than the percentage of departing teachers in that group, while a dashed fill represents the opposite. Interestingly, hiring rates of Hispanic teachers have outpaced attrition rates in *every year*, which accounts for the steady increase in the percentage of Hispanic teachers in Figure 6. On the other hand, hiring and attrition rates have largely cancelled each other out for Black and American Indian teachers, which means that the percentages of the workforce from these groups have not markedly changed over the past 25 years.

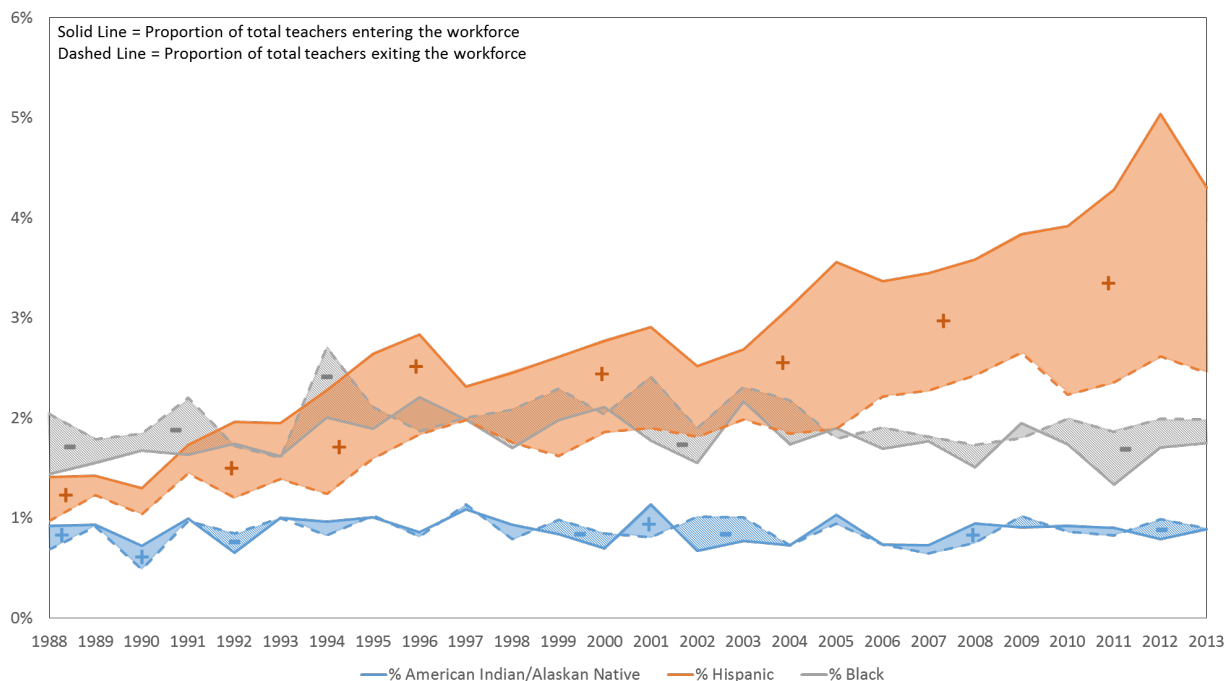


Figure 8. Historical Trends in State-Level Teacher Hiring and Attrition Rates by URM Category

Conclusions

Given both the rhetoric around the importance of teacher workforce diversity and the empirical evidence suggesting that minority students might benefit from a more diverse teaching workforce (Goldhaber et al., 2015), this report presents a “glass half-full”/“glass half-empty” scenario for Washington State policy makers. On the “half-full” side, the state has made strides (particularly in recent years) to increase the diversity of the state’s teaching workforce, particularly among Hispanic teachers; but, on the “half-empty side,” these increases are not nearly keeping pace with increases in the diversity of the state’s public school students (again, particularly among Hispanic students). Moreover, the pace of the diversification of the public school student body is unlikely to slow in coming years; for example, the NCES estimates that the percentage of U.S. public school students who are Hispanic will increase from 24% to 29% over the next 10 years (Snyder, 2014). Because of this, Washington State teacher education

programs will need to recruit and hire far more URM (and particularly Hispanic) teachers to ensure that the diversity of the state’s teaching workforce begins to reflect the diversity of its student body.

However, as we discuss in the companion paper (Goldhaber et al., 2015), teacher workforce diversity is just one of many competing objectives for improving the education system, and there may be substantial challenges and potential unintended consequences to diversifying the teacher workforce. Moreover, we must know much more about *why* there is a lack of diversity in the teacher workforce before we can design effective strategies to recruit more minority teachers.⁶ Nonetheless, the figures in this report illustrate just how far Washington State (and the country as a whole) has to go to ensure that the diversity of the teaching workforce reflects the diversity of the students they teach.

⁶ This question is part of the larger focus of this project, funded by the Gates Foundation, titled “The teacher pipeline in Washington State: Examining the transition from student teaching to the classroom and implications for workforce diversity.”

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