## Black Students in Oregon

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## Executive summary

In 2009, the Portland-based Black Parent Initiative requested a comprehensive analysis of the black-white achievement gap in Multnomah County. The report was a pioneering use of student-level longitudinal data by a nonprofit in Oregon. Among other things, the analysis found that black-white achievement gaps were relatively constant across all tested grades ( $3^{\text {rd }}$ through $10^{\text {th }}$ ), which suggested that black and white students were learning at similar rates while they were enrolled in Multnomah County schools but that, collectively, the school districts had not narrowed the gap during recent years.

This update, commissioned by KairosPDX, extends the analysis to the State of Oregon and takes advantage of additional years of data. Similar to the predecessor report, this analysis shows a sizable, persistent black-white achievement gap. Following cohorts of students over time, we find a small increase in the math achievement gap between $4^{\text {th }}$ and $8^{\text {th }}$ grades. Gaps widen more for middle-performing students than for students at the high- and low-ends of the testing distribution. In short, the goal of closing the achievement gap continues to elude Oregon schools.

Other notable findings include:

- 28,351 black students attended Oregon schools in 2015-16. Threequarters of the students were eligible for free- or reduced-priced lunch. One half of the students attended one of the following five school districts: Portland, Beaverton, David Douglas, Reynolds, Salem-Keizer.
- Black students graduated from high school at lower rates than white students in 2016 ( $61 \%$ versus $75 \%$ ). However, black and white students who performed at similar levels on $8^{\text {th }}$ grade math tests posted similar graduation rates (within 2-3 percentage points).
- Black and white 2006 high school graduates enrolled in postsecondary institutions at similar rates ( $71 \%$ versus $72 \%$ ). However, white students graduated from 4-year colleges at higher rates.
- Across all grades, 26 percent of black students were chronically absent during 2015-16 compared with 20 percent of white students. One half of black $12^{\text {th }}$ graders were chronically absent in 2015-16.
- One percent of Oregon teachers (179) are black. Two percent of principals (21) are black.
- Almost 6 percent of black students had a black teacher in 2015-16. Black students are about 2.5 times more likely than white students to have a black teacher.
- Black elementary students in 2014-16 were slightly more likely than their white peers to have at least one new or novice teacher (0-2 years of experience).


## Enrollment, Teachers, and Schools

## Student enrollment

In the 2015-16 school year, 28,351 black students* attended public K12 schools in Oregon ( $5 \%$ of all students). About one quarter of these were in Portland Public Schools and 50 percent were in PPS plus the next four school districts (Beaverton, David Douglas, Reynolds, and Salem-Keizer). Twenty districts enrolled 80 percent of the state's black students. Among Oregon's 190 school districts, 99 had fewer than 20 black students enrolled.
*Includes students who were enrolled for 60 or more consecutive calendar days and who were black alone or in combination with other races/ethnicities. White students in this report are non-Hispanic white alone.

Figure 1. Black students in Oregon, by school district, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

Figure 2. Oregon students by race/ethnicity, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

## Student enrollment

About half of Oregon's black
students are enrolled in five districts:
Portland Public, Beaverton, David
Douglas, Reynolds, and Salem-
Keizer.

Figure 3. Count of black and white students, Oregon, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

## Student characteristics

Figure 4. Oregon student characteristics, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

Black students experience more poverty than white students in Oregon and are disproportionately placed in special education and alternative school programming. Relatively fewer black students are placed in talented and gifted (TAG) programs or take AP classes.

## Teachers and principals

Figure 5. Black teachers in Oregon, by school district, 2015-16


Number of black teachers

Figure 6. Black principals in Oregon, by school district, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data. Note: Does not include multiracial black teachers or principals.

In 2015-16 there were about 30,000 teachers and 1,200 principals in Oregon. Of these, 179 teachers ( $1 \%$ ) and 21 principals ( $2 \%$ ) were black. Most black teachers and principals are in the same districts that have the largest number of black students.

## Students with a black teacher

Black students are relatively more likely to have a black teacher during the academic year than are white students, by a factor of two or more depending on grade and district.
Gershenson et al found that black elementary school students with at least one black teacher have a reduced risk of dropping out of school (Gershenson, S. et al. [2017]. The Long-Run Impacts of Same-Race Teachers. IZA Institute of Labor Economics.)

Figure 7. Share of students with a black teacher, Oregon, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

## Teacher years of experience

In the top five school districts and statewide, black elementary students are slightly more likely than their white peers to have at least one new or novice teacher ( $0-2$ years of experience). If the shares for black students equaled the shares for white students, 266 black elementary students ( $2 \%$ ) in 2015-16 would have had more-experienced teachers.

Figure 8. Share of elementary school students with at least one teacher with given years of experience, Oregon, average of 2014-15 and 2015-16


[^0]
## Teacher turnover

Relatively more black teachers than white teachers leave their teaching position from year to year in Oregon. Between 2014-15 and 2015-16, 15 percent of black teachers and 9 percent of white teachers left the state teacher workforce.

Figure 9. Teacher turnover, Oregon, 2014-15 to 2015-16


[^1]
## Elementary school characteristics

Compared to their white peers, black elementary school students in Oregon attend schools with higher poverty levels. Similar SPED rates at elementary schools where black and white students attend indicate that disproportionate SPED rates at the student level (see Figure 4) are occurring statewide rather than disproportionately at the schools where most black students attend.

Our analysis of TAG identification suggests that the factors that cause achievement gaps likely also cause the difference in school-level TAG identification rates observed within the "Top 5" districts, rather than different TAG identification practices at the schools attended by most black students.

Figure 10. Characteristics of elementary schools where black and white students attend, Oregon, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

## Alternative high school student characteristics

Figure 11. Characteristics of black and white students in alternative and regular high schools, Oregon, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

In 2015-16, almost two thirds of black students whose longest enrollment was at an alternative high school were chronically absent, compared with 40 percent for other black high school students. Fewer black alternative high school students experienced a suspension ( $6 \%$ versus $11 \%$ for other black high school students). Similar shares of black students across all high schools were eligible for free- or reduced-price lunch or placed in special education.

## Student Outcomes

## Chronic absenteeism

Figure 12. Chronic absenteeism rates, by grade, Oregon, 2015-16


Attendance and discipline are important predictors of on-time high school graduation. Across all grades, 26 percent of Oregon's black students and 20 percent of white students were absent for more than 10 percent of days during the school year. The lowest chronic absence rates for black students occur in 4th and 5th grades, with many more students in lower and higher grades missing at least 10 percent of the school year for any reason ( $25 \%$ kindergarten; $50 \%$ in 12th grade).

## Discipline

Discipline rates have been dropping for Oregon students but a gap remains: the share of black students with at least one disciplinary incident (suspensions or expulsions) in 2015-16 was more than 1.5 times the share of white students.

Figure 13. Share of students with at least one disciplinary incident, Oregon


Source: ECONorthwest analysis of Oregon Department of Education data.

## NAEP achievement gaps

On the National Assessment of Educational Progress (NAEP), black students in Oregon are less likely than white students to score at or above "proficient" in $4^{\text {th }}$ and $8^{\text {th }}$ grade reading and math. Gaps range from 14 to 34 percentage points, though the $4^{\text {th }}$ grade reading gap is not statistically significant at conventional levels. Oregon's gaps are statistically equal to U.S. gaps.

Figure 14. NAEP scores at or above proficient, Oregon, 2015


Source: ECONorthwest analysis of U.S. Department of Education. National Assessment of Educational Progress (NAEP). Note: Race is student-reported.

## Achievement and income

Figure 15. District achievement by income level, Oregon, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data. Note: PPS=Portland Public Schools

The chart shows student performance for all Oregon school districts with at least 20 black students. Each district is represented by two circles, one for black students (orange) and one for white students (gray). The concentration of orange circles on the left side of the chart illustrates that Oregon's black students experience less affluence than white students. The two trendlines show that, on average, black students (orange line) have lower achievement than white students (gray line) at every income level.

## Achievement gaps by grade

Black-white achievement gaps are present starting in $3^{\text {rd }}$ grade and continue, relatively unchanged, through high school. Black students score relatively better in reading than in math.

Figure 16. Average percentile of student achievement in Oregon, by grade, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

## Achievement distributions

Figure 17. Student achievement distributions, Oregon, 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data.

## Math gaps by achievement quartiles

Hanushek and Rivkin (2009) found that the black-white achievement gap grew in Texas by 0.08 standard deviations between grades 4 and 8 and was especially pronounced for the highest-achieving students

In Oregon cohorts, we found a smaller increase in the achievement gap ( 0.03 standard deviations between grades 4 and 8 ) and it was not pronounced for the highestachieving students.

Figure 18. Black-white math gaps (standard deviation units) by achievement quartile; average of two Oregon cohorts ( $8^{\text {th }}$ graders in 2014-15 and 2015-16)

|  | Grade |  |  |  | Students |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 4 | 5 | 6 | 7 | 8 | Black | White |
| Overall gap | 0.51 | 0.52 | 0.54 | 0.57 | 0.54 | 4,003 | 55,842 |
| Third-grade reading quartile |  | Increase of 0.03 SD |  |  |  |  |  |
| Lowest | 0.41 | 0.39 | 0.45 | 0.50 | 0.45 | 1,043 | 8,233 |
| 2nd | 0.26 | 0.34 | 0.32 | 0.36 | 0.32 | 985 | 10,737 |
| 3rd | 0.26 | 0.30 | 0.35 | 0.37 | 0.33 | 1,012 | 13,893 |
| Highest | 0.41 | 0.42 | 0.40 | 0.43 | 0.43 | 963 | 22,979 |

Source: ECONorthwest analysis of Oregon Department of Education data. Follows methodology from Hanushek, E. \& Rivkin, S. (2009). Harming the Best: How Schools Affect the Black-White Achievement Gap. Journal of Policy Analysis and Management.

## Math gaps over time

Between 2011-12 and 2015-16, blackwhite math gaps among Oregon's $4^{\text {th }}$ and $5^{\text {th }}$ graders have increased somewhat, by 0.07 standard deviations ( $4^{\text {th }}$ grade) and 0.10 standard deviations ( $5^{\text {th }}$ grade).

Figure 19. Black-white math gaps in $4^{\text {th }}$ and $5^{\text {th }}$ grade (standard deviations), Oregon, 2011-12 to 2015-16


Source: ECONorthwest analysis of Oregon Department of Education data. Follows methodology from Hanushek, E. \& Rivkin, S. (2009). Harming the Best: How Schools Affect the Black-White Achievement Gap. Journal of Policy Analysis and Management.

## High school graduation rates

Black students performing on the same level as white students on $8^{\text {th }}$ grade tests graduate from high school at only slightly lower rates than white students. However, most black students ( $71 \%$ ) score in the bottom two quartiles of achievement in $8^{\text {th }}$ grade, which makes the overall high school graduation rate for black students much lower than the rate for white students ( $61 \%$ versus $75 \%$ ).

Figure 20. High school on-time graduation rates by 8th grade math score quartile, Oregon class of 2016

|  | Count | Share | HS graduation rate |
| :---: | :---: | :---: | :---: |
| Bottom quartile math |  |  |  |
| Black | 956 | $50 \%$ | $50 \%$ |
| White | 8,863 | $30 \%$ | $53 \%$ |
| 2nd quartile math | 401 | $21 \%$ | $74 \%$ |
| Black | 6,088 | $21 \%$ | $76 \%$ |
| White |  |  |  |
| 3rd quartile math | 331 | $17 \%$ | $85 \%$ |
| Black | 6,739 | $23 \%$ | $85 \%$ |
| White | 229 | $12 \%$ | $90 \%$ |
| Top quartile math | 7,592 | $26 \%$ | $93 \%$ |
| Black |  |  |  |
| White | 1,917 | $100 \%$ | $61 \%$ |
| Total | 29,282 | $100 \%$ | $75 \%$ |
| Black |  |  |  |
| White |  |  |  |

Source: ECONorthwest analysis of Oregon Department of Education data.
Note: Does not include multiracial black students or students with no test score.

## 9th grade cohort outcomes

Figure 21. Outcomes for a cohort of Oregon 9th graders, 9th grade in 2005-06


Source: ECONorthwest analysis of Oregon Department of Education and National Student Clearinghouse data.
Note: Does not include multiracial black students.

While high school graduation rates are substantially lower for black students, those who graduate enroll in postsecondary institutions at the same rate as white students. The gaps reappear for postsecondary completion, however, with only 23 percent of black high school graduates receiving a credential within six years of their expected high school graduation.


[^0]:    Source: ECONorthwest analysis of Oregon Department of Education data.

[^1]:    Source: ECONorthwest analysis of Oregon Department of Education data.

