The White-Hispanic Performance Gap in Washington: Is the Gap Widening for All Hispanic/Latino Students?

At the January 2015 State Board of Education meeting, the Board heard that the White-Hispanic performance gap reduction for Washington student groups was the lowest performing of all the states for which the gap reductions could be computed. The analysis described to the Board showed that Washington was one of six states where the White-Hispanic performance gap increased from the 2003 NAEP administration to the 2013 NAEP administration, while the other states with reportable data showed a reduction in the White-Hispanic performance gap. To view the full presentation to the Board, please go to http://www.sbe.wa.gov/documents/BoardMeetings/2015/Jan/NAEPGaps50States.pdf.

In response to Board discussion and questions, this work frames the White-Hispanic performance gap in the context of poverty, as measured by the students qualifying for the Free and Reduced Price Lunch (FRL) Program. The research question addressed here is:

Does the White-Hispanic performance gap on the NAEP assessments differ for student groups when poverty status (FRL or Not FRL) is considered?

Methodology

To answer the research question, the NAEP 4th and 8th grade reading and math assessment data from the six most recent NAEP administrations (2003 and 2013) were analyzed. The NAEP State Comparison online tool found at http://nces.ed.gov/nationsreportcard/statecomparisons/ computes the average scaled score differences for a NAEP assessment between two administrations for the groups being compared; in this case, Hispanic and White students by poverty (FRL) status. The gap differences for each of the four NAEP assessments were computed separately, averaged, and collapsed into the table and chart shown below. In this analysis a positive value means that the average scaled score of the White student group was greater than the average scaled score for the Hispanic student group. On the summary table below, we would hope to see lower values for 2013 as compared to 2003 as this would indicate that the performance gaps are narrowing over time.

Summary Table showing the White-Hispanic performance gaps by assessment and by poverty status.

<table>
<thead>
<tr>
<th></th>
<th>4th Grade Reading</th>
<th>8th Grade Reading</th>
<th>4th Grade Math</th>
<th>8th Grade Math</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not FRL</td>
<td>FRL</td>
<td>Not FRL</td>
<td>FRL</td>
<td>Not FRL</td>
</tr>
<tr>
<td>2003</td>
<td>10.0</td>
<td>19.2</td>
<td>10.6</td>
<td>18.6</td>
<td>8.6</td>
</tr>
<tr>
<td>2005</td>
<td>25.9</td>
<td>17.5</td>
<td>2.3</td>
<td>22.1</td>
<td>14.9</td>
</tr>
<tr>
<td>2007</td>
<td>16.6</td>
<td>12.6</td>
<td>13.7</td>
<td>18.0</td>
<td>21.4</td>
</tr>
<tr>
<td>2009</td>
<td>26.1</td>
<td>15.1</td>
<td>17.7</td>
<td>16.7</td>
<td>15.9</td>
</tr>
<tr>
<td>2011</td>
<td>16.6</td>
<td>20.8</td>
<td>20.4</td>
<td>12.6</td>
<td>15.4</td>
</tr>
<tr>
<td>2013</td>
<td>11.1</td>
<td>19.4</td>
<td>14.9</td>
<td>17.5</td>
<td>12.1</td>
</tr>
</tbody>
</table>

*Note: average scaled score difference on the NAEP between White and Hispanic student groups by poverty status.

For more information contact andrew.parr@k12.wa.us.
Findings

The chart below shows how the performance of the White-Not FRL student group compares to the performance of the Hispanic-Not FRL student group over multiple years. In combination, the summary table and chart show that the White-Not FRL student group consistently performs higher than the Hispanic-Not FRL student group on all four NAEP assessments. Also, that the White-Hispanic performance gap increased 1.1 to 7.2 scaled score points for all of the assessments.

When the 4th and 8th Grade NAEP Reading and Math assessments are combined and averaged, the White-Hispanic performance gap increases by approximately 4.1 scaled score points in 2013 as compared to 2003. The White-Hispanic performance gap for Not FRL students was 9.1 scaled score points in 2003, increased to 20.5 scaled score points in 2009, and decreased to 13.2 scaled score points in 2013.

These data show that Hispanic students who do not qualify for FRL are improving on the NAEP but at a lower rate than are the White students who do not qualify for FRL. The White-Hispanic performance gaps are widening for students not living in poverty (Not FRL).

The chart below shows how the performance of the White-FRL student group compares to the performance of the Hispanic-FRL student group over multiple years. When used together, the summary table and chart show that the White-FRL student group consistently performs higher than the Hispanic-FRL student group. The White-Hispanic performance gap increased by small amounts (0.2 to 1.7 scaled score points) for all assessments, except for the 8th Grade NAEP Reading where the gap decreased by 1.1 scaled score points.

For more information contact andrew.parr@k12.wa.us.
When the 4th and 8th Grade NAEP Reading and Math assessments are combined and averaged for students in poverty (FRL), the White-Hispanic performance gap increased by only 0.3 scaled score points in 2013 as compared to 2003. The White-Hispanic performance gap for FRL student groups was 16.0 scaled score points in 2003 and increased slightly to 16.3 scaled score points in 2013.

These data show that Hispanic students who qualify for FRL are improving on the NAEP, and at about the same rate as the White students who qualify for FRL. For the students living in poverty (FRL), the White-Hispanic performance gaps are essentially unchanged.

![4th and 8th Grade NAEP Reading and Math (Combined) White-Hispanic Gap for FRL Students](image)

Summary of the Analyses

The performance of both the White student group and the Hispanic student groups is improving for all of the NAEP assessments and for both the FRL and Not FRL student groups. However, the White student group continues to perform at a higher level than the Hispanic student group on all of the examined NAEP administrations, regardless of student poverty (FRL) status.

Two noteworthy findings are reported here.

- First, the White-Hispanic performance gap is essentially unchanged for Hispanic students who qualify for FRL. However, the computed trend line shows a very slight downward trend, which indicates a slight gap reduction. The scaled score performance gap is widening for Hispanic students who do not qualify for FRL, and the computed trend line has a positive slope.
- Second, if the 2003 NAEP results are excluded from the chart below, the trend line for the FRL student group remains essentially the same, but the trend line for the Not FRL group shifts to a slight negative slope, which indicates an overall gap reduction from 2005 to 2013.

For more information contact andrew.parr@k12.wa.us.
More about this Analysis

The NAEP assessment program provides an excellent database from which to monitor student progress but the conclusions drawn from these data could be impacted by new, federally required, student demographic coding. Almost certainly, the disaggregation into additional student groups (including the Two or More student group) beginning in 2011 has an impact on this gap analysis. The White and Hispanic student groups are not formulated on the same criteria in 2003 as compared to 2013, which means that the Hispanic student group formulated in 2003 is not perfectly comparable to the Hispanic student group formulated in 2013. The same can be said of the White student groups for the same years.

The performance gaps between White and Hispanic student groups in Washington are essentially unchanging and may be slightly increasing, making Washington the lowest performer in the United States on this measure. Even considering the limitations of the data, the White-Hispanic performance gap in Washington is unacceptably large and has not narrowed.

For more information contact andrew.parr@k12.wa.us.