



THE WASHINGTON STATE BOARD OF EDUCATION

Governance | Accountability | Achievement | Oversight | Career & College Readiness

Title:	Student Performance Gaps – Educational System Health	
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Relevant To Board Roles:	<input type="checkbox"/> Policy Leadership <input checked="" type="checkbox"/> System Oversight <input checked="" type="checkbox"/> Advocacy	<input type="checkbox"/> Communication <input type="checkbox"/> Convening and Facilitating
Policy Considerations / Key Questions:	<p>The memo provides an up close look at the performance gaps between Black, White, Hispanic, and FRL groups through the NAEP assessment for all 50 states. The SBE staff recommends that the Statewide Indicators of Educational System Health (ESSB 5491) reports include a discussion of performance gaps.</p>	
Possible Board Action:	<input checked="" type="checkbox"/> Review <input type="checkbox"/> Adopt <input type="checkbox"/> Approve <input type="checkbox"/> Other	
Materials Included in Packet:	<input checked="" type="checkbox"/> Memo <input type="checkbox"/> Graphs / Graphics <input type="checkbox"/> Third-Party Materials <input type="checkbox"/> PowerPoint	
Synopsis:	<p>The ESSB 5491 (Statewide Indicators of Educational System Health) legislation requires the disaggregation of student performance data into the ESEA subgroups and goal setting for each subgroup. The performance gap analyses described in the accompanying memo were derived from the 2013 NAEP data.</p> <p>The analyses clearly show the presence of large performance gaps in reading and in math based on scaled scores and achievement level distribution. In this work, three separate performance gaps were analyzed, and these include performance gaps based on:</p> <ul style="list-style-type: none"> • The performance of FRL students as compared to Not FRL students, • The performance of White students as compared to Black students' and • The performance of White students as compared to Hispanic students. <p>While substantial performance gaps were identified for Washington students, similar gaps were found to occur in all states across the country. However, some distinct differences were evident from the data and analyses.</p> <ul style="list-style-type: none"> • The Washington performance gaps based on poverty status are slightly smaller than the average U.S. gaps and the Washington gaps are mostly smaller than the gaps for the peer states. • The Washington White-Black performance gaps are typically much smaller than the U.S. average and smaller than the peer state gaps. • The Washington White-Hispanic performance gaps are among the highest in the U.S. but differ somewhat based on assessed grade level and content area. 	



STUDENT PERFORMANCE GAPS – EDUCATIONAL SYSTEM HEALTH

Policy Considerations

The ESSB 5491 authorized Washington State Board of Education (SBE) to lead the effort in identifying system-wide performance goals and measurements for the six statewide indicators specified in the legislation. Among other tasks, the legislation requires the SBE to:

- Recommend revised performance goals and measurements, if necessary,
- Recommend evidence-based reforms as needed, and
- Compare Washington student achievement result with national data and to peer states.

Summary

At the September and November 2014 board meetings, the Board participated in presentations on the Statewide Indicators of Educational System Health and directed the SBE staff to complete the report to the legislative committees on Education following the guidance from the SBE provided at the November 2014 meeting. The SBE staff showed that:

- Four of the indicators are not on track to meet goals,
- Four of the indicators are not ranked in the top ten percent nationally, and
- Three of the indicators are not comparable to the peer states.

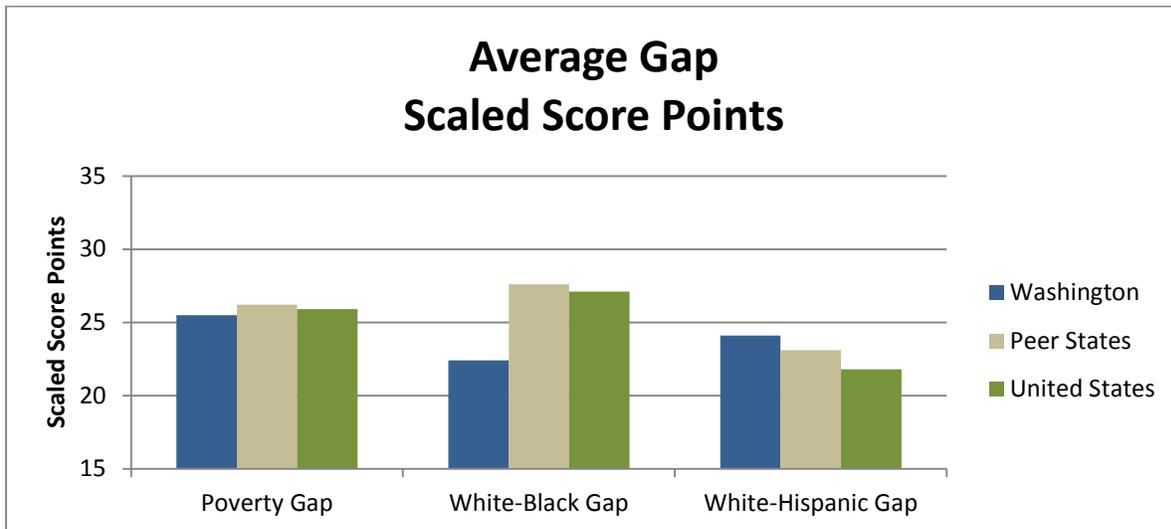
Based on these conclusions, the SBE recommended educational reforms or interventions intended to bring about improvements to the educational measures. Board members requested additional information about how performance gaps for Washington students compare to students nationally and to peer states.

The SBE analyzed data from the 2013 National Assessment of Educational Progress (NAEP) to determine how the performance gaps for Washington students compared nationally and to peer states. For this and other comparisons, Colorado, Connecticut, Maryland, Massachusetts, Minnesota, New Jersey, North Carolina, and Virginia were identified as peer states.

The three important findings from this work can be summarized as follows:

- Based on poverty status, the performance gaps identified for the Washington FRL student group are slightly smaller than the U.S. average and are generally smaller than the peer states by comparison. This conclusion holds for both reading and math for both 4th and 8th grade assessment data.
- The White-Black performance gap is small in relation to the U.S. average and small in comparison to the peer states. This is true for both content areas (reading and math) and gap measures (average scaled scores and percent At or Above Proficient).
- The 4th grade White-Hispanic performance gaps are among the largest one-third of all states in both reading and math, are significantly larger than the U.S. average, and are typical of the peer states'. The 8th grade performance gaps in reading are among the

largest in the country, while the math performance gaps are closer to the US average but are substantial.



The chart above summarizes each of the different gaps for Washington, the peer states, and for the United States. The data presented above is the simple average scaled score point gap for reading and math for 4th and 8th grade NAEP measures. Some interesting (and for the most part unexpected) notes are as follows:

- The average White-Black performance gap is much lower in Washington as measured against the comparison groups (U.S. average and Peer States median). Because White students in Washington perform similarly to White students across the country, the smaller gap here occurs because Washington Black students score among the highest in the country on the 4th and 8th Grade NAEP reading and math assessments.
- The average White-Hispanic performance gap is larger in Washington as measured against the comparison groups (U.S. average and Peer States median). Staff believes that different countries of origin for the Hispanic/Latino immigrant population of the U.S. and peers states bring about the observed differences.

Results

The NAEP is administered every other year and assesses 4th and 8th grade students in reading and math. The NAEP uses a complex sampling technique to assess a representative sample of the population of each state that can then be generalized to the state level and the national level. The NAEP is the only educational assessment that is currently administered that provides reading and mathematics achievement data comparable on a state to state and national level. Follow this link to read more about the NAEP <http://nces.ed.gov/nationsreportcard/>.

The NAEP provides state-level results disaggregated by the Elementary and Secondary Educational Act (ESEA) subgroups that include seven race/ethnicity groups and program subgroups based on special education (SWD), Free and Reduced Price Lunch (FRL), and English Language Learner (ELL) participation. With this level of disaggregation, the user has the capacity to examine performance differences based on race/ethnicity and program participation. Performance gaps can be framed in the context of scaled score differences and differences in the percentage of students at each achievement level (Below Basic, At or Above Basic, At or Above Proficient, or At Advanced). For these analyses, the SBE staff opted to examine scaled score differences and differences in the At or Above Proficient achievement level.

In the discussion that follows, the SBE reports performance gaps as follows:

- Gap based on Poverty Status: the performance (average scaled score or the percent At or Above Proficient) of the Not FRL group minus the performance of the FRL group.
- White-Black Performance Gap: the performance (average scaled score or the percent At or Above Proficient) of the White student group minus the performance of the Black student group.
- White-Hispanic Performance Gap: the performance (average scaled score or the percent At or Above Proficient) of the White student group minus the performance of the Hispanic student group.

Gaps Based on Poverty Status

On the 4th grade reading assessment, the average scaled score for the Washington FRL student group was 209, approximately 28.4 scaled points lower than the Not FRL student group (Chart 1). The percentage of the FRL student group At or Above Proficient (23.9 percent) was 30.5 percent lower than the Not FRL student group (Chart 2). Based on these data, several statements may be made.

- Performance gaps (based on average scaled core and percent At or Above Proficient) are slightly smaller than the U.S. average.
- The scaled score gap is the 34th highest in the U.S. but smaller than five peer states’
- The proficiency gap is the 32nd highest in the U.S. but smaller than seven peer states’.

Chart 1: Fourth grade reading scaled score performance gap by poverty status.

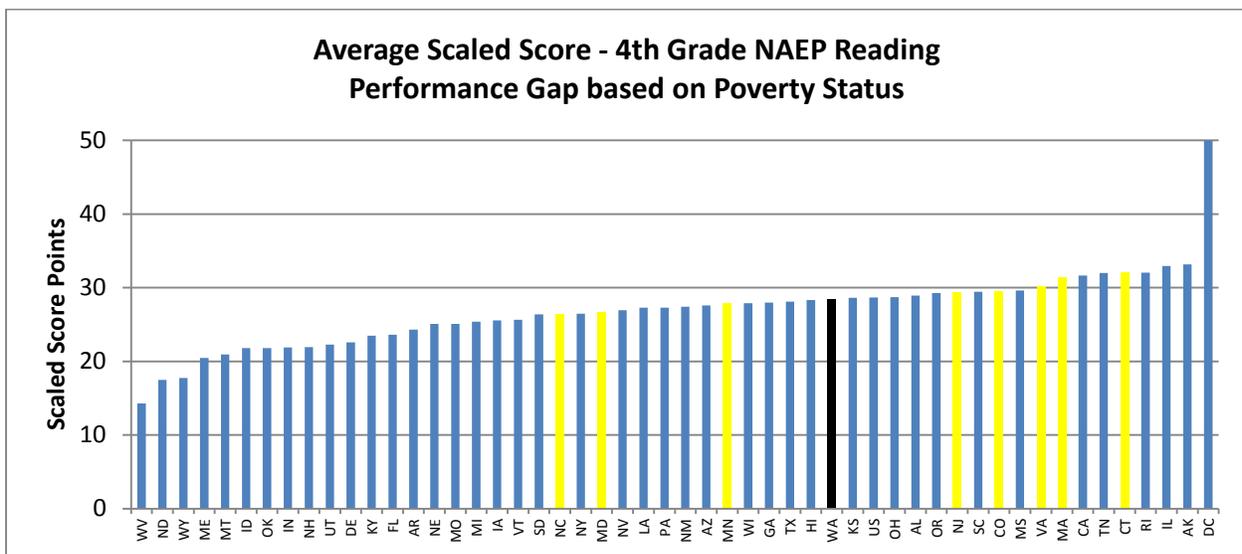
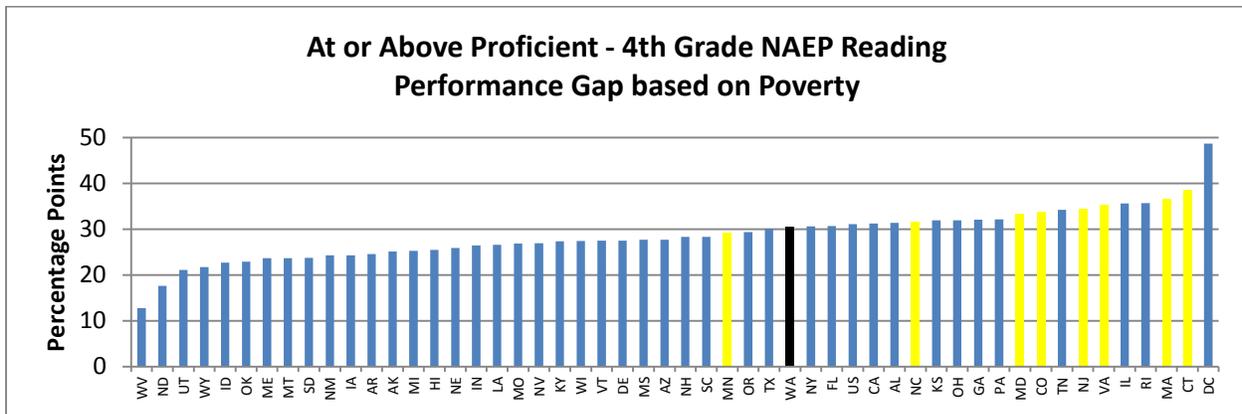


Chart 2: Fourth grade reading proficiency performance gap based on poverty status.



On the 4th grade math assessment, the scaled score performance gap for the Washington FRL student group (23.2 scaled points) was the 30th highest in the U.S., slightly lower than the U.S. average (23.7 scaled points), and smaller than all of the peer states (Chart 3). The proficiency performance gap of 32.8 percentage points for the Washington FRL student group was one point lower than the U.S. average and smaller than all the other peer states' (Chart 4).

Chart 3: Fourth grade math scaled score performance gap by poverty status.

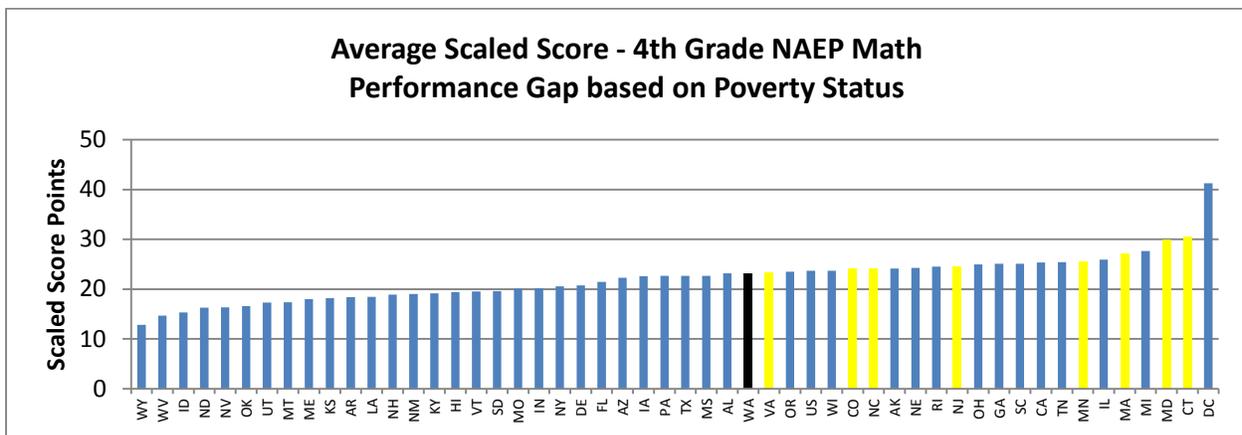
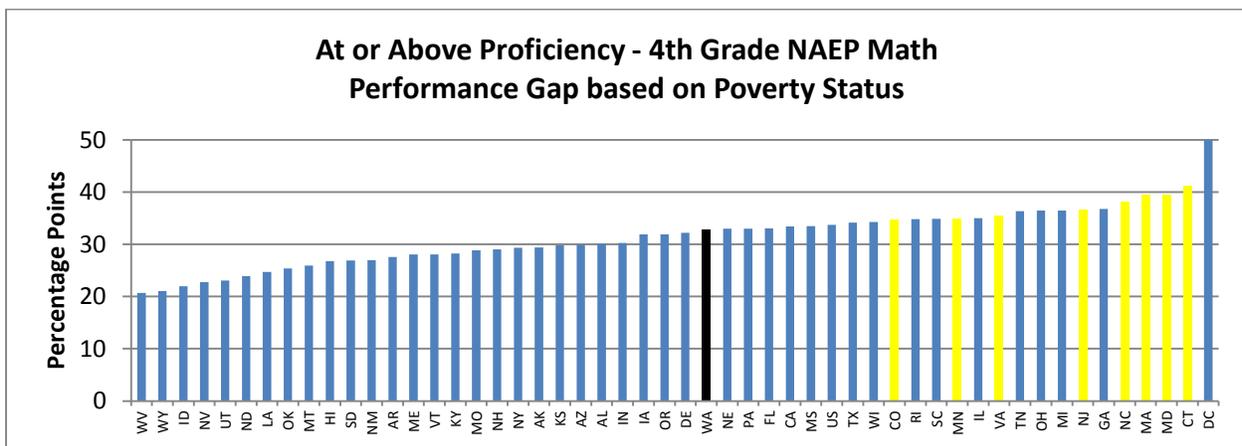


Chart 4: Fourth grade math proficiency performance gap based on poverty status.



On the 8th grade reading assessment, the average scaled score for the Washington FRL student group was 258, approximately 24.7 scaled points lower than the Not FRL student group (Chart 5). The percentage of the FRL student group At or Above Proficient (25.8 percent) was 28.5 percent lower than the Not FRL student group (Chart 6). Based on these data, several statements may be made.

- Performance gaps (based on average scaled core and percent At or Above Proficient) are greater than the U.S. average.
- The scaled score gap is the 40th highest in the U.S. but smaller than four peer states’
- The proficiency gap is the 39nd highest in the U.S. but smaller than seven peer states’.

Chart 5: Eighth grade reading scaled score performance gap by poverty status.

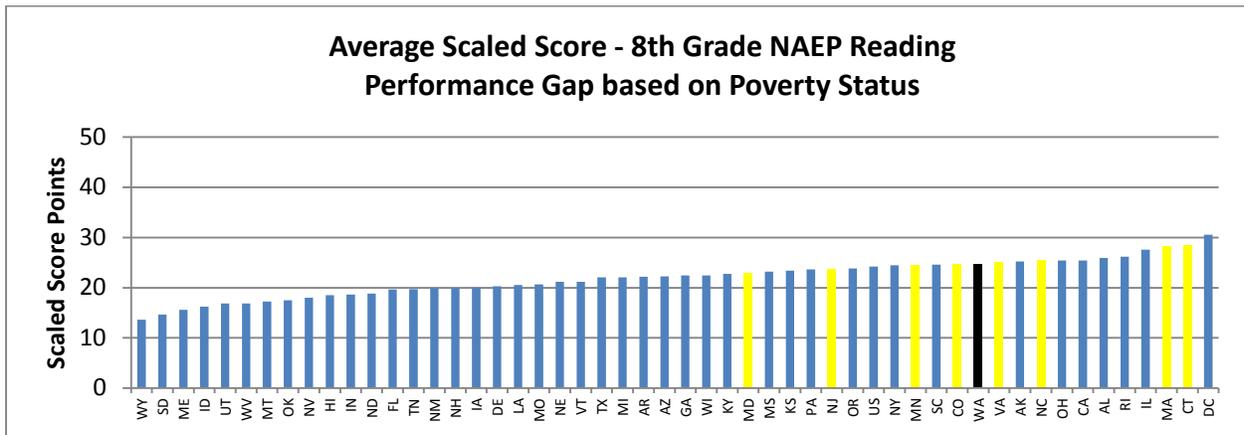
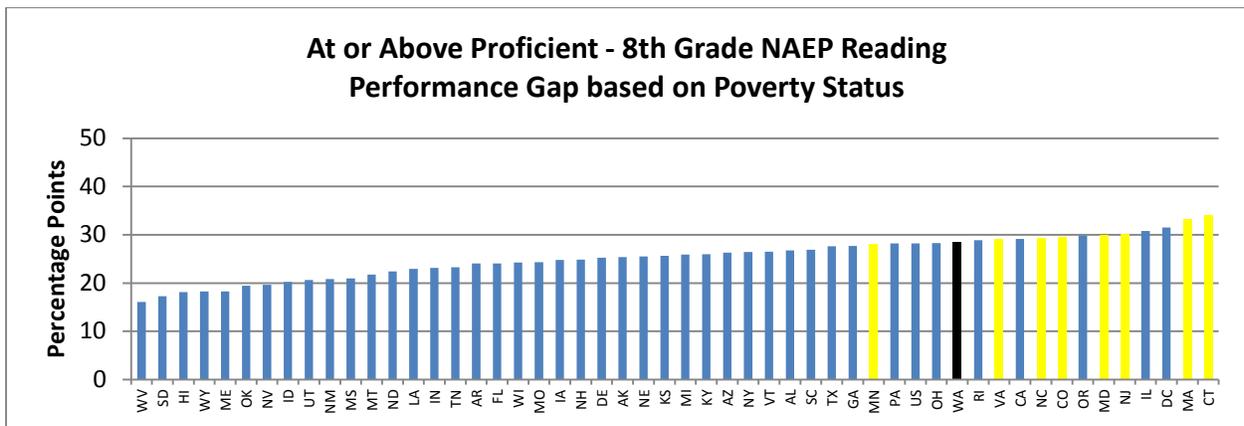


Chart 6: Eighth grade reading proficiency performance gap based on poverty status.



On the 8th grade math assessment, the Washington scaled score performance gap based on poverty is 25.6 scaled score points, which is approximately 1.5 gap points lower than the U.S. average and smaller than seven of the peer states (Chart 7). The Washington proficiency gap based on poverty is 28.1 percentage points which is more than one point smaller than the U.S. average of 25.9 gap points and is smaller than all the peer states (Chart 8).

Chart 7: Eighth grade math scaled score performance gap by poverty status.

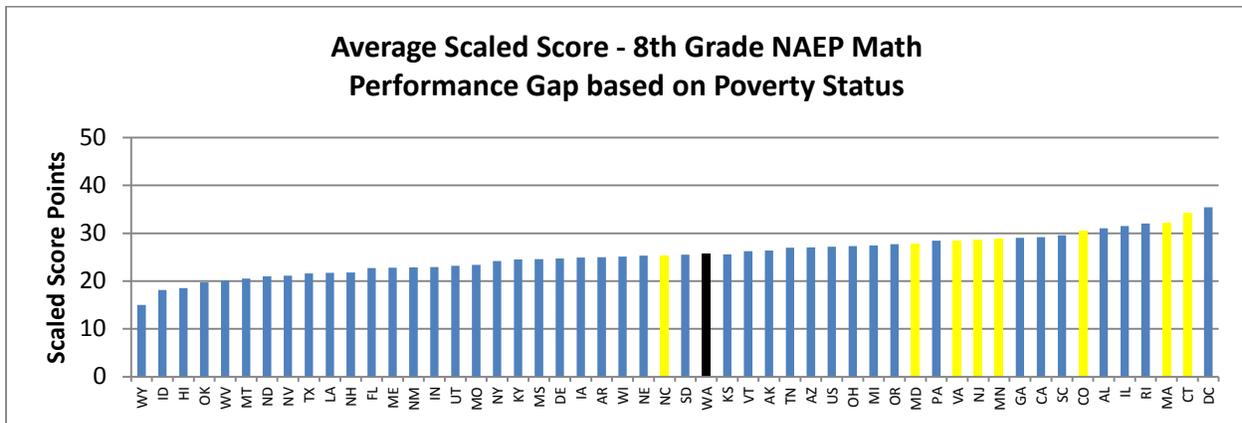
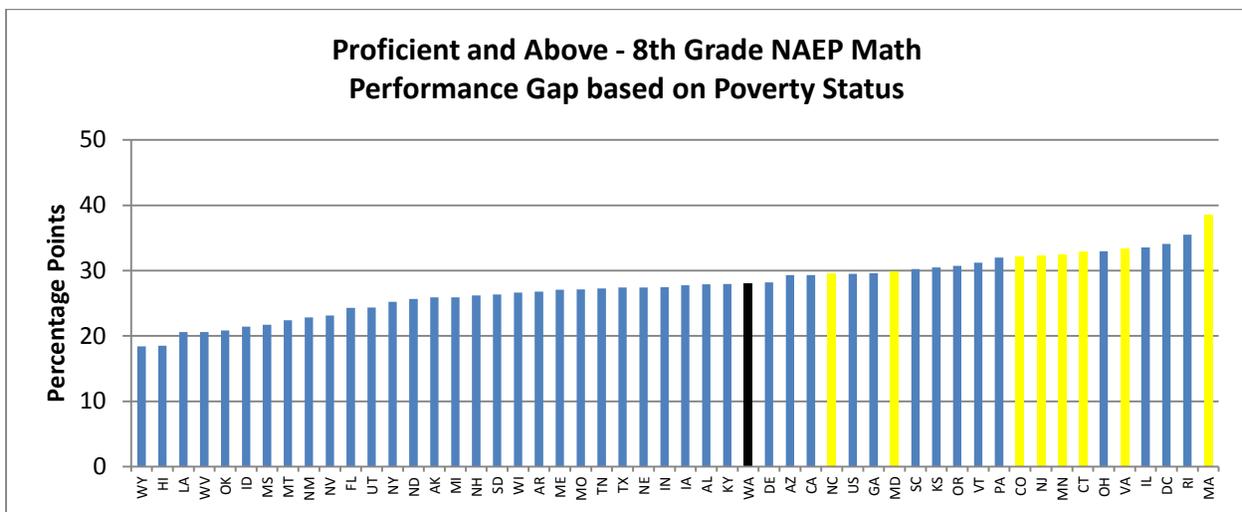


Chart 8: Eighth grade math proficiency performance gap based on poverty status.



In summary and for all measures based on poverty status, the performance gaps identified for the Washington FRL student group are slightly smaller than the U.S. average and are generally smaller than the peer states'. This conclusion holds for both reading and math for both 4th and 8th grade assessment data.

On a side note, the extraordinarily large gaps for the District of Columbia are believed to be due to the intense urbanization of the governmental unit. Staff further suspects that it is the presence of extremely large income disparities in the District of Columbia that contributes to the very large performance gaps. As evident in the analyses that follow, this is a very pronounced and consistent pattern.

White-Black Performance Gap

The White-Black, scaled score, performance gap in reading (20.4 scaled points for Washington students) is the 6th smallest in the U.S., smaller than the U.S. average, and is smaller than all of the peer states' (Chart 9). The reading performance gap framed in the context of proficiency for Washington students is approximately 21.4 percentage points, which is lower than the U.S. average of 27.8 and is the lowest of the peer states'.

Chart 9: Fourth grade reading scaled score White-Black performance gap.

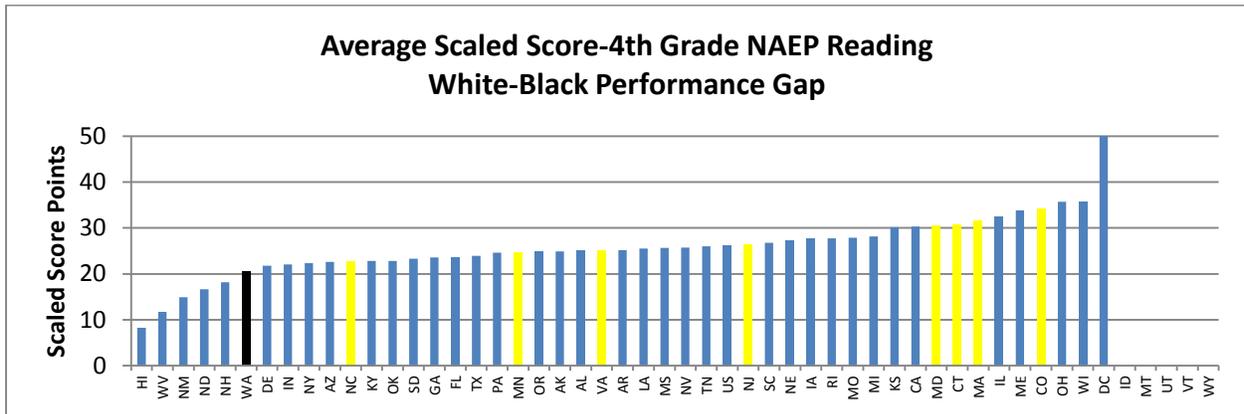
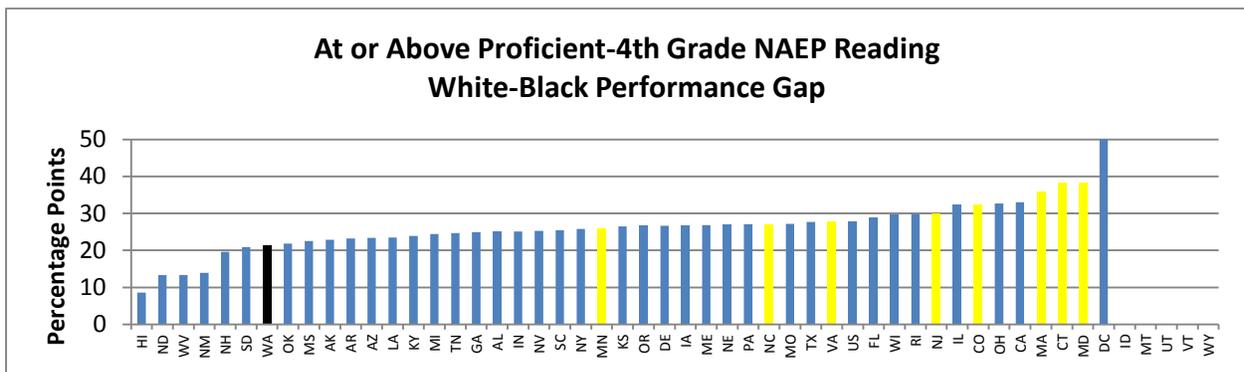


Chart 10: Fourth grade reading proficiency White-Black performance gap.



For the 4th grade math NAEP, the White-Black scaled score performance gap for Washington students is 20.7 scaled score points, which is the sixth smallest in the U.S. (Chart 11). The gap is far less than the US average scaled score gap of 25.7 points and is smaller than all the peer states'. The White-Black proficiency gap for Washington students is the 8th lowest in the U.S. at 27.1 percentage points, which is the smallest of the peer states', well below the U.S. average gap of 35.4 percentage points (Chart 12).

Chart 11: Fourth grade math scaled score White-Black performance gap.

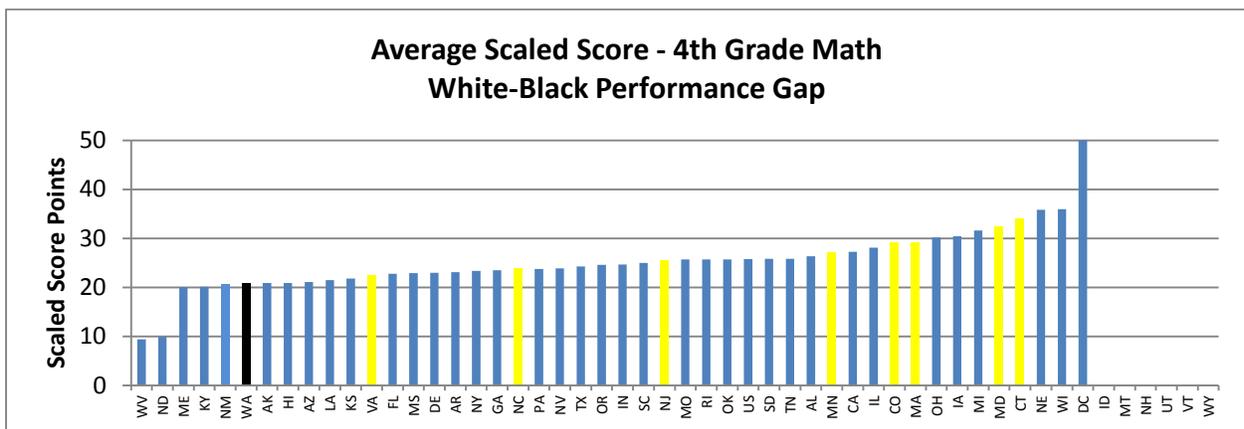
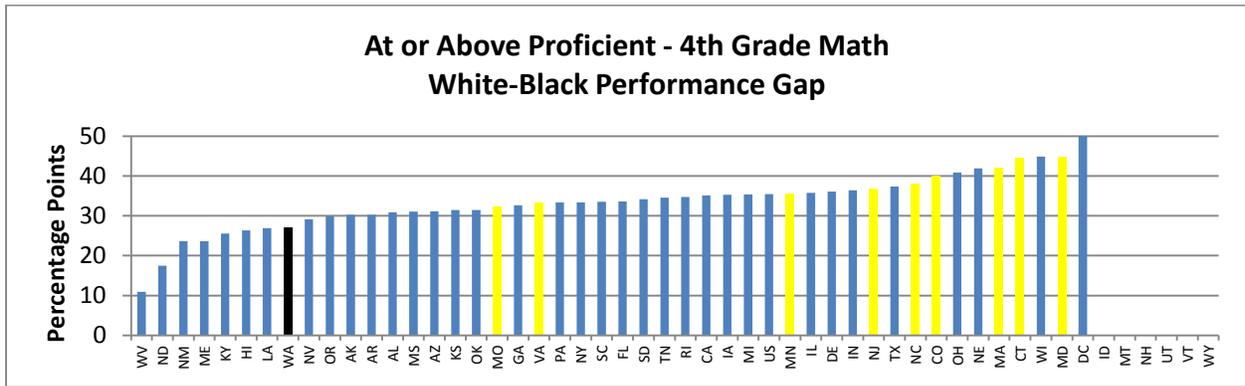


Chart 12: Fourth grade math proficiency White-Black performance gap.



For the 8th grade NAEP reading assessments, the scaled score White-Black performance gap for Washington students is the 9th smallest in the U.S. (21.3 scaled score points), approximately 5.5 scaled points smaller than the US average, and is far smaller than the peer states' (Chart 13). The Washington proficiency, White-Black, performance gap of 27.4 percentage points is the 25 smallest in the U.S. and is the second smallest of the peer states'.

Chart 13: Eighth grade reading scaled score White-Black performance gap.

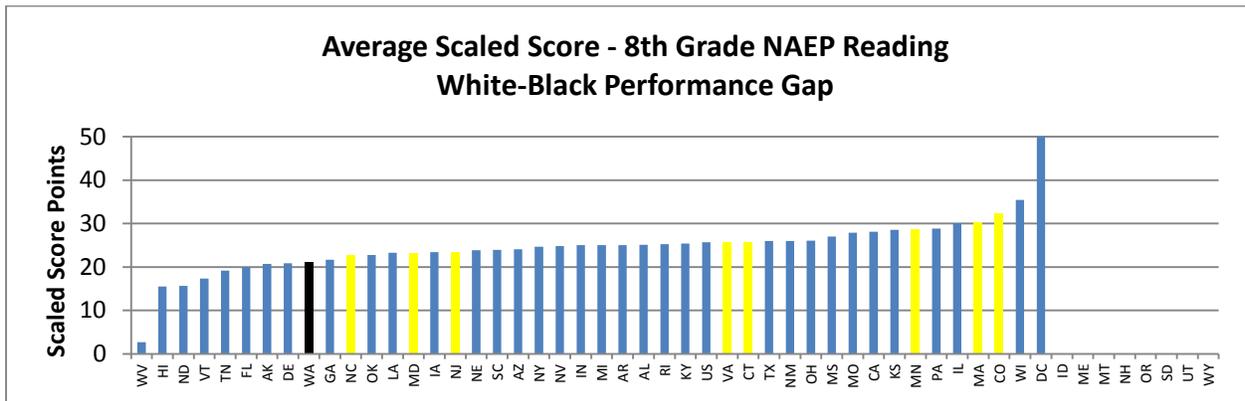
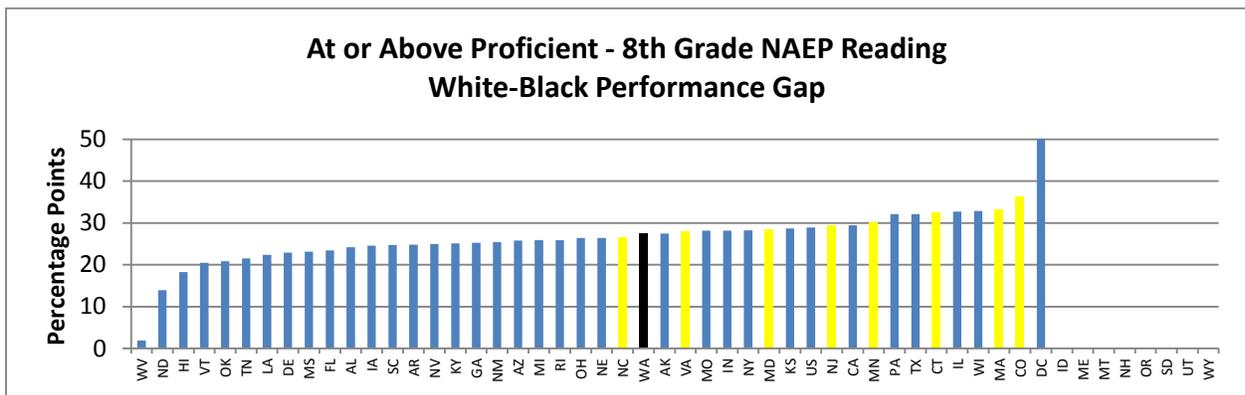


Chart 14: Eighth grade reading proficiency White-Black performance gap.



The White-Black scaled score performance gap in math for Washington 8th grade students (27.2 scaled score points) was the 11th smallest in the U.S. and was the smallest of the peer states (Chart 15). The Washington students posted a proficiency performance gap of 25.3 percentage points, which was the 10th smallest in the U.S., far lower than the U.S. average (30.8), and the lowest of the peer states' (Chart 16).

Chart 15: Eighth grade math scaled score White-Black, performance gap.

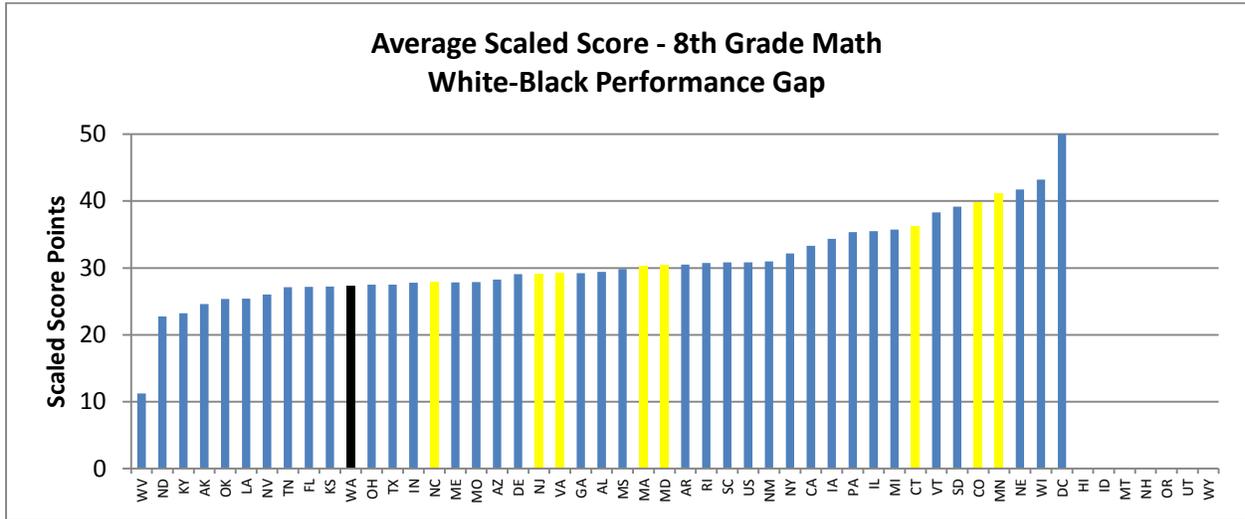
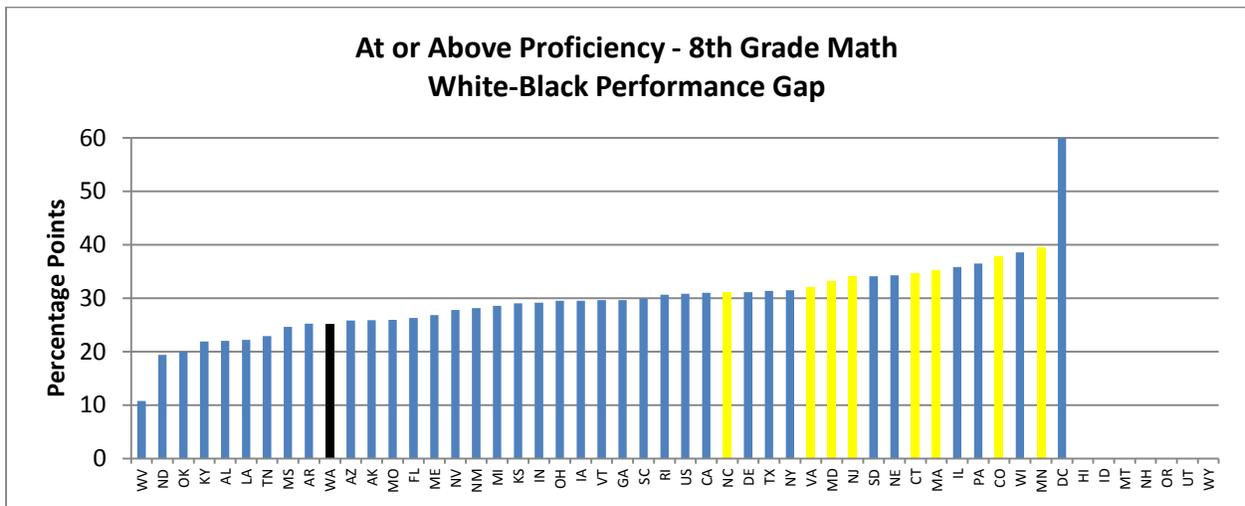


Chart 16: Eighth grade math proficiency White-Black, performance gap.



In summary, the White-Black performance gap is small in relation to the U.S. average and small in comparison to the peer states. This is true for both content areas (reading and math) and gap measures (average scaled scores and percent At or Above Proficient). Because White students in Washington perform similarly to White students across the country, the smaller gap results because Washington Black students score among the highest in the country on the 4th and 8th Grade NAEP reading and math assessments.

White-Hispanic Performance Gap

For the 4th grade reading assessment, the scaled score White-Hispanic performance gap for Washington students was 26.4 scaled points, which is the 38th largest gap in the US and is approximately two points higher than the U.S. average (Chart 17). The gap is the 4th lowest of the peer states'. The proficiency White-Hispanic performance gap (Chart 18) for Washington students is 27.7 percentage points, which is the 36th largest gap in the U.S. and is approximately two percentage points larger than the US average gap of 25.5 percentage points.

Chart 17: Fourth grade reading scaled score White-Hispanic, performance gap.

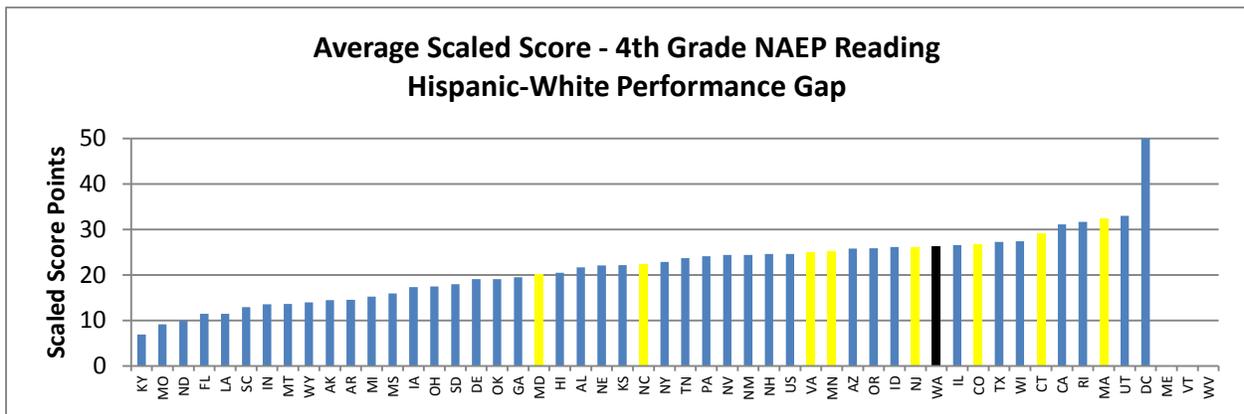
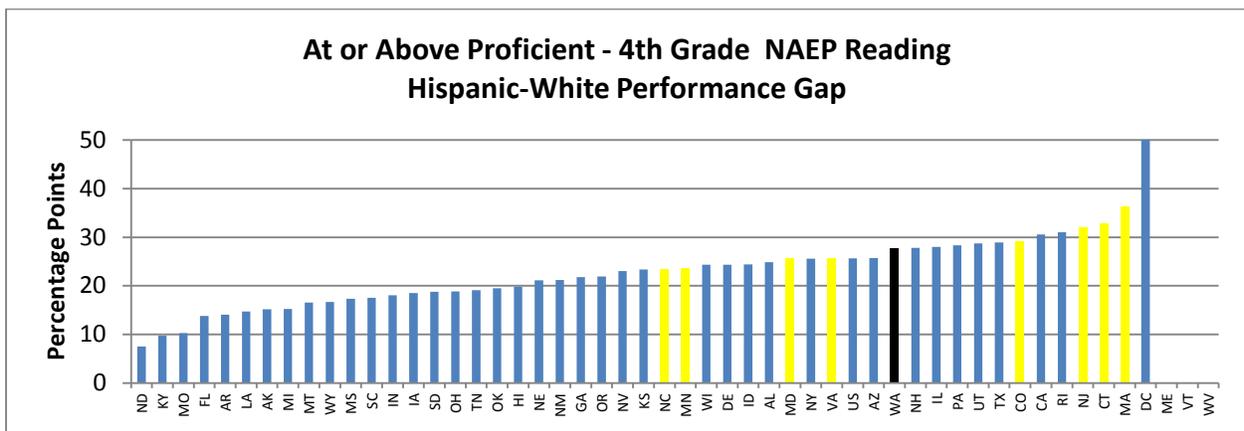
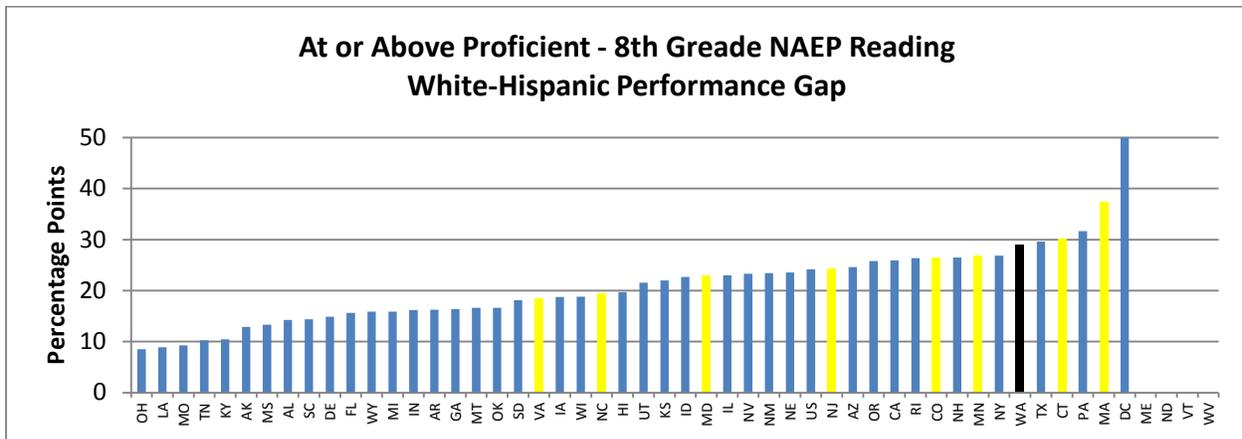


Chart 18: Fourth grade reading proficiency White-Hispanic, performance gap.



For the 4th grade math assessment, the Washington scaled score White-Hispanic performance gap is 21.8 scaled score points (Chart 19) which is the 37th largest gap in the U.S. and more than two points larger than the U.S. average of 19.4 scaled score points. The Washington gap is smaller than five of the peer states'. For math, the White Hispanic proficiency performance gap of 32.0 percentage points is the 38th largest gap in the U.S. and is five percentage points larger than the U.S. average gap (Chart 20). The Washington gap is smaller than five of the peer states'.

Chart 22: Eighth grade reading proficiency White-Hispanic, performance gap.



For the 8th Grade NAEP Math assessment, Washington students posted a White-Hispanic scaled score gap of 22.7 scaled score points, which is approximately the U.S. average gap of 22.4 scaled score points (Chart 23). The gap for Washington students is the 28th largest in the U.S. and is the middle score of the peer states'. For the proficiency gap measure in math, the Washington gap of 25.4 percentage points is the 31st largest in the U.S. and a little larger than the US average. Washington ranks in the middle of the peer states on this measure.

Chart 23: Eighth grade math scaled score White-Hispanic performance gap.

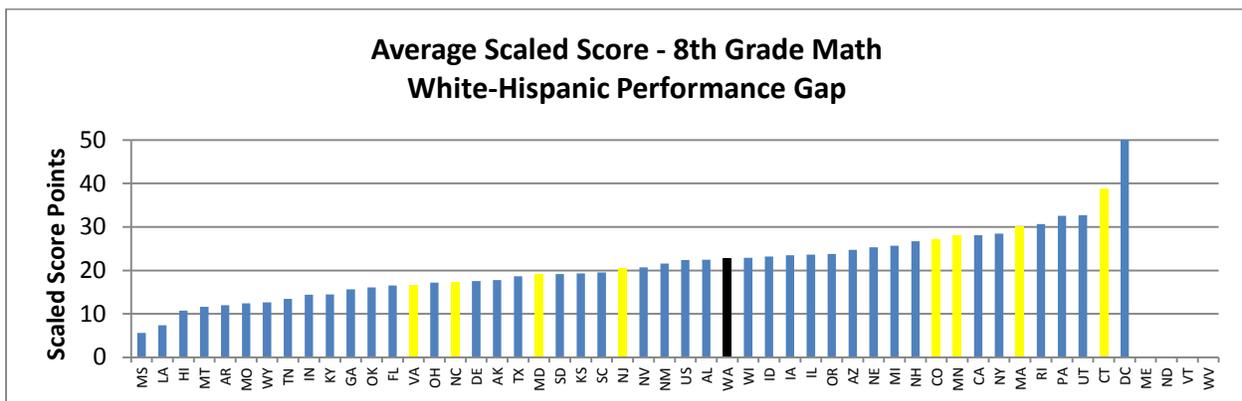
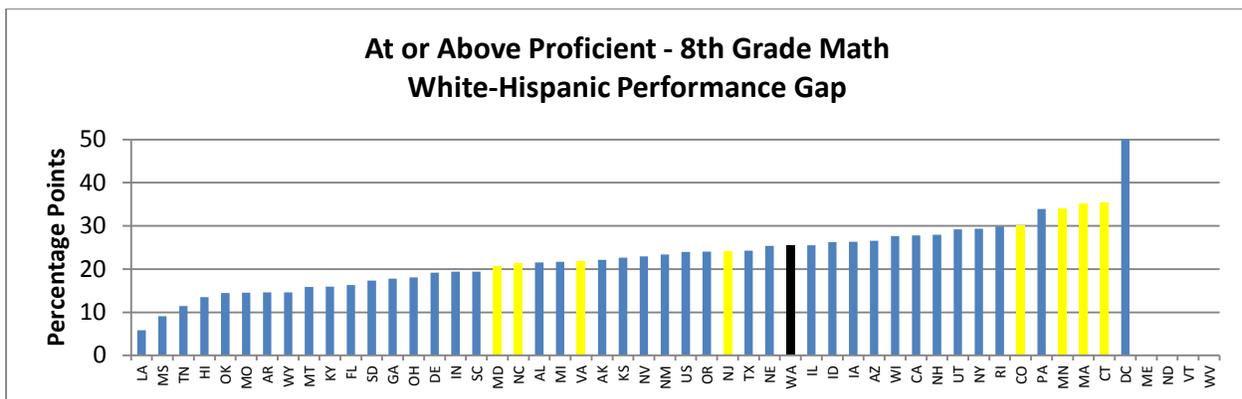


Chart 24: Eighth grade math proficiency White-Hispanic performance gap.



In summary, the 4th grade White-Hispanic performance gaps are among the largest one-third of all states in both reading and math, are significantly larger than the U.S. average, and are typical of the peer states'. The 8th grade performance gaps in reading are among the largest in the country, while the math performance gaps are closer to the U.S. average but are substantial.

Action

No action by the Board is required.

Please contact Andrew Parr at andrew.parr@k12.wa.us if you have questions regarding this memo.