

## Assertion of Progress and Exceptions Form

January 8, 2018

### ER 2-3: Math Mathematics

<p>Assertion of Progress with Evidence</p>	<p>Overall student performance in mathematics at all grade levels is relatively strong in regard to other large Washington State districts, as evidenced by:</p> <ul style="list-style-type: none"><li>• Strong performance relative to 48 comparable WA districts<ul style="list-style-type: none"><li>○ Rank 1 in grade 3 SBA</li><li>○ Rank 2 in grade 5 SBA</li><li>○ Rank 2 in grade 8 SBA</li></ul></li><li>• 94% or more of 9<sup>th</sup> graders (overall) earning full credit in math for the past three years</li></ul> <p>Performance gaps are minimal for several key demographic subsets of students</p> <ul style="list-style-type: none"><li>• Less than 3% difference by gender at all grade levels</li><li>• Post-ELL student performance is within 10% of non-ELL students, at all grade levels, and the gap is effectively erased for students who are two or more years post-ELL</li><li>• The fraction of Asian students meeting standard is above average at all grade levels, and actually meets the 95% at or above standard target in 3<sup>rd</sup> grade</li><li>• The fraction of multi-ethnic students meeting standard is comparable to the fraction of white students, at all grade levels.</li></ul>
<p>Exceptions with Evidence</p>	<p>Adequate progress toward the 95% at standard objective is not observed. In nearly all trend analyses (all students, or demographic subsets thereof) and at all grade levels (3, 5, and 8) the three-year trends are pretty much flat, indicating that absolute performance is stable, and not obviously improving.</p> <ul style="list-style-type: none"><li>• Three-year trend data in SBA results for all students do not show significant progress toward 95% at standard (performance appears to be stable, rather than improving)<ul style="list-style-type: none"><li>○ 81-83% met standard in grade 3 SBA</li><li>○ 73-76% met standard in grade 5 SBA</li><li>○ 72-75% met standard in grade 8 SBA</li><li>○ (grade 11 trend not meaningful because of small sample size)</li></ul></li></ul> <p>The absolute percentage of students meeting standard on SBA declines from third grade (~82% at standard) to eighth grade (~74% at standard).</p> <ul style="list-style-type: none"><li>• Consistent negative trend in fraction of students at standard, comparing grade 3 to grade 5. (Performance consistently drops in later elementary)<ul style="list-style-type: none"><li>○ 2014-15: -8% drop (81% to 73%)</li><li>○ 2015-16: -10% drop (83% to 73%)</li><li>○ 2016-17: -6% drop (82% to 76%)</li></ul></li></ul>


	<p>Achievement gaps exist when comparing specific demographic subsets of students. These gaps do not appear to widen in older grades, but neither do these gaps narrow.</p> <ul style="list-style-type: none"> <li>• Low Income v Non-low income       <ul style="list-style-type: none"> <li>○ 32-42% gap every year, in grades 3, 5 and 8</li> </ul> </li> <li>• SpEd v non-SpEd       <ul style="list-style-type: none"> <li>○ 40-50% gap every year, in grades 3, 5 and 8</li> </ul> </li> <li>• Hispanic v White       <ul style="list-style-type: none"> <li>○ 20-25% gap in 3<sup>rd</sup> grade</li> <li>○ 25-30% gap in 5<sup>th</sup> grade</li> <li>○ 20-25% gap in 8<sup>th</sup> grade</li> </ul> </li> <li>• Although a gap exists for Black students v White, the small proportion of Black students in the data makes this difficult to interpret.</li> </ul>
Strengths	<ul style="list-style-type: none"> <li>• Relative performance (ranking) to other districts is strong across a majority of subgroups/indicators</li> <li>• Reasonable interventions/Strategies to close gaps were outlined; as well as targeted strategies to improve low student outcomes.       <ul style="list-style-type: none"> <li>○ Curriculum (Differentiation, supplements)</li> <li>○ Professional development</li> <li>○ Teaching Methodology (Inclusion, Co-Teaching)</li> <li>○ Early intervention (Head Start)</li> <li>○ Parent engagement and wraparound services</li> </ul> </li> <li>• Evaluation of new screening tools in math is an exciting opportunity to help students succeed.</li> <li>• Multiple high school math pathways are important for flexibility</li> <li>• The performance of post-ELL students speaks well to the efficacy of LWSD ELL programs.</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>• In nearly all trend analyses and at all grade levels (3, 5, and 8) the three-year trends are flat, indicating that absolute performance is stable, and not obviously improving.</li> <li>• Current interventions have not shown to have significant impact upon these trends or gaps with the exception of ELL.</li> <li>• The absolute percentage of students meeting standard on the math SBA declines significantly between 3<sup>rd</sup> and 8<sup>th</sup> grades.</li> <li>• Gaps in specific demographic subsets (SpEd, Low Income and Hispanic) are dramatic (more than 15%) and persistent over time</li> <li>• Kindergarten readiness in regard to math is low and is one of the poorest performing indicators, especially for low-income and Latino/Hispanic preschoolers.</li> </ul>


<p>Focus/Priority Moving Forward</p>	<ol style="list-style-type: none"> <li>1) <u>Significant improvement in 5<sup>th</sup> grade SBA performance.</u> The transition from Arithmetic to Algebra is critical, and (largely) happens in middle school. Performance on fifth grade math SBA is a critical indicator of student preparation for success in middle school mathematics (and beyond).</li> <li>2) <u>Close wide gaps for Low-Income students for all indicators:</u> 11.3% of all LWSD students were Low income in 2016-17. Only half of low income students are at standard on the 3<sup>rd</sup> grade math SBA, falling to just one third at standard in 8<sup>th</sup>.       <ul style="list-style-type: none"> <li>• The low-income comparison to other districts was very interesting, and led to significant discussion over whether we might learn more out of the LWSD data by comparing low-income student performance for students at our Title I schools, against low-income student performance at our non-Title I schools. Comparison with other WA districts might suggest avenues for improvement here, as LWSD performance was close to average. Research efforts at other school districts that are performing strongly in math, especially for low-income. Look at low-income students who are meeting standard and determine what factors support that success.</li> </ul> </li> <li>3) <u>Close wide gaps for Latino/Hispanic students for all indicators:</u> 10.4% of all LWSD students were Hispanic/Latino in 2016-17. 56% were at standard in 3rd grade, falling to 43% in 8th.</li> <li>4) <u>Better understand the origin of the achievement gap in Special Education programs.</u> 11.3% of LWSD students were in Special Education programs, with a gap of 35%. However, the first priority in this subset is to better understand the origin of the gap (see Feedback on Indicators below)</li> <li>5) <u>Continue equity work.</u> This higher-level approach is valuable in being able to address these gaps holistically.</li> </ol>
<p>Presentation Comments</p>	<p>Report/Presentation Overall:</p> <ul style="list-style-type: none"> <li>• Three-year trend slides should include a panel breaking out number students included in each category.</li> <li>• When presenting race data, it would be helpful to always have the number of students in a category on the slide, and to present the larger categories first. That is, in the 49<sup>th</sup> district comparison, the Black/African American comparison was shown before Hispanics. We have a bit more than 6X more Hispanics/Latinos (10.4%) than Black/African American (1.7%), so show the Hispanic data first. Otherwise we (the board) have a tendency to focus too much attention on the first group we see.</li> <li>• Section in written report that states “Targets for Student Achievement” needs to be revised for all Ends results from “Student performance is comparable to student performance in other comparable WA state districts” to a statement that addresses that we be ranked in at least the top quartile (as stated at our extended work session in March 2017), possibly the top 5 school districts for overall students and the top 10 for subgroups.</li> <li>• Continue to provide subgroup comparisons with other districts, as well as overall.</li> </ul>

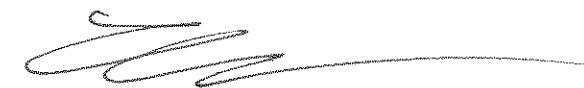
	<p>Feedback on Indicators</p> <ul style="list-style-type: none"><li>• <u>Show complementary data side-by-side in a stratified analysis.</u> (e.g. In the left panel: race/ethnicity gaps in low income students. In the right panel: race/ethnicity gaps in non-low-income students). One of the slides broke out race/ethnicity performance for low income students only. This seemed to show significantly smaller gaps than race/ethnicity performance when considering all students, and begged the question: were the gaps still there for race/ethnicity in Non-low income students?</li><li>• <u>Categorize Special Education more effectively.</u> (also noted in the ELA Assertion of Progress). This will help to better understand what is causing the gaps and how to address this issue. Options have been by Type of Disability (aggregating these); LRE Level; SBA with modifications, alternative. It is not clear which specific breakout, but there is a desire to disaggregate specific SLD from global cognitive delays.</li><li>• <u>Add indicator: "Number and % of 9<sup>th</sup> grade students who have passed Algebra with a C or better."</u> Algebra is foundational math for many science and Career and Technical Education (CTE) courses. In addition, understanding the proportion of students taking advantage of each middle/high school pathway at each grade level needs to be provided, in order to evaluate the effectiveness of the math pathways.</li><li>• <u>Add indicator: "Number and % of students who enrolled in college and required a remedial math course."</u> This provides information if our graduates are college ready (as stated in our mission)</li><li>• <u>Drop indicator: "Earned 1.0 math credit in 9<sup>th</sup> grade"</u>. This is not useful in providing information as it does not provide level of math attempted.</li></ul>
--	--


*Presented at November 6, 2017 Board Meeting  
Prepared by Siri Bliesner*

**Board Member Signatures:**

  
Chris Carlson, President

  
Siri Bliesner, Vice President

  
Eric Laliberte, Director

  
Cassandra Sage, Director

  
Mark Stuart, Director