THE WASHINGTON STATE BOARD OF EDUCATION

A high-quality education system that prepares all students for college, career, and life.

Title:	**Education Data Spotlight – Update on the Statewide Educational Indicators**
As Related To:	☒ Goal One: Develop and support policies to close the achievement and opportunity gaps. ☐ Goal Two: Develop comprehensive accountability, recognition, and supports for students, schools, and districts. ☐ Goal Three: Ensure that every student has the opportunity to meet career and college ready standards. ☐ Goal Four: Provide effective oversight of the K-12 system. ☐ Other
Relevant To Board Roles:	☐ Policy Leadership ☒ System Oversight ☐ Advocacy ☐ Communication ☐ Convening and Facilitating
Policy Considerations / Key Questions:	After only two years into this work, none of the statewide indicators of the educational system are on track to meet the long-term goals. The legislation authorizing this work indicates that the legislature has high aspirations for the Washington educational system and the high aspirations are reflected in the ambitious long-term goals. After learning about the most recent analyses, the Board might wish to discuss resetting the long term goals for the 3rd Grade Literacy and 8th Grade High School Readiness indicators when the required data are available and in a manner compatible with state law. New data are presented on the deeper disaggregation of the Asian student group and the Hawaiian/Pacific Islander student group. After viewing these new data, the Board may wish to discuss whether: • this deeper disaggregation is appropriate for some of the indicators. • to include aspects of this information in the December 2016 report to educational committees of the legislature.
Possible Board Action:	☒ Review ☐ Adopt ☐ Approve ☐ Other
Materials Included in Packet:	☒ Memo ☐ Graphs / Graphics ☐ Third-Party Materials ☐ PowerPoint
Synopsis:	This memo is divided into two parts: • Part I presents new analyses for indicators not previously reported on (Post-Secondary Attainment) and updates to other indicators. • Part II presents a glimpse into the exploratory work of disaggregating ESEA student groups more deeply and how this might be used in analyzing the performance of student groups for the SBE's educational system health work.

EDUCATION DATA SPOTLIGHT

STATEWIDE INDICATORS OF THE EDUCATIONAL SYSTEM

Policy Considerations

The State Board of Education (SBE) is authorized to monitor and report on the Statewide Indicators of the Educational System by ESSB 5491 of 2013 which comprises RCW 28A.150.550 that can be found at http://apps.leg.wa.gov/RCW/default.aspx?cite=28A.150.550. The RCW specifies that if the indicators are not on track to meet predetermined goals, the SBE must recommend evidence based reforms targeted at addressing the indicator(s) in question.

This memo is divided into two parts:

- Part I presents new analyses for indicators not previously reported on (Post-Secondary Attainment) and updates to other indicators
- Part II presents a glimpse into the exploratory work of disaggregating ESEA student groups more deeply and how this might be used in analyzing the performance of student groups for the SBE's educational system health work.

Summary and Key Questions

New data on the Statewide Indicators of the Educational System are reported here. This update focuses on several key elements or questions:

- The Smarter Balanced Assessment (SBA) results were significantly lower than the Measures of Student Progress (MSP), upon which goals and annual targets were built for the 3rd and 8th grade indicators. Due to the implementation of new assessments, the resetting of the annual targets for these two measures would be justified.
- With the delivery of new data, annual target setting became possible for the Quality of High School Diploma indicator, and the indicator is not on track to meet system goals.
- The first year of data for the Post-Secondary Attainment indicator shows that approximately 42 percent of high school graduates are estimated to have earned a post-secondary credential or certificate by age 26.

Key questions that will need to be addressed are how and should annual targets be reset to reflect the shift from the Measures of Student Progress to the SBA system of assessments and be compatible with RCW 28A.150.550 (3)? Section 3 of the RCW states that the "The performance goal…may only be adjusted upward", so it may not be possible under current state law to align these long-term goals with those required under the Every Student Succeeds Act (ESSA).

However, the SBE staff believes it desirable to align these goals in some way to the long-term goals required to be established under the ESSA, but it may not be entirely appropriate to match the school-level goals required in the ESSA to the state-level goals specified in RCW 28A.150.550. Go to http://www.sbe.wa.gov/edsystemhealth.php to learn more about the goal-setting strategy used for the statewide indicators of the educational system health.

Part 1

Background and Results

The Board was last updated on the Statewide Indicators of the Educational System in November of 2014, and submitted the first biennial report to the education committees of the legislature on December 1, 2014. Since that time, additional data have been released by the Office of the Superintendent of Public Instruction (OSPI) and other data and analyses produced by the Educational Research and Data Center (ERDC) in support of this work.

RCW 28A.150.550 specifies the statewide indicators to be tracked and reported upon. However, Section 5 of the referenced RWC authorizes the SBE and partners to recommend revised measurements if necessary. It is the revised measurements described in the December 2013 initial report that are reported on here.

Figure 1 summarizes the most recent data for the Statewide Indicators of the Educational System, while the disaggregated data for multiple years are appended at the rear of this memo. The 3rd Grade Literacy and 8th Grade High School Readiness measures were not on target to meet goals based on the 2014 MSP results, but the target attainment is unknown due to the implementation of the SBA.

Figure 1 shows the status of each of the statewide indicators described in this memo.

Indicator	Most Recent Year	Measure (%)	Target (%)	Meeting Targets?	Improving?
Kindergarten Readiness	2015-16	44.2	51.8	NO	YES
3rd Grade Literacy*	2014-15	52.1	73.0 (to be reset)	New Baseline	Unknown
8th Grade High School Readiness*	2014-15	37.5	48.7 (to be reset)	New Baseline	Unknown
High School Graduation	2014-15	78.1	81.9	NO	YES
Quality of High School Diploma	2012-13	82.2	84.2	NO	NO
Post-Secondary Attainment+ and Workforce	2014	42	TBD	TBD	TBD

*Note: The performance data for the most recent year is based on the Smarter Balanced Assessment and the targets (not yet reset) are based on the Measures of Student Progress.
+Note: The Post-Secondary Attainment measure examines the graduating class of 2006 eight years later to measure the rate of attainment.
TBD = Toi Be Determined

Post-Secondary Attainment

The SBE recommended measure for this indicator is the percentage of high school graduates attaining a credential, certificate, or completing an apprenticeship prior to age 26. The ERDC conducted the initial analysis of this measure and estimated this percentage at approximately 42 percent (Figure 2). The ERDC report found at http://www.erdc.wa.gov/briefs/pdf/201507.pdf explains more about the analysis and states that this estimate understates the true and real percentage for the following reasons:

- Some degree completions are not reported by the National Student Clearinghouse and some students block their information from being reported
- Some graduates complete Federal apprenticeship programs or those based outside Washington. ERDC does not receive this information
- Private vocational school data are included for the most recent year only, so completions in this sector between 2006-07 and 2011-12 are not incorporated into this analysis, and
- Many credentials earned in medical and dental fields, including massage therapy, are represented in professional license data from the Department of Health. ERDC does not have access to this source.

To make this estimate, the ERDC examined the post-secondary educational outcomes for the class of 2006 because these graduates would be 26 years old (18 years old at graduation plus seven years of time for post-secondary attainment).

This recommended goal was aligned to that described by the Washington Student Achievement Council WSAC) Roadmap plan to increase educational attainment in Washington. The WSAC 2013 and 2015 Reports (http://www.wsac.wa.gov/2015-roadmap-update) provide evidence that post-secondary credential completion at an early (rather than later) age provides important long term benefits. So while post-secondary credential completion is important, it is even more important and beneficial to do so as a young adult than later in life. With this idea in mind, measuring the percentage of graduates completing a credential, certificate, or apprenticeship as a young adult (prior to age 26) is an excellent indicator.

Figure 2: shows the percent of students completing a credential, certificate, or apprenticeship before age 26.

Percent of High School Graduates Earning a Credential or Certificate by Age 26	**Class of 2006**
	Reported in Spring 2015
All Students	42%
Black / African American	29%
American Indian / Alaskan Native	23%
Asian	55%
Hispanic	24%
Pacific Islander	25%
White	44%
Two or More	39%
Students with Disabilities	11%
Limited English	25%
Low-Income	25%

High School Graduation

The On-Time (4-Year) Adjusted Cohort Graduation Rate (ACGR) for the class of 2015 increased from 77.2 percent in 2014 to 78.1 percent in 2015. The ACGR declined for a number of years prior to 2013 and appears to have bottomed out for the class graduating at the end of the 2012-13 school year. The graduation rates for all student groups increased (highlighted in pale green) over the two most recent years and for one-half of the students groups over the five most recent years (Figure 3).

Figure 3: shows the on-time graduation rates and changes for the five most recent years.

4-Yr Cohort Grad Rate	2010-11	2011-12	2012-13	2013-14	2014-15	2-Year Change*	5-Year Change*
All Students	**76.6%**	**77.2%**	**76.0%**	**77.2%**	**78.1%**	**0.8%**	**1.5%**
Black / African American	68.9%	66.9%	65.4%	67.8%	68.8%	**1.0%**	**-0.1%**
American Indian / Alaskan Native	62.2%	56.4%	52.5%	53.7%	56.4%	**2.7%**	**-5.8%**
Asian	84.9%	84.4%	84.1%	86.5%	87.8%	**1.2%**	**2.9%**
Hispanic Latino	67.6%	66.5%	65.6%	67.3%	69.6%	**2.3%**	**2.0%**
Native Hawaiian / Pacific Islander	66.9%	64.4%	62.3%	64.6%	67.0%	**2.4%**	**0.1%**
White	81.9%	80.2%	79.4%	80.5%	80.9%	**0.4%**	**-1.0%**
Two or More	73.6%	78.1%	76.2%	75.5%	77.9%	**2.4%**	**4.3%**
Students with Disabilities	59.6%	57.4%	54.4%	55.7%	57.9%	**2.2%**	**-1.7%**
Limited English	54.5%	53.8%	50.4%	53.7%	55.8%	**2.1%**	**1.3%**
Low-Income	68.5%	66.0%	64.6%	66.4%	68.0%	**1.6%**	**-0.5%**

*Note: 2-Year and 5-Year Change shown as percentage point change.

8th Grade High School Readiness

This is a measure of the percentage of 8th grade students who meet standard on all three content area assessments (ELA, math, and science) administered statewide to all 8th graders. In the 2013-14 school year, the state assessments were the Measures of Student Progress (MSPs), while the 2014-15 assessments comprised the Smarter Balanced (SBA) ELA, the SBA math, and the MSP in science.

The OSPI recently cautioned data users about directly comparing the MSP and the SBA assessment results as the assessments and learning standards differ in many ways. Because of the substantial differences, the OSPI made the decision to not complete a concordance, bridging, or linking study. The OSPI identified the 2015 SBA results as a new baseline from which to make annual comparisons. Due to the change in assessments, it would be justifiable to reset the long-term goal for this indicator. However, using the current goal-setting methodology described in the most recent report to the legislature, two years of data are required to set the baseline before annual targets can be established. The 2015-16 SBA results are expected to be reported by the OSPI in the fall 2016 prior to the delivery of the 2016 biennial report to the legislature, meaning that this report would include the reset baseline and could include a reset long-term goal for the indicator.

The Smarter Balanced Assessment Consortia (SBAC) anticipated and publicly reported that lower aggregate proficiency rates associated to the new assessments should be expected for all SBAC states. With this understanding, the Board should not be alarmed that the rates for all of the student groups for this measure declined in 2015. The rates, percentage point differences, and percent change for the MSP and SBA assessments over the two most recent are shown below (Figure 4).

The Board should not be particularly concerned about the decline of up to 10 percentage points for all of the student groups, as such a decline was generally expected. The more interesting aspect of Figure 4 is how the percent change varied (-12.6 to more than -47 percent) for each of the student groups. The shift from the MSPs to the SBAs have the appearance of negatively impacted some groups to a greater degree than other groups.

- The change for the White, Asian, and Two or More student groups declined the lowest of the groups (-12.6 to -18.3 percent).

- The changes for the Black, American Indian, Hispanic, and Pacific Islander groups were the largest of the race and ethnicity student groups (-22 to -30 percent).
- The greatest declines were for the students with a disability and the limited English proficient student groups with reductions of -44.7 and -47.1 percent, respectively.

The apparent disproportionate changes based on race and ethnicity may 'self-correct' after the 2016 assessment results. In fall 2015, the Board heard concerns from educators about the unavailability or ineffectiveness of accommodations provided to English language learners and to students with a disability. So it is possible that the larger declines for the latter two groups may have more to do with the delivery of online accommodations for certain students. Problems with the delivery of accommodations are expected to be resolved with the next SBA administration.

Figure 4: shows the changes in rates from the 2014 and 2015 statewide assessments as measured by the 8th grade High School Readiness indicator.

8th Grade High School Readiness	2013-14 MSP	2014-15 SBA	Difference*	Percent Change+
All Students	**46.9%**	**37.5%**	**-9.4**	**-20.0**
Black / African American	22.7%	16.6%	-6.1	-27.0
American Indian / Alaskan Native	19.1%	14.2%	-4.9	-25.7
Asian	69.7%	60.9%	-8.8	-12.6
Hispanic / Latino	28.7%	19.9%	-8.8	-30.6
Pacific Islander / Native Hawaiian	26.4%	20.5%	-5.9	-22.4
White	53.0%	43.3%	-9.7	-18.3
Two or More	48.8%	40.0%	-8.8	-18.1
Students with a Disability	6.9%	3.8%	-3.1	-44.7
Limited English	5.9%	3.1%	-2.8	-47.1
Low-Income	30.1%	21.4%	-8.7	-28.9

*Note: Difference shown is the 2015 SBA percent meeting standard minus the 2014 MSP percent meeting standard in percentage points. A decline of this type was expected by the OSPI and the SBE due to the change in assessment systems.
+Note: shows the percent change calculated as (SBA rate minus MSP rate)/MSP rate *100).

3rd Grade Literacy

In spring 2015, Washington replaced the 3rd grade reading MSP with the 3rd grade ELA SBA as the statewide assessment for federal accountability purposes. Again, the OSPI would caution data users about directly comparing the MSP and the SBA assessment results because the assessments and learning standards are so wildly different. Due to the differences, it would be justifiable to reset the long-term goal for this indicator, but using the current goal-setting methodology described in the most recent report to the legislature, two years of data are required to set the baseline before annual targets can be established. The 2015-16 SBA results are expected to be reported by the OSPI in the fall 2016 prior to the delivery of the 2016 biennial report to the legislature, meaning that this report would include the reset baseline and could include a reset long-term goal for the indicator.

As was the case for the 8th Grade High School Readiness indicator, lower aggregate proficiency rates associated to the new assessments were expected for all SBAC states. With this understanding, the Board should not be alarmed that the proficiency rates for all of the student groups for this measure

declined in 2015. The rates, percentage point differences, and percent change for the MSP and SBA assessments over the two most recent are shown below (Figure 5).

The percent change varied from -17.7 percent to approximately -48 percent for the student groups based on race and ethnicity. The shift from the MSPs to the SBAs appear to have negatively impacted some student groups to a greater degree than other groups, but another year of assessment results is really needed to establish the new baselines and to better understand the factors related to the possible disproportionate changes.

Figure 5: shows the changes in rates from the 2014 and 2015 statewide assessments as measured by the 3rd Grade Literacy indicator.

3rd Grade Literacy	2013-14 MSP	2014-15 SBA	Difference*	Percent Change+
All Students	**72.0%**	**52.1%**	**-17.9**	**-27.6**
Black / African American	57.3%	34.2%	-23.1	-40.3
American Indian / Alaskan Native	49.7%	25.9%	-23.8	-47.9
Asian	84.6%	69.5%	-15.0	-17.7
Hispanic / Latino	57.9%	33.8%	-24.1	-41.6
Native Hawaiian / Pacific Islander	56.8%	31.6%	-25.2	-44.4
White	77.8%	59.9%	-17.9	-23.0
Two or More	73.7%	54.6%	-19.1	-25.9
Students with a Disability	37.8%	26.7%	-11.1	-29.4
Limited English	44.6%	19.2%	-25.4	-57.0
Low-Income	59.6%	36.0%	-23.6	-39.6

*Note: Difference shown is the 2015 SBA percent meeting standard minus the 2014 MSP percent meeting standard in percentage points. A decline of this type was expected by the OSPI and the SBE due to the change in assessment systems.

+Note: shows the percent change calculated as (SBA rate minus MSP rate)/MSP rate *100).

For some time, stakeholder groups and state commissions advocated for the deeper disaggregation of the ESEA subgroups to identify the underperformance of student groups that are masked by overall group performance. This is central to the idea included in the SBE Strategic Plan Goal 1.A.1. to analyze achievement and opportunity gaps through deeper disaggregation of student demographic data. To this end, a deeper disaggregation of the Asian student group performance on the 3rd Grade Literacy indicator was conducted for the 2014-15 SBA ELA statewide assessment (Figure 6). Additional disaggregation for the SBA math and for the Native Hawaiian and Pacific Islander student groups form the second part of this memo.

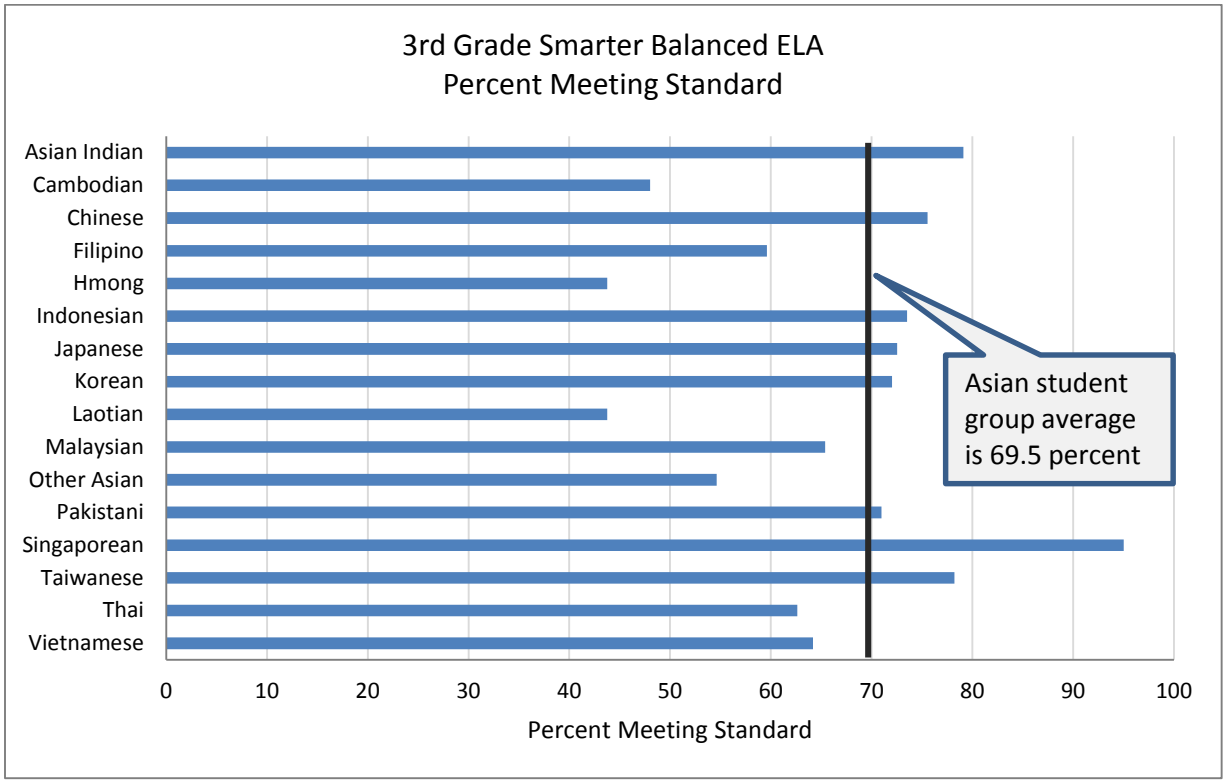
The deeper disaggregated data does exactly what was intended, to identify low performing student groups whose group underperformance is masked by the higher performance of other student groups. As a way to introduce Part II of this memo, a few general comments regarding the performance of Asian students (Figure 6) include the following:

- Nearly 70 percent of the 3rd grade students aggregated into the Asian student group met standard on the SBA in ELA.
- The lower performance of the Southeast Asian ethnicities on the continent (Cambodian, Hmong, Laotian, Malaysian, Thai, and Vietnamese) is masked.
- The East Asian ethnicities (Chinese, Japanese, Korean, Singaporean, and Taiwanese) perform at a higher-than-average level.

- The performance of the Island nations (Philippines and Indonesia) is mixed.
- The performance of the South Asian ethnicities (Pakistani and Asian Indian) are average and above average respectively.

Please review Part II of this memo to learn more about how deeper disaggregation of the statewide indicators dissect the performance of the ESEA Asian and Hawaiian/Pacific Islander student groups.

Figure 6: shows the performance of the Asian student group on the 3rd grade SBA ELA by reportable Asian ethnicities.



Action

No Board action is anticipated.

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

Part II

Executive Summary

This memo is a preliminary exploration of how staff could report more deeply disaggregated state-level data in the Indicators of Educational System Health report. Staff are attempting to show, at the state level, that there are various levels of performance among ethnic student groups that are masked within the federal race/ethnicity groups. These groups have differing levels of need or support which may inform evidence-based reforms that the Board is charged to recommend to the Legislature under SB 5491.

Background on the Data Requested

On request of SBE staff, OSPI Student Information provided SBE staff with a file that contains deeper disaggregation of 2015 Smarter Balanced and Biology EOC results for the ethnic groups that comprise the Asian, Pacific Islander, and Native American federal race/ethnicity groups.

When the student counts in the more deeply disaggregated ethnic groups are summed, the data show an inflated count of students greater than the total of the federal race/ethnicity group. This is due to some students being counted multiple times because they identified with more than one ethnic group. Although state averages for the Asian and Pacific Islander groups were included in the charts, the average performance of the deeply disaggregated ethnic groups are not necessarily comparable because some of the students may have self-identified as the Two or More Races federal race/ethnicity group. Data are duplicated among ethnic groups at this level of deeper disaggregation.

Notes on the Data

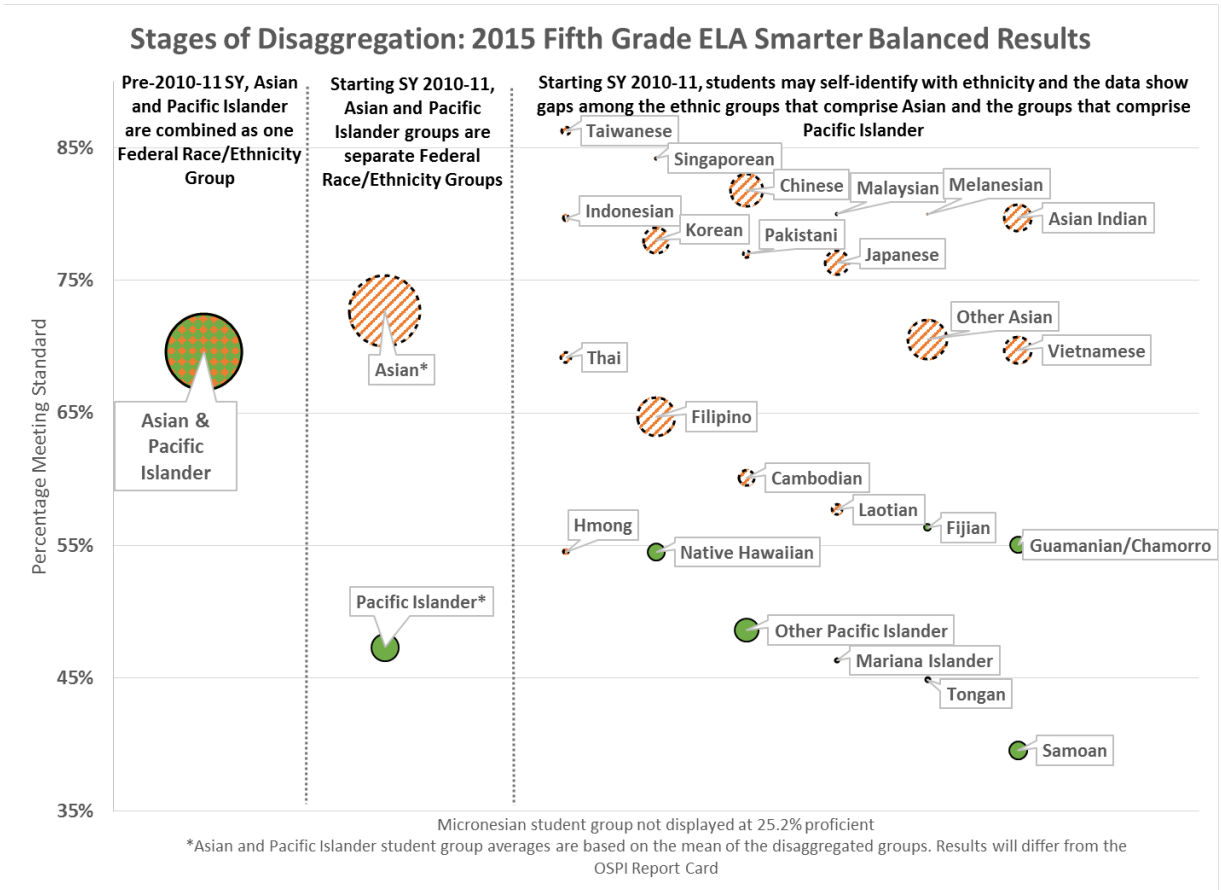
This work is a preliminary exploration of deeper disaggregation of ethnic group data. The following are notes on the complexity of the data:

- The students represented in the file self-identified with one or more federal race/ethnicity groups and one or more ethnic groups (i.e. Singaporean, Micronesian, Taiwanese, et cetera).
- Some of the students may have identified as more than one ethnic group but only one federal race/ethnicity group (i.e. student self-identified with Asian comprised of Chinese and Laotian but did not self-identify with federal race/ethnicity groups other than Asian).
- Other students in the file may have identified as one or more ethnic groups and more than one federal race/ethnicity group (i.e. student self-identified with Pakistani and Hmong ethnic groupings but also identified as the Two or More Races federal race/ethnicity grouping).
- When interpreting these data it is important to consider that the sample size is relatively low for some of the student groups. In the charts, the groups with relatively low sample sizes have been indicated with an asterisk to advise caution when generalizing about the performance of the student group.

Brief History of Disaggregation

The original Elementary and Secondary Education Act (ESEA) of 1965 was part of President Lyndon B. Johnson's "War on Poverty." The original ESEA focused on a disaggregation comparing low-income to non-low-income students. Data analysis by the U.S. Department of Education showed that there were considerable gaps in student outcomes between low income students and their peers. Since 1977, the Department of Education collected aggregated student data based on five race/ethnicity groups. These groups were American Indian or Alaska Native, Asian and Pacific Islander, Black or African American, Hispanic, and White.

Numerous revisions were made to the ESEA but, for the purposes of the discussion of deeper disaggregation, fast-forward to the No Child Left Behind Act (NCLB) of 2001 under President George W. Bush. NCLB required annual testing, expanded public reporting of student assessment and demographic results on state-monitored report cards. The comparability afforded by the assessment results and the disaggregation by major race/ethnicity groupings illuminated achievement gaps among student groups. In 2007, the Department of Education revised its guidance on collection and reporting to disaggregate the Asian and Pacific Islander student group into an Asian student group separate from the Pacific Islander student group and created a new group – Two or More Races. Also, students were allowed to self-identify with several ethnicity groups that make up the aggregated federal race/ethnicity groups. By the 2010-2011 school year, Washington implemented the new guidance on federal race/ethnicity groups. Within Washington in 2013-2014, the State Board of Education in collaboration with the Office of Superintendent of Public Instruction began reporting Current-ELL student group performance separately from Former-ELL student group performance in the Washington Achievement Index.



Findings and Charts

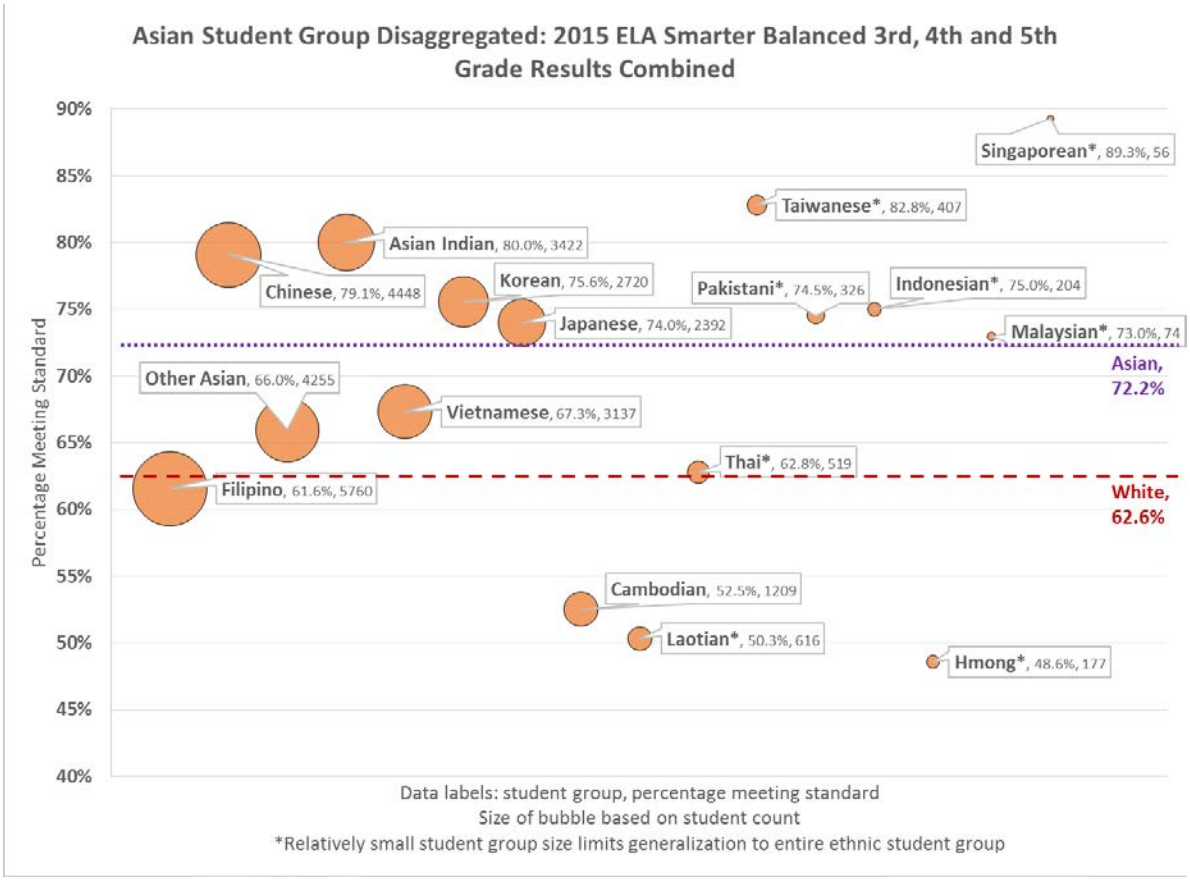
The following charts show that there are considerable differences in performance among ethnic groups that comprise the Asian, Pacific Islander and, for some students, the Two or More Races federal race/ethnicity groups. There is closer performance between the federal race/ethnicity groups of Asian and White in reading than in math, and even closer performance in science. However, the gaps among the more deeply disaggregated ethnic groups are present at all grade levels and, in general, the ethnic groups maintain similar gaps relative to one another regardless of content area or grade level. The performance of the ethnic groups is most widely distributed for math and science and the results for English Language Arts show somewhat less disparate gaps among ethnic groups. Staff analyzed all of the grade levels available in the data, but for the purpose of brevity, included only selected charts in this memo and presentation.

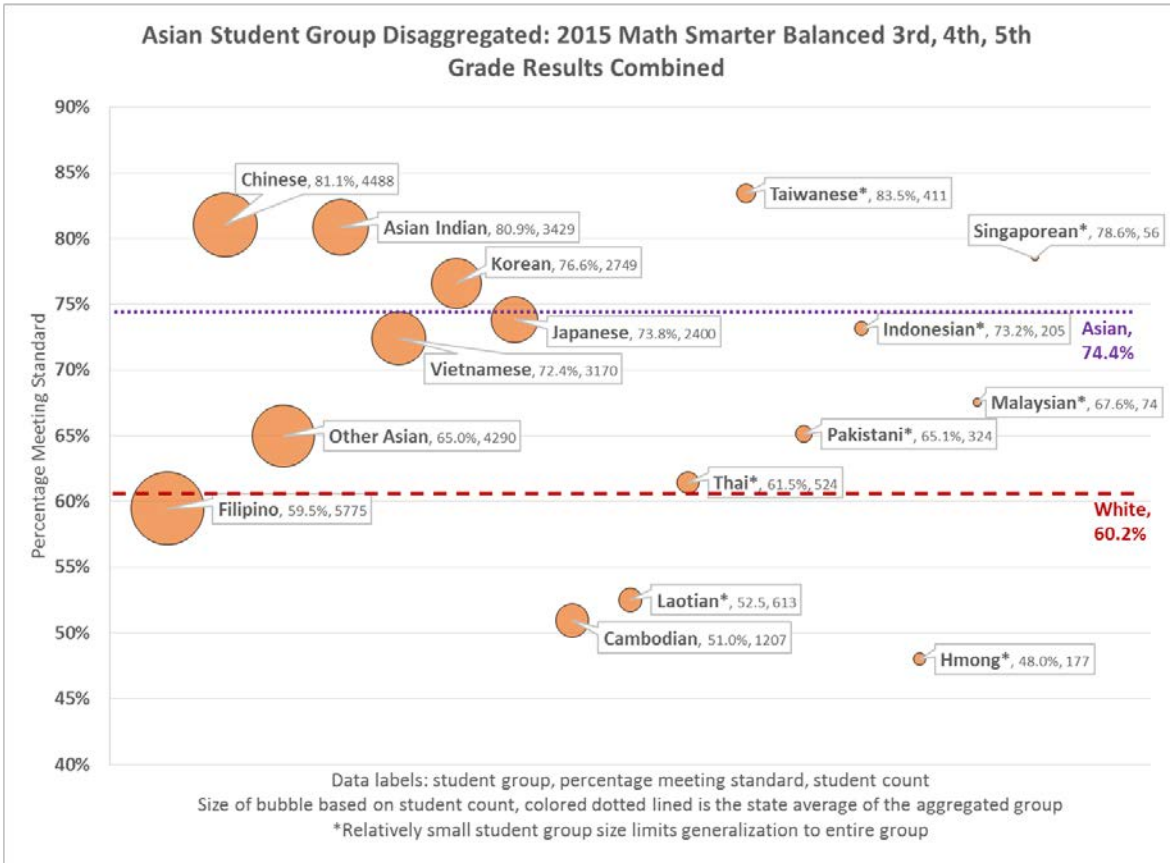
The main takeaway from these charts is that there are considerable gaps among ethnic groups and those differences are masked when the data are aggregated to the level of the federal race/ethnicity groups. This indicates that the student groups require differing levels of support and resources. In regards to potential inclusion of this deeper disaggregation of data in the Indicators of Educational System Health report, these data could inform the Board's recommendations of evidence-based reforms as required under Senate Bill 5491. This is a preliminary exploration of deeper disaggregation of data and staff are looking for feedback from the Board and stakeholders as to how the data may be used.

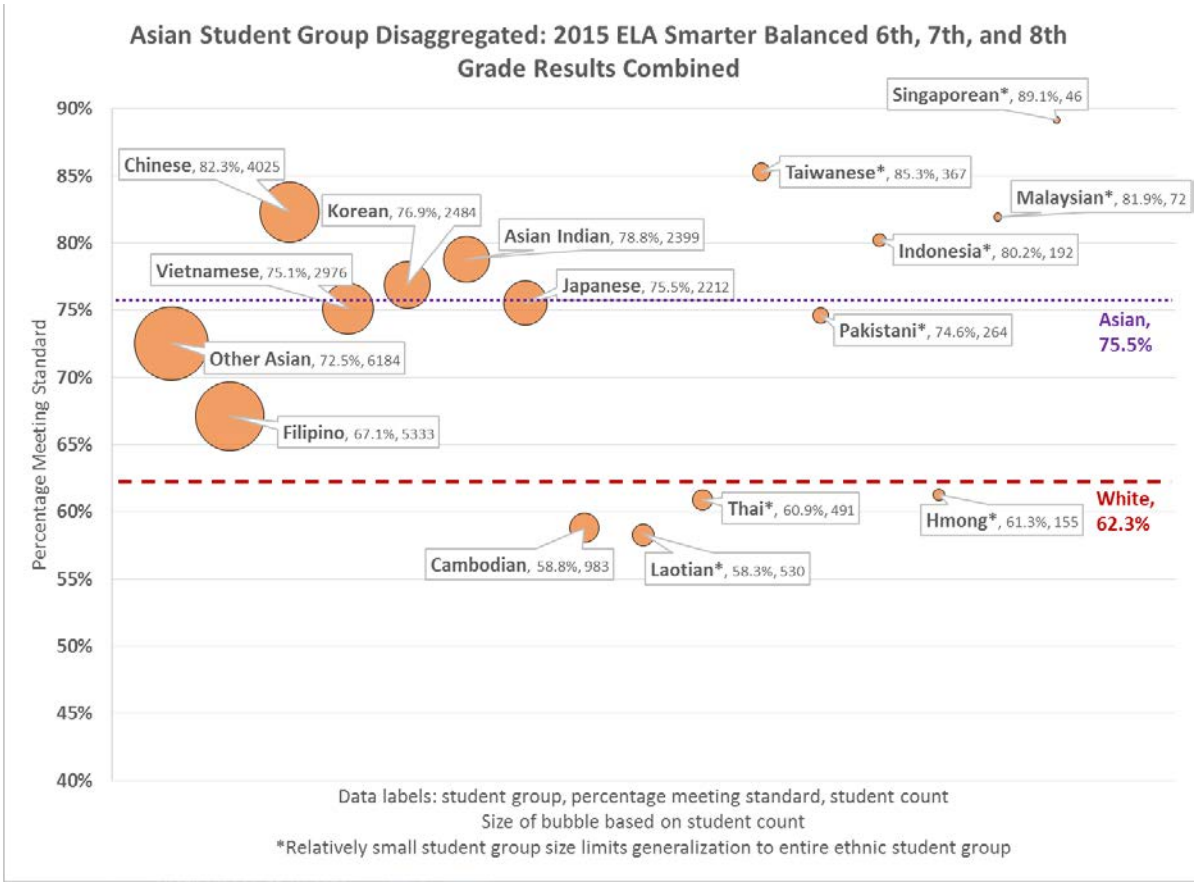
Methodology and Chart Guide

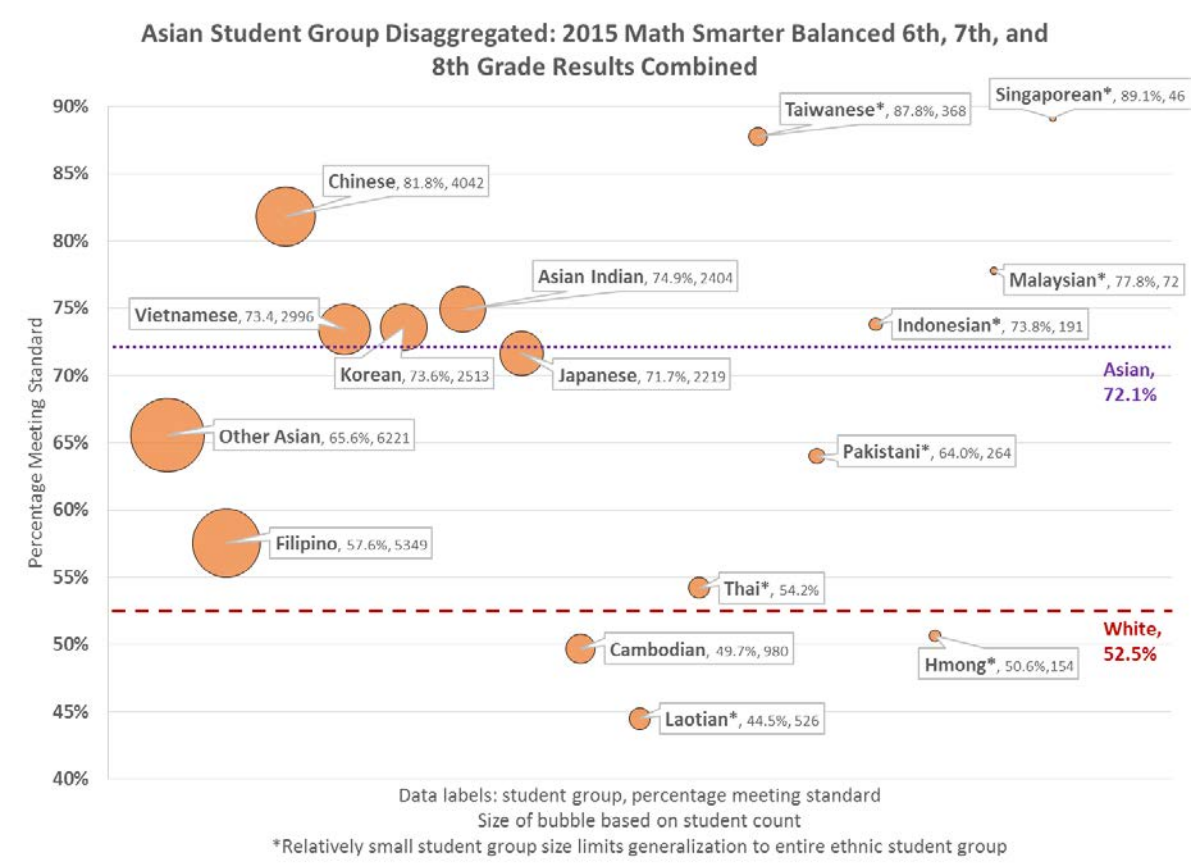
Data were analyzed at all grade levels and for the charts shown here, combined to form grade three, four, and five grade bands and six, seven, and eight grade bands. This choice was made to increase sample size to minimize challenges with interpretation of results from small sample sizes. These results were plotted to show:

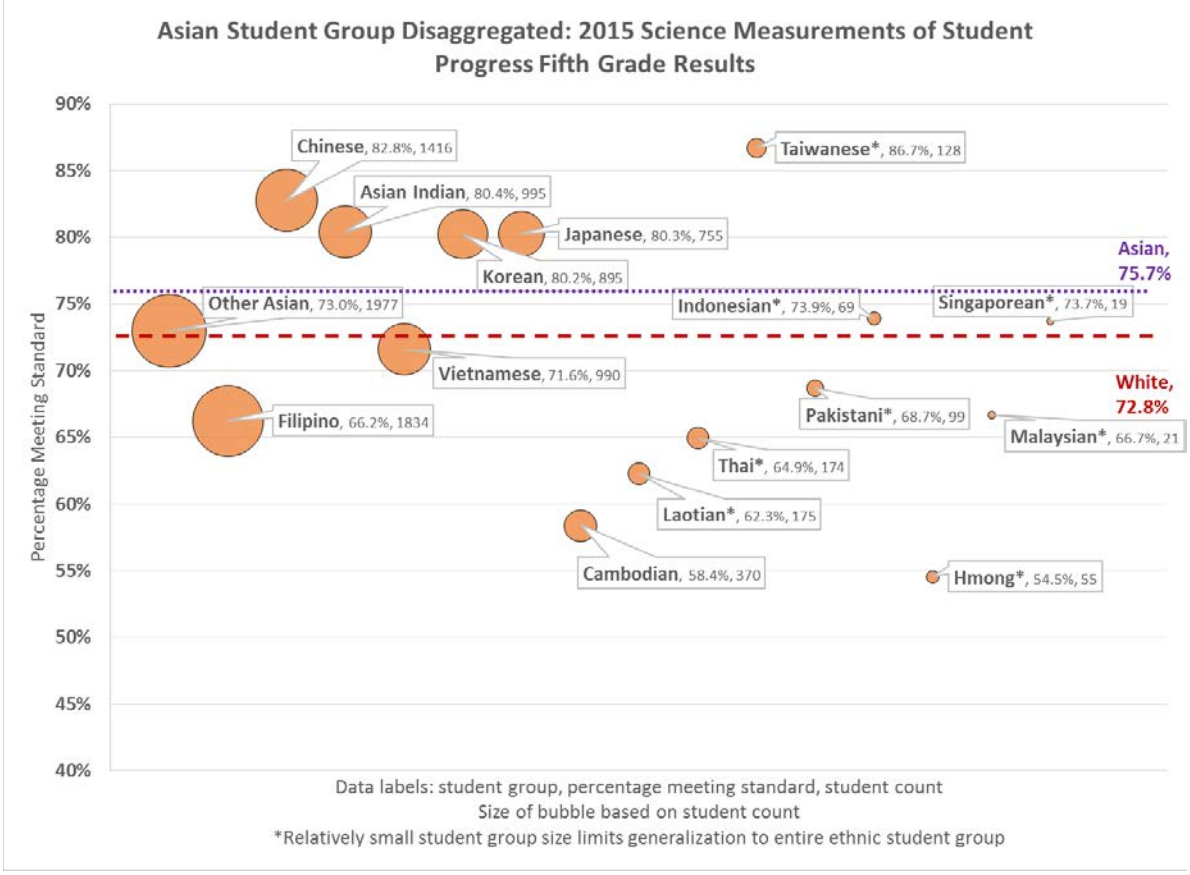
- Performance level on the Y-axis.
- The X-axis is an ordering of largest student ethnicity group to smallest. The intervals between groups are not representative of differences in size besides a simple largest to smallest order.
- Size of bubbles are relative to other bubbles on same chart. It should be noted that the size of Asian student group bubbles should not be compared to the size of Pacific Islander student group bubbles across charts as they are only relative to other bubbles on the same chart.
- Dotted, colored lines representing the state average at the listed grade levels for the Asian and white federal race/ethnicity groups were added to the Asian student group disaggregation charts. The lines were not added to the Pacific Islander student group disaggregation charts because the state average of the Pacific Islander federal race/ethnicity group was considerably lower than the mean that would result from averaging the deeper disaggregated ethnicity groups. Some of the students in the deeper disaggregation may have been part of the Two or More Races federal race/ethnicity student group. It is also possible that some higher-performing Pacific Islander students identified with multiple Pacific Islander groups, thus raising the average of the deeper disaggregated ethnicity groups through duplication. However, these hypotheses cannot be confirmed with the state aggregated data file.

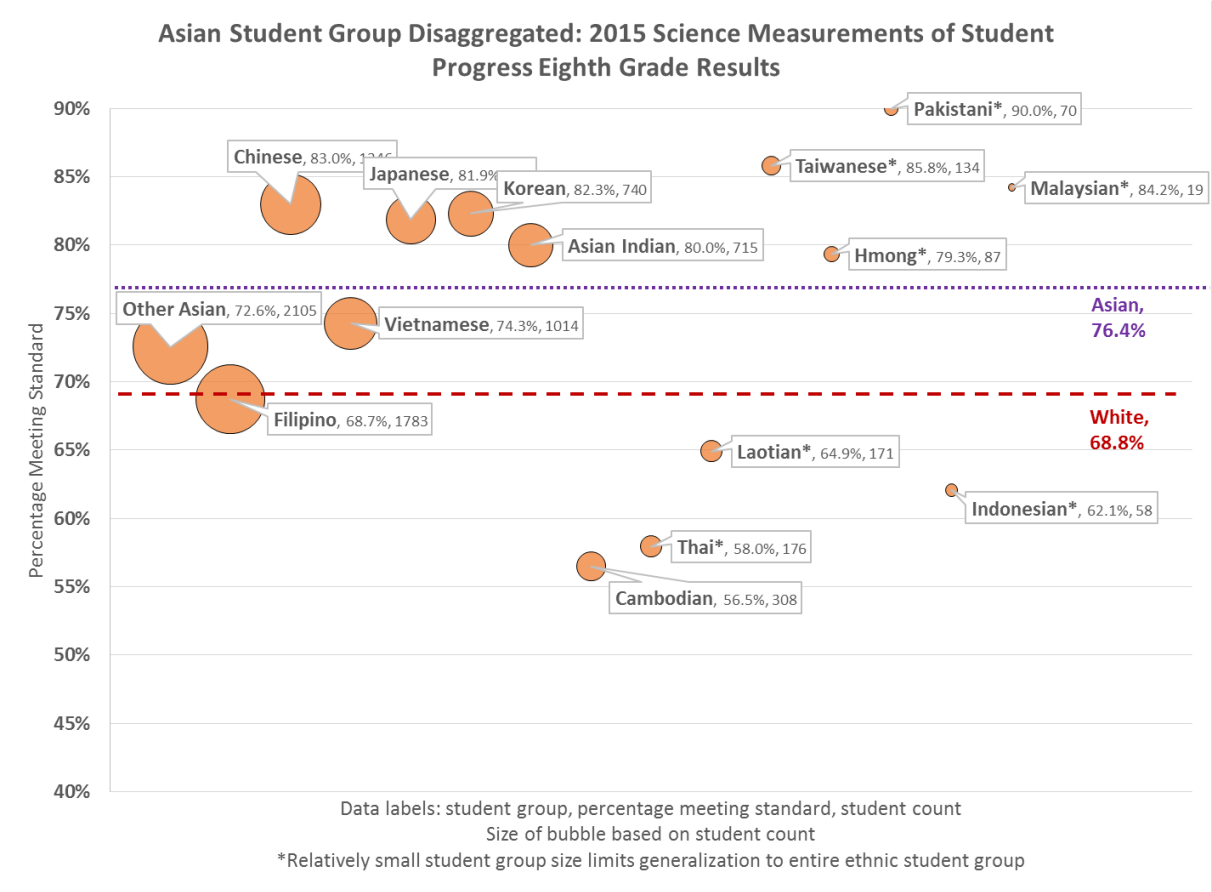

Asian Student Group Disaggregated: 2015 ELA Smarter Balanced 3rd, 4th and 5th Grade Results Combined
Percentage Meeting Standard
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Singaporean*, 89.3%, 56
Taiwanese*, 82.8%, 407
Asian Indian, 80.0%, 3422
Chinese, 79.1%, 4448
Korean, 75.6%, 2720
Pakistani*, 74.5%, 326
Indonesian*, 75.0%, 204
Japanese, 74.0%, 2392
Malaysian*, 73.0%, 74
Asian, 72.2%
Other Asian, 66.0%, 4255
Vietnamese, 67.3%, 3137
Thai*, 62.8%, 519
Filipino, 61.6%, 5760
White, 62.6%
Cambodian, 52.5%, 1209
Laotian*, 50.3%, 616
Hmong*, 48.6%, 177
Data labels: student group, percentage meeting standard
Size of bubble based on student count
*Relatively small student group size limits generalization to entire ethnic student group

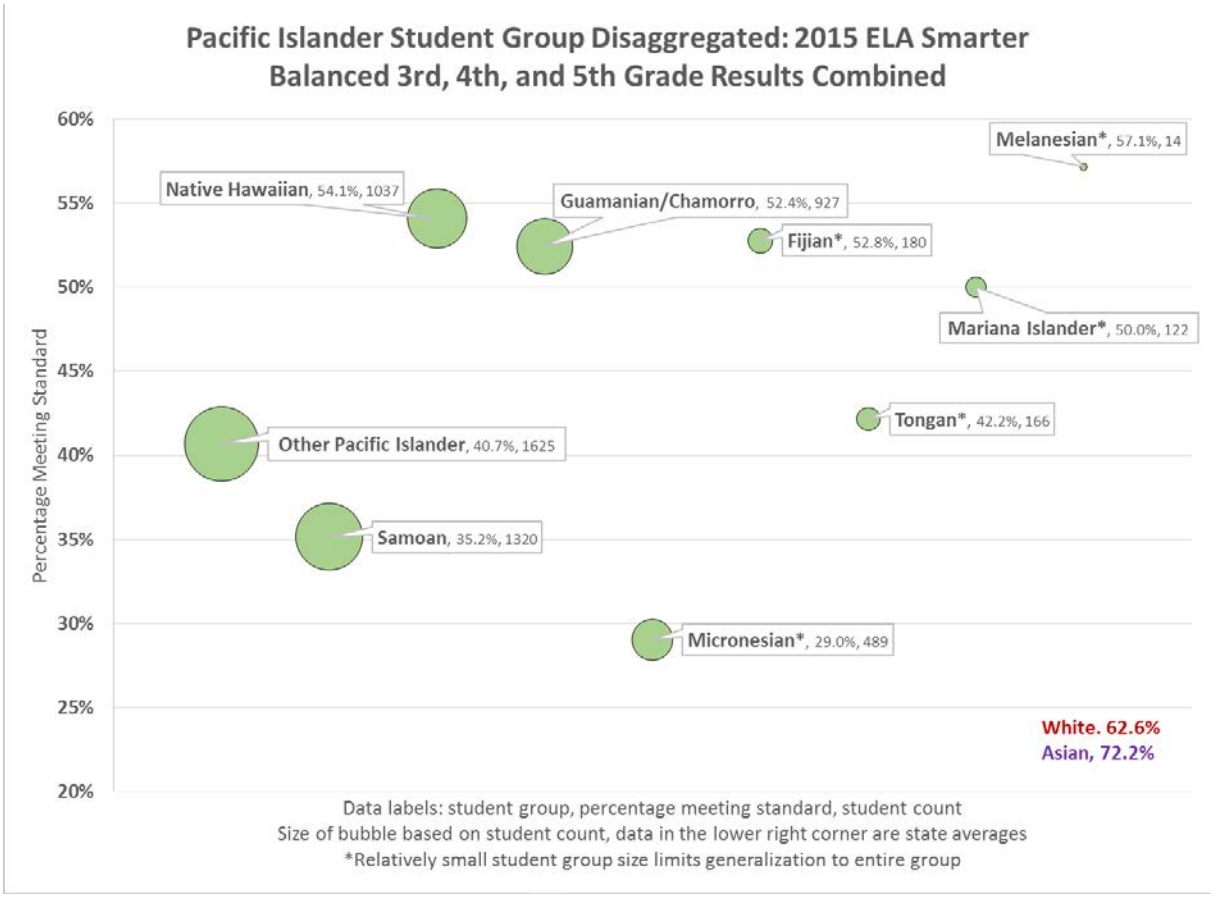

Asian Student Group Disaggregated: 2015 Math Smarter Balanced 3rd, 4th, 5th Grade Results Combined
Percentage Meeting Standard
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Chinese, 81.1%, 4488
Taiwanese*, 83.5%, 411
Asian Indian, 80.9%, 3429
Singaporean*, 78.6%, 56
Korean, 76.6%, 2749
Japanese, 73.8%, 2400
Indonesian*, 73.2%, 205
Asian, 74.4%
Vietnamese, 72.4%, 3170
Malaysian*, 67.6%, 74
Other Asian, 65.0%, 4290
Pakistani*, 65.1%, 324
Thai*, 61.5%, 524
Filipino, 59.5%, 5775
White, 60.2%
Laotian*, 52.5, 613
Cambodian, 51.0%, 1207
Hmong*, 48.0%, 177
Data labels: student group, percentage meeting standard, student count
Size of bubble based on student count, colored dotted lined is the state average of the aggregated group
*Relatively small student group size limits generalization to entire group

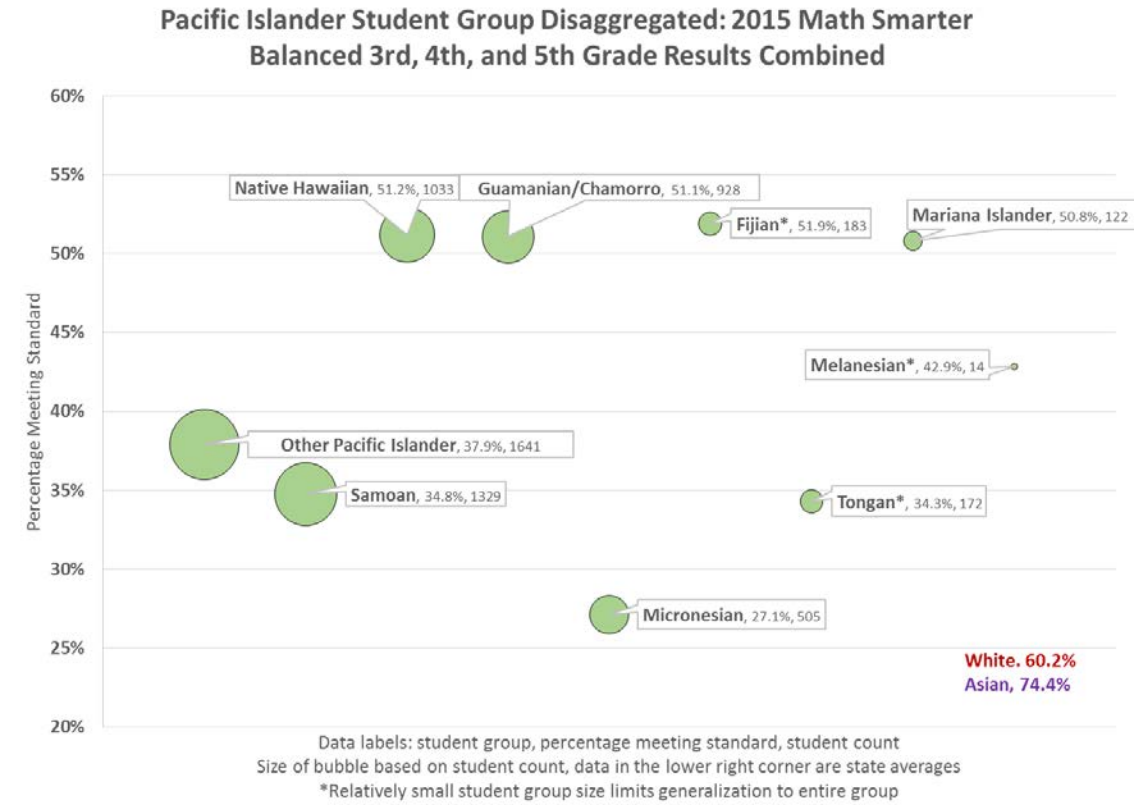

Asian Student Group Disaggregated: 2015 ELA Smarter Balanced 6th, 7th, and 8th Grade Results Combined
Percentage Meeting Standard
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Singaporean*, 89.1%, 46
Chinese, 82.3%, 4025
Taiwanese*, 85.3%, 367
Malaysian*, 81.9%, 72
Korean, 76.9%, 2484
Asian Indian, 78.8%, 2399
Indonesia*, 80.2%, 192
Vietnamese, 75.1%, 2976
Japanese, 75.5%, 2212
Pakistani*, 74.6%, 264
Asian, 75.5%
Other Asian, 72.5%, 6184
Filipino, 67.1%, 5333
White, 62.3%
Thai*, 60.9%, 491
Hmong*, 61.3%, 155
Cambodian, 58.8%, 983
Laotian*, 58.3%, 530
Data labels: student group, percentage meeting standard, student count
Size of bubble based on student count
*Relatively small student group size limits generalization to entire ethnic student group


Asian Student Group Disaggregated: 2015 Math Smarter Balanced 6th, 7th, and 8th Grade Results Combined
Percentage Meeting Standard
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Taiwanese*, 87.8%, 368
Singaporean*, 89.1%, 46
Chinese, 81.8%, 4042
Asian Indian, 74.9%, 2404
Malaysian*, 77.8%, 72
Vietnamese, 73.4, 2996
Indonesian*, 73.8%, 191
Korean, 73.6%, 2513
Japanese, 71.7%, 2219
Asian, 72.1%
Other Asian, 65.6%, 6221
Pakistani*, 64.0%, 264
Filipino, 57.6%, 5349
Thai*, 54.2%
White, 52.5%
Cambodian, 49.7%, 980
Hmong*, 50.6%, 154
Laotian*, 44.5%, 526
Data labels: student group, percentage meeting standard
Size of bubble based on student count
*Relatively small student group size limits generalization to entire ethnic student group


Asian Student Group Disaggregated: 2015 Science Measurements of Student Progress Fifth Grade Results
Percentage Meeting Standard
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Chinese, 82.8%, 1416
Taiwanese*, 86.7%, 128
Asian Indian, 80.4%, 995
Japanese, 80.3%, 755
Korean, 80.2%, 895
Asian, 75.7%
Other Asian, 73.0%, 1977
Indonesian*, 73.9%, 69
Singaporean*, 73.7%, 19
Vietnamese, 71.6%, 990
White, 72.8%
Pakistani*, 68.7%, 99
Filipino, 66.2%, 1834
Malaysian*, 66.7%, 21
Thai*, 64.9%, 174
Laotian*, 62.3%, 175
Cambodian, 58.4%, 370
Hmong*, 54.5%, 55
Data labels: student group, percentage meeting standard, student count
Size of bubble based on student count
*Relatively small student group size limits generalization to entire ethnic student group


Asian Student Group Disaggregated: 2015 Science Measurements of Student Progress Eighth Grade Results
Percentage Meeting Standard
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
Pakistani*, 90.0%, 70
Chinese, 83.0%, 1346
Taiwanese*, 85.8%, 134
Japanese, 81.9%
Malaysian*, 84.2%, 19
Korean, 82.3%, 740
Asian Indian, 80.0%, 715
Hmong*, 79.3%, 87
Asian, 76.4%
Other Asian, 72.6%, 2105
Vietnamese, 74.3%, 1014
Filipino, 68.7%, 1783
White, 68.8%
Laotian*, 64.9%, 171
Indonesian*, 62.1%, 58
Thai*, 58.0%, 176
Cambodian, 56.5%, 308
Data labels: student group, percentage meeting standard, student count
Size of bubble based on student count
*Relatively small student group size limits generalization to entire ethnic student group


Pacific Islander Student Group Disaggregated: 2015 ELA Smarter Balanced 3rd, 4th, and 5th Grade Results Combined
Percentage Meeting Standard
60%
55%
50%
45%
40%
35%
30%
25%
20%
Melanesian*, 57.1%, 14
Native Hawaiian, 54.1%, 1037
Guamanian/Chamorro, 52.4%, 927
Fijian*, 52.8%, 180
Mariana Islander*, 50.0%, 122
Tongan*, 42.2%, 166
Other Pacific Islander, 40.7%, 1625
Samoan, 35.2%, 1320
Micronesian*, 29.0%, 489
White. 62.6%
Asian, 72.2%
Data labels: student group, percentage meeting standard, student count
Size of bubble based on student count, data in the lower right corner are state averages
*Relatively small student group size limits generalization to entire group


Pacific Islander Student Group Disaggregated: 2015 Math Smarter Balanced 3rd, 4th, and 5th Grade Results Combined
Percentage Meeting Standard
60%
55%
50%
45%
40%
35%
30%
25%
20%
Native Hawaiian, 51.2%, 1033
Guamanian/Chamorro, 51.1%, 928
Fijian*, 51.9%, 183
Mariana Islander, 50.8%, 122
Melanesian*, 42.9%, 14
Other Pacific Islander, 37.9%, 1641
Samoan, 34.8%, 1329
Tongan*, 34.3%, 172
Micronesian, 27.1%, 505
White. 60.2%
Asian, 74.4%
Data labels: student group, percentage meeting standard, student count
Size of bubble based on student count, data in the lower right corner are state averages
*Relatively small student group size limits generalization to entire group

Potential for Future Work

Initial responses to this exploratory work on deeper disaggregation have been very enthusiastic. The results were shared at the 2015 Washington Educational Research Association conference and with advocates from Asian and Pacific Islander communities. Stakeholders have been excited to see this data as they had not seen Washington assessment data disaggregated beyond the federal race/ethnicity student groups. These data have the potential to be used in research that examines the gaps among ethnic groups that are masked in the aggregated federal race/ethnicity student groups. The data are useful at the state-level because there are enough students from each ethnic group that the data can be reported without being suppressed. However, there are a number of challenges to reporting the data at the ESD-, district-, or school-level due to federal suppression requirements.

Staff have explored these data from the perspective of potential inclusion of deeper disaggregation in the Indicators of Educational System Health report that includes the potential for evidence-based reforms to improve student group performance. This preliminary exploration of how disaggregated data could be used to close achievement and opportunity gaps at the state level by examining ethnic group performance at a greater level of detail than the aggregate federal race/ethnicity student groups.

Staff are soliciting feedback from the Board and education stakeholders on how these data can best be used in the Indicators of Educational System Health. The following are the suggestions from stakeholders on how to expand this analysis in the future and may be available in current data systems:

- Examine regional concentrations of student demographics or performance results by region (i.e. district- or ESD-level analysis to determine areas of need in the state).
- Link the data to early childhood program participation data via the Educational Research Data Center.
- Examine home language of students (potentially available for English Language Learner students).
- Examine the performance differences of the more deeply disaggregated student groups by program status (ELL/Non-ELL, SPED/Non-SPED, and FRL/Non-FRL) to understand if the groups' performance is a proxy for poverty or other program status.
- Examine the gender gap for the disaggregated ethnic groups.
- Examine the higher-level course-taking patterns for the ethnic groups.

The following are data that stakeholders would like to see but are unlikely to be available:

- Investigate whether there are data relating to cultural education programs (i.e. music, dance, cuisine, language, history education relating to the ethnicity groups).
- Investigate whether there are data on the number of generations that a student's family has been in the United States.

If you have questions, suggestions, or ideas for future work regarding Part II, deeper disaggregation of student data for potential inclusion in the Indicators of Educational System Health report, of this memo please contact parker.teed@k12.wa.us

Appendix A

The Kindergarten Readiness Indicator is the percent of kindergarten students who are characterized as kindergarten ready by demonstrating the characteristics of entering kindergarteners on all six domains of the Washington Kindergarten Inventory of Developmental Skills (WaKIDS). Only a subset of the kindergarten population participates in the WaKIDS.

Table A1: shows the performance the Kindergarten Readiness Indicator by student group.

Kindergarten Readiness	2012-13	2013-14	2014-15	2015-16	2015-16 Target	Difference 2015-16*
All Students	**37.2%**	**40.8%**	**39.5%**	**44.2%**	**51.8%**	**-7.6%**
Black / African American	41.3%	38.7%	39.3%	41.2%	51.4%	-10.2%
American Indian / Alaskan Native	30.2%	36.0%	34.4%	35.2%	46.6%	-11.4%
Asian	42.1%	45.0%	43.2%	51.5%	54.0%	-2.5%
Hispanic / Latino	23.9%	25.4%	25.1%	31.1%	42.6%	-11.5%
Native Hawaiian / Pacific Islander	30.4%	30.4%	30.2%	33.9%	45.3%	-11.4%
White	50.3%	51.7%	48.5%	50.5%	59.6%	-9.1%
Two or More	45.3%	47.6%	46.5%	49.4%	57.0%	-7.6%
Students with a Disability	16.2%	18.7%	17.4%	19.8%	35.5%	-15.7%
Limited English	19.0%	20.3%	21.0%	27.8%	39.1%	-11.3%
Low-Income	30.1%	32.3%	30.6%	33.7%	46.4%	-12.7%

*Note: Difference shown in percentage points.

The 3rd Grade Literacy Indicator is the percent of students who meet standard on the 3rd Grade SBA ELA. The performance difference between 2014 and 2015 was discussed earlier in this memo and is not addressed here because of the full implementation of the SBA.

Table A2: shows the performance the 3rd Grade Literacy Indicator by student group.

3rd Grade Literacy	**2009-10 MSP**	**2010-11 MSP**	**2011-12 MSP**	**2012-13 MSP**	**2013-14 MSP**	**2014-15 SBA**
All Students	**72.1%**	**73.1%**	**68.8%**	**73.1%**	**72.0%**	**52.1%**
Black / African American	58.6%	61.7%	54.9%	59.1%	57.3%	34.2%
American Indian / Alaskan Native	54.9%	55.8%	52.1%	52.8%	49.7%	25.9%
Asian	80.5%	82.2%	78.9%	83.1%	84.6%	69.6%
Hispanic / Latino	52.0%	57.4%	52.1%	57.2%	57.9%	33.8%
Native Hawaiian / Pacific Islander	63.1%	62.0%	53.3%	62.9%	56.8%	31.6%
White	78.6%	78.7%	75.0%	79.4%	77.8%	59.9%
Two or More		76.7%	71.7%	75.9%	73.7%	54.6%
Students with a Disability	41.3%	41.8%	37.7%	37.4%	37.8%	26.7%
Limited English	30.3%	36.8%	28.7%	41.4%	44.6%	19.2%
Low-Income	59.5%	61.9%	56.6%	61.4%	59.6%	36.0%

The 8th Grade High School Readiness Indicator is the percentage of 8th grade students who meet standard on all three 8th grade assessments (SBA ELA, SBA math, and MSP science). The performance difference between 2014 and 2015 was discussed earlier in this memo and is not addressed here because of the full implementation of the SBA.

Table A3: shows the performance on the 8th Grade High School Readiness Indicator by subgroup.

8th Grade High School Readiness	2010-11 MSP	2011-12 MSP	2012-13 MSP	2013-14 MSP	2014-15 SBA
All Students	**42.0%**	**45.8%**	**43.8%**	**46.9%**	**37.5%**
Black / African American	21.4%	23.5%	22.3%	22.7%	16.6%
American Indian / Alaskan Native	19.8%	21.4%	20.7%	19.1%	14.2%
Asian	58.5%	64.3%	63.4%	69.7%	60.9%
Hispanic / Latino	23.0%	27.1%	25.6%	28.7%	19.9%
Pacific Islander / Native Hawaiian	24.4%	23.4%	23.0%	26.4%	20.5%
White	48.2%	52.0%	50.1%	53.0%	43.3%
Two or More	42.0%	47.5%	45.7%	48.8%	40.0%
Students with a Disability	4.9%	5.7%	5.2%	6.9%	3.8%
Limited English	3.1%	4.4%	4.5%	5.9%	3.1%
Low-Income	25.6%	29.6%	27.9%	30.1%	21.4%

The High School Graduation Indicator reports the On-Time (4-Year) Adjusted Cohort Graduation Rate.

Table A4: shows the performance on the High School Graduation Indicator by subgroup.

4-Yr Cohort Grad Rate	2010-11	2011-12	2012-13	2013-14	2014-15	Target 2014-15	Difference 2014-15
All Students	**76.6%**	**77.2%**	**76.0%**	**77.2%**	**78.1%**	**81.9%**	**-3.8%**
Black / African American	68.9%	66.9%	65.4%	67.8%	68.8%	74.8%	-6.0%
American Indian / Alaskan Native	62.2%	56.4%	52.5%	53.7%	56.4%	68.0%	-11.6%
Asian	84.9%	84.4%	84.1%	86.5%	87.8%	87.9%	-0.2%
Hispanic / Latino	67.6%	66.5%	65.6%	67.3%	69.6%	74.1%	-4.5%
Native Hawaiian / Pacific Islander	66.9%	64.4%	62.3%	64.6%	67.0%	73.0%	-6.0%
White	81.9%	80.2%	79.4%	80.5%	80.9%	85.1%	-4.2%
Two or More	73.6%	78.1%	76.2%	75.5%	77.9%	81.0%	-3.1%
Students with a Disability	59.6%	57.4%	54.4%	55.7%	57.9%	67.4%	-9.5%
Limited English	54.5%	53.8%	50.4%	53.7%	55.8%	64.0%	-8.2%
Low-Income	68.5%	66.0%	64.6%	66.4%	68.0%	74.3%	-6.3%

*Note: Difference shown in percentage points.

The Quality of High School Diploma shows the percentage of recent high school graduates who did not take remedial coursework in college.

Table A5. Shows the performance on the Quality of High School Diploma Indicator by subgroup.

Quality of High School Diploma	2010-11	2011-12	2012-13	2012-13 Target	Difference 2012-13*
All Students	**81.9%**	**84.0%**	**82.2%**	**84.2%**	**-1.9**
Black / African American	77.4%	77.6%	73.9%	79.1%	-5.2
American Indian / Alaskan Native	83.1%	83.0%	82.0%	84.3%	-2.3
Asian	82.1%	83.7%	82.6%	84.1%	-1.5
Hispanic / Latino	76.2%	78.1%	74.6%	78.8%	-4.1
Native Hawaiian / Pacific Islander	83.9%	86.1%	81.3%	86.1%	-4.8
White	83.2%	85.6%	84.4%	85.5%	-1.1
Two or More		84.9%	82.0%	86.0%	-4.0
Students with a Disability	83.7%	86.2%	82.3%	86.0%	-3.8
Limited English	72.6%	85.6%	80.7%	80.6%	0.1
Low-Income	80.0%	83.2%	80.7%	82.9%	-2.3

*Note: Difference shown in percentage points.

In addition to measuring the percentage of high school graduates attaining a credential, certificate, or completing an apprenticeship prior to age 26 (described in Part I of this memo), the Post-Secondary Attainment Indicator also measures the percentage of recent high school graduates who are enrolled in post-secondary education, training, or are employed in the workforce during the 2nd and 4th quarters.

Table A6: shows the performance on the secondary measure of the percentage of graduates who are engaged in employed or engaged in post-secondary education.

Post-Secondary Enrollment and Employment	Class of 2011		Class of 2012		Class of 2013	
	Reporting Year 2012		Reporting Year 2013		Reporting Year 2014	
	2nd Quarter	4th Quarter	2nd Quarter	4th Quarter	2nd Quarter	4th Quarter
All Students	**76.7%**	**75.9%**	**73.7%**	**75.8%**	**76.3%**	**76.9%**
Black / African American	70.7%	68.0%	68.3%	71.2%	73.4%	74.2%
American Indian / Alaskan Native	60.0%	57.0%	58.0%	60.7%	59.0%	61.9%
Asian	82.5%	81.6%	80.6%	82.5%	83.7%	84.9%
Hispanic / Latino	62.8%	62.9%	64.6%	68.7%	67.2%	69.5%
Native Hawaiian / Pacific Islander	57.5%	58.0%	57.5%	63.4%	64.6%	62.8%
White	77.6%	76.8%	75.8%	77.4%	78.1%	78.3%
Two or More			72.8%	74.9%	76.0%	76.5%
Students with a Disability	53.2%	50.9%	45.4%	48.8%	48.1%	50.4%
Limited English	59.1%	60.4%	52.9%	60.9%	56.1%	60.1%
Low-Income	66.1%	65.2%	64.7%	68.0%	67.1%	68.7%

Please contact Andrew Parr at andrew.parr@k12.wa.us if you have questions regarding the data tables comprising Appendix A.