

The Washington Achievement Index – Proposed Updates



ANDREW PARR – STATE BOARD OF EDUCATION

AUGUST 26, 2015

ACHIEVEMENT AND ACCOUNTABILITY
WORKGROUP



August 26, 2015

Our Perfect Storm



- Three elements of an accountability ‘perfect storm’
 - ✦ New assessment system
 - ✦ Recently adopted learning standards
 - ✦ Organized opposition to testing in general, the Smarter Balanced and Common Core
- Result – an unprecedented number of schools, districts, and the state did not meet the 95 percent participation expectation.



Test Refusals



- AYP Participation analyses for 2162 schools
- All Students by content area for all reportable subgroups
 - ✦ 464 Failed AYP (All Students) for ELA and Math
 - ✦ School-level participation rates (< 5 to 100 percent, extreme rates are suppressed on OSPI Report Card)
- Per Federal requirements
 - ✦ Test refusals are identified as non-participants
 - ✦ Students are identified as Not Meeting Standard
 - ✦ Factor into the denominator for Proficiency rate calculations

RESULT – schools with low participation rates would be expected to have low proficiency rates.



Need for an Index Communication Plan



Groups of schools based on participation rates

- Schools with >95 percent participation rate
 - ✦ Are the results reflective of motivated test-takers?
- Schools with <95 percent participation rate but with reportable proficiency data
 - ✦ Is the data from population of participants demographically and academically representative of the school?
 - ✦ If the test refusals were non-random are the results biased in favor or against the school?
- Schools with very low participation rates and very low proficiency rates.
 - ✦ How can the reported rate of only XX percent meeting standard be considered 'correct or accurate' for some schools?



Test Refusals



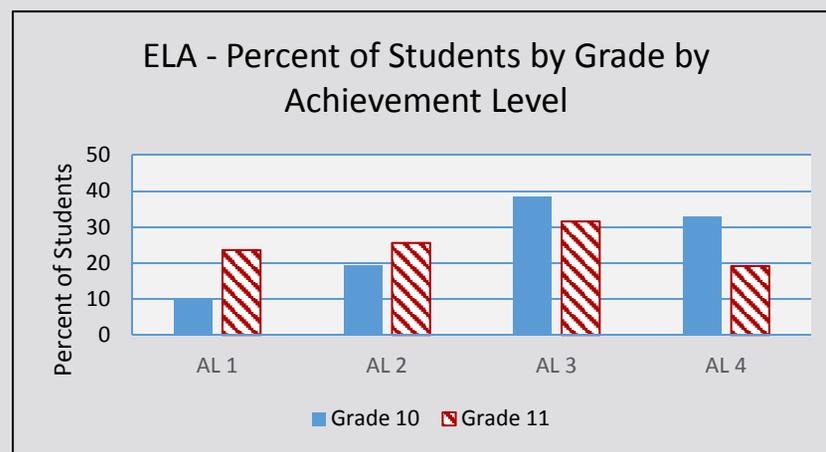
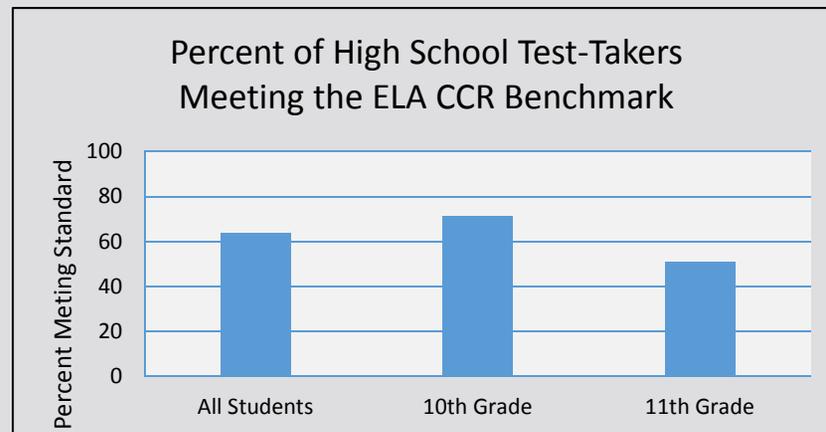
- Less impactful to Index ratings for elementary and middle schools.
- Will be impactful to high school Index ratings

Just as the low participation rates negatively impacted an unprecedented number of schools for AYP, we expect negative impacts to school Index ratings.



High School SBAC ELA – Unusual Results

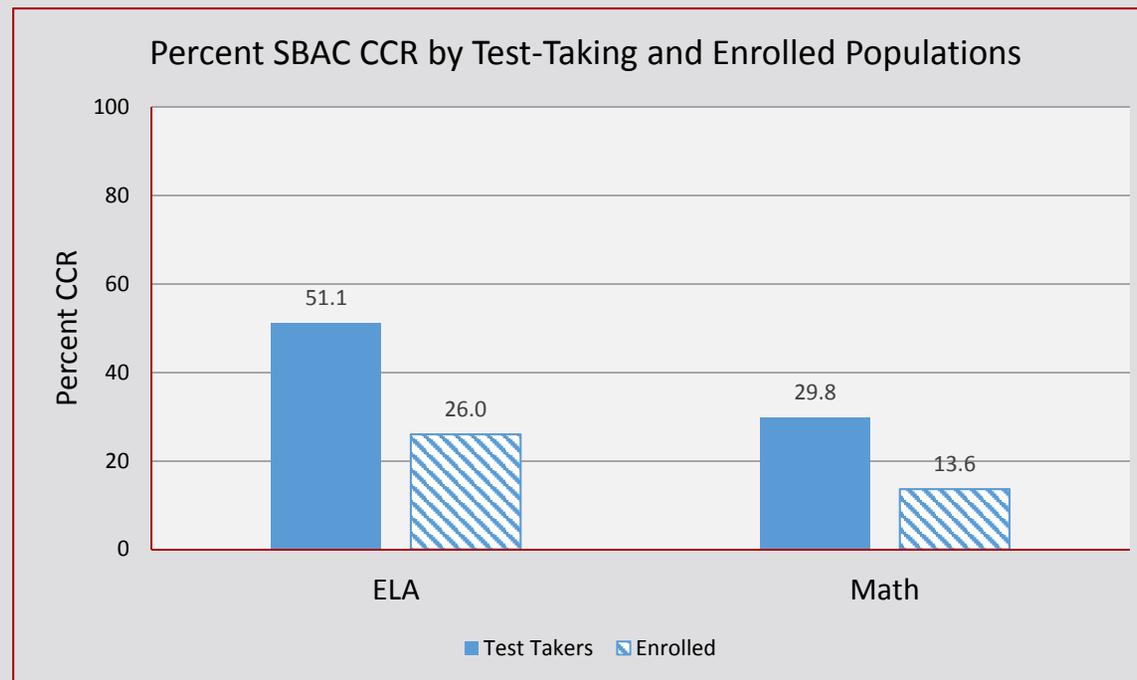
- The 10th Grade students outperformed the 11th grade students by a wide margin.
 - ✦ 10th = 71 percent CCR
 - ✦ 11th = 51 percent CCR
- Participation rates differ
 - ✦ 10th = 97 percent part.
 - ✦ 11th = 53 percent part.



11th Grade Results

Percent CCR by Population

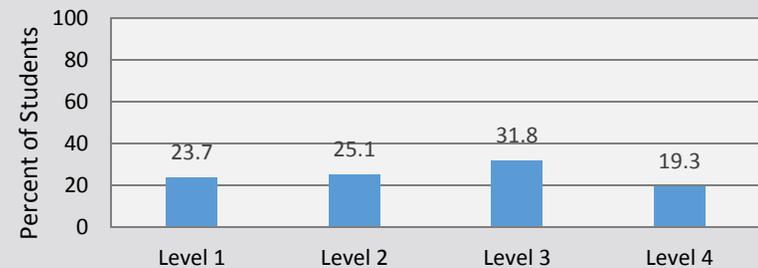
- For test-takers, the success rate is pretty low.
- The success rate is even lower when accountability business rules are applied to the population.



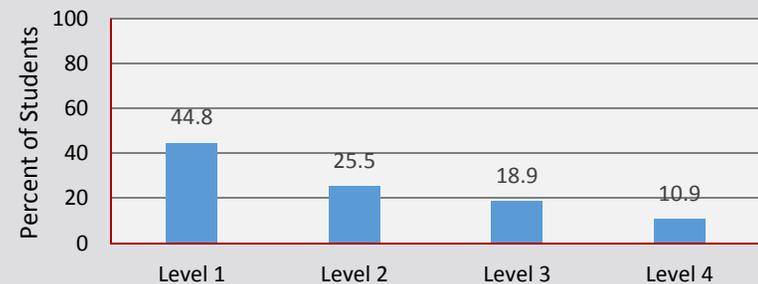
11th Grade SBAC Results

- Results for Test-Takers
 - ✦ 51 percent CCR in ELA
 - ✦ 30 percent CCR in Math
- The distribution just looks a little odd – especially in light of the 10th grade results.

Percent of 11th Graders by SBAC ELA Achievement Level



Percent of 11th Graders by SBAC Math Achievement Level



Participation – Proficiency Rate Connection



- High performance and high participation in 2014
- Low performance and low participation in 2015

School	HSPE Reading		SBAC ELA	
	2014		2015	
	PART	PRO	PART	PRO
School 1	> 95	89.4	12.8	5.3
School 2	> 95	92.1	12.5	12.0
School 3	> 95	90.6	18.6	11.1
School 4	> 95	85.6	11.0	< 5.0
School 5	> 95	93.9	12.8	< 5.0

EOC Math		SBAC Math	
2014		2015	
PART	PRO	PART	PRO
> 95	91.3	6.7	< 5.0
> 95	92.5	10.4	5.9
> 95	91.6	16.8	8.4
> 95	75.4	14.9	< 5.0
> 95	95.2	11.2	< 5.0



High Performing Schools Winter 2015 Index Version



- These were Exemplary schools based on the winter 2015 Index version. None will be exemplary in the next Index version.

School	HSPE Reading			SBAC ELA
	Percent Meeting Standard			
	2012	2013	2014	2015
School 1	96.8	96.3	96.4	< 5.0
School 2	91.2	92.5	89.4	5.3
School 3	96.5	96.6	96.2	< 5.0

EOC Math			SBAC Math
Percent Meeting Standard			
2012	2013	2014	2015
95.3	95.7	93.6	< 5.0
93.1	92.1	91.3	< 5.0
90.4	92.4	93.3	< 5.0



Questions and Discussion



We expect the lower proficiency rates to result in lower Index ratings for many schools.

1. How could the discussion of low participation, low proficiency, and low school ratings be framed for the field?
2. How can we use the next Index release to show the importance of high participation rates?
3. Is there other policy work we can initiate to improve participation rates going forward?



Position Statement from the Board



**ADDRESSES SCHOOL ACCOUNTABILITY
DURING THE NEXT SEVERAL YEARS**



Presentation Roadmap



- **High School Smarter Balanced**
 - ✦ Impact of participation rates on the Index
 - ✦ Student motivation on the Smarter Balanced
- **September action item to approve a position statement**
 - ✦ Minor changes to the HS Index indicator weightings
 - ✦ Inclusion of Dual Credit Participation
 - ✦ Recommending more heavily weighted CCR indicator
- **Statewide Indicators of the Educational System**



Position Statement by the Board



- Approved a Provisional Position Statement at the July board meeting
 - ✦ Excluded the proposed high school indicator weighting
 - ✦ No substantive changes to the Index for elementary and middle schools
 - ✦ Included other items discussed by the AAW in June
- SBE workgroup formed to discuss high school indicator weighting
 - ✦ 3 board members and SBE staff
 - ✦ Directive – bring an indicator weighting scheme forward that includes Dual Credit for the full board to consider at the September meeting



Changes to the CCR Weighting



Inclusion of Dual Credit Participation requires a change that preserves the emphasis of High School Graduation rate.

Staff recommends to increase the CCR weighting to accommodate the inclusion of Dual Credit Participation.

Impact data were created for two models or simulations.

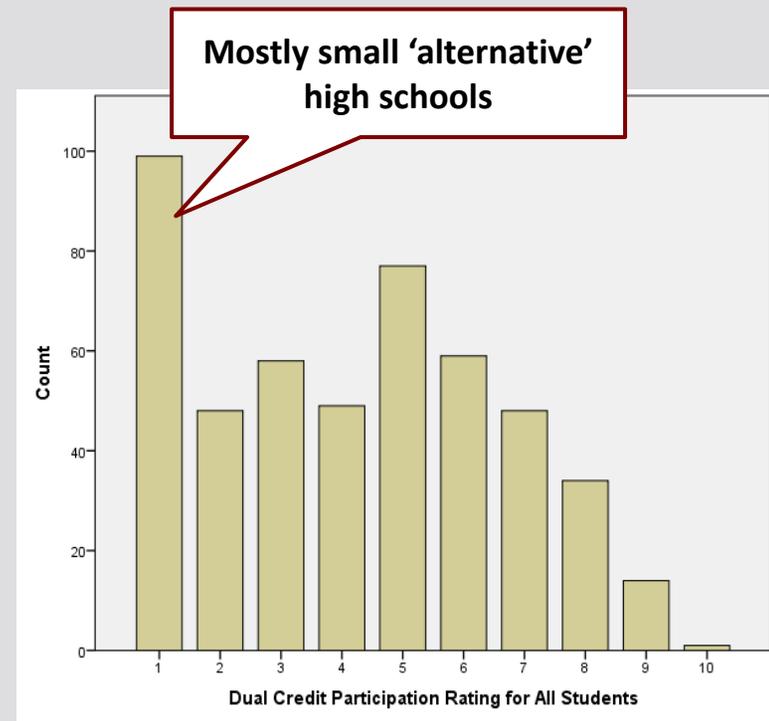


Dual Credit

- Dual Credit Participation and Index rating crosswalk table.

From	To	Rating Value
0	< 10	1
10	< 20	2
20	< 30	3
30	< 40	4
40	< 50	5
50	< 60	6
60	< 70	7
70	< 80	8
80	< 90	9
90	100	10

- Distribution of rating values for the All Students group.



Dual Credit Participation Descriptive Statistics



- Ranges and median values for the Dual Credit Participation rates are similar for all subgroups.

	Percent of Students Participating in Dual Credit Programs			
	Low	High	Median	Schools
All Students	0.4	90.8	37.8	487
Targeted Subgroup				
Native American/Alaskan	2.4	80.0	31.4	71
Black/African American	1.8	89.3	46.4	151
Hispanic/Latino	0.8	92.2	42.2	320
Pacific Islander/Hawaiian	11.1	84.2	52.2	53
Former Bilingual	1.3	96.8	50.8	255
Bilingual	0.9	87.5	36.9	151
Students with a Disability	0.9	89.8	31.6	298
Low Income	0.4	91.2	35.6	442
Non-Targeted Subgroups				
Asian	3.2	93.9	63.6	181
White	0.4	90.1	39.6	463
Two or More Races	1.9	88.7	51.5	239



Dual Credit Participation



IMPACT DATA FOR TWO SIMULATIONS



High School Indicator Weighting Model 1



		ELA	Math	Science	Component Average	Overall Average
Proficiency	All Students	5%	5%	5%	15%	30% of Index
	Targeted Subgroup	5%	5%	5%	15%	

		ELA	Math	Component Average	Overall Average
Growth	All Students	7.5%	7.5%	15% of Index	30% of Index
	Targeted Subgroup	7.5%	7.5%	15% of Index	

		5-Year Graduation Rate	Dual Credit Participation	Component Average	Overall Average
College and Career Readiness	All Students	17.5%	2.5%	20% of Index	40% of Index
	Targeted Subgroup	17.5%	2.5%	20% of Index	



Model 1 Impact Data



- Dual Credit ratings are lower than graduation ratings, so the scores would expectedly decline a small amount.
- 75 percent of impacted schools experience a rating decline of up to -0.413 rating points.
- School staff would be incentivized to provide and enroll more students in Dual Credit courses.

Group	Schools	Change to Index Ratings		
1	High schools with reportable Dual Credit Participation data	319*	239 ratings decreased up to -0.413 rating points	79 ratings increased up to 0.217 rating points
2	High schools lacking reportable CCR data elements	62	None	
3	High schools lacking a 2014 Index rating because of insufficient data	275	None	

*Note: The rating for one school was unchanged.



High School Indicator Weighting Model 2 - Recommended



		ELA	Math	Science	Component Average	Overall Average
Proficiency	All Students	5.33%	5.33%	5.33%	16%	32% of Index
	Targeted Subgroup	5.33%	5.33%	5.33%	16%	

		ELA	Math	Component Average	Overall Average
Growth	All Students	8%	8%	16% of Index	32% of Index
	Targeted Subgroup	8%	8%	16% of Index	

		5-Year Graduation Rate	Dual Credit Participation	Component Average	Overall Average
College and Career Readiness	All Students	16%	2%	18% of Index	36% of Index
	Targeted Subgroup	16%	2%	18% of Index	



Model 2 – Impact Data



- Recommended Model – impacts a few more schools the magnitude of impact is smaller.
- 79 percent of impacted schools experience a rating decline of up to -0.272 rating points.

Group		Schools	Change to Index Ratings	
1	High schools with reportable Dual Credit Participation data	319	253 ratings decreased up to -0.272 rating points	66 ratings increased up to 0.146 rating points
2	High schools lacking reportable CCR data elements	62	None	
3	High schools lacking a 2014 Index rating because of insufficient data	275	None	



Summary of Models

- All of the Models
 - ✦ Equally weight content area assessments
 - ✦ Equally weight All Students and Targeted Subgroup
- Model 1
 - ✦ Makes graduation the heaviest weighted measure
- Model 2 (recommended)
 - ✦ Equally weights proficiency, growth, and graduation rate
 - ✦ Smallest negative impacts to schools.

Measure	Percent of Index Rating		
	Current	Model 1	Model 2
Proficiency	33.3	30	32
Growth	33.3	30	32
CCR	33.3	40	36
Grad Rate	33.3	35	32
Dual Credit		5	4
Negatively Impacted Schools		239	253
Maximum Rating Point Decline		-0.413	-0.272
Median Rating Point Decline		-0.120	-0.099



Discussion Questions



Do you see any potential problems with recommending Model 2 to the Board in September?



Proposed Board Action



The Board approved a **Provisional** Position Statement on the Accountability System During the Transition to the Smarter Balanced Assessments at the July board meeting.

The Board will consider approving the Position Statement on the Accountability System During the Transition to the Smarter Balanced Assessments.



Position Statement



- Index methodology is not changing
 - ✦ Equal weighting of content area assessments
 - ✦ Carry forward growth data for SBAC Field Test schools
- High School indicator weightings change a little
 - ✦ Proficiency (32%), Growth (32%) and CCR (36%)
 - ✦ CCR = Graduation Rate (32%) and Dual Credit (4%)
- Start a 3-year cycle of identifying new Priority and Focus schools to maintain a constant list of schools while:
 - ✦ Monitoring the performance and progress of all schools
 - ✦ Annually assessing PLA performance against exit criteria
 - ✦ Adding PLA schools as necessary



Questions



Please contact Andrew Parr via email at
andrew.parr@k12.wa.us
if you have questions about this presentation.



Statewide Indicators of the Educational System – ESSB 5491



ANDREW PARR – STATE BOARD OF EDUCATION

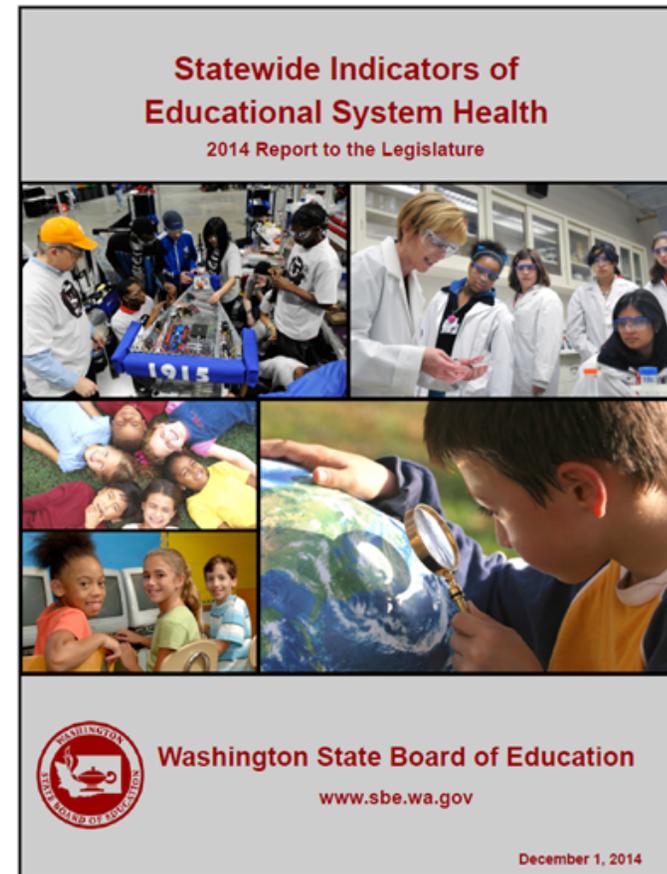
AUGUST 26, 2015

ACHIEVEMENT AND ACCOUNTABILITY
WORKGROUP



5491 Indicators

- Six indicators of educational system 'health' specified by the 2013 Legislature.
- Several indicators revised by the SBE in the December 2013 report
 - ✦ 3rd Grade Literacy
 - ✦ 8th Grade HS Readiness



Key Questions



1. Do you believe that that the annual targets for the 5491 indicators (3rd Grade Literacy and 8th grade HS Readiness) should be reset because of the move to the Smarter Balanced assessments?
2. If the targets are reset, how should that be accomplished to fulfill legislative mandate?



3rd Grade Literacy



- Goals and target-setting are dependent on comparable data over multiple years.
- Annual step increases over 4 percentage points may not be achievable without significant system reforms.

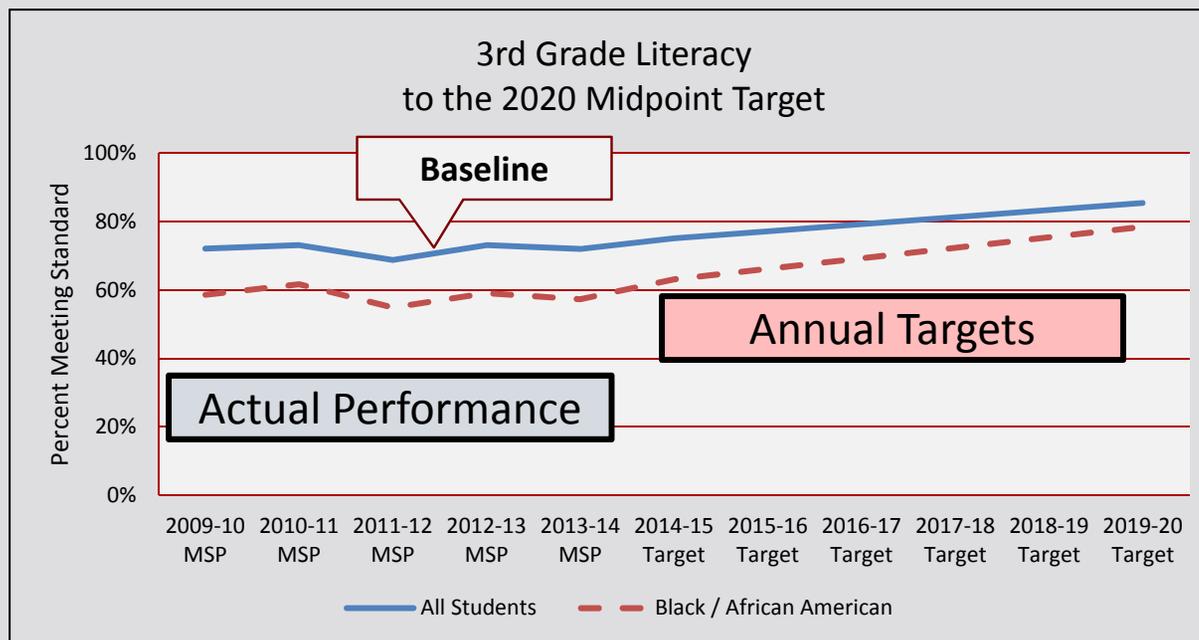
3rd Grade MSP Literacy	2009-10 MSP	2010-11 MSP	2011-12 MSP	2012-13 MSP	2013-14 MSP	2-Year Average Baseline	Gap to 100%	50% of Gap	Annual Step Increase	2020 Midpoint Target	2027 Endpoint Goal
All Students	72.1%	73.1%	68.8%	73.1%	72.0%	71.0%	29.1%	14.5%	2.1%	85.5%	100%
Black/African American	58.6%	61.7%	54.9%	59.1%	57.3%	57.0%	43.0%	21.5%	3.1%	78.5%	100%
American Indian/Alaskan Native	54.9%	55.8%	52.1%	52.8%	49.7%	52.5%	47.6%	23.8%	3.4%	76.2%	100%
Asian	80.5%	82.2%	78.9%	83.1%	84.6%	81.0%	19.0%	9.5%	1.4%	90.5%	100%
Hispanic/Latino	52.0%	57.4%	52.1%	57.2%	57.9%	54.7%	45.4%	22.7%	3.2%	77.3%	100%
Native Hawaiian/Pacific Isl.	63.1%	62.0%	53.3%	62.9%	56.8%	58.1%	41.9%	21.0%	3.0%	79.1%	100%
White	78.6%	78.7%	75.0%	79.4%	77.8%	77.2%	22.8%	11.4%	1.6%	88.6%	100%
Two or More		76.7%	71.7%	75.9%	73.7%	73.8%	26.2%	13.1%	1.9%	86.9%	100%
Students with Disabilities	41.3%	41.8%	37.7%	37.4%	37.8%	37.6%	62.5%	31.2%	4.5%	68.8%	100%
Limited English	30.3%	36.8%	28.7%	41.4%	44.6%	35.1%	65.0%	32.5%	4.6%	67.5%	100%
Low-Income	59.5%	61.9%	56.6%	61.4%	59.6%	59.0%	41.0%	20.5%	2.9%	79.5%	100%



3rd Grade Literacy



- The methodology provides a mechanism to monitor actual performance against goals, but relies on data comparability.



Add Non-Comparable Data...



- Smarter Balanced data disrupts the year-to-year comparability

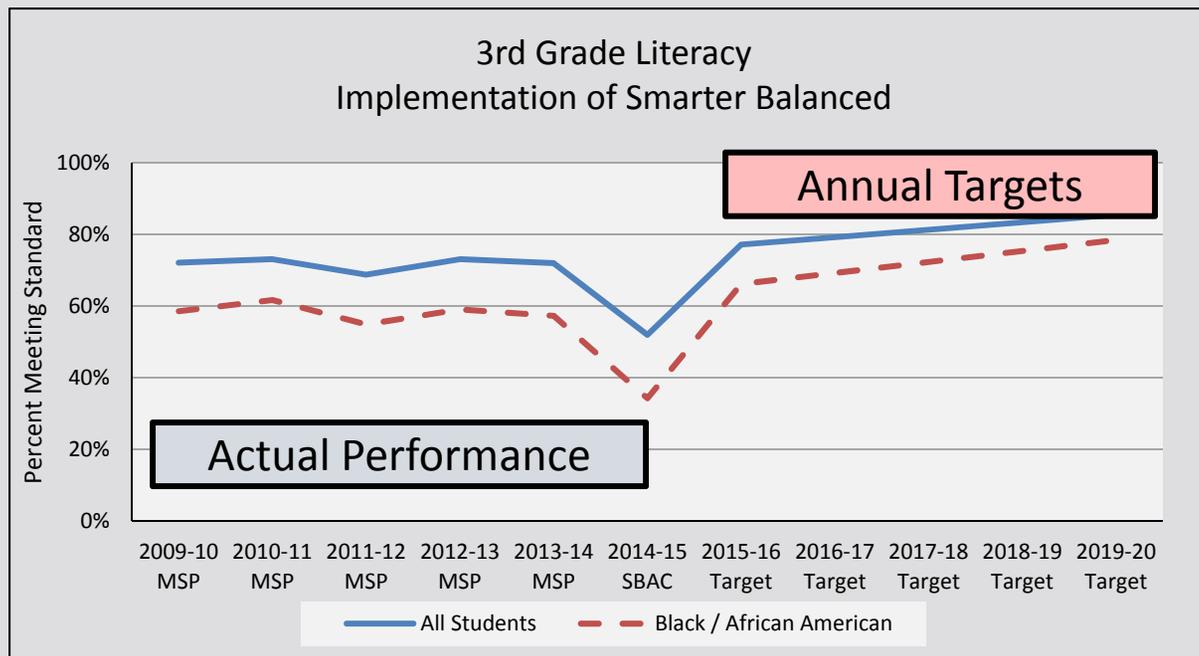
3rd Grade MSP Literacy	2010-11 MSP	2011-12 MSP	2012-13 MSP	2013-14 MSP	2014-15 SBAC	2-Year Average Baseline	Gap to 100%	50% of Gap	Annual Step Increase	2020 Midpoint Target	2027 Endpoint Goal
All Students	73.1%	68.8%	73.1%	72.0%	52.0%	71.0%	29.1%	14.5%	2.1%	85.5%	100%
Black/African American	61.7%	54.9%	59.1%	57.3%	34.3%	57.0%	43.0%	21.5%	3.1%	78.5%	100%
American Indian/Alaskan Native	55.8%	52.1%	52.8%	49.7%	25.7%	52.5%	47.6%	23.8%	3.4%	76.2%	100%
Asian	82.2%	78.9%	83.1%	84.6%	69.4%	81.0%	19.0%	9.5%	1.4%	90.5%	100%
Hispanic/Latino	57.4%	52.1%	57.2%	57.9%	33.7%	54.7%	45.4%	22.7%	3.2%	77.3%	100%
Hawaiian/Pacific Islander	62.0%	53.3%	62.9%	56.8%	31.6%	58.1%	41.9%	21.0%	3.0%	79.1%	100%
White	78.7%	75.0%	79.4%	77.8%	59.8%	77.2%	22.8%	11.4%	1.6%	88.6%	100%
Two or More	76.7%	71.7%	75.9%	73.7%	54.5%	73.8%	26.2%	13.1%	1.9%	86.9%	100%
Students with Disabilities	41.8%	37.7%	37.4%	37.8%	25.5%	37.6%	62.5%	31.2%	4.5%	68.8%	100%
Limited English	36.8%	28.7%	41.4%	44.6%	19.1%	35.1%	65.0%	32.5%	4.6%	67.5%	100%
Low-Income	61.9%	56.6%	61.4%	59.6%	35.9%	59.0%	41.0%	20.5%	2.9%	79.5%	100%



New Assessment System



- Smarter Balanced assessment system is not directly comparable to the MSP assessment system.
- Current annual targets are not attainable.



Resetting Targets is Required



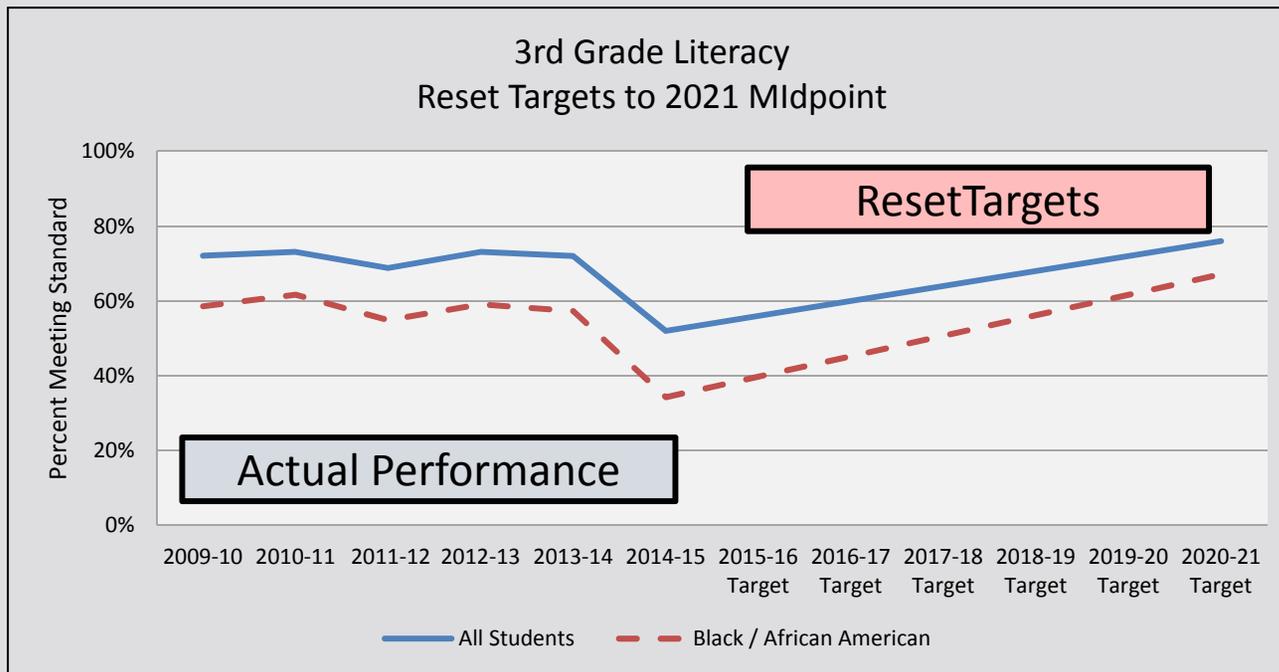
- The performance goal for each indicator ‘...may only be adjusted upward.’ (per ESSB 5491)
- The endpoint goal is gap elimination and 100 percent proficiency by the end of the 2026-27 school year.
- If we follow the current methodology and maintain the current endpoint goal:
 - ✦ Midpoint target shifts from 2019-20 to 2020-21
 - ✦ Endpoint goal remains unchanged in 2027
 - ✦ **With a lowered baseline starting point and reduced number of years to meet goals (12 vs. 14), the annual step increases are larger.**



3rd Grade Literacy - Reset Targets Linear Gap Reduction - Option 1



- The SBAC gap is nearly double the MSP gap, meaning that annual step increases are larger.



Reset Targets for 3rd Grade Literacy



- Historical performance confirms that the annual SBAC step increases are mostly non-attainable.
- Goals are no longer ‘realistic but challenging.’

	Annual Step Increase (in Percentage Points)		Midpoint Target	
	MSP	SBAC	2019-20 MSP	2020-21 SBAC
All Students	2.1	4.0	85.5%	76.0%
Black/African American	3.1	5.5	78.5%	67.2%
American Indian/Alaskan Native	3.4	6.2	76.2%	62.9%
Asian	1.4	2.6	90.5%	84.7%
Hispanic/Latino	3.2	5.5	77.3%	66.9%
Hawaiian/Pacific Islander	3.0	5.7	79.1%	65.8%
White	1.6	3.4	88.6%	79.9%
Two or More	1.9	3.8	86.9%	77.3%
Students with Disabilities	4.5	6.2	68.8%	62.8%
Limited English	4.6	6.7	67.5%	59.6%
Low-Income	2.9	5.3	79.5%	68.0%



Goal-Setting Alternative

Exponential vs. Linear Step Increases



- Rationale: results from increased funding and reforms will not manifest immediately – it takes time to see improvement from change
- At least several years will be required for classroom instruction to ‘catch up’ to the Smarter Balanced assessment system.
- There is no real reason to believe that gap reductions will occur in linear fashion over time.
- **Caveat: this exponential methodology is inconsistent with other goal-setting activities (AMOs for example) and might be viewed as sending ‘mixed signals’ to the field.**



3rd Grade Literacy – Reset Targets

Exponential Gap Reduction – Option 2



- Option 2 assumes that gap reduction will occur in smaller increments initially and then in larger increments after classroom instruction improves and ‘catches up’ with the assessment system.
 - ✦ The first 25% of the gap to 100% is made up over the first six years (end of 2020-21 school year)
 - ✦ The next 25% of the gap to 100% is made up over the next three years (end of 2023-24 school year)
 - ✦ The final 50% of the gap is made up over the final three years (end of 2026-27 school year)



How Would Targets Change Over Time?



- Goals and targets are challenging and achievable.

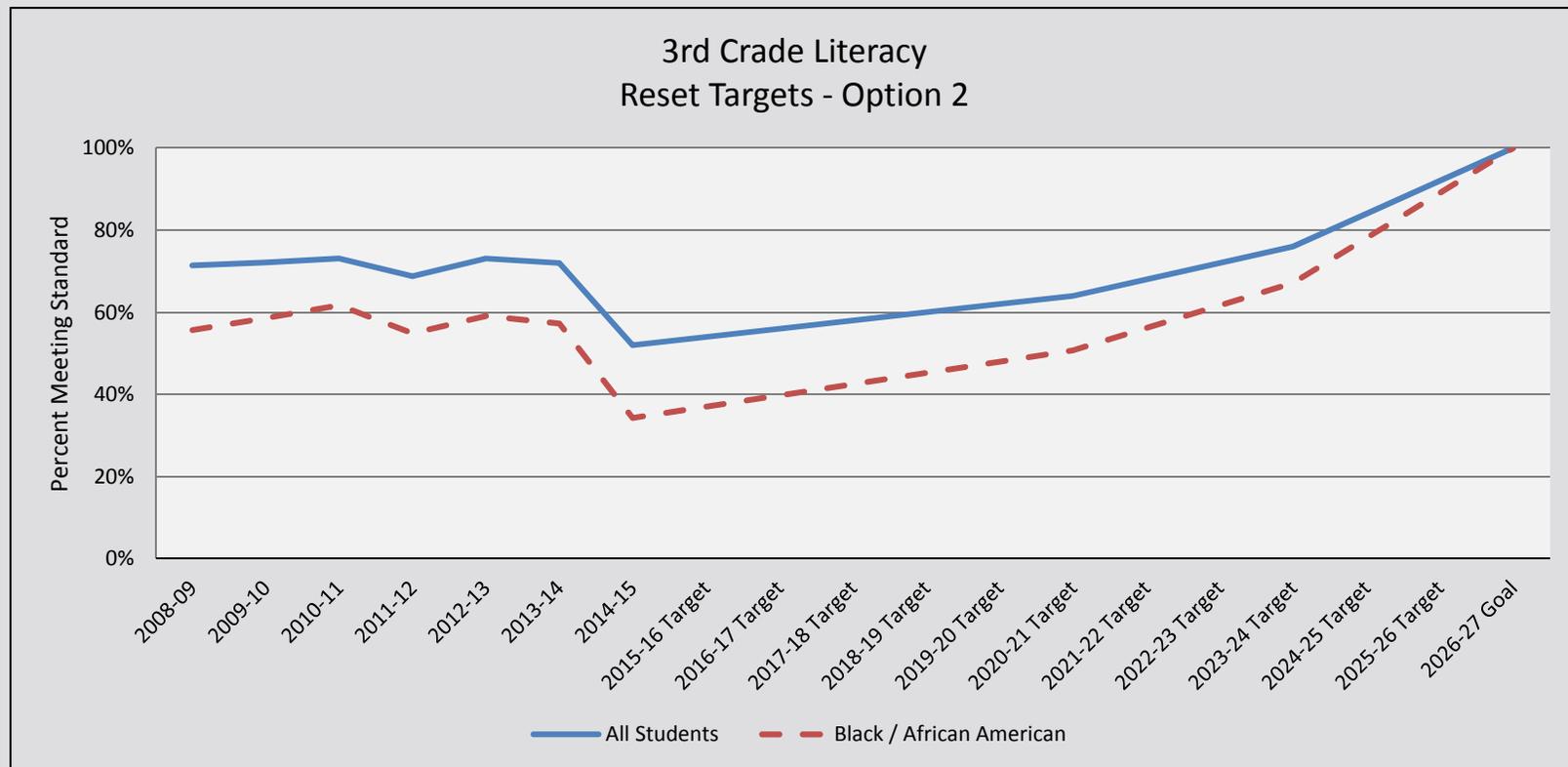
	Step Increase (in Percentage Points)		
	Years 1 to 6	Years 7 to 9	Years 10 to 12
All Students	2.0	4.0	8.0
Black/African American	2.7	5.5	11.0
American Indian/Alaskan Native	3.1	6.2	12.4
Asian	1.3	2.6	5.1
Hispanic/Latino	2.8	5.5	11.1
Hawaiian/Pacific Islander	2.9	5.7	11.4
White	1.7	3.4	6.7
Two or More	1.9	3.8	7.6
Students with Disabilities	3.1	6.2	12.4
Limited English	3.4	6.7	13.5
Low-Income	2.7	5.3	10.7



3rd Grade Literacy – Reset Targets Exponential Gap Reduction – Option 2



- The target would be approximately 72 percent of 3rd grade students meeting standard in 8 years.



Key Questions



1. Do you believe that that the annual targets for the 5491 indicators (3rd Grade Literacy and 8th grade HS Readiness) should be reset because of the move to the Smarter Balanced assessments?
2. If the targets are reset, how should that be accomplished to fulfill legislative mandate?
3. Our other legislative mandates that require target setting...



Other Improvement Goals



<http://apps.leg.wa.gov/rcw/default.aspx?cite=28A.305.130>

(4) For purposes of statewide accountability:

(a) Adopt and revise performance improvement goals in reading, writing, science, and mathematics, by subject and grade level, once assessments in these subjects are required statewide; academic and technical skills, as appropriate, in secondary career and technical education programs; and student attendance, as the board deems appropriate to improve student learning. The goals shall be consistent with student privacy protection provisions of RCW [28A.655.090](#) and shall not conflict with requirements contained in Title I of the federal elementary and secondary education act of 1965, or the requirements of the Carl D. Perkins vocational education act of 1998, each as amended. The goals may be established for all students, economically disadvantaged students, limited English proficient students, students with disabilities, and students from disproportionately academically underachieving racial and ethnic backgrounds. The board may establish school and school district goals addressing high school graduation rates and dropout reduction goals for students in grades seven through twelve. The board shall adopt the goals by rule. However, before each goal is implemented, the board shall present the goal to the education committees of the house of representatives and the senate for the committees' review and comment in a time frame that will permit the legislature to take statutory action on the goal if such action is deemed warranted by the legislature;



Questions



Please contact Andrew Parr via email at
andrew.parr@k12.wa.us
if you have questions about this presentation.

