



THE WASHINGTON STATE BOARD OF EDUCATION

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

Title:	<u>Position Statement with Achievement Index Weighting</u>	
As Related To:	<input type="checkbox"/> Goal One: Develop and support policies to close the achievement and opportunity gaps. <input checked="" type="checkbox"/> Goal Two: Develop comprehensive accountability, recognition, and supports for students, schools, and districts.	<input type="checkbox"/> Goal Three: Ensure that every student has the opportunity to meet career and college ready standards. <input checked="" type="checkbox"/> Goal Four: Provide effective oversight of the K-12 system. <input type="checkbox"/> Other
Relevant To Board Roles:	<input type="checkbox"/> Policy Leadership <input checked="" type="checkbox"/> System Oversight <input type="checkbox"/> Advocacy	<input type="checkbox"/> Communication <input type="checkbox"/> Convening and Facilitating
Policy Considerations / Key Questions:	The Washington Achievement Index was originally designed to include a measure of Dual Credit as part of the College and Career Readiness indicator. The anticipated Board action will specify the weighting of the Dual Credit measure in the Index.	
Possible Board Action:	<input type="checkbox"/> Review <input checked="" type="checkbox"/> Approve	<input type="checkbox"/> Adopt <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 Board is expected to take action on whether to approve changes to the Achievement Index made necessary by the inclusion of Dual Credit Participation. The SBE staff proposes that the high school Index indicator weightings be changed as follows:</p> <ol style="list-style-type: none"> 1. Proficiency (32 percent) equally weighted between ELA, math, and science. 2. Growth (32 percent) equally weighted between ELA and math. 3. College and Career Readiness (36 percent), weighted at 32 percent Graduation measure and 4 percent Dual Credit Participation measure. 	



ACHIEVEMENT INDEX WEIGHTING AND THE POSITION STATEMENT ON THE ACCOUNTABILITY SYSTEM DURING THE TRANSITION TO THE SMARTER BALANCED ASSESSMENTS

Policy Considerations

In RCW 28A.657.110, the Washington State Board of Education (SBE) is authorized to redesign the Achievement Index for the purpose of meeting state and federal accountability requirements. The SBE staff recommends that the Index indicator weighting be changed to accommodate an additional measure of College and Career Readiness. The Board will consider whether to adopt the Position Statement that includes recommended changes to the Achievement Index indicator weightings.

Summary

The SBE staff conducted Index rating simulations and impact analyses for two models that use different weighting schemes to include Dual Credit Participation in the School Achievement Index.

- Model 1: Proficiency (30%), Growth (30%), CCR (35% graduation and 5% Dual Credit Part.)
- Model 2: Proficiency (32%), Growth (32%), CCR (32% graduation and 4% Dual Credit Part.)

The SBE Index Workgroup is recommending that the Board approve the Position Statement (attached) that includes the Model 2 indicator weightings because the model:

- Results in a smaller overall impact to the school Index ratings
- Equally weights proficiency, growth, and graduation measures.

Background

At the July 2015 State Board of Education SBE meeting, the SBE staff proposed new high school Index indicator weightings to accommodate the addition of Dual Credit Participation in the winter 2016 Index version as part of the Position Statement on the Accountability System during the Transition to the Smarter Balanced Assessment. The Board opted to approve a Provisional Position Statement on the Accountability System during the Transition to the Smarter Balanced Assessment that excluded the SBE staff-recommended high school Index indicator weightings. The SBE staff was directed to explore high school indicator weighting options and a methodology in which the high school Index indicator weightings might be modified to accommodate other new measures (gap reduction for example). As directed, the SBE staff worked with three Board members (Board Member Maxie, Board Member Maier, and Board Member Bailey) to explore Index indicator weighting for high schools for the purpose of making a recommendation to the full Board at the September 2015 meeting.

The SBE staff proposal at the July board meeting weighted the Proficiency indicator at 30 percent, the Growth indicator at 30 percent, and the College and Career-Readiness (CCR) indicator at 40 percent. The proposal followed the current methodology of equally weighting the performance of the All Students group and the Targeted Subgroup for any given indicator (described above as Model 1). The Index methodology that is currently used is aligned with recommendations from the Achievement and Accountability Workgroup (AAW) in 2013, and was approved by the Board at the March 2014 meeting.

The SBE staff recommended changes were presented to the AAW on August 26, 2015. The Feedback Report is included with the online board meeting materials.

Simulations and Impact Analyses

After conducting brief descriptive analyses (included at the end of this memo) to better understand the Dual Credit Participation measure, the SBE staff conducted two simulations to examine the impact of Dual Credit Participation on the high school Index ratings under different weighting factors.

1. Model 1: Proficiency (30 percent), Growth (30 percent), CCR (35 percent graduation and 5 percent Dual Credit Participation).
2. Model 2: Proficiency (32 percent), Growth (32 percent), CCR (32 percent graduation and 4 percent Dual Credit Participation).

Model 1

Proficiency (30%), Growth (30%), CCR (35% graduation and 5% Dual Credit Participation)

When the 2014 Dual Credit Participation data were included in the 2014 Index ratings computations, three groups of schools emerged from the analysis:

- Group 1: 319 schools serving 12th graders were impacted by the change. This group of schools had reportable proficiency, growth, graduation, and dual credit measures and a 2014 Index rating. As anticipated, the Index ratings for most schools (75 percent) with reportable Dual Credit Participation data declined by a small amount. Only about 25 percent of the impacted high schools saw Index ratings increase with the inclusion of the Dual Credit data.
- Group 2: The Index ratings for 62 high schools were unchanged because the CCR components (Graduation rate and Dual Credit Participation rate) were not reportable meaning that the Index rating was based only on Proficiency and Growth. Because the CCR indicator did not factor into the simulation analysis, there was no change to the 2014 Index rating.
- Group 3: The Index ratings for 275 schools were not calculable because reportable data were present for only one of the three indicators. Per Index business rules, two of the three indicators must be reportable for an Index rating to be computed. Because only one indicator was present, no Index calculation was made.

Table 1: Impact data for the simulation described as Model 1.

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

The median Index rating decline for the 239 schools was -0.120 rating points while the median Index rating increase for the 79 schools was 0.058 rating points. As would be predicted, the application of the weighting model results in more schools with a lower Index rating, but the Index rating is most often only slightly lower. This is the impact stakeholders would expect and hope to see.

Model 2 (SBE Staff Recommended)

Proficiency (32%), Growth (32%), CCR (32% graduation and 4% Dual Credit Participation)

The median Index rating decline for the 253 schools was -0.099 rating points while the median Index rating increase for the 66 schools was 0.028 rating points. As we would predict, the application of the weighting model results in more schools with a lower Index rating, but the Index rating is most often only slightly lower. Like that for Model 1, Model 2 results in the low impact stakeholders would expect and hope to see.

This weighting scheme may be attractive to the Board because Model 2 equally weights proficiency, growth, and graduation, while maintaining a low weighting factor for the Dual Credit Participation. Even though a few additional schools are negatively impacted, the model is attractive and recommended by staff because the Index rating changes are smaller for Model 2 as compared to Model 1. Model 2 is also recommended because it is more closely aligned with the current weighting scheme that equally weights the Proficiency, Growth, and CCR indicators. This means that the year-to-year comparability would be greater for Model 2 (recommended) than for Model 1.

Table 2: Impact data for the simulation described as Model 2.

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	

Action

The Board is expected to vote on whether to approve the Position Statement on the Accountability System during the Transition to the Smarter Balanced Assessment.

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

Attachment A

Descriptive Analyses – Dual Credit Participation

As would be expected, a near perfect correlation (Pearson R = 0.996) exists between the high school Index ratings computed with and without the Dual Credit Participation data for Model 1. The correlation reported here is only for the 319 Group 1 schools that had reportable Dual Credit data, and remember that a perfect correlation is 1.000. A near perfect correlation (Pearson R = 0.998) exists between the high school Index ratings computed with and without the Dual Credit Participation data for Model 2. As was the case above, the correlation coefficient reported here is for the 319 Group 1 schools that had reportable Dual Credit data. In this scenario, a very high correlation would be expected.

Table 1 summarizes the descriptive statistics the 2014 Dual Credit Participation data for high schools included in the Index. The ranges of Dual Credit Participation rates by student group are very similar. Even without further incentivizing, any given student group has the potential ability to be among the highest performers on this measure.

The median values are lower than the graduation rates, which means that the inclusion of the Dual Credit data will drive down the Index ratings by a small amount. This phenomena should incentivize schools to increase or promote Dual Credit Participation for the purposes of supporting student learning and increasing Index rating score.

Table 1: Descriptive statistics for schools with reportable Dual Credit Participation data.

	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

Correlation coefficients were computed to examine the relationship between characteristics of the assessed population at high schools and the Dual Credit Participation rates (Table 2). This analysis would address the question, “What is the nature of the relationship between school characteristics and Dual Credit Participation rates?” As a reminder, correlations can be positive or negative and are represented as a value between 0.000 (no correlation) and 1.000 (perfect correlation). The correlation coefficient numerically describes the relationship between two measures but does not imply causality. In a general sense, any subgroup has the potential to have high or low Dual Credit Participation rates. While most of the correlations are weak, none are well developed and that is what would be expected and desirable. Each of the analyses specified in Table 2 are described below.

1. A moderately strong correlation coefficient ($R = 0.595$, $N = 487$) means that as school enrollment increases the Dual Credit Participation rate would be predicted to increase. Generally speaking, larger high schools would be expected to have higher Dual Credit participation rates and correspondingly higher rating values. Remember, a larger enrollment does not cause the Dual Credit Participation rates to be higher. Schools with larger enrollments may offer more Dual Credit options or more classes, or a wider variety of Dual Credit options, or be more proximal to an institute of higher learning where Dual Credit options are available.
2. A weak negative correlation coefficient ($R = -0.312$, $N = 175$) between the percentage of students with a disability (SWD) who tested and Dual Credit Participation rate means that schools with a high percentage of SWDs would be expected to have lower Dual Credit rating values. However, the relationship is not well developed.
3. A weak negative correlation coefficient ($R = -0.292$, $N = 326$) between the percentage of students qualifying for Free and Reduced Price Lunch (FRL) who tested and Dual Credit Participation rate means that schools with a high percentage of assessed FRL students would be expected to have lower Dual Credit rating values.
4. A moderate and negative correlation coefficient ($R = -0.427$, $N = 40$) between the percentage of assessed English Language Learners (ELL) and the Dual Credit Participation rate means that schools with a high percentage of ELLs would be expected to have lower Dual Credit rating values.
5. A weak negative correlation coefficient ($R = -0.288$, $N = 144$) between the percentage of assessed Former English Language Learners and the Dual Credit Participation rate means that schools with a high percentage of Former ELLs would be expected to have lower Dual Credit rating values.

Table 2: Correlation coefficients between Dual Credit Participation rates and characteristics of the assessed population at high schools.

Analysis	Student Group	Dual Credit Participation Rate Pearson R*
1	Students enrolled in the high school	0.595
2	Percentage of tested students who were SWD	-0.312
3	Percentage of tested students who were FRL	-0.292
4	Percentage of tested students who were ELL	-0.427
5	Percentage of tested students who were Former ELL	-0.288

*Note: all correlations are significant at the 0.05 level.

Position Statement on the Accountability System

During the Transition to the Smarter Balanced Assessment

The Washington State Achievement Index incorporates three consecutive years of assessment data to generate ratings for all public schools in the state. Washington's transition to new learning standards and assessments in Math, English Language Arts, and Science poses challenges in maintaining comparable data and making school identifications consistent with state and federal requirements.

During the 2013-14 school year, OSPI offered an opportunity for schools to field test the new Smarter Balanced Assessments based on the Common Core standards. During this year, roughly 35 percent of schools participated in the SBAC Field Test, in lieu of administering the Measurements of Student Progress. Schools that participated in the field test did not receive scores from the Smarter Balanced assessments.

As a result, two sets of schools were created – schools taking the old assessments (MSP, HSPE, and EOCs), which continued to generate three years of comparable assessment data, and those that field tested the SBAC assessments. Because the field test participants were not provided with results, each field test school's prior year's proficiency rates were carried over for 2013-14 accountability decisions (i.e., AYP and Achievement Index). In essence, one year counted for two in the ratings.

During this transition year, consistent with U.S. Department of Education guidance, schools were held harmless to the impact of this "carry over" year of data if it was significant to their identification as a Priority or Focus School. Newly identified Priority or Focus schools who participated in the field test, were removed from these lists. Beginning in the 2014-15 school year, all schools moved to the Smarter Balanced assessment system, measuring the new state learning standards in English language arts and math. Beginning with the Index using 2014-15 Smarter Balanced assessment results, schools will no longer have three years of assessment data measuring the same learning standards; however, comparability across schools within the year will be preserved, since everyone will be taking the same assessment in 2014-15.

Accordingly, the State Board and OSPI plan to make the following adjustments pertaining to the use of the Achievement Index and its use in the identification of Persistently Lowest Achieving (PLA) schools, Priority schools, and Focus schools during the next several years.

- **The Achievement Index will be published each year following the Board approved methodology.** Content area assessments used for the Proficiency indicator will continue to be equally weighted. The underlying data used for the Index will be made available public as is the current practice, subject to OSPI data suppression rules to protect student privacy.
- **The Achievement Index will continue to utilize norm-referenced tier ratings, until several years of data allows an appropriate determination of a criterion reference.** The tier ratings will continue to reflect normative scaling. This means that while all scores are expected to be lower during the transition, approximately the same number of schools will be placed in the 'underachieving' or 'priority' school categories. The same is true for the 'exemplary' and 'very good' categories.
- **The Index will continue to utilize the 'carry forward' provision for the field test year to make sure all schools continue to be represented in the Index.** This is a continuation of current policy – schools that field tested in 2014 will continue to have their data (proficiency and growth) 'carried forward' from 2013 to maintain an index score.

- **Adjust the Proficiency, Growth, and College- and Career-Readiness (CCR) Indicator weightings for high schools to accommodate the inclusion of Dual Credit Participation beginning with the winter 2016 Index version.** The OSPI will compute the high school Index ratings based on indicator weighting factors of Proficiency (32 percent), Growth (32 percent), and CCR (32 percent Graduation and 4 percent Dual Credit Participation).
- **Student growth model data will continue to be an indicator of student achievement in the Index.** In the event that growth model SGPs are not publicly released by the OSPI for the winter 2016 Index version and for one or more additional years, the Index will utilize a three-year rolling average SGP for all reportable student groups in the place where annual SGP data would normally populate until the growth model SGPs are endorsed and released by the OSPI. The Board is committed to making student academic growth as measured by the Student Growth Percentiles Growth Model a major component of the Index. The SBE will adjust the Growth indicator as needed to align with the public reporting of SGPs by the OSPI.
- **Priority and Focus School identifications will be suspended for two years while the schools newly identified in 2015 are served for 2015-16, 2016-17, and 2017-18. For this three-year period, the total number of served schools will remain roughly constant. Priority or Focus schools identified in previous years would be removed from the PLA list if exit criteria are met.** Following the most recent (March 2015) school identifications, OSPI now is serving approximately 121 Priority Schools and 133 Focus Schools. The service period for these schools is three years. The intent of the Board is to not significantly add to this list until a new group of Priority and Focus schools are identified in spring of 2018, given that the list already maximizes OSPI current service capacity.
- **Three-year Priority and Focus Schools service cycles will be established beginning with the Winter 2018 Index version.** New Priority and Focus Schools will be identified every three years beginning with the 2018 Index version (then again based on the 2021, 2024, 2027 Index versions) and served continuously by the OSPI until the schools meet exit criteria. Since the PLA list will be identified each year as required by law, the OSPI will annually monitor the progress of all schools and may, on a case-by-case basis, require supports for schools failing to progress as expected.
- **OSPI may add schools to the Priority & Focus list in 2015-16 on a limited basis.** While it is the intent of OSPI to not significantly add to the size of the Priority and Focus schools list during this year, some schools may be added if unusual circumstances require intervention.
- **Resumption of the full school identification process for Priority & Focus list restarts in 2018 for service in the 2018-19 school year. The Achievement Awards will continue to be given each year.** Adjustments will be made each year to ensure fairness in the criteria during the transition to new assessments.
- **The annual list of Persistently Lowest Achieving Schools will be published in accordance with state law.** This list will be published, even though it may not result in new Priority or Focus school identifications each year. The Index will be used in each year to establish this list as is the current practice.
- **This policy will adjust as our status under ESEA federal regulations evolves.** Changes to our ESEA flexibility waiver status, or ESEA reauthorization, may necessitate changes to this policy.