

#### THE WASHINGTON STATE BOARD OF EDUCATION

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

#### REPORT TO THE LEGISLATURE

## THRESHOLD SCORES FOR TENTH GRADE ENGLISH LANGUAGE ARTS AND MATH STATE ASSESSMENTS 2018

Authorizing legislation: RCW 28A.305.130

Submitted by: The State Board of Education

Prepared by:

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#### **Executive Summary**

This report responds to RCW 28A.305.130, which requires that:

By December 1, 2018, the state board of education, in consultation with the superintendent of public instruction, must identify and report to the governor and the education policy and fiscal committees of the legislatures on the equivalent student performance standard that a tenth grade student would need to achieve on the state assessments to be on track to be career and college ready at the end of the student's high school experience.

The Office of the Superintendent of Public Instruction (OSPI) worked with the Smarter Balanced Consortium as well as educators, content experts, and OSPI's Assessment national Technical Advisory Committee to develop recommended scores on the 10<sup>th</sup> grade state assessments. In January 2018, OSPI recommended scores for the 10<sup>th</sup> grade English Language Arts and math assessments to the State Board of Education (SBE), which the Board adopted. The recommended scores for the 10<sup>th</sup> grade English Language Arts assessment were: Level 2—2491; Level 3—2577; and, Level 4—2678. The recommended scores for the 10<sup>th</sup> grade math assessments were: Level 2—2533; Level 3—2614; and, Level 4—2697. Students who earn a Level 3 or higher are considered on-track to be career and college ready by the time they graduate high school.

#### Introduction

During the past few years, the state has been transitioning to using assessments developed by the Smarter Balanced Consortium as the state assessments. The Smarter Balanced high school assessments were originally designed to be administered in the 11<sup>th</sup> grade. Legislation passed in 2017 (ESHB 2224, chapter 31, laws of 2017) directed that beginning with the Class of 2020 the administration of high school English Language Arts and math assessments be in 10<sup>th</sup> grade. With the change in the grade of administration of the tests, the Office of the Superintendent of Public Instruction reviewed and recommended scores describing the four achievement levels, which the State Board of Education adopted at its January 11, 2018 Board meeting. A student who earns a Level 3 or 4 on the high school tests is considered to have met the performance standard that indicates the student is on-track to being career and college ready by the time of graduation.

This report responds to RCW 28A.305.130, which requires that:

By December 1, 2018, the state board of education, in consultation with the superintendent of public instruction, must identify and report to the governor and the education policy and fiscal committees of the legislatures on the equivalent student performance standard that a tenth grade student would need to achieve on the state assessments to be on track to be career and college ready at the end of the student's high school experience.

#### Process for Identifying 10<sup>th</sup> Grade Assessment Achievement Level Scores

The process for identifying the scores for the 10<sup>th</sup> grade Math and English Language Arts started in summer of 2017 with communication between OSPI, the Smarter Balanced Consortium and SBE. At the July 2017 Board meeting, the Board discussed assessments with Dr. Tony Alpert, Executive Director of the Smarter Balanced Consortium. Work on identifying the scores began early, because OSPI and the Board wanted to identity the scores before testing in the 2017-2018 school year. This timeline allowed schools, parents and students to receive their assessment score results according to a similar schedule as previous years.

The scores on Smarter Balanced assessments are scale scores—that is, the scores for each grade's math test relate to other grade's math test on a consistent scale, and likewise for the English Language Arts tests. Because of this, it was anticipated that the Level 3 score (the score that indicates a student is on-track to being career and college ready by the time of graduation) for the 10<sup>th</sup> grade tests would fall between the Level 3 score on the 8<sup>th</sup> grade tests and the Level 3 score on the 11<sup>th</sup> grade tests. To refine the anticipated score, OSPI conducted both internal and external reviews of the assessments.

For the 10<sup>th</sup> grade math test, test items that relied on concepts a typical 10<sup>th</sup> grader would not have been introduced to were removed from the test bank. The resulting test was reviewed to ensure that there was an appropriate range of complexity and depth of concepts. A similar review of the 11<sup>th</sup> grade English Language Arts test was also conducted, but items did not end up being removed from the English Language Arts exam. As part of the transition to the Smarter Balanced assessments, the 11<sup>th</sup> grade English Language Arts test was used as one of the state tests for 10<sup>th</sup> graders since 2015. Washington 10<sup>th</sup> graders have performed relatively well on the English Language Arts Smarter Balanced assessments, with over 70 percent of the 10<sup>th</sup> graders who took the test in 2015 earning at least a Level 3.

OSPI conducted an internal review of the tests in fall of 2017, and consulted with OSPI's Assessment National Technical Advisory Committee meeting on September 7, 2017. In September and October OSPI consulted an online advisory panel of Washington state educators and content experts, and convened an in-person workgroup of Washington educators and content experts in October. The in-person Smarter Balanced grade 10 cut-score validation group, composed of educators from multiple Smarter Balanced consortium states, met in early November. OSPI updated the Board on the process and progress of setting the 10<sup>th</sup> grade scores at the September and November Board meetings. (Background materials created by SBE staff and the OSPI presentations from each of these meetings is available on the SBE website at: <a href="http://www.sbe.wa.gov/2017-board-meeting-archives.">http://www.sbe.wa.gov/2017-board-meeting-archives.</a>)

#### The 10<sup>th</sup> Grade Assessment Achievement Level Scores

In January 2018, Dr. Deb Came, Assistant Superintendent for OSPI, Dr. Tony Alpert, Executive Director of the Smarter Balanced Consortium, and Dr. Tom Hirsch, a consultant for OSPI, presented on the process and recommended achievement level scores on the 10<sup>th</sup> grade Smarter Balanced tests. The presentation prepared by OSPI and the Smarter Balanced Consortium is included as an attachment to this report.

Figure 1 shows the math threshold scores for grades 3, 4, 5, 6, 7, 8, and 11, approved by the Board in January 2017, and the scores for grade 10 (in the orange box), approved in January 2018. Figure 2 shows the corresponding English Language Arts threshold scores. For both subjects, the approved 10<sup>th</sup> grade set of scores fall on the expected trend of scale scores for each grade.

The recommended scores for the 10<sup>th</sup> grade English Language Arts assessment were: Level 2—2491; Level 3—2577; and, Level 4—2678. The recommended scores for the 10<sup>th</sup> grade math assessments were: Level 2—2533; Level 3—2614; and, Level 4—2697. These scores were adopted by the Board at the January meeting.

Figure 1

#### Math Threshold Scores

Grade	Level 1-2	Level 2-3	Level 3-4
3	2381	2436	2501
4	2411	2485	2549
5	2455	2528	2579
6	2473	2552	2610
7	2484	2567	2635
8	2504	2586	2653
10	2533	2614	2697
11	2543	2628	2718

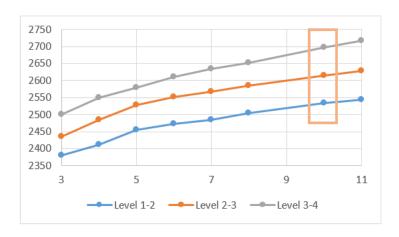
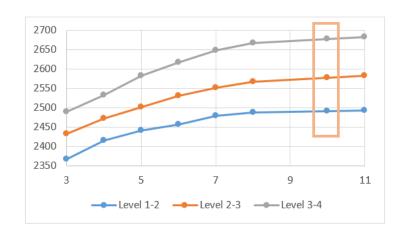


Figure 2

#### English Language Arts Threshold Scores

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(	Grade	Level 1-2	Level 2-3	Level 3-4
	3	2367	2432	2490
	4	2416	2473	2533
	5	2442	2501	2582
	6	2457	2531	2618
	7	2479	2552	2649
	8	2487	2567	2668
	10	2491	2577	2678
	11	2493	2583	2682



#### Links to Background Information

July 2017 Board meeting memo: Supporting Seamless Transitions to Postsecondary Education: a Focus on Assessments

September 2017 Board meeting memo: House Bill 2224 (Providing Flexibility in High School Graduation Requirements)—Update & Next Steps

http://www.sbe.wa.gov/sites/default/files/public/documents/BoardMeetings/2017/September/12%20House% 20Bill%202224%20Update%20v2.pdf

September 2017 OSPI presentation to the Board: 10<sup>th</sup> Grade Smarter Balanced Assessments: On Track to College & Career-Ready

http://www.sbe.wa.gov/sites/default/files/public/documents/BoardMeetings/2017/September/Additional%20 Materials/10th%20grade%20plan SBE 2017-09-14.pdf November 2017 Board meeting cover page and OSPI presentation to the Board: Update on High School Assessments

http://www.sbe.wa.gov/sites/default/files/public/documents/BoardMeetings/2017/November/Update%20on% 20HS%20Assessments.pdf

January 2018 Board meeting cover page and OSPI presentation to the Board: 10<sup>th</sup> Grade Smarter Balanced Assessments: On Track to College & Career Ready (also included as an attachment to this report) <a href="http://www.sbe.wa.gov/sites/default/files/public/meetings/Jan-2018/10th%20Grade%20Score-Setting.pdf">http://www.sbe.wa.gov/sites/default/files/public/meetings/Jan-2018/10th%20Grade%20Score-Setting.pdf</a>

ATTACHMENT A: OSPI Presentation "10 <sup>th</sup> Grade Smarter Balanced Assessments: On Track to College &	
Career-Ready"	

# 10th Grade Smarter Balanced Assessments: On Track to College & Career-Ready

STATE BOARD OF EDUCATION - JANUARY 10, 2018



#### RCW 28A.305.130

The State Board of Education shall...

(4)(b)(i) Identify the scores students must achieve in order to meet the standard on the statewide student assessment. The board shall also determine student scores that identify levels of student performance below and beyond the standard. The board shall set such performance standards and levels in consultation with the superintendent of public instruction and after consideration of any recommendations that may be developed by any advisory committees that may be established for this purpose;



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#### RCW 28A.305.130, continued (ESHB 2224)

(4)(b)(ii)(A) The legislature intends to continue the implementation of chapter 22, Laws of 2013, 2nd sp. sess. when the legislature expressed the intent for the state board of education to identify the student performance standard that demonstrates a student's career and college readiness for the eleventh grade consortium-developed assessments.

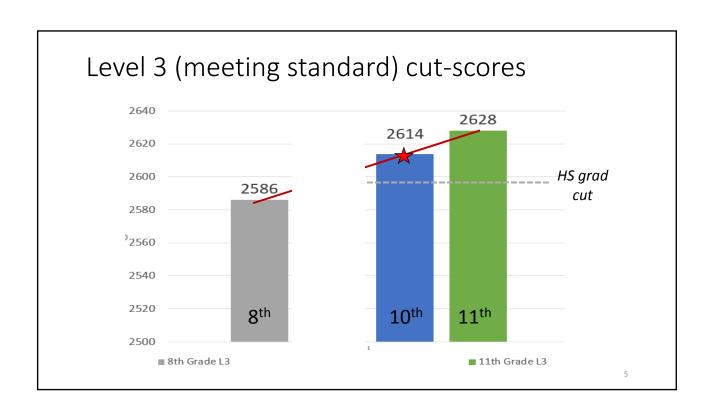
Therefore, by December 1, 2018, the state board of education, in consultation with the superintendent of public instruction, must identify and report to the governor and the education policy and fiscal committees of the legislature on the equivalent student performance standard that a tenth grade student would need to achieve on the state assessments to be on track to be career and college ready at the end of the student's high school experience;

#### Recommendations: 10<sup>th</sup> grade cut-scores

Ma	ath		ELA

Grade	Level 2 Cut	Level 3 Cut	Level 4 Cut	Grade	Level 2 Cut	Level 3 Cut	Level 4 Cut
3	2381	2436	2501	3	2367	2432	2490
4	2411	2485	2549	4	2416	2473	2533
5	2455	2528	2579	5	2442	2502	2582
6	2473	2552	2610	6	2457	2531	2618
7	2484	2567	2635	7	2479	2552	2649
8	2504	2586	2653	8	2487	2567	2668
10	2533	2614	2697	10	2491	2577	2678
11	2543	2628	2718	11	2493	2583	2682

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Timeline of Steps	
Conversations with Smarter Balanced	7/2017-12/2017
OSPI Internal Test Review: Item Specifications, Standards, Test Blueprint	7/2017–10/2017
OSPI's Assessment National Technical Advisory Committee	9/7/2017
SBE meeting	9/14/2017
Online advisory panel of WA educators and content experts	9/2017-10/2017
In-person advisory workgroup of WA educators	10/17-18/2017
In-person Smarter Balanced grade 10 cut-score validation • Includes educators from multiple Smarter Balanced consortium states	11/2-3/2017



## Changing from 11<sup>th</sup> grade to 10<sup>th</sup> grade test: Issues around Content and Standards

<u>MATH</u> Which standards would be exclusive to a third year of high school math, that we would not necessarily expect a 10<sup>th</sup> grader to know?

We do want to allow for more complex concepts that  $10^{\text{th}}$  graders might have seen.

#### **ENGLISH LANGUAGE ARTS**

What is appropriate depth and text complexity?



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#### **Cut-Score Validation**

Focused on Grades 9 and 10



Smarter Balanced Staff Recommendation December 2017



### **Contextual Information Standard Setting - 2014**

- Focused on Grades 3-8 and 11
- ELA/literacy and Mathematics
- Included grade specific In-Person Workshop (~500 participants) and Online Panel (~2000 participants)
- Included an in-Person Cross-Grade Review Panel comprised of In-Person Grade Specific panel participants



## **Validation Workshop -- November 2017**

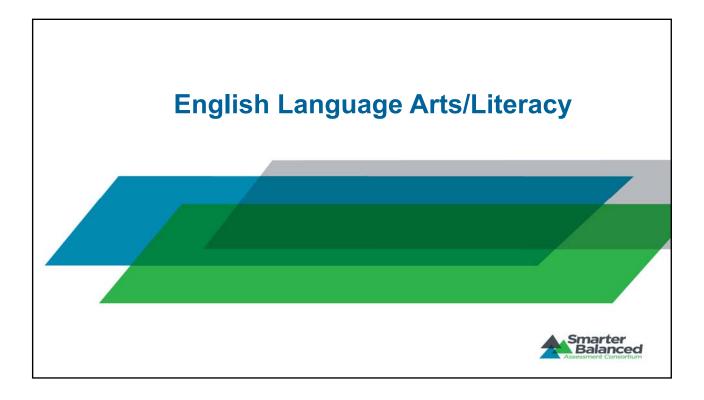
- Smarter Balanced derived draft cut scores for 9<sup>th</sup> and 10<sup>th</sup> grade based on the adopted 8<sup>th</sup> and 11<sup>th</sup> grade cut scores
- Smarter Balanced then hosted an In-Person Workshop to validate the draft cut scores for grades 9 and 10
- This review used a bookmarking method very similar to the process used in 2014
- The bookmarking process asks educators to find the items that are just at threshold of students' ability for each level of performance that requires cut-scores



#### 9th and 10th Grade Cut-Score Validation

- For mathematics, WA removed some items that measure content for which they would expect most students would not have the opportunity to learn by the 10<sup>th</sup> grade
- As an additional verification, after the process concluded, participants reviewed the omitted items and declared whether had these items not been omitted, would their recommendations have changed





#### **ELA Changes Based on Panel Recommendations**

Before

#### After

Grade	Level 2 Cut	Level 3 Cut	Level 4 Cut	Grade	Level 2 Cut	Level 3 Cut	Level 4 Cut
3	2367	2432	2490	3	2367	2432	2490
4	2416	2473	2533	4	2416	2473	2533
5	2442	2502	2582	5	2442	2502	2582
6	2457	2531	2618	6	2457	2531	2618
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8	2487	2567	2668	8	2487	2567	2668
10	2491	2577	2677	10	2491	2577	2678
11	2493	2583	2682	11	2493	2583	2682

Panelists achieved consensus and made only minor changes to the draft calculated cut-scores

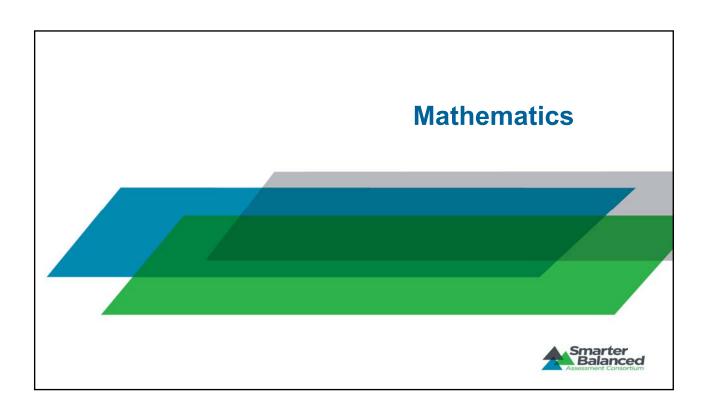


#### **ELA/literacy Recommendation**

 Smarter Balanced staff recommend that Washington adopt for grade 10 in English language arts/literacy the following cut scores

Level 2: 2491 Level 3: 2577 Level 4: 2678





#### **Mathematics**

- Panelists struggled to achieve consensus and were generally unable to recommend a set of cut-scores that they were confident were better than the drafts. However, they did not strongly endorse the drafts either.
- Some panelists expressed concern that their recommendations might differ based on whether or not students participated in an integrated or content specific math pathway.
- Panelists were informed that absent consensus to change, the drafts would remain.



#### **Mathematics (continued)**

- Early in the process, panelists voted to change the level 2 cut from 2529 to 2533. This motion passed with 7 in favor 2 opposed and 1 abstention.
- The panelists' final vote was to adopt the draft cut-score for level 3. The motion passed with 8 in favor and 2 opposed.



#### **Mathematics Cut Scores**

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#### After

Grade	Level 2 Cut	Level 3 Cut	Level 4 Cut	Grade	Level 2 Cut	Level 3 Cut	Level 4 Cut
3	2381	2436	2501	3	2381	2436	2501
4	2411	2485	2549	4	2411	2485	2549
5	2455	2528	2579	5	2455	2528	2579
6	2473	2552	2610	6	2473	2552	2610
7	2484	2567	2635	7	2484	2567	2635
8	2504	2586	2653	8	2504	2586	2653
10	2529	2614	2697	10	2533	2614	2697
11	2543	2628	2718	11	2543	2628	2718



#### **Mathematics Recommendation**

 Smarter Balanced staff recommend that Washington adopt for grade 10 in mathematics the following cut scores

Level 2: 2533 Level 3: 2614 Level 4: 2697



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