

Select Assessments: Recommended New Cut-Scores

SBE Special Meeting – August 15, 2016

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Graduation Alternatives: Collection of Evidence (COE)

ELA & Math

COE – ELA & Math

- State has implemented new English Language Arts and Math learning standards for college and career readiness
- Assessments, and assessment alternatives, are to be aligned to learning standards
- OSPI developed new COE tasks aligned with new standards *and* with the format of general assessment (i.e., ELA versus separate Reading & Writing)

COE – ELA & Math

- First administered in SY 2015-2016, with June 2016 submissions
- Number of tasks per submission modified
 - Previous version required 6-8 tasks per content area
 - ELA requires 12 distinct work tasks (across reading, writing, and research)
 - Math has 4 tasks
- Scores from all tasks are included in student results (old COE just used “best works”)

COE – ELA & Math: Cut-Score Construct

- The traditional standard setting process of matching performances to an achievement level descriptor was not employed.
 - Student sample for June 2016 submission was about 500 for each content area.
 - Samples are not large enough to be representative for traditional standard setting, and that likely wouldn't give “equal impact”.
- OSPI is proposing use of “equal impact” model as previously applied with other graduation cut-scores determinations.
 - Trying to allow approximately the same proportion of students to ‘clear the bar’ on the new COEs as did on the old COEs.

COE Equal Impact Reference Group

- For Math, equal impact is a relative easy derivation
 - Used last three administration years of COE submissions to derive comparison set for target impact
 - Average pass rate on COE Year I math is 80%

Math	Target Rate	Cut-Score
3-Year Average	80.0%	14 (out of 40 pts)



COE Equal Impact Reference Group

- For ELA, a little more complexity to consider as we shift from a separate Reading and Writing format to all claims that comprise ELA total score.
 - Using pass rates for old Reading COE, found **Reading claim score** on new COE that yields same rate
 - Using pass rates for old Writing COE, found **Writing claim score** on new COE that yields same rate
 - Added Reading claim score and Writing claim score to derive **proportion** of all new COE submitters that earned subtotal score
 - Derived **total score** that yielded that proportion of submitters

COE Proposed Cut-Score - ELA

	Reading	Writing
“Old” COE Pass Rate	81%	68%
“New” COE Claim Score (using “old” pass rates)	8	9
ELA Subtotal (“R” & “W” claims, only)	17 pts	
Subtotal Pass Rate (submissions w/ \geq 17 pts)	80%	
ELA Total Score (score linked to 80% pass rate)	24 pts (81%)	



COE Proposed Cut-Scores

Math	Target Rate	Cut-Score
3-Year Average	80.0%	14 (out of 40 pts)

ELA	Cut-Score
{ <i>Approach detailed on previous slide</i> }	24 (out of 68 pts)



Questions & Discussion



Exit Exam Alternatives:
College Admissions – SAT & ACT

Issues

- Washington's assessment graduation requirements have switched from
 - Reading and Writing to ELA
 - Course specific Math to comprehensive Math
- Changes in SAT test and reporting and ACT reporting

Issues: SAT

- Changes in SAT tests
 - SAT released a new assessment in March 2016
 - SAT released concordance tables in May 2016
- WA can use concordance table for new Math cut-score, but we need to translate from
Old SAT R & W → New SAT ELA

SAT Concordance Table - Math

Old SAT Math Section to New SAT Math Section to New SAT Math Test Concordance Table

Table 12

Old SAT Math Section (200-800)	New SAT Math Section (200-800)	New SAT Math Test (10-40)	Old SAT Math Section (200-800)	New SAT Math Section (200-800)	New SAT Math Test (10-40)	Old SAT Math Section (200-800)	New SAT Math Section (200-800)	New SAT Math Test (10-40)
200	200	10	410	450	22.5	620	640	32
210	220	11	420	460	23	630	650	32.5
220	230	11.5	430	470	23.5	640	660	33
230	250	12.5	440	480	24	650	670	33.5
240	260	13	450	490	24.5	660	690	34.5
250	280	14	460	500	25	670	700	35
260	300	15	470	510	25.5	680	710	35.5
270	310	15.5	480	510	25.5	690	720	36
280	330	16.5	490	520	26	700	730	36.5
290	340	17	500	530	26.5	710	740	37
300	350	17.5	510	540	27	720	750	37.5
310	360	18	520	550	27.5	730	760	38
320	360	18	530	560	28	740	760	38
330	370	18.5	540	570	28.5	750	770	38.5
340	380	19	550	570	28.5	760	780	39
350	390	19.5	560	580	29	770	780	39
360	400	20	570	590	29.5	780	790	39.5
370	410	20.5	580	600	30	790	800	40
380	420	21	590	610	30.5	800	800	40
390	430	21.5	600	620	31			
400	440	22	610	630	31.5			



Proposed Approach: SAT ELA

- Add old SAT “R” & “W” cuts together:
 - R = 350; W = 380
 - Combined = 730
- Translate “combined” score to New SAT “ELA” using College Board concordance table
 - Combined = 730 → ELA = 410

SAT Concordance Table - ELA

Old SAT Writing plus Critical Reading Sections to New SAT Evidence-Based Reading and Writing Section Concordance Table

Table 11

Old SAT Writing plus Critical Reading Sections (400-1600)	New SAT Evidence-Based Reading and Writing Section (200-800)	Old SAT Writing plus Critical Reading Sections (400-1600)	New SAT Evidence-Based Reading and Writing Section (200-800)	Old SAT Writing plus Critical Reading Sections (400-1600)	New SAT Evidence-Based Reading and Writing Section (200-800)	Old SAT Writing plus Critical Reading Sections (400-1600)	New SAT Evidence-Based Reading and Writing Section (200-800)
400	200	710	400	1020	570	1330	710
410	210	720	410	1030	570	1340	710
420	220	730	410	1040	580	1350	710
430	230	740	420	1050	580	1360	720
440	240	750	420	1060	590	1370	720
450	260	760	430	1070	590	1380	730
460	270	770	430	1080	600	1390	730
470	280	780	440	1090	600	1400	730
480	290	790	440	1100	610	1410	740
490	300	800	450	1110	610	1420	740
500	310	810	450	1120	620	1430	740
510	310	820	460	1130	620	1440	750



SAT Proposed Cut-Scores*

Math	Cut-Score
“Old” Test	390
“New” Test	430

ELA	Cut-Score
“Old” Test	R = 350 W = 380
“New” Test	410

* “New” Test cut-scores derived from College Board concordance table comparing results from new to old



Issues: ACT

- ACT modified score reporting formats to reflect ELA (for use in SY2015-2016)
- WA needs to adopt methodology to translate:
 - Old ACT Reading & Writing → New ACT ELA
- ACT established an ELA score based on an average of English, Reading, and Writing components
 - Previously, WA did not have a distinct English component cut-score.
 - However, the previous Writing score was actually a composite of ACT's English & Writing components.

Proposed Approach: ACT

Shift from distinct “R” & “W” to new ELA:

- R = 13; W = 15 \longrightarrow ELA = ??

ACT ELA = Average(Reading, English, Writing)

✓ 13

✓ 15

Assuming equal weighting across subjects (as ACT does) and within scores for WA’s previous E/W cut-score, then:

$$\frac{(13 + 15 + 15)}{3} = 14.3, \text{ which rounds to } \mathbf{14}$$

ACT Proposed Cut-Score

	Cut-Score
Previous (separate components)	Reading = 13 Writing (E/W) = 15
Proposed ELA	14



Proposed Approach: ACT

How does that compare with the SAT ELA score?

- ACT ELA score of 14 is 19th percentile nationally
15 is 26th percentile nationally
- SAT ELA score of 430 is 24th percentile nationally

Questions & Discussion



Exit Exam Threshold – Revisited

Smarter Balanced Math

Threshold Scores Vary by Purpose

Threshold Score	ELA	Math
Accountability	2583 Level 3	2628 Level 3
Exit Exam	2548 Level 2	2595 Level 2

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ELA	2102-2492	2493-2582	2583-2681	2682-3032
High School Score Ranges	Level 1	Level 2	Level 3	Level 4
Math	2118-2542	2543-2627	2628-2717	2718-3085

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Exit Exam Threshold– HS Math

- SBE derived the HS math exit exam threshold in 2015 to be proportional to ELA exit exam threshold, and agreed to revisit with additional data.
- State lacks sufficient scores to support revisiting the HS math exit exam threshold set by SBE in 2015.
- Participation on 11th grade math test was 61% this year, up from 50% in 2015, but still not sufficient.



Smarter Balanced Exit Exam Status in 2016 – Math

2016		Percent Met Accountability Cut-Score	Percent Met Requirement Using Basic	Percent Meeting Exit Exam Threshold	Total Percent Meeting Assessment Requirements
10	N= 19,216	55.0%	0.1%	10.0%	65.0%
11	N= 47,322	21.8%	0.1%	6.4%	28.3%
12	N= 2,217	12.5%	0.0%	2.4%	15.0%



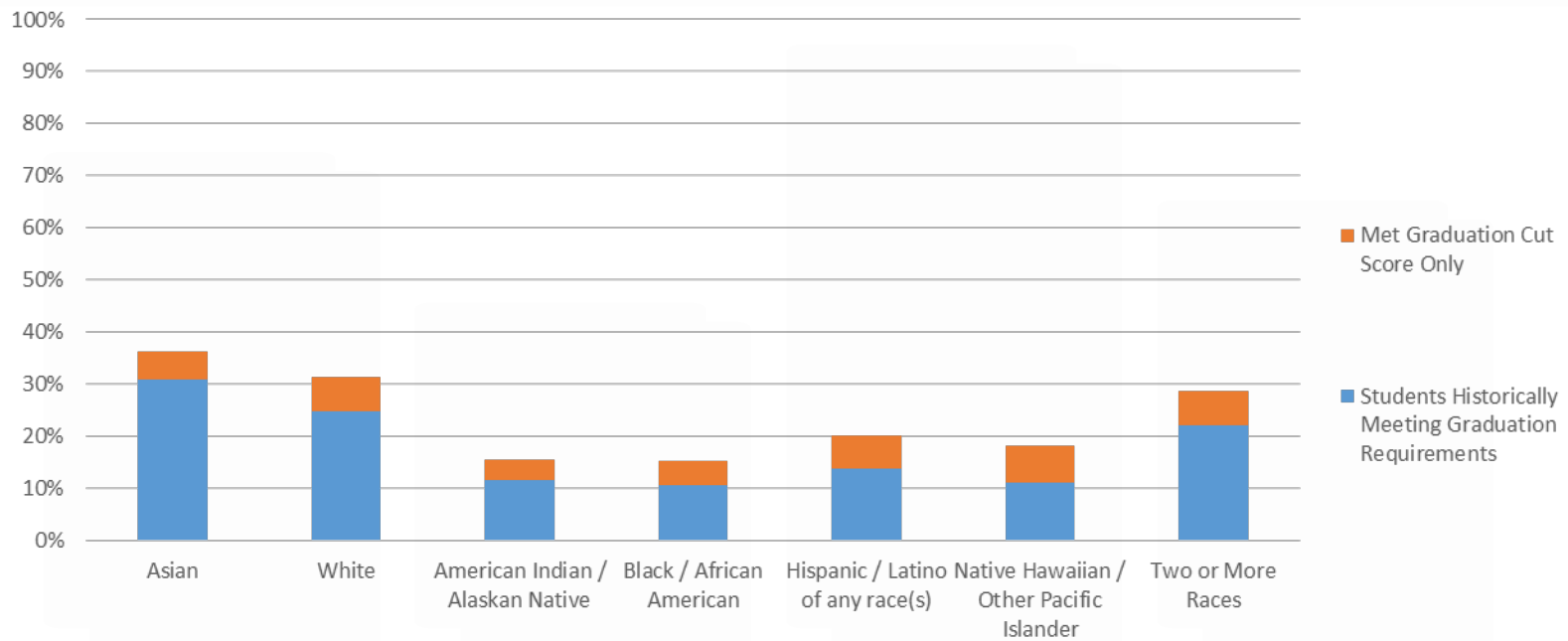
Smarter Balanced Exit Exam Status in 2016 vs 2015 – Math

2016		Percent Met Accountability Cut-Score	Percent Met Requirement Using Basic	Percent Meeting Exit Exam Threshold	Total Percent Meeting Assessment Requirements
10	N= 19,216	55.0%	0.1%	10.0%	65.0%
11	N= 47,322	21.8%	0.1%	6.4%	28.3%
12	N= 2,217	12.5%	0.0%	2.4%	15.0%

2015		Percent Met Accountability Cut-Score	Percent Met Requirement Using Basic	Percent Meeting Exit Exam Threshold	Total Percent Meeting Assessment Requirements
11	N= 35,041	13.2%	0.1%	4.2%	17.5%
12	N= 304	24.5%	0.0%	0.0%	24.5%



Percent of Student Meeting Assessment Graduation Requirements by Race - Math



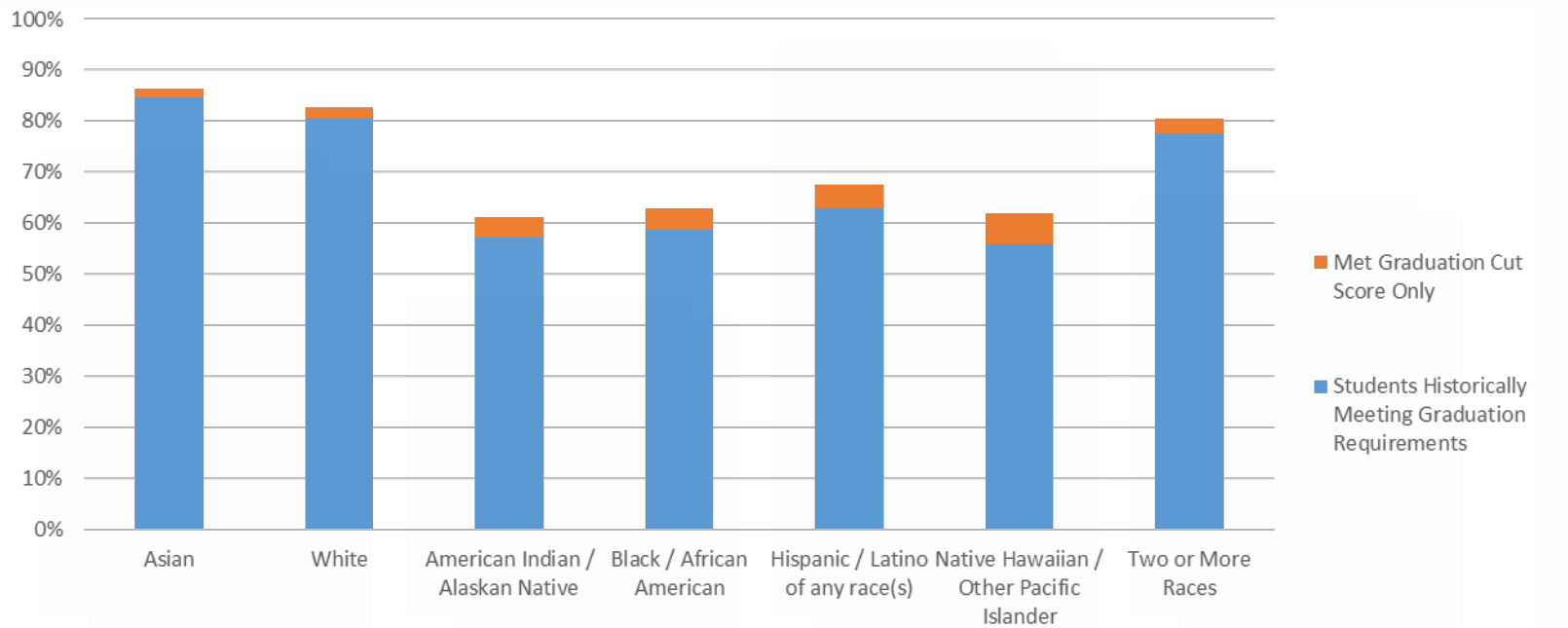
Smarter Balanced Exit Exam Status in 2016 vs 2015 – ELA

2016		Percent Met Accountability Cut-Score	Percent Met Requirement Using Basic	Percent Meeting Exit Exam Threshold	Total Percent Meeting Assessment Requirements
10	N= 76,153	70.8%	0.9%	8.3%	79.9%
11	N= 15,324	75.3%	0.3%	2.8%	78.3%
12	N= 2,163	20.5%	0.4%	8.1%	29.0%

2015		Percent Met Accountability Cut-Score	Percent Met Requirement Using Basic	Percent Meeting Exit Exam Threshold	Total Percent Meeting Assessment Requirements
10	N= 73,728	70.4%	0.9%	8.0%	79.2%
11	N= 38,264	25.3%	0.4%	5.2%	30.9%
12	N= 282	37.4%	0.0%	0.6%	37.9%



Percent of Student Meeting Assessment Graduation Requirements by Race - ELA



OSPI's Proposals

Proposed Motions

State Board approve Superintendent's recommended cut-score for:

- ▶ Exit Exam ELA Collection of Evidence, score of 24
- ▶ Exit Exam Math Collection of Evidence, score of 14
- ▶ New SAT ELA & Math, scores of 410 and 430, respectively
- ▶ New ACT ELA, score of 14

Defer revisiting the Smarter Balanced Math exit exam threshold score.