California Practitioners Advisory Group Meeting

Item 4: California School Dashboard: Overview of Changes Made to the Calculation of the State Indicators

Analysis, Measurement, and Accountability Reporting Division

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Topics

- Changes to Calculation of Academic Indicator

  - Prior State Board of Education (SBE) Actions on Academic Indicator

  - Review of Distance from Level 3 (DF3) methodology

  - Comparison of 2016 and 2017 Results

  - Actions at November 2017 SBE meeting

Topics (Cont.)

- SBE Action on Chronic Absenteeism Indicator

- Business Rule Changes

    – Suspension Rate Indicator

Changes to Calculation of Academic Indicator

Prior SBE Action on Academic Indicator: November 2016

- Directed CDE staff to develop recommended cut scores and performance categories for the English Language Arts/Literacy (ELA) and mathematics assessments in grades three through eight using scale scores to measure student progress for consideration at the January 2017 SBE meeting.

Prior SBE Action on Academic Indicator: January 2017

- Approved performance standards for Academic Indicator

  - Using Distance from Level 3 (i.e., Distance from Standard Met methodology)

  - Based on 2015 and 2016 Smarter Balanced test results

- Approved Academic Indicator for inclusion in Spring 2017 Dashboard

Prior SBE Action on Academic Indicator: September 2017

- Approved to delay incorporation of California Alternate Assessments (CAAs) in Academic Indicator

- Directed CDE staff to report CAA data (for transparency purposes) in the Dashboard.

- CDE provided update on work to include the 2016–17 Smarter Balanced Summative Assessment Results in Academic Indicator.

Review of Distance from Level 3 Methodology

- Distance between:

  ➢ Student's score on Smarter Balanced Summative Assessments, and

  ➢ Lowest possible scale score* for Standard Met Achievement Level (**Level 3**)

*Scale scores vary by content area and grade level.

DF3 Example: Grade Five Mathematics

Grade five student received a score of **2,505**.

Grade 5 Scale Score Range for Level 3

2,528   2,578
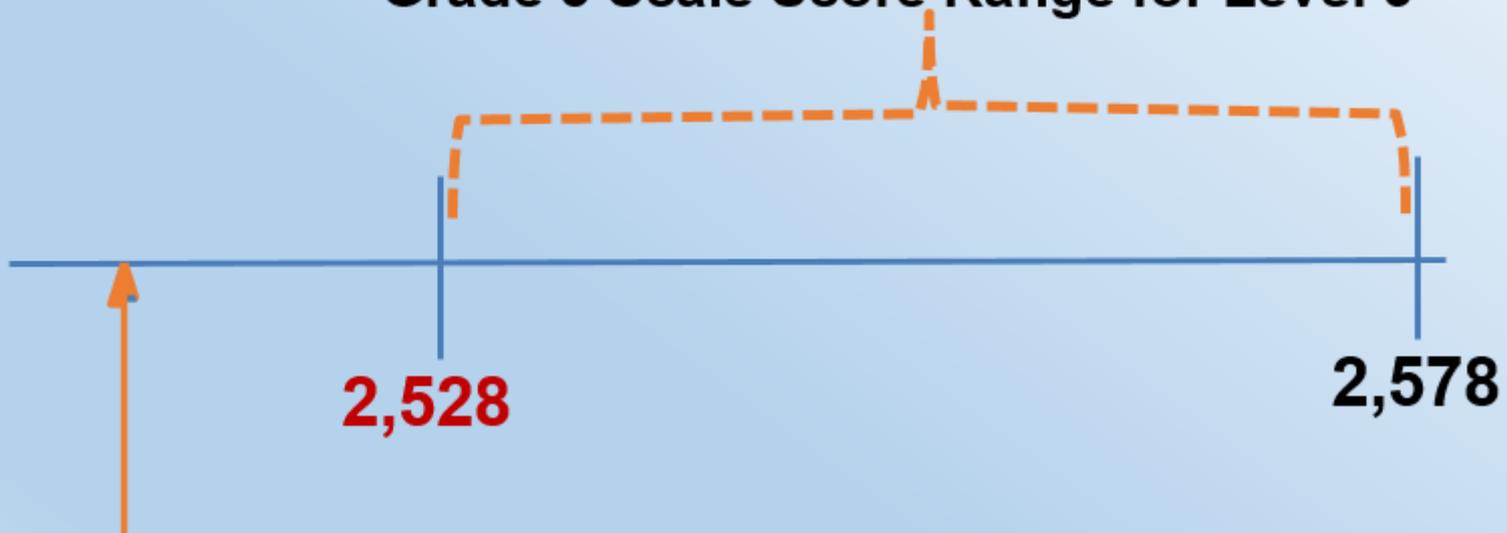
Student scored 2,505. This is 23 points below the lowest possible score for Level 3.

(**2,505** – **2,528** = -23 points)

Change Comparison Between the 2017 Spring/Fall Dashboards

- **Spring 2017 Dashboard**: Performance standards for Academic Indicator based on two years of data (2015 and 2016)

  - Distributions were positively skewed: Over 80 percent of LEAs had positive change.

- **Fall 2017 Dashboard:** 2017 Change distribution are more symmetrical: 45 percent of LEAs had a positive change

Change Comparison from Spring/Fall 2017

Math Spring 2017

Percentile	Math Change from Prior Year to Current Year	Change Level
5	-11.8	**Declined Significantly**
6.6	-10	**Declined**
10	-7.1	
15	-4	
20	-1.65	
21.8	-1	
25	0.2	**Maintained**
30	1.7	
35	3	
40	4.3	
43.7	5	**Increased**
45	5.3	
50	6.4	
55	7.4	
60	8.4	
65	9.7	
70	10.9	
75	12.5	
80	14.6	
81.5	15	**Increased Significantly**
85	16.8	
90	20	
95	25	

Math Fall 2017

Percentile	Math Change from Prior Year to Current Year	Change Level
5	-19.5	**Declined Significantly**
9	-15	**Declined**
10	-13.7	
15	-10.1	
20	-7.9	
25	-6.1	
30	-4.3	
35	-3.1	**Maintained**
35.6	-3.0	
40	-2.1	
45	-1.1	
50	.1	
55	1.1	
60	2.1	
63.9	3.0	**Increased**
65	3.4	
70	4.6	
75	6.1	
80	7.9	
85	9.8	
90	13.7	
91.4	15.0	**Increased Significantly**
95	20.1	

November 2017 SBE Action

- Approved:

  - New **Change cut scores** for ELA and mathematics

  - New High and Medium **Status cut scores** for mathematics

  - New **color layout** for the five-by-five grid
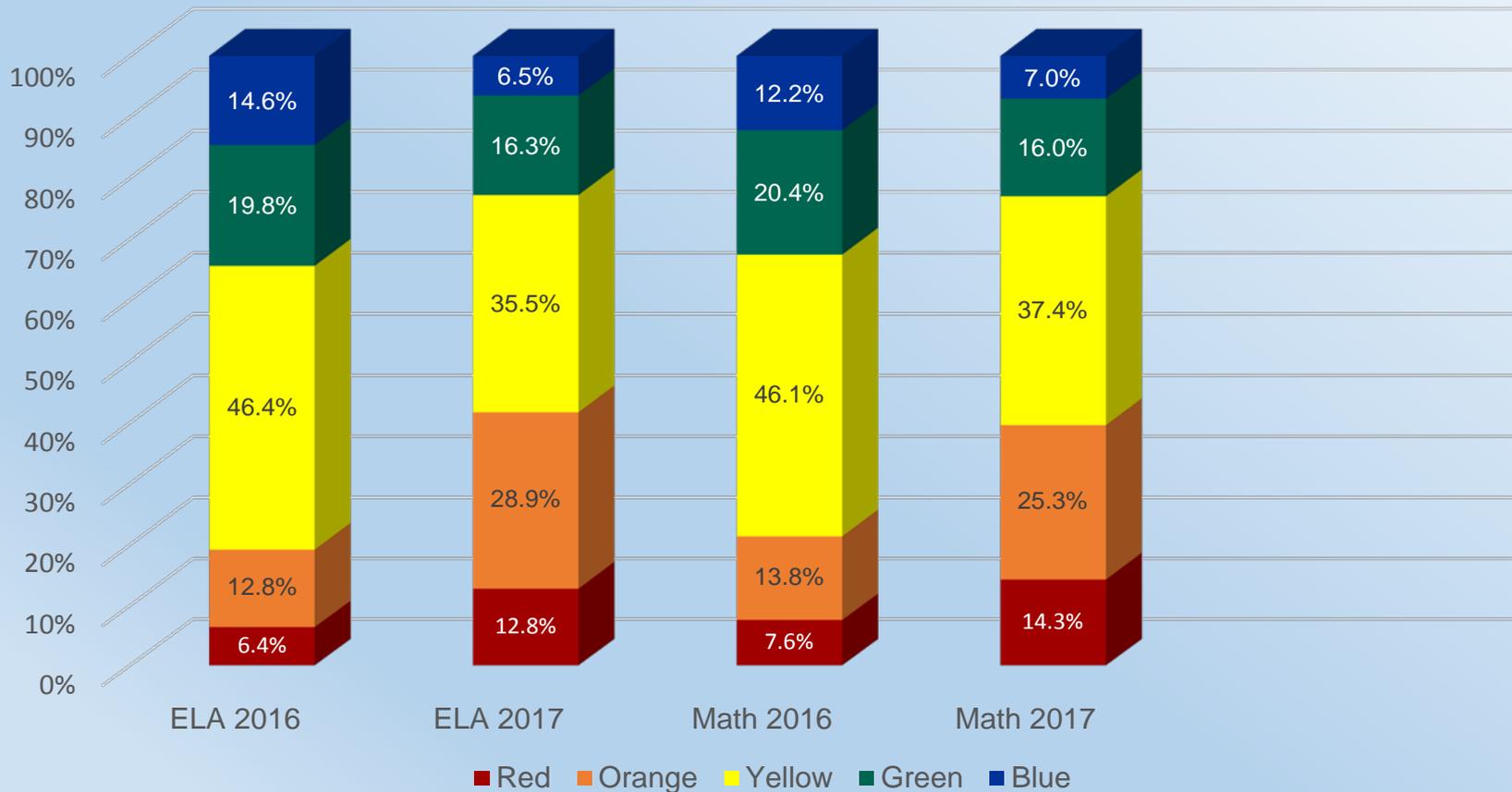
Options Reviewed at November 2017 SBE Meeting

- **Maintain:** Original Color layout and Original Cut Scores

- **Option 1:** New Change Cut Scores, New Status Cut Scores for mathematics, and New Color Layout-*Recommended Option*

- **Option 2:** New Color Layout and Original Cut Scores

- **Option 3(a):** New Cut Scores and Original Color Layout

- **Option 3(b):** New Cut Scores and Alternate New Color Layout

- **Option 4:** Two-Year Average

Recommendation: New Cut Scores/New Color Layout

- Establishes goals based on a more actual picture of performance statewide that continue to be ambitious and sustainable

- Reduces volatility from year to year and controls for large swings (two or more performance levels)

Original Methodology
Original Color Layout and Cut Scores

	ELA 2016	ELA 2017	Math 2016	Math 2017
Blue	14.6%	6.5%	12.2%	7.0%
Green	19.8%	16.3%	20.4%	16.0%
Yellow	46.4%	35.5%	46.1%	37.4%
Orange	12.8%	28.9%	13.8%	25.3%
Red	6.4%	12.8%	7.6%	14.3%

■ Red   ■ Orange   ■ Yellow   ■ Green   ■ Blue

Recommended Methodology
New Color Layout and Revised Cut Scores

	ELA 2016	ELA 2017	Math 2016	Math 2017
Blue	17.3%	8.2%	13.2%	9.4%
Green	20.2%	24.9%	22.9%	23.4%
Yellow	39.0%	23.4%	35.7%	28.2%
Orange	19.2%	36.6%	24.4%	33.3%
Red	4.3%	6.9%	3.9%	5.6%

■ Red ■ Orange ■ Yellow ■ Green ■ Blue
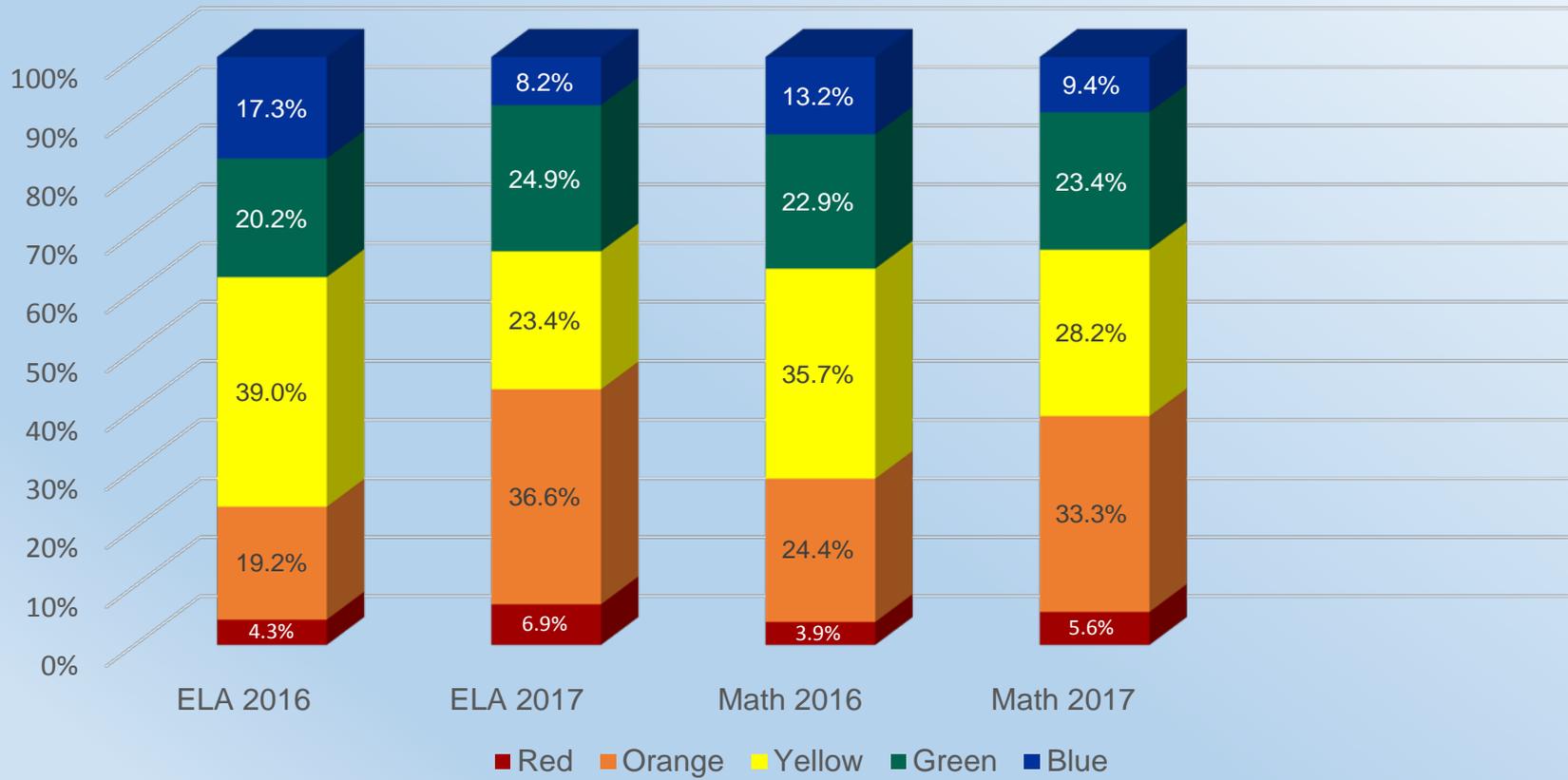
Comparing Original Methodology to Recommended Methodology

LEA Results

	2016 ELA-*Current*	2016 Math-*Current*	2017 ELA-*Current*	2017 Math-*Current*	2017 ELA Option 1	2017 Math Option 1
Red	81	119	169	231	64	89
Orange	177	217	487	410	328	600
Total	258	336	656	641	692	689

Revisions to *Change* Cut Scores

New Change Cut Scores for Both English language arts and Mathematics
Increased Significantly By 15 points or more
Increased by 3 to less than 15 points
Maintained Declined by less than 3 points or Increased by less than 3 points
Declined By 3 to 15 points
Declined Significantly by more than 15 points

Revisions to *Mathematics* Cut Scores

Status Cut Scores
Very High 35 or higher
High Zero to 34.9 points (revised)
Medium -25 points below to less than Zero (revised)
Low -25.1 points to -95 points
Very Low -95 points or lower

Rationale: Revisions to Status Cut Scores for Mathematics

- Ensure that LEAs and schools cannot receive a "High" Status if they have a negative DF3:

  - Addresses issues raised by advocacy groups after release of Spring 2017 Dashboard

New ELA Five-by-Five Colored Table

Level	Change: Declined Significantly by more than 15 points	Change: Declined By 3 to 15 points	Change: Maintained Declined by less than 3 points or Increased by less than 3 points	Change: Increased by 3 to less than 15 points	Change: Increased Significantly By 15 points or more
Status: Very High 45 points or higher	Green	Green	Blue	Blue	Blue
Status: High 10 to 44.9 points	Green	Green	Green	Green	Blue
Status: Medium -5 points to +9.9 points	Yellow	Yellow	Yellow	Green	Green
Status: Low -5.1 to -70 points	Orange	Orange	Orange	Yellow	Yellow
Status: Very Low -70.1 points or lower	Red	Red	Red	Orange	Orange

New Mathematics Five-by-Five Colored Table

Level	Change: Declined Significantly by more than 15 points	Change: Declined By 3 to 15 points	Change: Maintained Declined by less than 3 points or Increased by less than 3 points	Change: Increased by 3 to less than 15 points	Change: Increased Significantly By 15 points or more
Status: Very High 35 points or higher	Green	Green	Blue	Blue	Blue
Status: High zero to 34.9 points	Green	Green	Green	Green	Blue
Status: Medium -25 points to less than zero	Yellow	Yellow	Yellow	Green	Green
Status: Low -25.1 to -95 points	Orange	Orange	Orange	Yellow	Yellow
Status: Very Low -95 points or lower	Red	Red	Red	Orange	Orange

SBE Action on Chronic Absenteeism Indicator

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- Include a link in Fall 2017 Dashboard that directs users to Chronic Absenteeism reports on DataQuest.

- Direct CDE staff to develop recommendation for:

  - March 2018 SBE meeting: Proposed Status cut scores to be used to update Fall 2017 Dashboard

  - September or November 2018 SBE meeting: Proposed Change cut scores

Business Rule Changes: Suspension Rate Indicator

Suspension Rate Indicator K-12 Schools

- For the Fall 2017 Dashboard K-12 schools will have the unified district cut scores applied:

  - Using enrollment to determine a school type (elementary, middle, high) disadvantaged schools that were assigned an elementary type vs. middle or high school type.

  - K-12 enrollment is more aligned to unified districts than any of the other indicators

Suspension Rate Indicator K-12 Schools (Cont.)

- Using the unified school district five-by-five colored grid provides a better and fairer evaluation of suspension rates for K-12 schools.
  - This change had a positive impact on 29 schools (i.e., increase in performance level). No schools were negatively impacted.

Questions and/or Discussion