

Background

May 5, 2017

While there are many details yet undecided about how schools will be identified for support and improvement in California, the recent draft of the ESSA state plan specifies that schools will be identified based on the number of “red” indicators in the Dashboard – schools that are in the lowest performance category for both academic status and change across multiple measures. In this memo, we show that **schools in the “red” category for ELA and Math are very different when using CORE’s growth measure vs. California’s one-year change metric.** The CORE districts have built local awareness and buy-in for their growth measure and have reason to believe it is a more robust and fair estimation of a school’s true impact on student achievement. Regardless of the specific method used to identify schools, it is clear that the identified schools would differ if CORE’s growth measure were used in place of the state’s change measure. For these reasons, we recommend that the State of California’s ESSA consolidated plan include a waiver request to establish an Innovation Zone within the state, furthering California’s commitment to innovation, continuous improvement, and local control while also complying with ESSA’s statutory requirements.

The CORE Districts – Fresno, Garden Grove, Long Beach, Los Angeles, Oakland, Sacramento, San Francisco, and Santa Ana – have chosen to use both academic performance and academic growth for school improvement and accountability. The CORE measure of student growth takes into account an individual student’s prior test history, socioeconomic disadvantage, disability status, English learner status, homelessness, and foster care status, and uses this information to measure how quickly they grow relative to students similar to them in these categories. The CORE model also accounts for concentration of these characteristics within schools. In this way, the CORE growth measure is constructed as a “value added” model, estimating the school’s impact on student achievement relative to other schools serving similar students. Alternately, California’s accountability system uses one-year school-wide *change over time* in student achievement, which does not account for changes in student population or the kinds of students a school serves. Since these two approaches of measuring change in academic performance over time are very different, in this memo we explore how differently the two metrics identify schools as low performing within the CORE districts.

Testing Differences in Measurement Approaches

Due to the differences in how they are calculated, it is likely that the California academic performance change metric and the CORE academic growth metric provide substantially different information about school performance. To test this hypothesis, we use LCAP dashboard data and CORE academic growth data from 2015-16 to model how different the California academic indicator five-by-five color table is if we use CORE’s growth data in place of California’s change data.

We based this analysis on the subset of schools that have both CORE growth and LCAP dashboard change data – Elementary and Middle schools in the 8 CORE districts (1,050 schools). In order to split the CORE growth indicator into five performance levels that are comparable to levels in the Dashboard data, we assigned each school a 1-5 performance level category that is the same size as the equivalent category for CORE school academic change within grade level and subject. For instance, 7.84 percent of CORE elementary schools have level 1 on the CA math change indicator, so the bottom 7.84 percent of schools on the CORE math growth indicator were assigned to level 1 for that subject and

grade level.

As Table 1 demonstrates, there are substantial differences between the two indicators. For instance, of the 76 schools that “declined significantly” on the CA math change measure, only 27 (35 percent) are also in the lowest group on the CORE growth measure. The comparable percentage for ELA is 30 percent.

Table 1: Differences Between CORE Growth and CA Change Measures

MATH		CORE Growth Measure				
CA Change Measure		Declined Significantly	Declined	Maintained	Increased	Increased Significantly
	Inc. Significantly		1	10	12	93
Increased		17	40	68	154	94
Maintained		13	47	44	75	12
Declined		27	39	46	34	12
Dec. Significantly		27	24	16	9	0

ELA		CORE Growth Measure				
CA Change Measure		Declined Significantly	Declined	Maintained	Increased	Increased Significantly
	Inc. Significantly		0	2	13	68
Increased		2	32	78	226	74
Maintained		3	61	84	75	11
Declined		16	82	55	32	1
Dec. Significantly		7	14	1	1	0

Schools were then assigned a performance color based on a five-by-five color table including the CORE growth indicator and the CA academic status indicator for Mathematics and ELA comparable to the Dashboard. Comparing the schools listed as red on the five-by-five color table when identified with CORE growth vs. CA change, we find significant differences (see Table 2). For instance, of the 111 schools identified as “red” using CA change vs. status in math, only 70 percent are identified when using the CORE growth measure. (The comparable percentage for ELA is 82 percent.) This means that 33 schools in the CORE districts that are “red” on the CA math measure have a growth score that does not place them in this lowest performance level when using the CORE metric.

Table 2: Performance Color Levels When Using CORE and CA Measures

MATH		Using CORE Growth Measure				
Using CA Change Measure		Red	Orange	Yellow	Green	Blue
	Blue		0	0	2	23
Green		0	8	18	113	13
Yellow		17	73	296	11	151
Orange		22	42	72	4	9
Red		78	22	11	0	0

ELA		CORE Growth Measure				
Using CA Change Measure		Red	Orange	Yellow	Green	Blue
	Blue		0	0	0	20
Green		0	2	14	81	10
Yellow		5	58	361	16	125
Orange		24	70	58	2	1
Red		101	19	3	0	0

Looking at it the other way around, there is a substantial number of schools that are in the lowest performance group on the CORE measure that are in higher performance levels when using the CA change metric. For example, in math, 17 schools are “red” when using the growth measure but are “yellow” when using CA change. These are likely cases where, despite noteworthy scale score improvements when comparing SY16 school-wide performance to SY15, the impact of the school on individual students given where the SY16 students started was low. This is likely caused by a substantive shift in student demographics, or variations in test participation.

The different identification that we observe indicates that the CORE academic growth indicator and the CA academic change indicator are not representing the same information. Furthermore, there is reason to believe that the CORE measure is the more accurate version: since CORE’s measure tracks individual students’ growth over time, it is a more robust indicator of school growth than a change measure, which can fluctuate based on changes in student demographics rather than reflecting a true “school effect.”

These differences in the CORE measure vs. the CA change measure can have huge implications when used to identify schools for support and improvement under the Every Student Succeeds Act (ESSA). Given that the color table across all 5 state indicators will be used to identify schools, differences in how academic achievement is measured will dramatically change which schools are red on ELA/Math and thus which schools are ultimately identified.

Differences Within Districts

The results presented in this memo demonstrate that CORE’s measures contribute different information to the understanding of school performance than California’s more limited indicators. We believe that the CORE districts locally driven measures on growth, high school readiness and social emotional learning and school culture/climate help provide a more complete picture of school performance, and as part of an Innovation Zone, will help support the continuous improvement of California’s accountability system.

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