Innovations in Accountability Policy: The CORE-PACE Research Partnership

Noah Bookman
Heather Hough
Rick Miller
David Plank





is a collaboration among

9 California school districts.



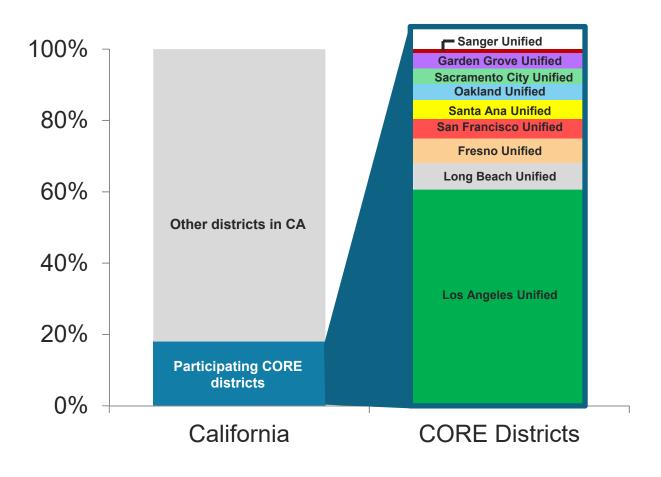
Why are superintendents, school leaders, and teachers from these districts actively involved in a collaborative effort?







We're working together to significantly improve student outcomes – for ALL students.



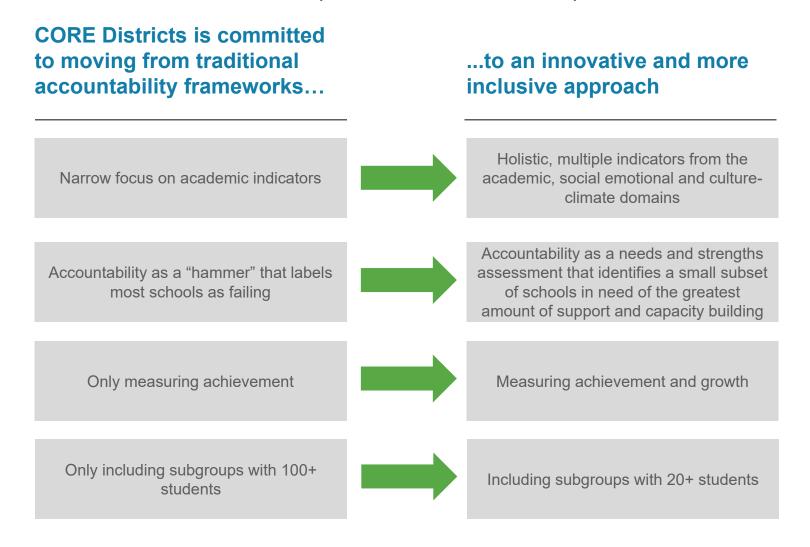
OVER 1 MILLION STUDENTS IN CORE





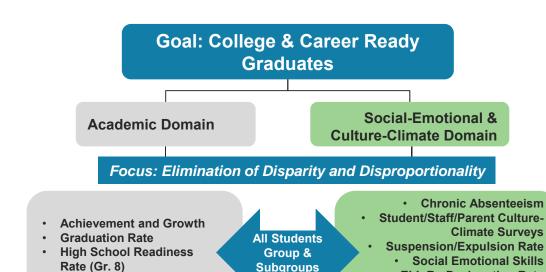
The Intent of the School Quality Improvement Index:

Developed by educators and experts working with the CORE districts, the Index offers more and better information to help schools and teachers help students learn.





Designing the School Quality Improvement Index:



MAKING ALL STUDENTS VISIBLE:

N size of 20 resulting in over 150,000 additional students counted!



Guiding principles:

- ✓ Information as "flashlight" (and not a "hammer")
- ✓ From a narrow focus to a holistic approach
- ✓ Making all students visible
- ✓ From just achievement to achievement and growth

Developed through collaboration and partnership:

ELL Re-Designation Rate

Special Education Disproportionality

- ✓ Led by the CORE Superintendents
- ✓ Guided by the experts in our districts
- With input from hundreds of educators across the CORE districts
- With support from our key partners (e.g. Stanford University, Harvard University)
- ✓ With guidance from our Oversight Panel (e.g. ACSA, CSBA, Ed Trust West, PACE, PTA)



Each indicator has been carefully developed, refined, and analyzed before inclusion in the Index

Measurable

 Evidence of validity, reliability and stability through the examination of baseline and/or field test data.

Actionable

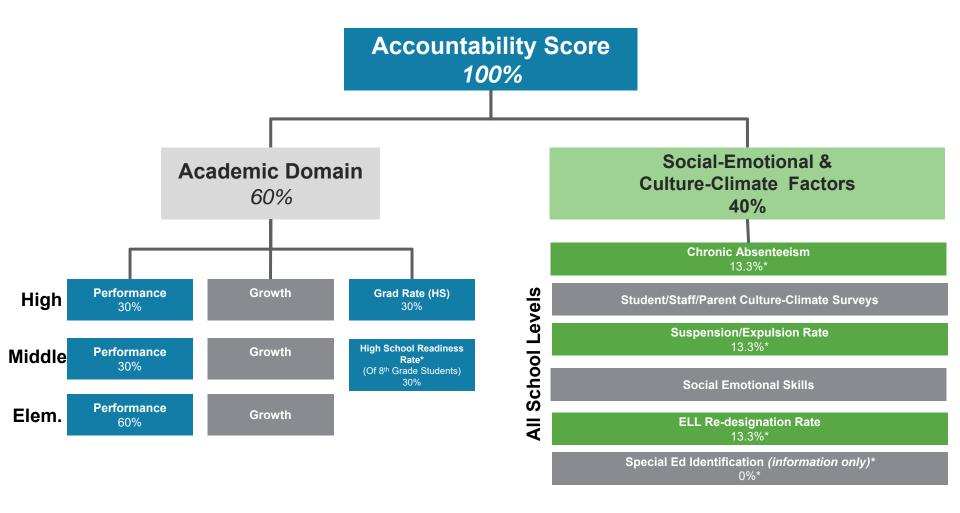
- Evidence from research that schools can influence and impact the outcome in question.
- Evidence from baseline data that schools serving similar youth demonstrate notably different outcomes (such that there is evidence that schools play a substantive role in the outcome).

Meaningful

 Clearly connected (e.g., through research) to college and career readiness, and the elimination of disparity and disproportionality (e.g., based upon the current presence of substantive gaps in performance).

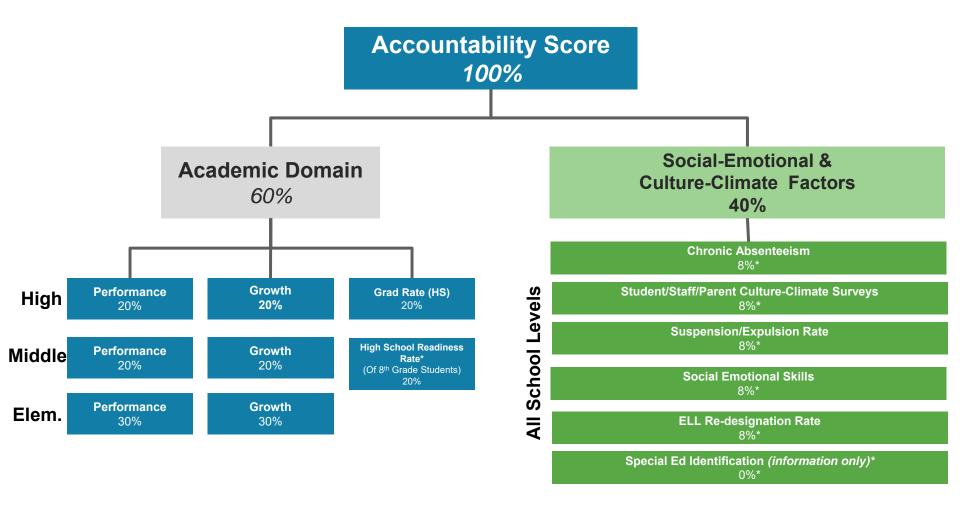


The School Quality Improvement Index (2014-2015)



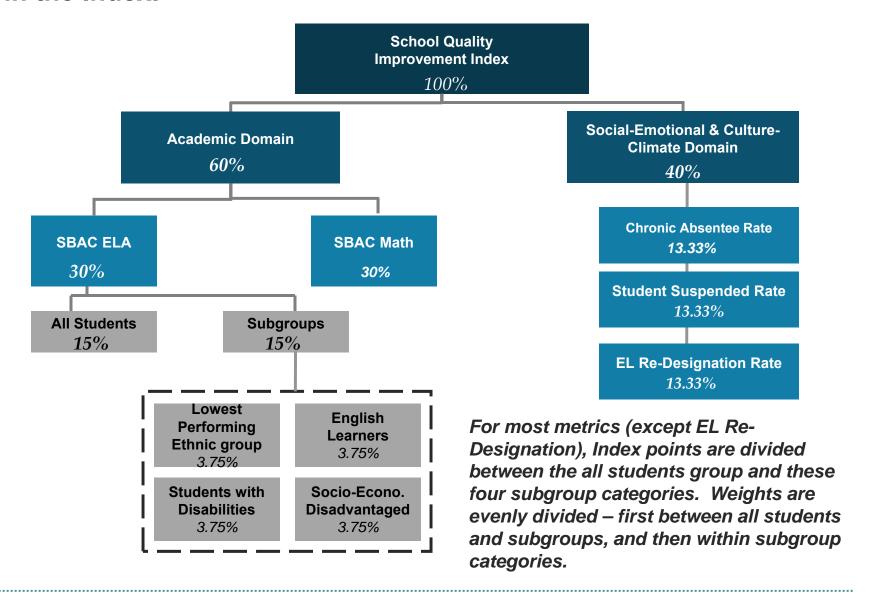


The School Quality Improvement Index (2015-2016+)





Subgroup results account for half of the weight in most of the metrics in the Index.





SAMPLE HIGH SCHOOL

PRELIMINARY REPORT - SUBJECT TO CHANGE - 12/01/15

Public | 2887

CDS code: 000000000000000 Random Valley Unified

AA: 8% FI: 1% Al/AN:0%

SD: 68% EL: 40% SWD: 9%

PI: 0% WH: 3%

1234 Any Street Random Valley, CA 12345 AS: 22% HI: 64%

Two+: 2%

	Metric result 2014	Metric result 2015	Change in Metric Performance from 2014 to 2015	Index Level 2015	Change in Index Level from 2014 to 2015	
ACADEMIC DOMAIN (see pages 12 & 13 fo	ACADEMIC DOMAIN (see pages 12 & 13 for metric descriptions)					
Academic Performance English Language Arts	-	43% MEET OR EXCEED STANDARDS		5 /10	-	
Growth English Language Arts			Coming Fall 2016			
Academic Performance Math	-	12% MEET OR EXCEED STANDARDS	-	5 /10	-	
Growth Math			Coming Fall 2016			
Four Year Cohort Graduation Rate	86% GRADUATED CLASS OF 2013	88% GRADUATED CLASS OF 2014	+2%	8/10	利 1	
Five Year Cohort Graduation Rate	86% GRADUATED CLASS OF 2012	88% GRADUATED CLASS OF 2013	+2%	8/10	7 1	
Six Year Cohort Graduation Rate	87% GRADUATED CLASS OF 2011	87% GRADUATED CLASS OF 2012	0%	7 /10	⇒ 0	
SOCIAL-EMOTIONAL & CULTURE-CLIMAT	E DOMAIN (see pag	es 12 & 13 for metric	descriptions)			
Chronic Absenteeism	19% CHRONICALLY ABSENT	15% CHRONICALLY ABSENT	-4%	7 /10	№ 2	
Suspension Rates (includes students suspended and/or expelled)	6% SUSPENDED (AND/OR EXPELLED)	5% SUSPENDED (AND/OR EXPELLED)	-1%	6/10	⇒ 0	
English Learner Re-designation	10% RE-DESIGNATED	15% RE-DESIGNATED	+5%	8/10	∌ 3	
Social-Emotional Skills	Coming Fall 2016					
Culture and Climate	Coming Fall 2016					

This February, CORE Districts will publicly release the 1st version of the School Quality Improvement Index at www.coredistricts.org

Reports support **CONTINUAL IMPROVEMENT** for school leaders and teachers



2015 Performance on the Index Metrics for All Students and Each Subgroup Category

Overall Index results are generally evenly weighted between the all students group and subgroup performance (for subgroups with 20 or more students).

	All Students	Lowest Performing Racial/Ethnic Subgroup	English Learners	Students with Disabilities	Socio-Economoic ally Disadvantaged Students
ACADEMIC DOMAIN (see pages 12 & 13	for metric descriptions)			
Academic Performance English Language Arts	43% MEET OR EXCEED STANDARDS	33% (AA) MEET OR EXCEED STANDARDS	1 % MEET OR EXCEED STANDARDS	7% MEET OR EXCEED STANDARDS	43% MEET OR EXCEED STANDARDS
Growth English Language Arts			Coming Fall 2016		
Academic Performance Math	12% MEET OR EXCEED STANDARDS	7% (AA) MEET OR EXCEED STANDARDS	1 % MEET OR EXCEED STANDARDS	0% MEET OR EXCEED STANDARDS	13% MEET OR EXCEED STANDARDS
Growth Math			Coming Fall 2016		
Four Year Cohort Graduation Rate	88% GRADUATED CLASS OF 2014	77% (WH) GRADUATED CLASS OF 2014	78% GRADUATED CLASS OF 2014	53% GRADUATED CLASS OF 2014	88% GRADUATED CLASS OF 2014
Five Year Cohort Graduation Rate	88% GRADUATED CLASS OF 2013	84% (AA) GRADUATED CLASS OF 2013	82% GRADUATED CLASS OF 2013	66% GRADUATED CLASS OF 2013	89% GRADUATED CLASS OF 2013
Six Year Cohort Graduation Rate	87% GRADUATED CLASS OF 2012	83% (WH) GRADUATED CLASS OF 2012	78% GRADUATED CLASS OF 2012	57% GRADUATED CLASS OF 2012	88% GRADUATED CLASS OF 2012
SOCIAL-EMOTIONAL & CULTURE-CLIMA	TE DOMAIN (see pag	es 12 & 13 for metric	descriptions)		
Chronic Absenteeism	15% CHRONICALLY ABSENT	19% (WH) CHRONICALLY ABSENT	14% CHRONICALLY ABSENT	30% CHRONICALLY ABSENT	13% CHRONICALLY ABSENT
Suspension Rates (includes students suspended and/or expelled)	5% SUSPENDED (AND/OR EXPELLED)	12% (AA) SUSPENDED (AND/OR EXPELLED)	5% SUSPENDED (AND/OR EXPELLED)	12% SUSPENDED (AND/OR EXPELLED)	5% SUSPENDED (AND/OR EXPELLED)
English Learner Re-designation	15% RE-DESIGNATED	(N/A)	(N/A)	(N/A)	(N/A)
Social-Emotional Skills			Coming Fall 2016		
Culture and Climate	Coming Fall 2016				

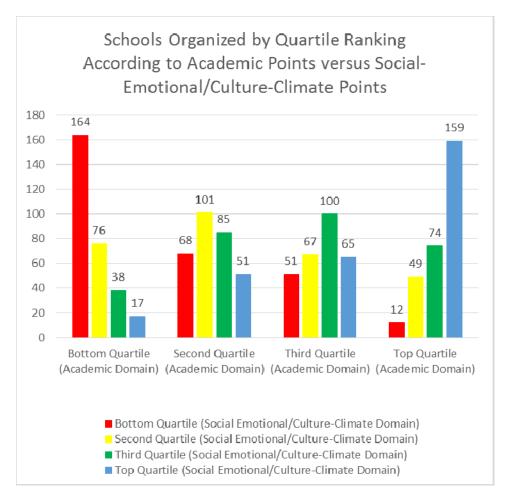
Results include performance by the "all students" group and by subgroups

Examples of full reports for elementary, middle, and high schools are available online at http://coredistricts.org/core-index/



Preliminary finding 1a: Providing academic and social emotional/cultureclimate factors creates a more holistic and actionable picture of schools.

Schools with strong social-emotional and culture-climate performance also tend to have stronger academic performance



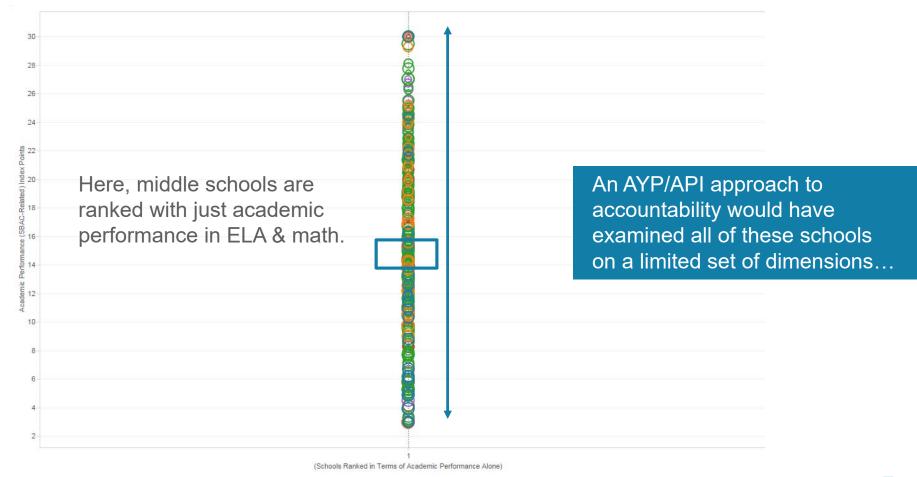
Correlations between Academic Domain Points earned with social-emotional and culture-climate factors are ~0.6, which suggests a strong relationship.

Appropriate support and intervention depends upon meaningful diagnosis of strengths and challenge areas.



Preliminary finding 1b: Providing academic and social emotional/cultureclimate factors creates a more holistic and actionable picture of schools.

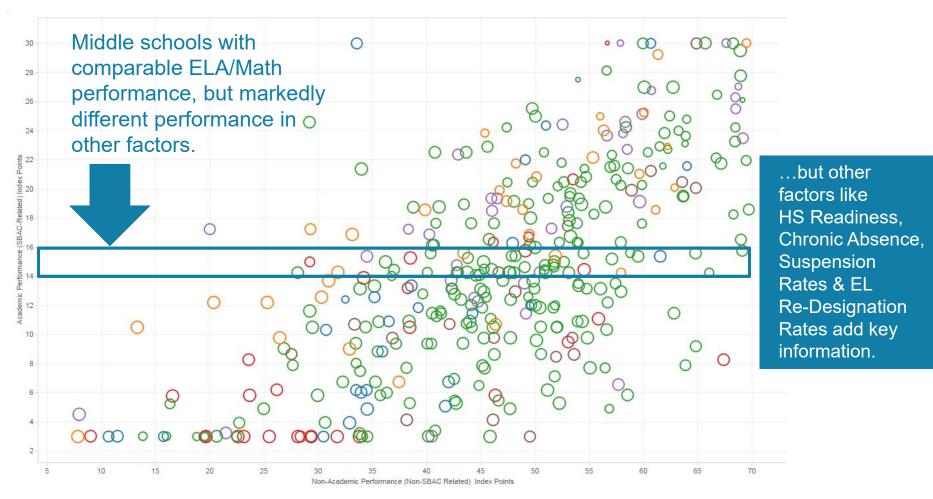
That said, schools with the same academic performance on the Index often have markedly different performance on other Index indicators (1 of 3).





Preliminary finding 1b: Providing academic and social emotional/cultureclimate factors creates a more holistic and actionable picture of schools.

That said, schools with the same academic performance on the Index often have markedly different performance on other Index indicators (2 of 3).





Preliminary finding 1b: Providing academic and social emotional/cultureclimate factors creates a more holistic and actionable picture of schools.

That said, schools with the same academic performance on the Index often have markedly different performance on other Index indicators (3 of 3).

	School A			School B	
	About these schools				
Enrollment	1001			836	
African-American (%)	14%			11%	
EL (%)	31	L%		27%	
Socio-Economically Disadvantaged (%)	87	7%		89%	
SWD (%)	9	%		11	.%
		P	erformand	e	
	Result	Out of		Result	Out of
Academic Performance Index Points	14	30		15	30
Math (% Meets+)	16			23	
Math Index Level	5	10		7	10
ELA (% Meets+)	31			35	
ELA Index Level	7	10		7	10
Non-Academic Performance Index Points	31	70		52	70
Chronic Absence (%)	11			6	
Chronic Absence Index Level	4	10		8	10
EL Redesignation Rate	12			12	
EL Redesignation Rate Index Level	3	10		3	10
High School Readiness Rate	38			62	
High School Readiness Index Level	6	10		10	10
Suspension Rate	11			6	
Suspension Index Level	5	10		7	10
Total Index Points	45	100		67	100

Schools with the same academic performance on the Index often have markedly different performance on other Index indicators (3 of 3)



Preliminary finding 2: These data help us identify schools that are "beating the odds" and potential exemplars for peer learning.



Consider these schools with markedly above average Index results, and three-quarters of students or more in poverty.

Here, we identify schools with high overall Index results despite having three-quarters or more of their students in poverty.



CORE is also part of the national dialogue on including Social Emotional Skills in Multiple Measure approaches to school quality



With over half a million students participating, our Spring 2015 Field Test of measures of social-emotional skills lets us explore how to measure these essential skills at scale.



CORE Field Test of Measures of Social Emotional Learning and School Culture-Climate

District Name	Number of Students
Fresno	34,583
Long Beach	45,342
Los Angeles	308,602
Oakland	8,386
San Francisco	23,249
Santa Ana	34,136
Total	454,298

More than 450,000 students participated in the Spring 2015 field test of SEL measures

District	Number of	Number of Students Covered by
Name	Teachers	Teacher Reports
Fresno	2,436	63,767
Santa Ana	301	7,293
Total	2,737	71,060

Two districts collected teacher reports on students' SE competencies from more than 2,700 teachers, covering approximately 71,000 students



Social Emotional Skills Cover Four Topics – Including Inter-Personal and Intra-Personal Skills

SE Competency	Definition
Growth Mindset	The belief that one's abilities can grow with effort. Students with a growth mindset see effort as necessary for success, embrace challenges, learn from criticism, and persist in the face of setbacks.
Self-Efficacy	The belief in one's own ability to succeed in achieving an outcome or reaching a goal. Self-efficacy reflects confidence in the ability to exert control over one's own motivation, behavior, and environment.
Self-Management	The ability to regulate one's emotions, thoughts, and behaviors effectively in different situations. This includes managing stress, delaying gratification, motivating oneself, and setting and working toward personal and academic goals.
Social Awareness	The ability to take the perspective of and empathize with others from diverse backgrounds and cultures, to understand social and ethical norms for behavior, and to recognize family, school, and community resources and supports.



Student, Staff and Family Culture-Climate Surveys cover four topics as well.

CLIMATE OF SUPPORT FOR ACADEMIC LEARNING

Students and teachers feel that there is a climate conducive to learning and that teachers use supportive practices, such as encouragement and constructive feedback; varied opportunities to demonstrate knowledge and skills; support for risk-taking and independent thinking; atmosphere conducive to dialog and questioning; academic challenge; and individual attention to support differentiated learning.

KNOWLEDGE AND FAIRNESS OF DISCIPLINE, RULES AND NORMS

Clearly communicated rules and expectations about student and adult behavior, especially regarding physical violence, verbal abuse or harassment, and teasing; clear and consistent enforcement and norms for adult intervention.

SAFETY

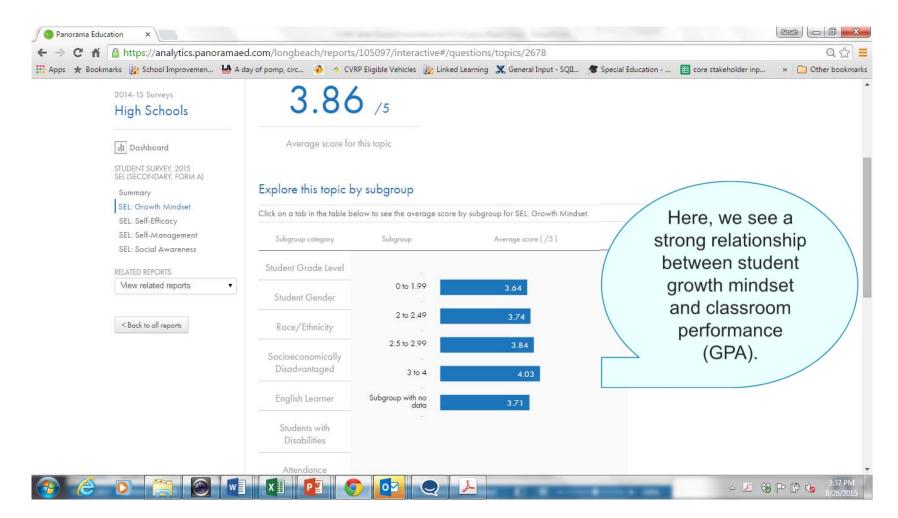
Students and adults report feeling safe at school and around school, including feeling safe from verbal abuse, teasing, or exclusion by others in the school.

SENSE OF BELONGING (SCHOOL CONNECTEDNESS)

A positive sense of being accepted, valued, and included, by others (teacher and peers) in all school settings. Students and parents report feeling welcome at the school.

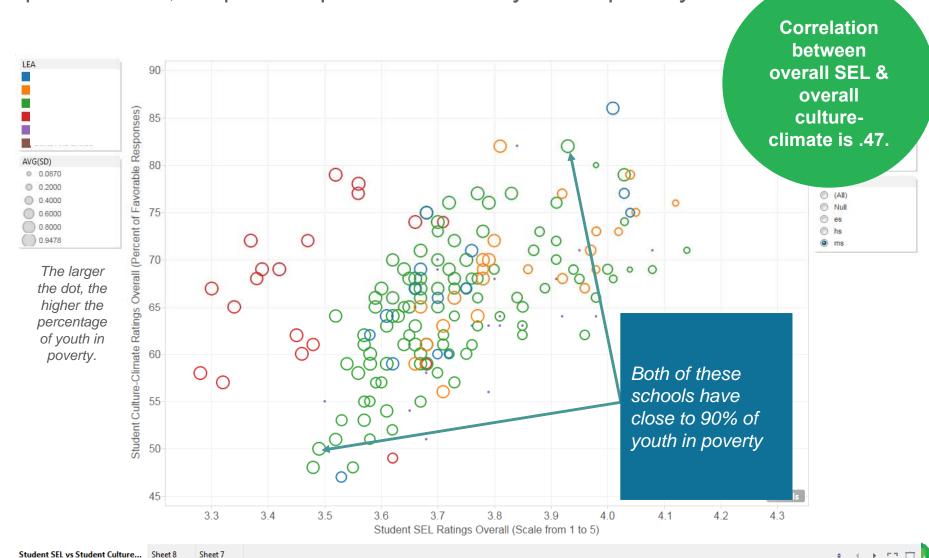


With over half a million students participating in our Spring 2015 Field Test of SEL Skills, schools and districts have received critical information about the youth that they serve.

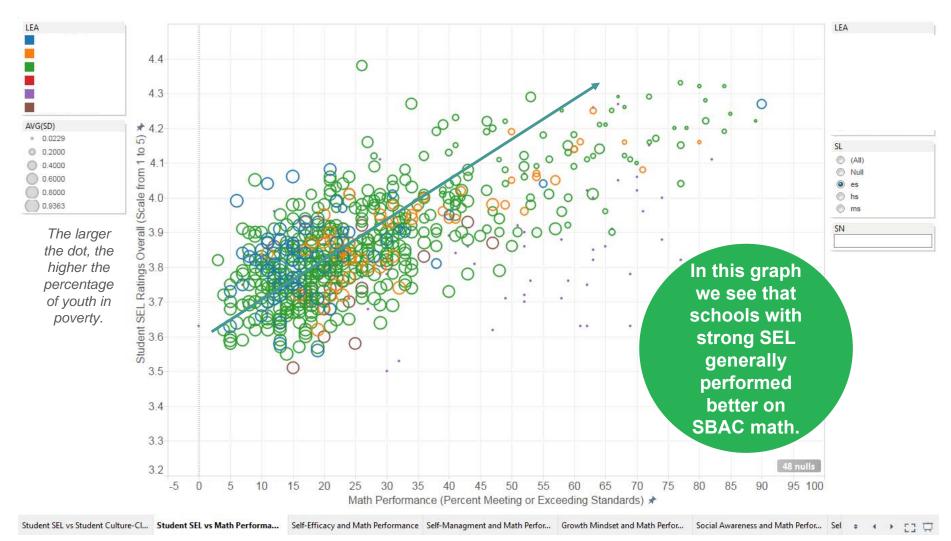




SEL & Culture Climate: A school's culture-climate is related to social emotional skills reports, and we see a substantive range in school performance, despite comparable levels of youth in poverty.



Math & SEL: A school's SEL results are also related to performance on other indicators, such as math.





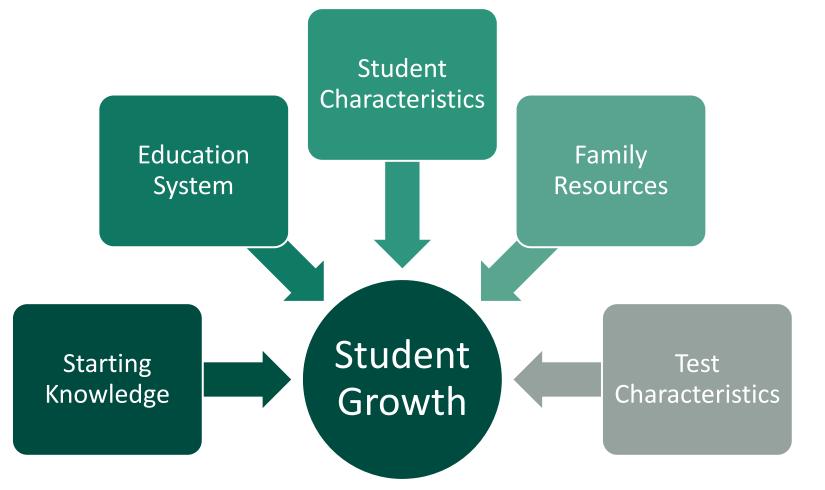
An additional preliminary finding of interest

In predictive analysis that look at which of the four SEL skills best predict GPA and SBAC results...

- At middle school, self-management is the most predictive skill.
- At high school, growth mindset is the most predictive skill.



CORE is also developing a growth model. A Growth Model is Designed to Measure the Effect of the Education System on Student Growth

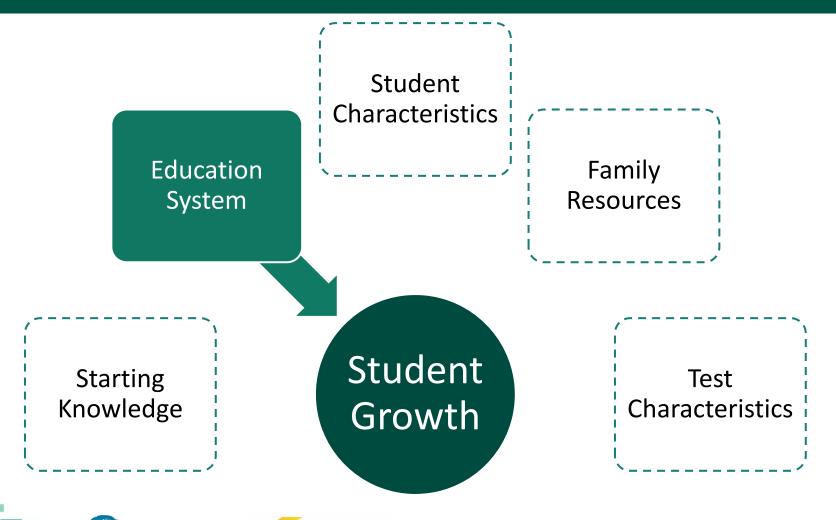








Uses Statistical Techniques to Isolate the Impact of the Education System from Non-School Factors









Our Model Selection Approach

(For Illustrative Purposes)

		Overall Growt		
	Criterion 1	Criterion 2	Criterion 3	Criterion 4
Simple Growth Model Option 1				
Simple Growth Model Option 2				
Growth Model with Context Adjustments Option 3		0		
Growth Model with Context Adjustments Option 4				







Selection Criteria

Main themes from our work so far with district staff

The growth model should...

be fair

be technically accurate

be simple enough to explain

have informational value







Areas for future development of the CORE Index and Continuous Improvement Data System

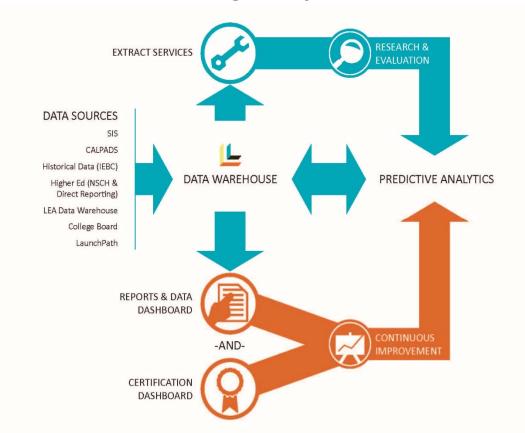
Area	Possible Approaches
Developing the next generation of measures for Social Emotional Skills	Performance TasksGame-based assessmentsObservational assessments
Developing measures of College & Career Ready Graduates	 AP/IB enrollment/exam passage SAT/ACT/SBAC college ready thresholds Linking analyses between college going/college completion and current Index indicators Partnering with the Linked Learning field on career readiness indicators (e.g., pathway completion) High school capstone projects, graduate portfolios, etc.
Student growth measures non-achievement indicators	SELAttendanceProbability of being HS Ready or Graduating
Adding LCAP subgroups	Foster care studentsHomeless students
Pre-K and the Early Grades	 School readiness indicators Early reading and math indicators Assessment of social emotional skills (e.g., teacher report on students)



Collaboration with the Linked Learning Alliance:

A next-generation, continuous improvement data system focused on college and career readiness

The Linked Learning Data System Architecture



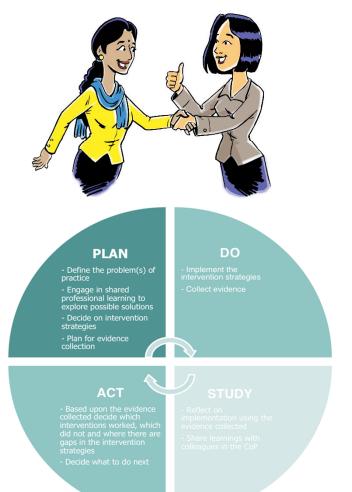
We're collaborating with the Linked Learning field on career readiness indicators (e.g., pathway completion)

Through this partnership, data collection, storage, analysis, and reporting can be streamlined across districts, reducing costs and saving time.



School Interventions and Supports in CORE Waiver:

- ✓ A focus on capacity building, and peer learning (and away from interventions dictated by external forces).
- ✓ Rooted in data.

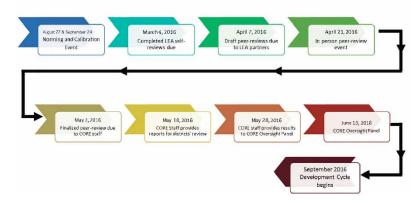




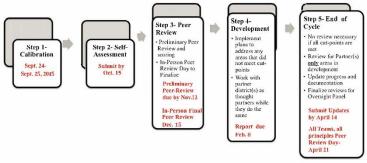
Multiple layers of accountability: Holding ourselves and each other to a higher level of accountability for student achievement.

- Transparency in student and school achievement data: All CORE districts participate in a shared data system.
- ✓ Self- and peer-evaluations: Evaluating how well they are meeting the commitments in the School Quality Improvement System.
- Oversight Panel: unbiased external compliance review of each district's progress.

P1 & P2 self- and peer-review process



P3 self- and peer-review process





Join Us!

We're opening up our Data Collaborative!

Data Collaborative

- Data dashboard with student-level academic, socialemotional and culture-climate metrics via a CORE-coordinated data warehouse
- Access to detailed benchmark data on multiple measures not available in state or federal databases – including EL re-designation, chronic absenteeism, and SEL/CC factors
- Access to CORE-developed and validated SEL and CC survey instruments with implementation
- Twice annual convenings of collaborating districts focused on common problems of practice

Additional Collaborative Learning Opportunities

- Targeted supports for low performing schools via coaching from high performing schools and communities of practice
- Professional development opportunities for district staff with education experts and peers in other CA districts
- Annual collaboration convenings for participating Superintendents

Provide your teachers and leaders with more information –academic growth and students' social-emotional skills – so they can better support their students.

Collaborate and learn from peers who are having success with similar students.







Our innovative approach to accountability and support is already impacting state policy and educator and school leader practice.

Let's work together to impact the re-design of the state's accountability system!

Visit http://bit.ly/coreinterest to share your interest in joining our data collaborative.



Studying the CORE "intervention"

Additional metrics

Data dashboard

Convenings and meetings

Shared benchmark data



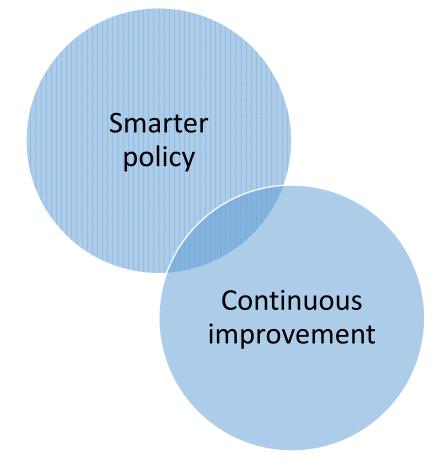
Targeted support for school improvement

Capacity building at all levels

Continuous improvement

Improved student outcomes

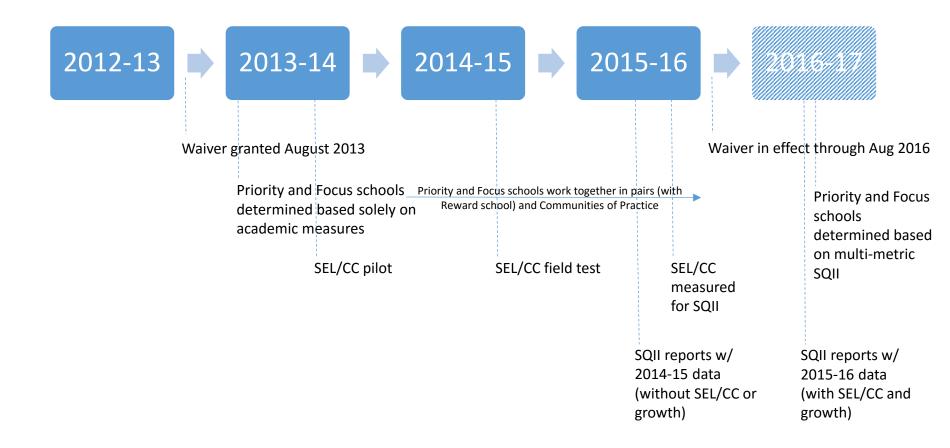




- 1. What is the effect of including diverse measures in an accountability index?
- 2. Does peer-to-peer collaboration lead to changes in practice?



CORE waiver policy implementation timeline



1. What is the effect of including innovative measures in an accountability index?

- Has measuring SEL/CC raised awareness of these issues in each district? In the schools?
- How has measuring these things changed behavior in each of he districts? In the schools?
 - What training/support was provided around interpretation of measures or practices to support SEL?
- Does the multi-metric SQII change the identification of the bottom 5% of schools? In what way(s)?
- Do some schools/teachers/classrooms have higher SEL than expected? What explains this?



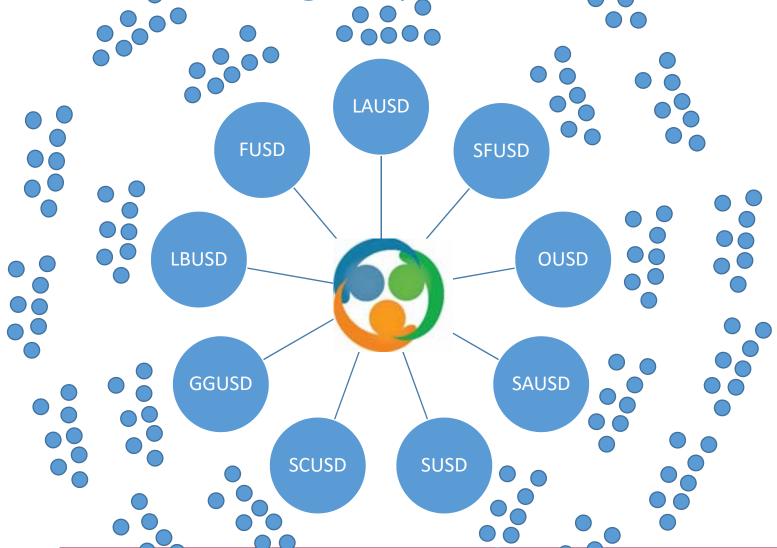
2. Does peer-to-peer collaboration lead to changes in practice at the local level?

- What activities have staff in the local districts participated in with CORE?
- How do these collaborative activities fit into the structures and policies within each district?
- Are staff at the local level engaging in "continuous improvement"? Is there any evidence that this activity will lead to changes in student outcomes?
 - Schools involved in pairing or communities of practice
 - District leaders working together on common problems of practice

Use of data and evidence Rigorous inquiry



Understanding implementation





Analytic approach

Quantitative analysis

Uncover patterns in data

Explore variation

Analyze outcomes

Understand implementation

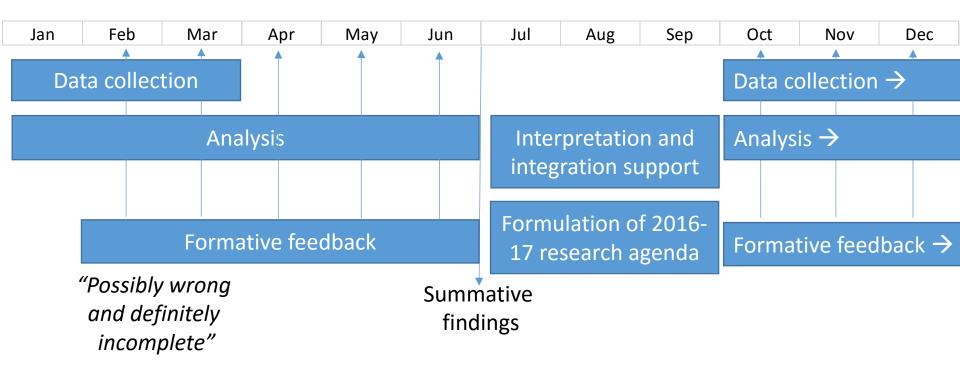
Highlight "best practices"

Explain variation

Qualitative analysis



Research to support improvement



Join us! CORE-PACE Research Partnership

- Network of researchers across the state supporting continuous improvement and policymaking
- Access to:
 - Streamlined process for conducting research of interest to CORE partners
 - Quantitative data system
 - Existing relationships with district leaders
 - Understanding of policy and practice context in each site
 - Structure for helping districts use data and research for improvement
- Dynamic research process -> Questions change with focus on problems of practice within districts



Discussion



Contact us

- Noah Bookman: noah@coredistricts.org
- Heather Hough: hjhough@stanford.edu
- Rick Miller: rick@capitolimpact.org
- David Plank: dnplank@stanford.edu

Appendix



Sample SEL Items

To assess social-emotional skills, we ask students about their beliefs and behaviors. Below, for instance, are some self-management items.

Please answer how often you did the following during the past 30 days...

- I came to class prepared.
- I remembered and followed directions.
- I got my work done right away instead of waiting until the last minute.
- I paid attention, even when there were distractions.
- I worked independently with focus.
- I stayed calm even when others bothered or criticized me.
- I allowed others to speak without interruption.
- I was polite to adults and peers.
- I kept my temper in check.

(Almost Never, Once in a While, Sometimes, Often, Almost All the Time)



Sample Culture-Climate Items

To assess culture-climate, we ask students, staff and families about their experiences with and perceptions of their school. Below are sample items from the student culture-climate survey.

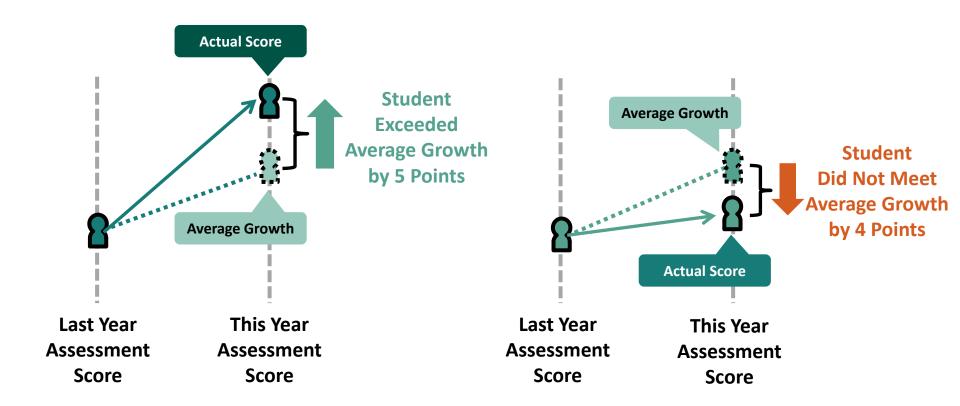
How strongly do you agree or disagree with the following statements?

- Adults at this school encourage me to work hard so I can be successful in college or at the job I choose.
- My teachers work hard to help me with my schoolwork when I need it.
- Teachers give students a chance to take part in classroom discussions or activities.
- This school promotes academic success for all students.
- This school is a supportive and inviting place for students to learn.
- Teachers go out of their way to help students.
- I feel close to people at this school.

(Strongly Disagree, Disagree, Neither Disagree Nor Agree, Agree, Strongly Agree)



Growth in General



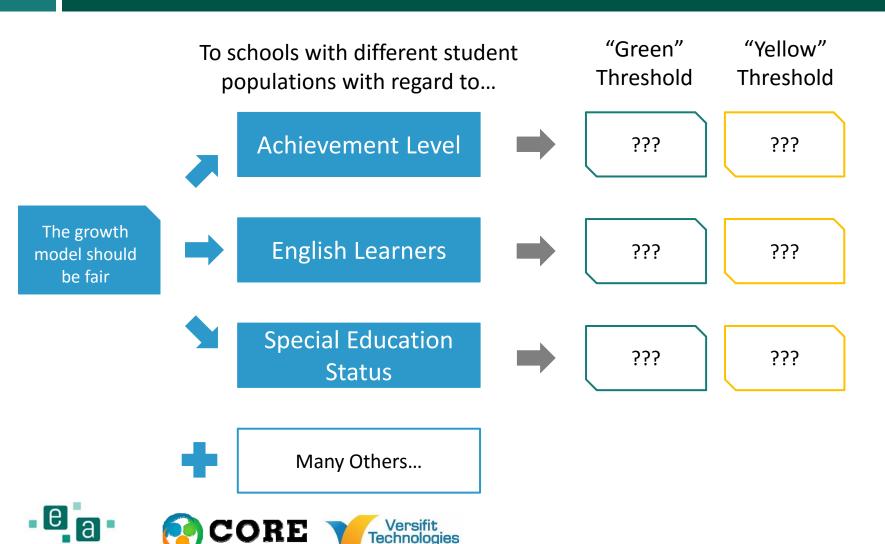






An Example: Fairness

Education Analytics INC.



Schools Sorted by Poverty Group

School A

School B

School C

School D

School E

School F

Low-Poverty Schools

School G

School H

School I

School J

School K

School L

Mid-Poverty Schools School M

School N

School O

School P

School Q

School R

High-Poverty Schools High Growth

Average Growth

Low Growth

Now, color code the schools by their SGP result using different models







Completely Neutral Model

School A

School B

School C

School D

School E

School F

Low-Poverty Schools School G

School H

School I

School J

School K

School L

Mid-Poverty Schools

School M

School N

School O

School P

School Q

School R

High-Poverty Schools

Key

High Growth

Average Growth

Low Growth







Somewhat Neutral Model

School A

School B

School C

School D

School E

School F

Low-Poverty Schools School G

School H

School I

School J

School K

School L

Mid-Poverty Schools

School M

School N

School O

School P

School Q

School R

High-Poverty Schools

Key

High Growth

Average Growth

Low Growth







Very Non-Neutral Model

School A

School B

School C

School D

School E

School F

Low-Poverty Schools

School G

School H

School I

School J

School K

School L

Mid-Poverty Schools School M

School N

School O

School P

School Q

School R

High-Poverty Schools

Key

High Growth

Average Growth

Low Growth







Model Options

- Model A
 - Growth with flexible pre-test coefficient
 - No demographic adjustments
- Model B
 - Growth with flexible pre-test coefficient
 - Student-level demographic adjustments
- Model C
 - Growth with flexible pre-test coefficient
 - Student-level and school-average demographic adjustments

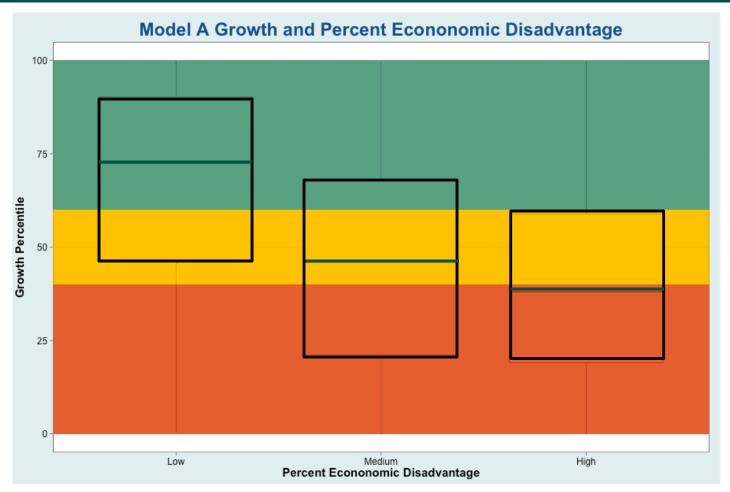






Method A: Only controlling for prior achievement

Somewhat neutral with respect to Percent Socioeconomically disadvantaged.



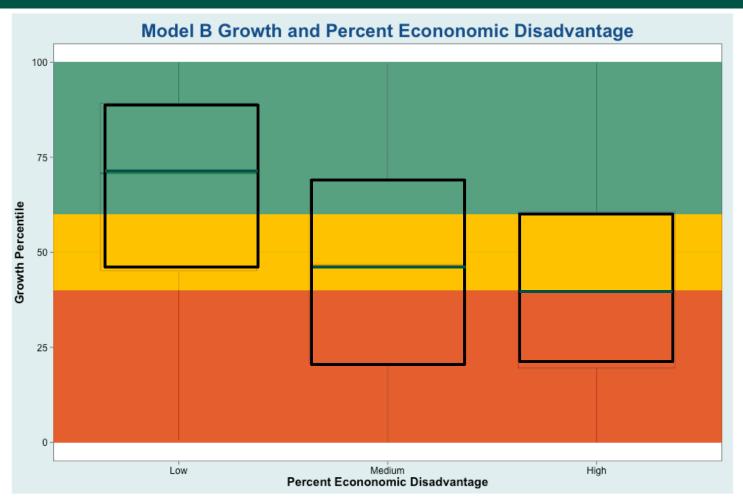






Method B: Controlling for prior achievement and select student demographics.

Somewhat neutral with respect to Percent Socioeconomically disadvantaged.









Method C: Controlling for prior achievement, and select student and school avg. demographics.

Fairly neutral with respect t Percent Socioeconomically disadvantaged.

