Understanding the School Impact on Academic and Social Emotional Learning: Lessons from the CORE Districts

Webinar, May 30th 2019

Agenda for the webinar

- Dave Calhoun & Rick Miller: Background on CORE's work
  - multiple measures, continuous improvement & why CORE chose to measure SEL
- Heather Hough: What we know about SEL measures from prior research
- Sean McLaughlin: How a growth model works and why it matters
- Hans Fricke: New learning about the development of an SEL growth model
- Reflections
  - Jennifer Bourgeois, Corona Norco Unified School District
  - James Feffer, Palm Springs Unified School District
- Q & A

History of CORE's Work on Improvement and SEL Surveys

Dave Calhoun & Rick Miller – CORE Districts

CORE: Who We Are
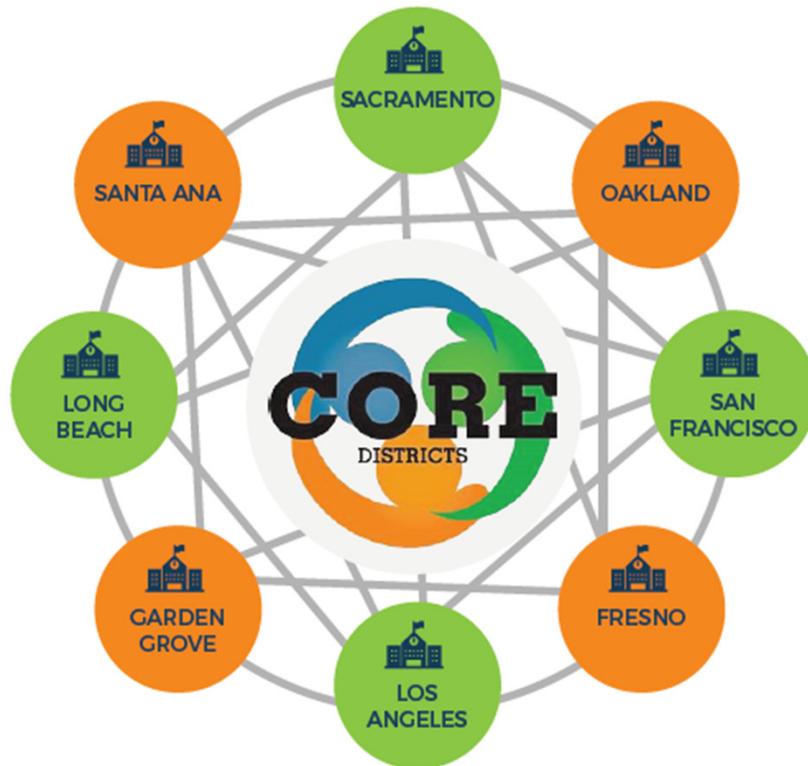
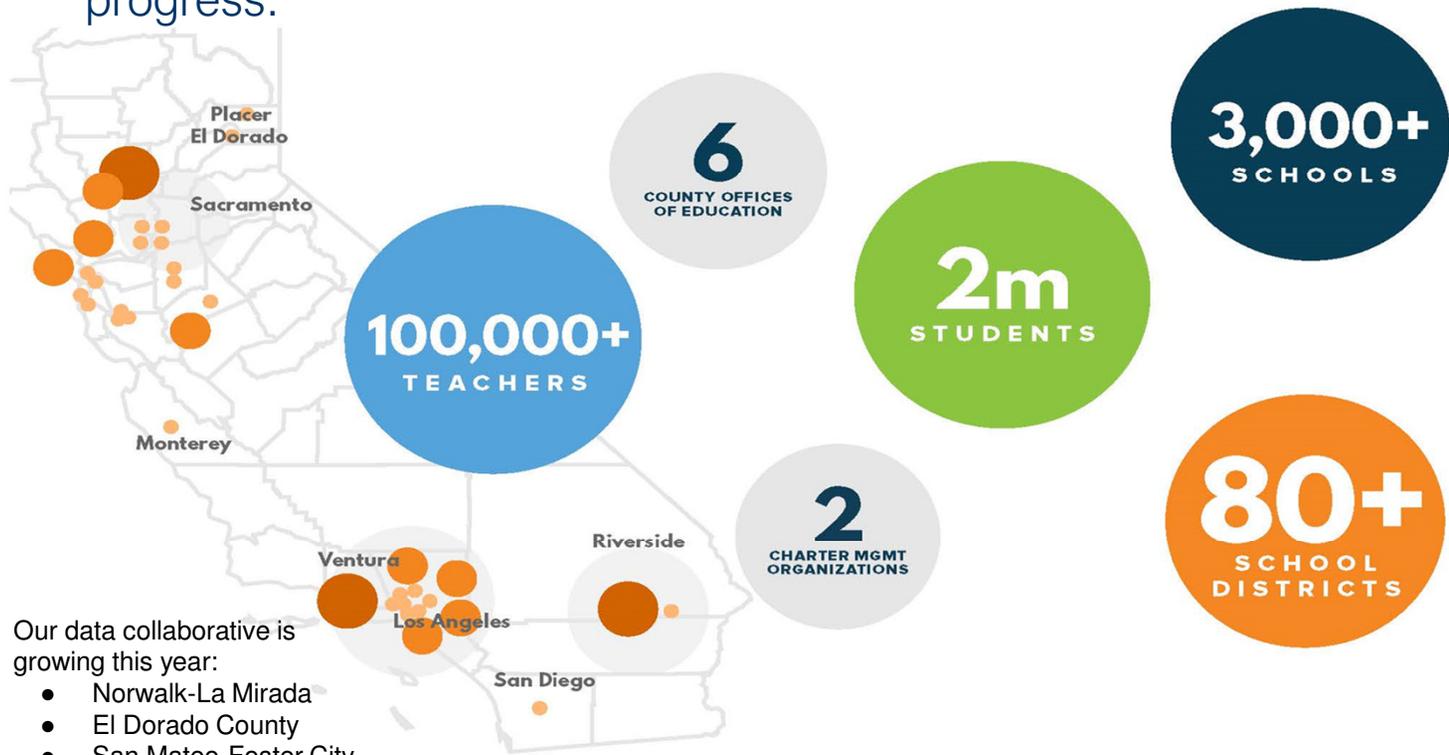
8 of California's largest districts

1 million students

56,000 educators

1,800 schools

CORE DATA COLLABORATIVE provides educators in urban, rural and suburban districts a clearer picture of school progress.

6 COUNTY OFFICES OF EDUCATION

100,000+ TEACHERS

2m STUDENTS

3,000+ SCHOOLS

2 CHARTER MGMT ORGANIZATIONS

80+ SCHOOL DISTRICTS

Placer
El Dorado
Sacramento
Monterey
Ventura
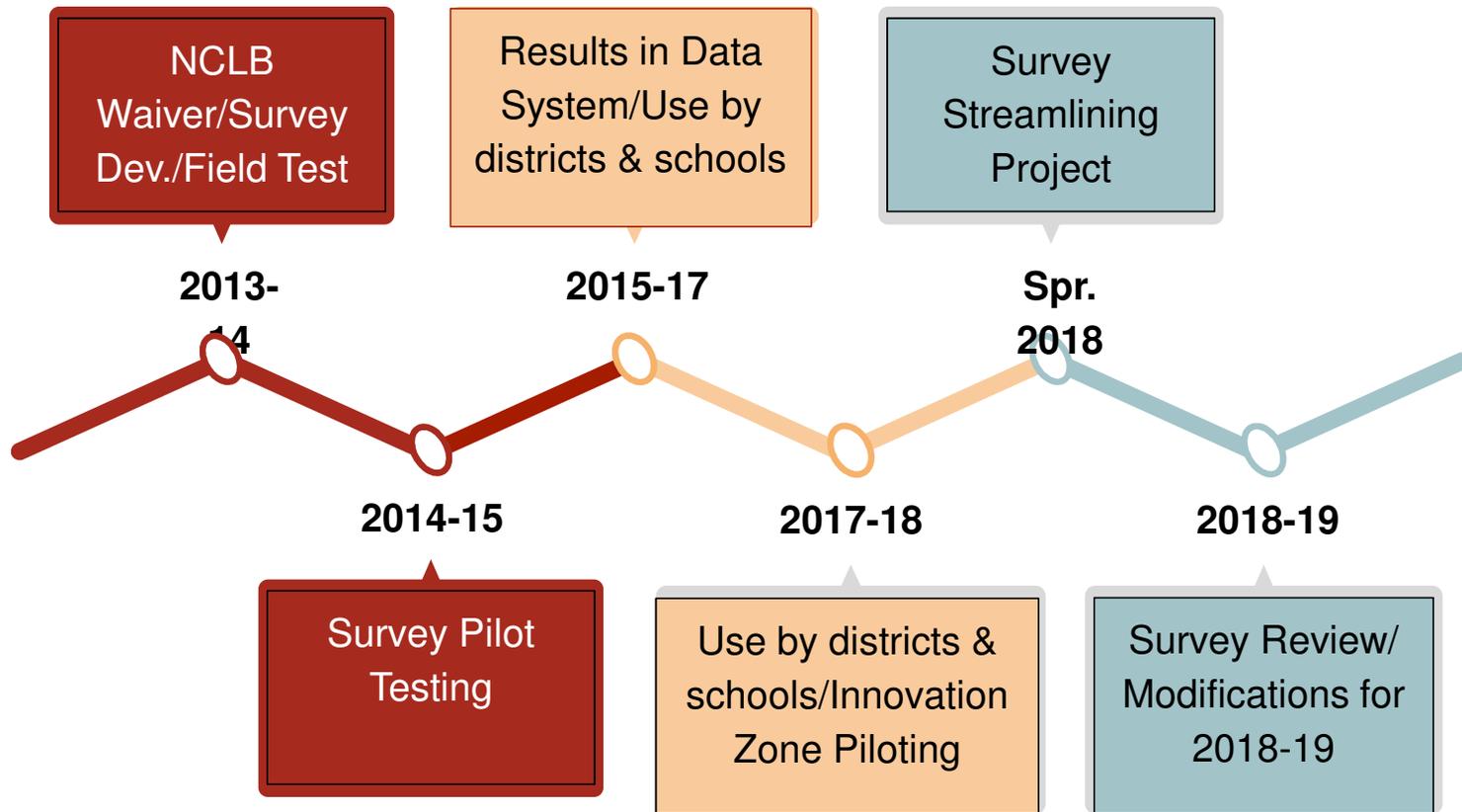Los Angeles
San Diego
Riverside

Our data collaborative is growing this year:
- Norwalk-La Mirada
- El Dorado County
- San Mateo-Foster City
- Monterey County
- San Diego County
- West Contra Costa
- Placer County

CORE DISTRICTS

CORE Focus Areas Over Time

- CORE 1.0
  - Focus on cross-district collaboration and equity
  - 2010-2013
- CORE 2.0
  - Focus on integrated and holistic school accountability and equity
  - 2013-2016
- CORE 3.0
  - Focus on developing capacities for continuous improvement through data, research, improvement practices through a lens of equity
  - 2017-2019

History of the CORE Student Surveys

CORE SEL Surveys in Use in 2019

- Districts Implementing the CORE Surveys:
  - Los Angeles Unified School District
  - Fresno Unified School District
  - Oakland Unified School District
  - San Francisco Unified School District
  - Santa Ana Unified School District
  - San Bernardino City Unified School District
  - Palm Springs Unified School District
  - Corona-Norco Unified School District

- Some 15-20 additional districts in the Spring of 2019

CORE SEL Constructs

SELF-MANAGEMENT
ability to regulate one's emotions, thoughts, and behaviors effectively in different situations

SOCIAL AWARENESS
ability to take the perspective of and empathize with others, including those from diverse backgrounds and cultures

GROWTH MINDSET
belief that one's strengths can grow with effort

SELF-EFFICACY
belief in one's ability to succeed in achieving an outcome or reaching a goal

CORE SEL Data for Continuous Improvement

- In concert with the district, school teams track school progress over time

- Create and implement school plans (some within the SPSA) focused on supporting kids in SEL competencies

- Develop interventions and learning opportunities within and outside of classrooms to support SEL development

What we are learning about…

Social and Emotional Learning

…based on CORE's survey
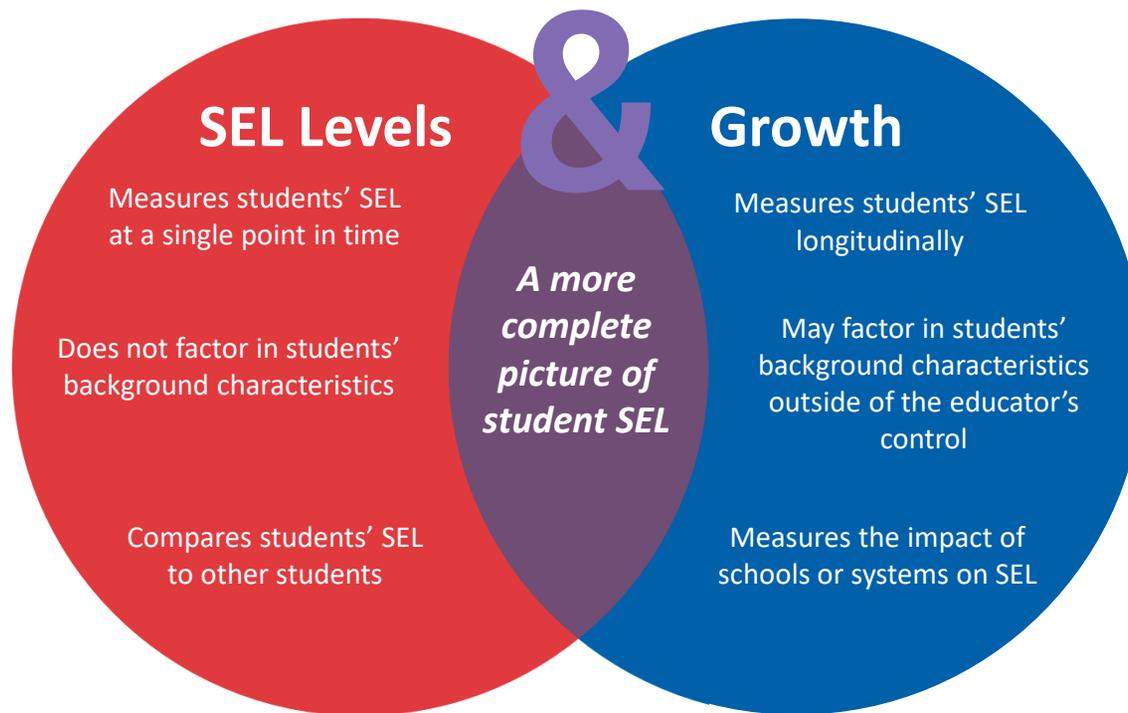
GROWTH MODELS

Sean McLaughlin – Education Analytics

What is a Growth Model?

- ☐ A statistical "growth model" or a "value-added model" is a statistical approach for measuring the effect that a school has on student's academic growth from one year to the next

- ☐ We can apply this statistical methodology to measure the effect a school has on student's growth in SEL from one year to the next

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Power of Two Measures

SEL Levels & **Growth**

Measures students' SEL at a single point in time

Does not factor in students' background characteristics

Compares students' SEL to other students

A more complete picture of student SEL

Measures students' SEL longitudinally

May factor in students' background characteristics outside of the educator's control

Measures the impact of schools or systems on SEL

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Adapted from materials created by Battelle for Kids

How a Growth Model Works

Step 1

After survey is complete, EA **collects and scales student data** from CORE and **determines average growth for each subject and grade level as well as demographic adjustments**

Note: specific numbers on this slide for adjustments are for illustrative purposes, the actual adjustment amounts are calculated each year and for each grade independently and reflect the actual observed trends across the CORE Districts

Step 2

Each **student gets a customized statistical prediction** based on his or her characteristics

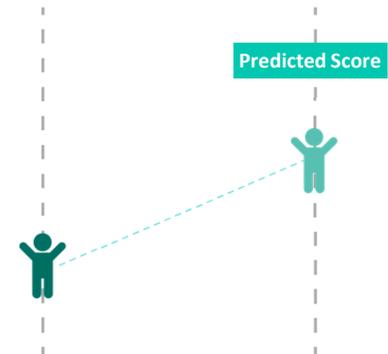+35 Average growth for students with similar prior SEL scale score

+2 Adjustment for student-level characteristics

-5 Adjustment for school-level characteristics
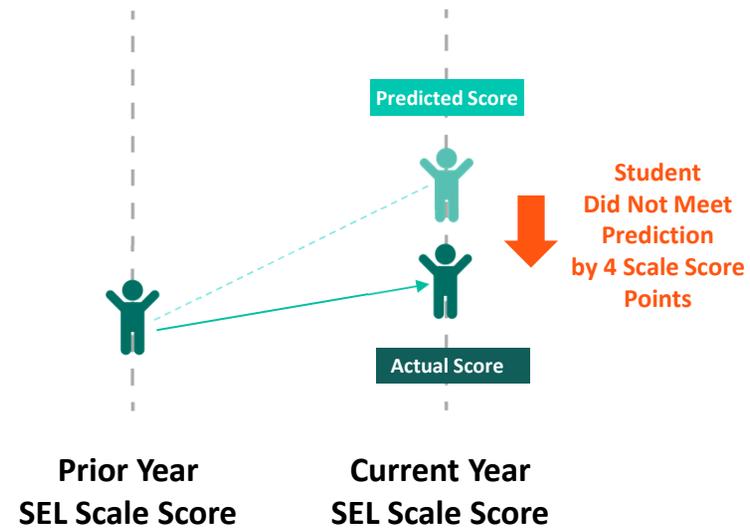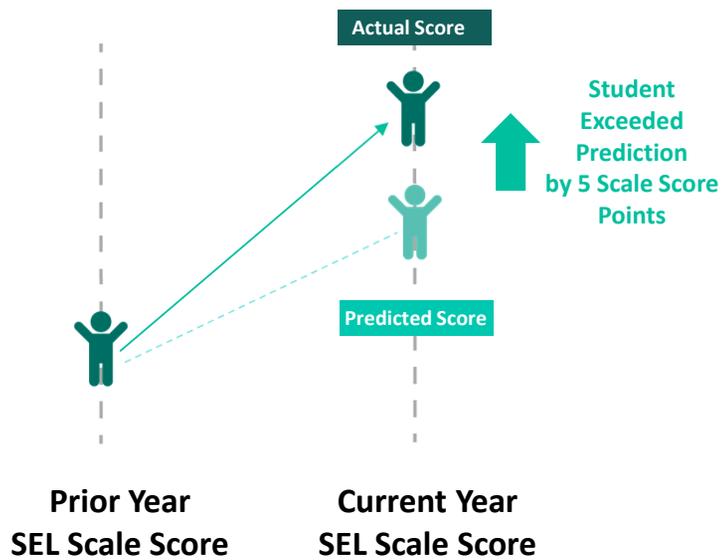
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+32 points During the year

Predicted Score

Prior Year SEL Scale Score

Current Year Predicted SEL Scale Score
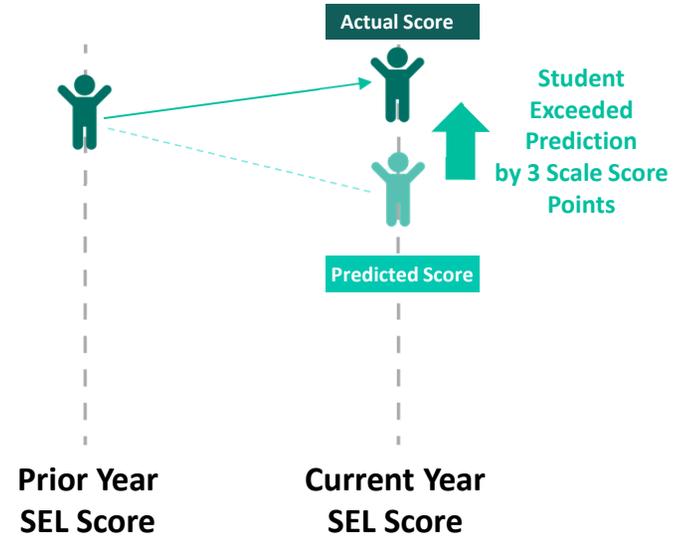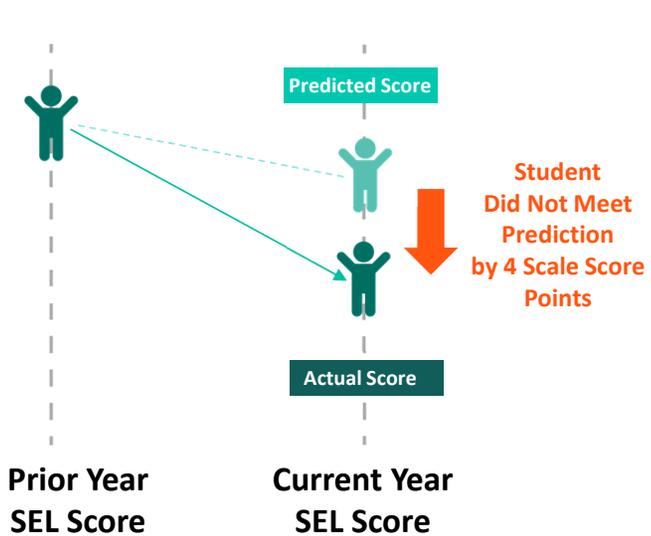
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How a Growth Model Works

Step 3

☐ Determine whether each **student exceeded or did not meet prediction, and by how much**

Actual Score

Student Exceeded Prediction by 5 Scale Score Points

Predicted Score

Prior Year SEL Scale Score

Current Year SEL Scale Score

Predicted Score

Student Did Not Meet Prediction by 4 Scale Score Points

Actual Score

Prior Year SEL Scale Score

Current Year SEL Scale Score

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Students with **High** Prior Year SEL Scores

Predicted Score
Actual Score
Student Did Not Meet Prediction by 4 Scale Score Points
Prior Year SEL Score
Current Year SEL Score

Actual Score
Predicted Score
Student Exceeded Prediction by 3 Scale Score Points
Prior Year SEL Score
Current Year SEL Score

Students with **Low** Prior Year SEL Scores

Predicted Score
Actual Score
Student Did Not Meet Prediction by 3 Scale Score Points
Prior Year SEL Score
Current Year SEL Score

Actual Score
Predicted Score
Student Exceeded Prediction by 4 Scale Score Points
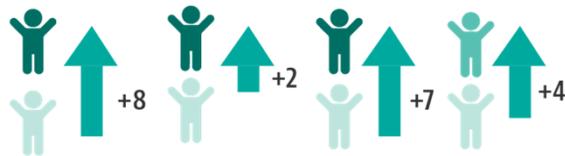Prior Year SEL Score
Current Year SEL Score
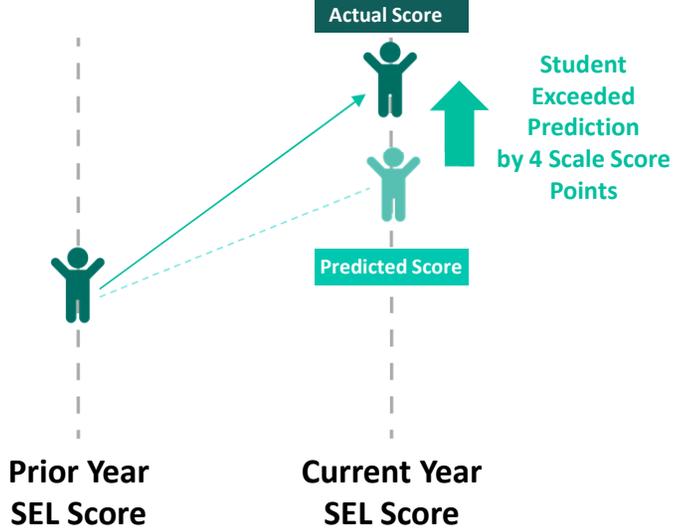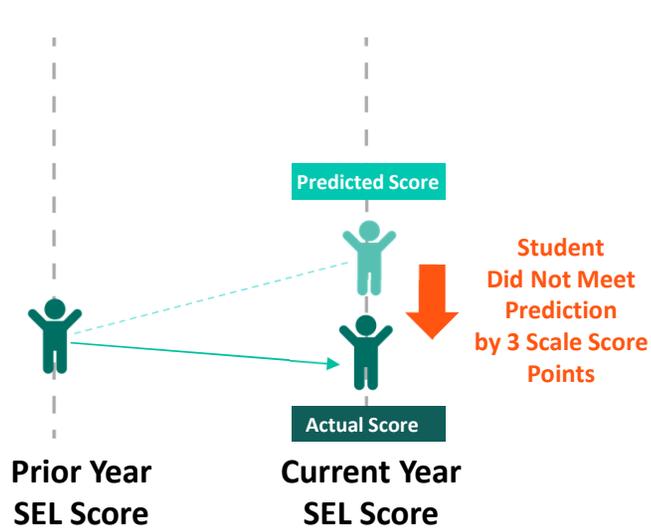
How a Growth Model Works

Step 4

☐ **On average**, did a school's students tend to exceed or not meet their predictions, and by how much?

School A
(Average **+3.25** Scale Score Points)

Above Average SEL Growth
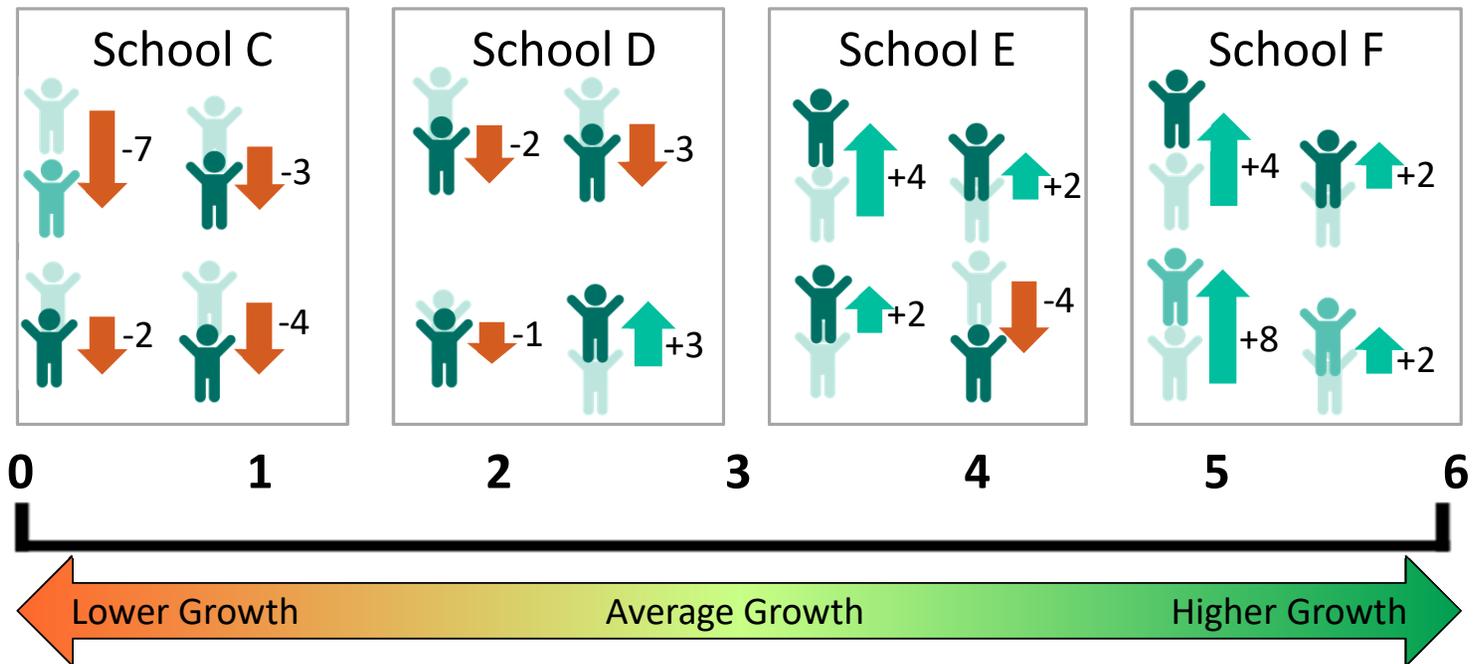
School B
(Average **-1.25** Scale Score Points)

Below Average SEL Growth

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How a Growth Model Works

Stability of School Contributions to Student Social-Emotional Learning Gains

Hans Fricke & Heather Hough, Policy Analysis for California Education - Stanford University

Susanna Loeb, Brown University

Robert Meyer, Andrew Rice, & Libby Pier, Education Analytics

Motivation

- School value-added models are increasingly used to measure schools' contributions to student success

- Increasing interest in measuring SEL

- Recent work shows meaningful differences across schools in changes in SEL scores by grade (Loeb et al., 2018), but whether these differences represent the effects of schools is still unclear

- We examine the stability of the estimated school-by-grade effects on SEL across two years

Data

- Data from 5 of the 8 CORE Districts (Fresno, Long Beach, Los Angeles, San Francisco, and Santa Ana)
- SEL scale scores in three years: 2014-15, 2015-16, and 2016-17 - growth mindset, self-management, self-efficacy, social awareness
- Math and ELA scores (SBAC)

Methods

- Estimate value-added models by grade and by year (2015-16 and 2016-17) for four SEL (grades 5 – 12) and two SBAC outcomes (grades 5 – 8)

- Control for pretest scores in all six outcomes (except only SEL outcomes in grades 10 and 11) and demographics
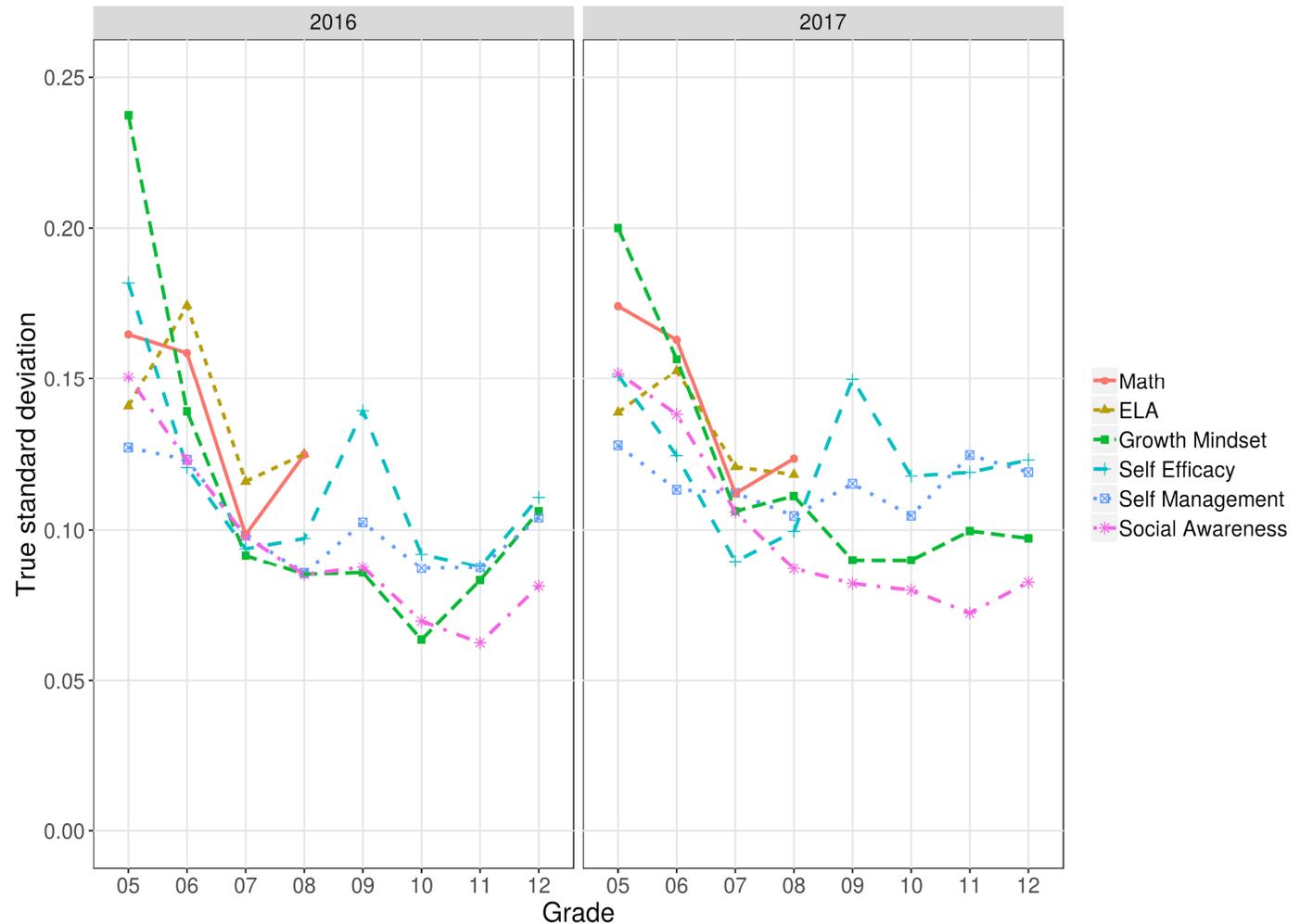
- Control for measurement error

Estimate correlations between the same grades in different years (e.g., Grade 6 students in 2015-16 and Grade 6 students in 2016-17)

Results

Variance of School Growth Estimates:

Standard Deviations by Grade and Year

SEL school effects vary as much as school effects on SBAC scores
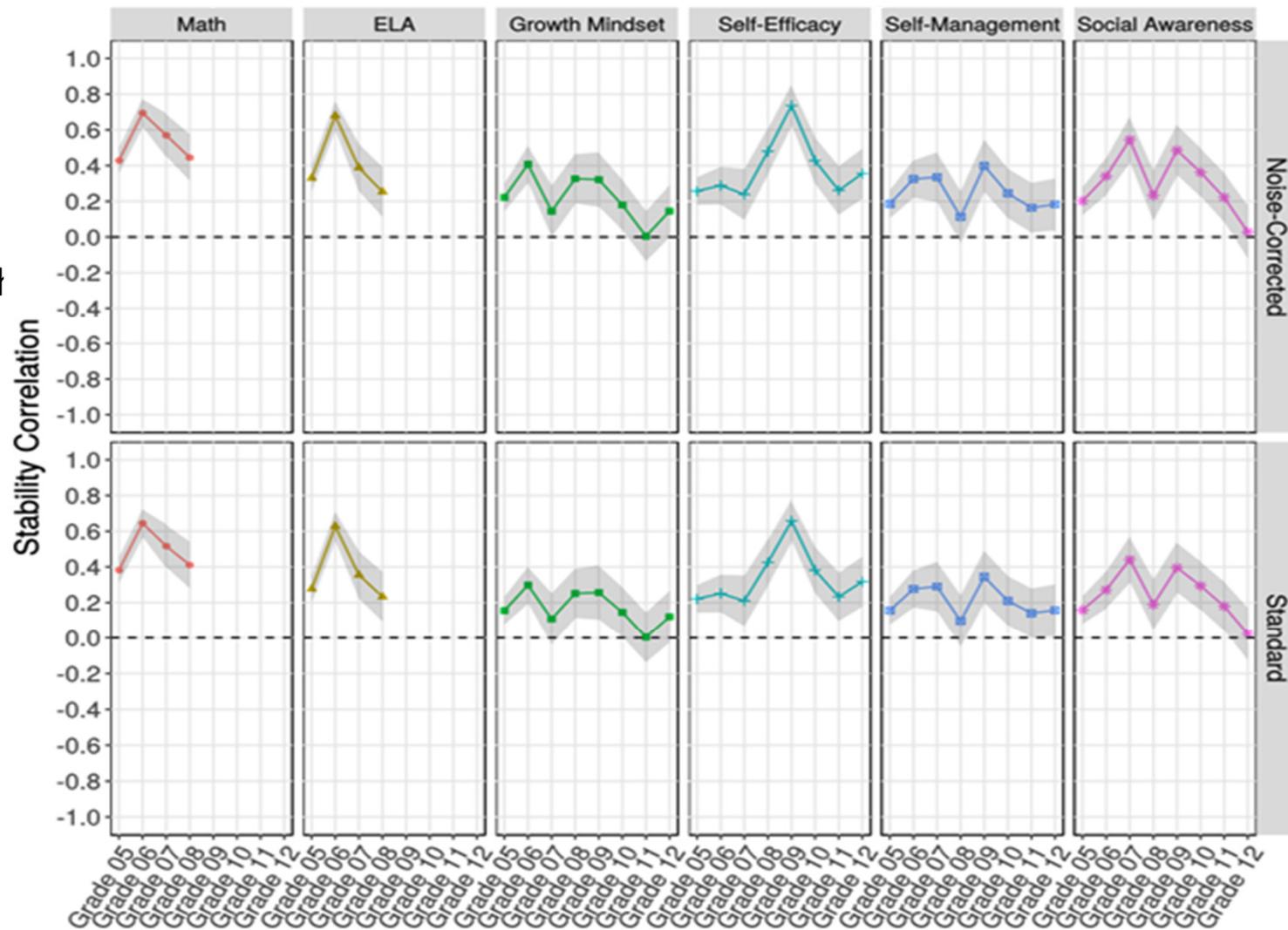
Results

Correlations of School Growth Measures Across Years:

Correlation are mostly positive and significant but rather low

Evidence that school effects capture true contributions

Much of the school effect in one year is unrelated to the school effect in the next year
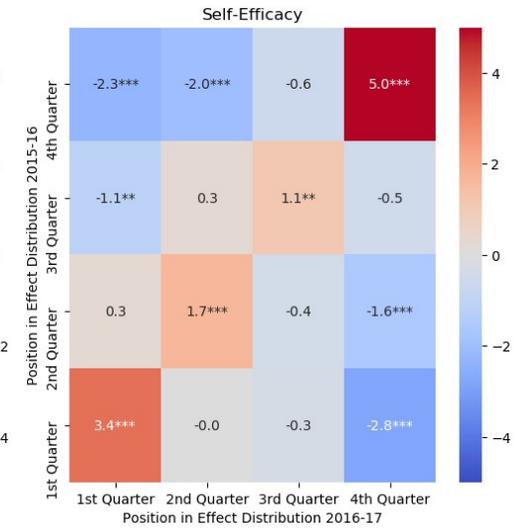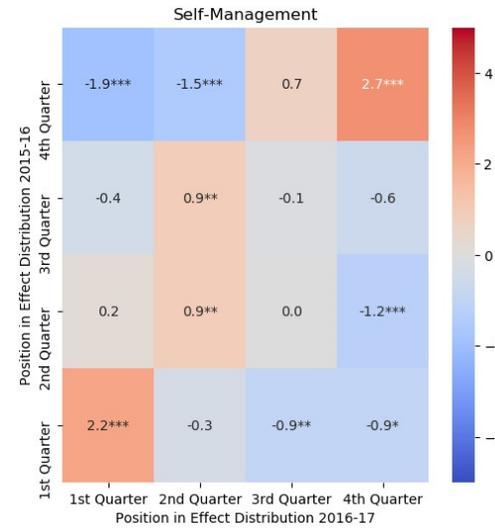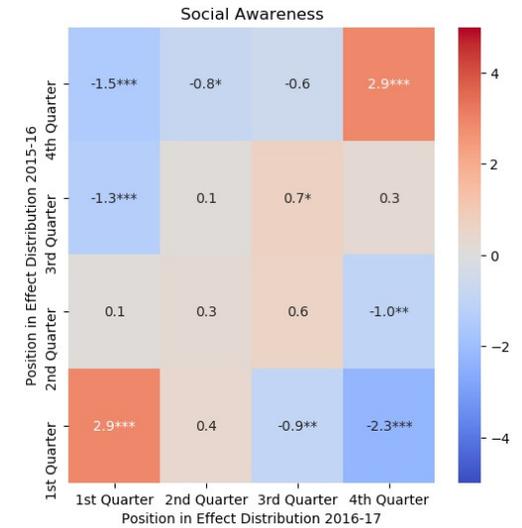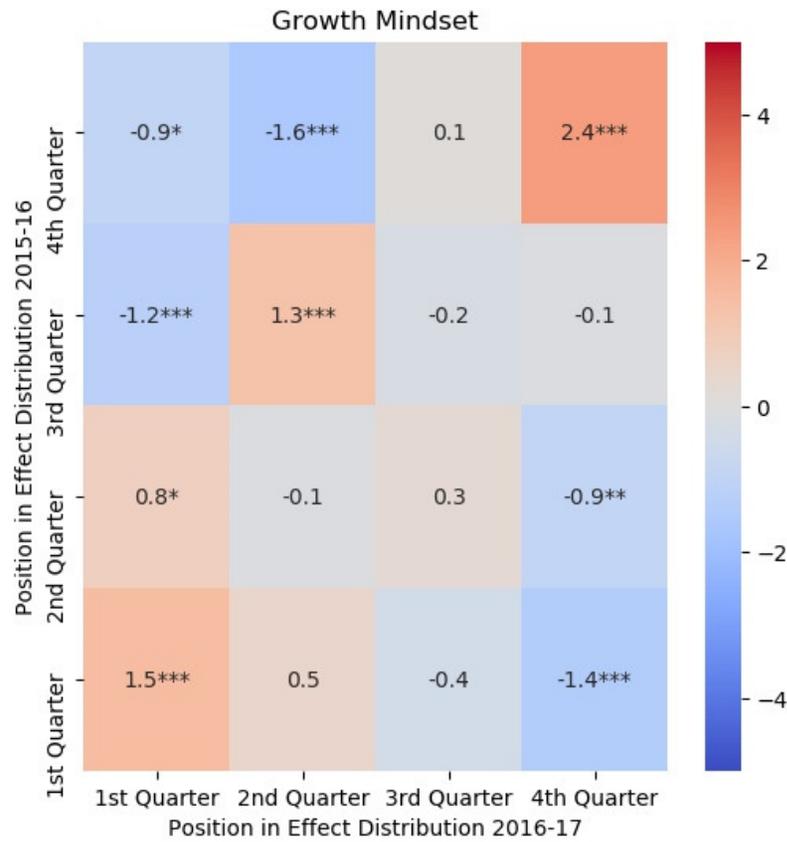
Results

Growth Mindset

Examining Movement of Schools Along School Effect Distribution:

Quarter Rank Transitions from 2015-16 to 2016-17

Number of schools that are consistently among schools with highest and lowest contributions to SEL

Social Awareness

Self-Management

Self-Efficacy

Conclusion

- Evidence that school value-added measures capture real contributions to SEL

- However, effects are not very stable form one year to the next
  - Schools may not have the kinds of effects on students' social-emotional development that persists over long spans of time (i.e., a year or more) - unlikely
  - Proportion of variance in estimated school effects actually explained by school practices may be lower than models suggest

Conclusion

- Research needed to better understand what drives low stability and how stable school effects based on other SEL measures are

- These measures are not ready to be used for school accountability or high-stakes decision making

- A group of schools does stand out, may help identify top or bottom performers and inform practices

- SEL should be measured. For instance, levels of SEL are more stable and help identify schools and students in need of support.

Practitioner Reflections

Jennifer Bourgeois, Ph.D.

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- Corona-Norco Unified School District

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https://www.edpolicyinca.org/projects/core-pace-research-partnership/sel