## Supporting Students' Social-Emotional Learning as a Force for Recovery

May 8, 2020 12:00 pm – 1:00 pm

Moderated by Heather Hough, Executive Director





### Panelists



**Rick Miller** Executive Director *CORE Districts* 



Klint Kanopka PhD Candidate Stanford Graduate School of Education



Libby Pier Research Manager *Education Analytics* 



Jennifer Peck Executive Director Partnership for Children and Youth



Mai Xi Lee Director II, Social Emotional Learning Sacramento City Unified School District



Policy Analysis for California Education

### Today's Agenda

- **Rick Miller** Background on SEL in the CORE Districts
- Klint Kanopka New research showing that improvements in students' SEL is related to subsequent improvements in other outcomes
- Libby Pier Compilation of research showing that
- Jennifer Peck What are systems and structures that could be built to advance this vision at scale?
- Mai Xi Lee What can schools and districts do to support students when they re-enter?
- **Discussion** Moderated questions for panelists from the audience

### Logistical notes

- Please type your questions & comments into the Q&A box
  - You can vote on others' entries, which will determine which questions get answered first
- Slides and links to resources can be found on the PACE event page:
- <u>https://edpolicyinca.org/events/pace-webinar-supporting-students-social-emotional-learning-force-recovery</u>
- The video recording from this webinar will be posted online early next week

# **Rick Miller**

Executive Director CORE Districts

PACE

# **CORE** Districts

Fresno Unified
Garden Grove Unified
Los Angeles Unified
Long Beach Unified
Oakland Unified
Sacramento City Unified
San Francisco Unified
Santa Ana Unified





### How the CORE districts work together

- 2010 to 2013: District Partnerships
  - Standards Implementation
  - Building Relationships
- 2013 to 2016: CORE ESEA Waiver
  - Measuring More than Test Scores
  - Equity Driven Accountability School Report Cards
  - Continuous Improvement Based Interventions (e.g., School Pairings)
- Current Work: Systems Improvements
  - Equity Driven Analytics the CORE Data Collaborative
  - Testing our Theory of Improvement at the School Level and District Level
  - Networked Improvement Communities







Created by Districts for Districts



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



With almost half a million students surveyed across two years, CORE's measures of social-emotional skills let us explore how to measure these essential skills at scale.

#### Surveys of Students' Social-Emotional Learning

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.

# Klint Kanopka

PhD Candidate

CIE

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# Changes in Social-Emotional Learning: Insights from CORE

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### Acknowledgements





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### Background

- Social-emotional learning (SEL) skills are strongly predictive of educational and labormarket success (Farrington et al. 2012; Duckworth et al. 2007; Dweck 2006; Kautz et al. 2014; Deming 2017)
- Only one other study has assessed the relationship between changes in an SEL measure and changes in student outcomes (Duckworth, Tsukayama, & May, 2010)
- CORE districts provide natural place to look at relationship between changes in SEL and changes in academic and behavioral outcomes

### **Research Questions**

- Are within student changes in self-reported social-emotional skills predictive of changes in academic outcomes for students?
- Do the relationships between SEL changes and changes in other student outcomes vary by student characteristics such as gender, race, economically disadvantaged status, and previous SEL level?

### Sample

- 49,216 students
- Three school years: 2014-15, 2015-16, 2016-17
- Grades: 4-8
- Five districts:
  - Fresno
  - Long Beach
  - Los Angeles
  - San Francisco
  - Santa Ana



### Measures

#### **Independent Variables**

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- Four self-report SEL scales
- Growth Mindset
- Social Awareness
- Self-efficacy
- Self-management
- Measured yearly
- Standardized within cohort-year

#### **Dependent Variables**

- Achievement tests
  - SBAC Math
  - SBAC ELA
- Attendance Rate
- Measured yearly
- Standardized within cohort-year



### Modeling Approach

- Cohort-year standardized variables
  - Looks at student changes relative to their peers
  - Controls for grade effects
- Individual fixed effects
  - Controls for student characteristics that do not vary with time

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- Link together observations for the same student over time
- Provide estimates of within-student trends

### All measures exhibit year-to-year change



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### SEL growth is associated with better outcomes



### Lowest SEL students see most concurrent growth



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### Students see gains regardless of SBAC Math level



### Takeaways

- Gains in SEL are positively associated with increases in achievement and attendance
  - Associations are largest for growth mindset and self-management
- Associations between SEL and math achievement vary across levels of SEL
  - Largest for the students with the lowest levels of SEL
  - SEL growth associated with SBAC Math growth regardless of SEL level
- Associations vary across levels of math achievement
  - All levels see an association between SEL gains and gains in SBAC Math
  - Different SEL constructs are more associated at different levels of SBAC Math
- Results for SBAC ELA and attendance rate closely mirror SBAC Math
- Associations between SEL and outcomes are consistent across subgroups
  - All groups see outcome growth alongside SEL growth





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Improving lives through learning



# Libby Pier, PhD

Research Manager

**Education Analytics** 

CE

Policy Analysis for California Education



### School & Classroom Effects on Students' SEL Growth

Dr. Libby Pier

### What is a growth model?

### What is a Growth Model?

- A statistical approach for measuring the effect that a school (or classroom) has on *students' academic growth* from one year to the next
- We can apply this statistical methodology to measure the effect a school (or classroom) has on *students' growth in SEL* from one year to the next



#### Step 1

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

**Note**: Specific numbers on this slide for adjustments are for illustrative purposes.

### 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

+32 points During the year





Step 3

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





### Step 4

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

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



+7

Above Average SEL Growth

#### **School B**

(Average -1.25 Scale Score Points)



**Below Average SEL Growth** 



### Step 5

 Growth result is converted to a common scale (0-6 scale shown as an example)





# School Effects

### Results

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



#### Variance of School Growth Estimates: Standard Deviations by Grade and Year



### Results

- Correlations are mostly positive and significant, but generally 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

#### **Correlations of School Growth Measures Across Years**





# Classroom Effects

### Results

#### How "big" or "small" are classroom effects on students' SEL growth?

#### Variance Explained at Each Level (And as %)

Outcome	School Level	Classroom Level	Student Level
Math	0.02 (7%)	0.05 (17%)	0.21 (77%)
ELA	0.01 (4%)	0.03 (10%)	0.24 (86%)
Growth Mindset	0.02 (3%)	0.07 (9%)	0.69 (88%)
Self-Efficacy	0.02 (2%)	0.05 (6%)	0.77 (92%)
Self-Management	0.01 (1%)	0.04 (5%)	0.74 (94%)
Social Awareness	0.02 (2%)	0.05 (5%)	0.82 (93%)

### Results

#### Do classrooms with high SEL growth also have high academic growth?

#### Weighted Correlations Between Classroom Effects

Social Awareness	0.07 (0.02)	0.11 (0.02)	0.27 (0.03)	0.43 (0.02)	0.5 (0.02)	1 (0)	
Self-Management	0.04 (0.02)	0.09 (0.02)	0.15 (0.03)	0.52 (0.02)	1 (0)	0.5 (0.02)	
Self-Efficacy	0 (0.02)	0 (0.02)	0.26 (0.03)	1 (0)	0.52 (0.02)	0.43 (0.02)	Weighted Correlation 1.00 0.75
Growth Mindset	0.17 (0.02)	0.2 (0.02)	1 (0)	0.26 (0.03)	0.15 (0.03)	0.27 (0.03)	0.50
ELA	0.62 (0.01)	1 (0)	0.2 (0.02)	0 (0.02)	0.09 (0.02)	0.11 (0.03)	
Math	1 (0)	0.62 (0.02)	0.17 (0.02)	0 (0.02)	0.04 (0.02)	0.07 (0.02)	
	Math	ELA	Growth Mindset	Self-Efficacy	Self- Management.	Social . Awareness	

# Conclusion

### Conclusions

- Schools and classrooms affect students' growth in SEL from one year to the next
- Classrooms have a larger impact on SEL growth than schools
- Schools' impacts are not that stable from one year to the next
- These measures are not ready to be used for any sort of high-stakes accountability
- But they could be useful for identifying:
  - Consistently high- or low-growth SEL schools  $\rightarrow$  for continuous improvement
  - Consistently high- or low-growth SEL classrooms → for professional development and learning

# Jennifer Peck

**Executive Director** 

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Partnership for Children and Youth

## Mai Xi Lee

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### Director II, Social Emotional Learning Sacramento City Unified School District

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### Discussion