

# Academic Support Index

Full presentation available at:

<http://academicsupportindex.blogspot.com>

*“Improving student outcomes  
through evidence based education”*



# Theoretical Framework

- Adverse Childhood Experience Study
  - “Dose Response relationship” between childhood trauma and the chances for negative health outcomes (Fellitti, 1998)
- Response to Intervention
  - Increased level of support along with increasing need
- Educational Debt
  - A measure of the obligation we have to support each student (Ladson-Billings, 2006)

# Started with questions we had...

- How can we tell if our programs or interventions are actually making a difference for students?
- How can we figure out which students might struggle academically in advance so we can target them for support?
- How can we target our limited resources to the students most in need?
- How can we talk about the achievement gap without contributing to stereotype threat?
- Fundamentally, how can we become more effective with our outcomes and more efficient with our resources?

# The Academic Support Index...

- Allows you to look at student data along a demographic continuum as opposed to the traditional use of “buckets” such as gender, race, or socioeconomic status.
- Is the sum of points assigned to characteristics that correlate to academic underperformance.
- “Headwinds” are things that make learning more challenging.
- “Tailwinds” are things that make learning easier.

# Different ways to think of the ASI:

- A measure of the amount of support a student may need to meet his/her potential
- A measure of our obligation to provide that support
- The ASI is the sum of the “headwinds” that a student faces
- “Headwinds” are outside our locus of control
- “Tailwinds”:
  - Within our control
  - Come in the form of instruction, interventions, and support
  - Improve student outcomes

# Summary of ASI correlation to student outcomes

Metric	R <sup>2</sup>
Kindergarten Universal Screener	0.85766
End of Third Grade Reading Target	0.96378
End of 5 <sup>th</sup> Grade Reading Target	0.98485
5 <sup>th</sup> Grade SBA Math Scaled Scores	0.98324
Smarter Balanced Assessment Math 8 <sup>th</sup> Grade	0.91429
Smarter Balanced Assessment Math 11 <sup>th</sup> Grade	0.93762
Smarter Balanced Assessment English 11 <sup>th</sup> Grade	0.97446
Cumulative GPA	0.9552
UC/CSU Eligibility	0.9682
Six year post graduation degree attainment	0.9405

# ASI as an Instructional Tool

- Predictive Analytics

- STARS Protocol: Identified 88% of all non-special education students who struggled with transition to 9<sup>th</sup> Grade (CERA 2015, AERA 2017)
  - Students were identified four months before the first day of school

- Intervention Design

- \$100 Million (CERA 2016)
  - LCFF-S “Unduplicated” vs. ASI 3+
  - Using ASI would reallocate over \$100 million dollars to underperforming students
- Increased the CAHSEE passing rate for African American students by 13% for less than \$25 (CERA 2015)

- Achievement and Equity Goals

- Targeted professional development that led to an increase in the level of mastery on constructed response writing from 13% to 58% for high ASI 3+ students (Berkeley High School, 2012-Present)



# ASI as Research Tool

- Identifying successful schools: “Apples to Apples”
  - The ability to look at similar students across time and space.
  - No such thing as “similar schools” but there are similar students, just in different proportions
- High Reliability
  - Students with similar Academic Support Indexes perform similarly over time and place
- FERPA
  - Keeps student data anonymous

# ASI as an Evaluation Tool

- Demographic Context
  - Comparing intervention and control groups by average ASI, Percent ASI 3+, ASI distribution (CERA 2014, AERA 2015)
  - Comparing across schools and/or classrooms
  - Continuum vs. buckets
- Sub-group Analysis
  - Evaluate outcomes by ASI and ASI clusters (CERA 2014, AERA 2015)
  - “Apples to Apples”
- Intervention vs. “Control”
  - ASI and ASI clusters perform similarly over time allowing for comparison of student outcomes (CERA 2014, AERA 2015)

## Educational Conferences

- California Educational Research Association (CERA) Distinguished Paper Award 2014
  - *“Building and Utilizing an Academic Support Index”*
- CERA Presentations: 2014, 2015, & 2016
  - *“Identifying Students For Transition Support from Middle To High School”*
  - *“Boosting Test Performance For At-Risk Students”*
  - *“The Academic Support Index vs. LCAP Unduplicated”*
- American Educational Research Association
  - 2015 & 2017
- California Academic Academy, 2016

## Publications and Presentations

- Essay: “Reframing the Achievement Gap”
- Three papers being submitted for publication in peer reviewed journals
- The Cambridge Handbook of Applied School Psychology (chapter submission)
- Berkeley City College Black Student Union, 2015
- Other: Parent groups, community groups, teacher organizations, students

# Thank You!

## Questions?

- Learn more at:
  - [academicsupportindex.blogspot.com](http://academicsupportindex.blogspot.com)
- Contact me:
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