Assessing to Serve Students

A Progress Report on WCSD & CASEL’s Research-Practitioner Grant
Learning Intentions

• Deepen understanding of:
  – How partnership formed with shared agenda.
  – How the new student self-report items were developed.
  – How students rate their own competencies.
  – Links between social and emotional competencies and academic outcomes.
Assessing Our Own Competencies
Assessing Our Own Competencies

• Sort 9 items into three categories:
  – Most like me: easiest for you to do
  – Somewhat like me
  – Least like me: hardest for you to do

• Find partner and share:
  – #1 easiest – why is this easy for you to do?
  – #1 hardest – why is this hard for you to do?
Collaborating Districts Initiative (CDI)

- Anchorage
- Austin
- Atlanta
- Chicago
- Cleveland
- Nashville
- Oakland
- Sacramento
- Washoe
Institute of Education Sciences
Research-Practitioner Grant

Data Systems +
Academic Integration +
SEL Practitioners +
Research
=
NERD LOVE
Foundational Project Aims

In order to create a balanced assessment system:

• Develop reliable and valid student self-report measures of social emotional competence (SEC).

• Validate by examining associations with academic outcomes.

• Examine whether competencies buffer against risk for dropout.
The Need for Early Identification

WCSD Cohort Graduation Rates (2006 - 2009)

- 2005-2006: 57%
- 2006-2007: 55%
- 2007-2008: 56%
- 2008-2009: 56%

2015: 75%

2,078 Non-Graduates in 2009

<table>
<thead>
<tr>
<th>Average Credits Earned</th>
<th>Range of Credits Earned</th>
<th>Average GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.15 Out of 22.5 needed (24 normally possible)</td>
<td>0 to 22</td>
<td>1.58 on 4.0 scale</td>
</tr>
</tbody>
</table>
WCSD Early Warning System

Attendance (0 - 2)
Transiency (0 - 2)
Retention (0 - 2)
Reading/Math Scores (0 - 4)
Credit Deficiency (0 - 4)
Suspension (0 – 1)

TOTAL RISK SCORE (0 – 15)

0 = No Risk
1 = Low Risk
2 = Moderate Risk
3+ = High Risk
# Sample Student

## Elementary School

<table>
<thead>
<tr>
<th>Student Number</th>
<th>IEP</th>
<th>No</th>
<th>IEP - Last 2 Years</th>
<th>No</th>
<th>Early Warning System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>IEP</td>
<td>No</td>
<td>IEP - Last 2 Years</td>
<td>No</td>
</tr>
<tr>
<td>Grade</td>
<td>06</td>
<td>504</td>
<td>No</td>
<td>504 - Last 2 Years</td>
<td>No</td>
</tr>
<tr>
<td>DOB</td>
<td>ELL</td>
<td>Yes</td>
<td>ELL - Last 2 Years</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Gifted</td>
<td>No</td>
<td>MTSS No</td>
<td>MTSS - Last 2 Years</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## MAP Results
Click here to see all MAP detail

<table>
<thead>
<tr>
<th>Reading</th>
<th>RIT Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter 11-12</td>
<td>188</td>
<td>6</td>
</tr>
<tr>
<td>Spring 11-12</td>
<td>192</td>
<td>8</td>
</tr>
<tr>
<td>Fall 12-13</td>
<td>199</td>
<td>18</td>
</tr>
<tr>
<td>Winter 12-13</td>
<td>202</td>
<td>20</td>
</tr>
</tbody>
</table>

## CRT Results
Click here to see all CRT detail

<table>
<thead>
<tr>
<th>Math</th>
<th>Result</th>
<th>Scale</th>
<th>Reading</th>
<th>Result</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-12</td>
<td>Emergent/Developing</td>
<td>150</td>
<td>11-12</td>
<td>Emergent/Developing</td>
<td>157</td>
</tr>
<tr>
<td>12-13</td>
<td>Approaches Standard</td>
<td>267</td>
<td>12-13</td>
<td>Emergent/Developing</td>
<td>165</td>
</tr>
</tbody>
</table>

## Growth (SY 2012)

<table>
<thead>
<tr>
<th>Math</th>
<th>Adequate Growth</th>
<th>Move Up</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Percentile</td>
<td>95</td>
<td>Catching up to proficiency</td>
<td>65</td>
</tr>
</tbody>
</table>

## Course Marking

<table>
<thead>
<tr>
<th>Term 1 (12-13)</th>
<th>Term 2 (12-13)</th>
<th>Term 3 (12-13)</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Name</td>
<td>Mark</td>
<td>Course Name</td>
<td>Mark</td>
</tr>
<tr>
<td>G6: ART</td>
<td>S</td>
<td>G6: ART</td>
<td>S</td>
</tr>
<tr>
<td>G6: ELA</td>
<td>B</td>
<td>G6: ELA</td>
<td>C</td>
</tr>
<tr>
<td>G6: HANDWRITING</td>
<td>S</td>
<td>G6: HANDWRITING</td>
<td>S</td>
</tr>
<tr>
<td>G6: MATH</td>
<td>C</td>
<td>G6: MATH</td>
<td>B</td>
</tr>
<tr>
<td>G6: STRINGS</td>
<td>A</td>
<td>G6: STRINGS</td>
<td>A</td>
</tr>
<tr>
<td>G6: SCIENCE</td>
<td>C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Following our Freshmen through High School

9th Grader Risk Status (2010-2011) and 4-Year Cohort Graduation Outcomes (Class of 2014)

N = 4,516

No Risk
- Graduated (N = 2,995)
- Low Risk
- Moderate Risk
- High Risk

Graduated (N = 2,995) | Adjusted/Adult Diploma (N = 171) | Dropout/Vanished (N = 784) | Transfer (N = 579)
But...not a perfect predictor

31% \((n = 417)\) of High Risk 9\(^{th}\) graders *DID graduate*

How do we promote resilience and persistence?
Research Questions

Are Social and Emotional Competencies the “glue” that binds students to school and helps them persist in the face of obstacles?

Can we measure them???
Integration of Social and Emotional Learning Standards

How does your school and your own classroom feel to all the members of the learning community?

How do you intentionally address SEL through other academic areas and instructional strategies?

How are you intentionally teaching the knowledge and skills of SEL?
How Did We Get Here?

A quick review of IES key findings
2012-2015
Process of Developing a Measure

1. You Are Here
2. Test Theory of Action
3. Analyze Spring ‘13 Data With IRT
4. Analyze Spring ‘14 Data with IRT
5. Analyze Spring ‘15 Data With IRT
6. Need More Items for Moderate to High SEL
7. Focus Groups with Students
8. Revise Items
9. Scrutinize Items
10. Visit Classrooms
11. Collectively Review Results
12. Review District SEL Standards
13. Iteratively improving/adapting the “ruler” for measuring SEL

You Are Here
Student Climate Survey

• Computer-based survey since 2011
• Social and emotional competence items:
  – Grades 5, 6, 8, and 11 (N = 7,021)
  – Bank of 150+ randomly assigned items in 8 scales
  – Randomly presented at start or end of survey
  – 17 “anchor” items presented to all students
Schoolwork: “Doing my school work even when I do not feel like it.”

Emotion Regulation: “Getting through something even when I feel frustrated.”

Goal Management: “Finishing tasks even if they are hard for me.”

Social Awareness: “Learning from people with different opinions than me.”

Emotion Knowledge: “Knowing when my feelings are making it hard for me to focus.”

Self-Concept: “Knowing what my strengths are.”

Responsible Decision-Making: “Thinking about what might happen before making a decision.”

Relationship Skills: “Getting along with my classmates.”

“How easy or difficult is each of the following for you?”
- Very Easy
- Easy
- Difficult
- Very Difficult
**Problem #1: Too Many Kids Said They Had Perfect Social and Emotional Competencies**

*Please indicate the extent to which the following statements are true about yourself.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Never True for Me</th>
<th>Rarely True for Me</th>
<th>Sometimes True for Me</th>
<th>Usually True for Me</th>
<th>Always True for Me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I know how to disagree without starting an argument.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>2. I know how to join a conversation that has already started.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>3. I apologize when I learn that I upset a classmate.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>4. I am able to stand up for myself without putting others down.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>5. When I work on a joint project in school, I get along with the members of my group.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>6. There are very few people that I do not get along with at school.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>7. I know how to “agree to disagree” at school.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>8. I am able to join a group in the lunchroom.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>9. I get along with my teachers.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>
Problem #2: Too Many Kids Said Vocabulary Was Hard
“I almost feel like it would help to have kids write the questions, and then adults revise them and stuff, just because—you figure you guys are like, way, way out of high school—oh, sorry, don’t take it like that. I'm talking about the school board. They're, like, more than twice our age, they're like all 50 and have Masters and Doctorates. They don’t know what we're like, so— Yeah, when we do the survey, I feel like they have this stereotype of who I am. They're like, ‘Oh, they think I am a person who tweets all day and does nothing.’ That’s how I feel sometimes when I read the questions...

-Damonte Ranch HS Student
2014-2015: Latest and Greatest Items

Which competencies are hardest for our kids?
Relationship Competencies on the Rasch Difficulty Ruler

Hardest to Do

Easiest to Do
Sort Students’ Relationship Competencies
1 = Hardest to Do and 6 = Easiest to Do

- Introducing myself to a new student at school.
- Getting along with my classmates.
- Joining a group I don’t usually sit with at lunch.

- Sharing what I am feeling with others.
- Being polite to adults.
- Talking to an adult when I have problems at school.
Find a Partner

• Describe to partner why you ranked the difficulty of the questions the way you did.

• After you see answer key:
  – How did your expectations match (or not match) the answer key?
  – What surprised you?
1. Sharing what I am feeling with others.
2. Joining a group I don’t usually sit with at lunch.
3. Talking to an adult when I have problems at school.
4. Introducing myself to a new student at school.
5. Getting along with my classmates.

1 = Hardest to Do  
6 = Easiest to Do
Relationship Competencies

Hardest to Do

- Sharing what I am feeling with others.
- Joining a group I don't usually sit with at lunch.
- Talking to my friends about how I feel when I am upset with them.
- Talking to an adult when I have problems at school.
- Joining a group that is already talking.
- Forgiving myself if I hurt someone's feelings, after I apologize to them.
- Talking to classmates about why they feel a certain way.
- Forgiving classmates when they upset me.
- Working out disagreements on group projects.
- Helping other people solve their disagreements.
- Getting along with others even when I am having a bad day.
- Getting along with classmates even if I disagree with them.
- Stopping myself before I hurt someone's feelings.
- Getting along with adults at school even when we disagree.
- Introducing myself to a new student at school.
- Helping classmates calm down if they're upset.
- Using my skills to make my group better.
- Making friends with people who have different opinions than me.
- Fixing problems I am having with my friends.
- Getting along well with anyone my teacher assigns me to work with.
- Forgiving classmates when they apologize to me.
- Making sure that everyone's ideas are heard in a group.
- Apologizing if I ever upset a classmate.
- Respecting a classmate's opinions during a disagreement.
- Getting along with my classmates.
- Being polite to classmates.
- Getting along with my teachers.
- Being polite to adults.

Easiest to Do
Find a Foursome

• How are you currently teaching these competencies through direct or embedded instruction?

• How does your current practice match student perception of difficulty?
  – E.g. Is more attention focused on competencies considered more difficult by students?
  – Or are you spending more time on easy competencies (and is that why kids think they’re easy)?
17 Anchor Items

- Taken by all students
- 2 - 3 items for each scale
- 1 “easy” item
- 1 “hard” item
17 Anchor Items by Difficulty Level

- **Harder**
  - Self-Management: Finishing tasks even if they are hard for me.
  - Decision-Making: Thinking about what might happen before making a decision.
  - Self-Management: Knowing when my feelings are making it hard for me to focus.
  - Self-Management: Doing my schoolwork even when I do not feel like it.
  - Social Awareness: Learning from people with different opinions than me.
  - Self-Management: Getting through something even when I feel frustrated.
  - Self-Management: Being prepared for tests.
  - Social Awareness: Knowing what people may be feeling by the look on their face.
  - Self-Awareness: Knowing ways I calm myself down
  - Self-Awareness: Being patient even when I am really excited.
  - Social Awareness: Knowing when someone needs help.
  - Self-Awareness: Knowing the emotions I feel.
  - Self-Awareness: Knowing what my strengths are.
  - Decision-Making: Knowing what is right or wrong.
  - Self-Management: Setting goals for myself.
  - Relationship: Respecting a classmate's opinions during a disagreement.
  - Relationship: Getting along with my classmates.

- **Easiest to Do**

**Hardest to Do**

**Easiest to Do**
17 Anchor Items: Sailing Away!

• State of Nevada adopted for statewide survey
• State of Alaska adopted for statewide survey
• Austin, Texas adopted for district survey
Debrief

• Are these competencies important to learning? Why or why not?
• How do we support students and schools with this information?
RELATIONSHIP BETWEEN SOCIAL AND EMOTIONAL COMPETENCIES AND OUTCOMES

What is the relationship between students’ social and emotional competencies and their academic and behavioral outcomes?
2014-2015 Academic Risk Status among Students with Low vs. High Social and Emotional Competencies

Students with Low SEC
1.5x more likely to be Moderate or High Risk

- Low SEC: 52% No Risk, 25% Low Risk, 13% Moderate Risk, 10% High Risk
- High SEC: 63% No Risk, 22% Low Risk, 8% Moderate Risk, 7% High Risk
2014-2015 In-School Suspension Rates among Students with Low vs. High Social and Emotional Competencies

Multi-Level Model
Controlling for grade, gender, IEP, LEP, FRL, and 13-14 suspensions
ICC = .32
SEL: $b = -0.33$, $p = .01$
Multi-Level Model:
Controlling for grade, gender, IEP, LEP, FRL, 2013-2014 absent days
SEL: $b = -0.07, p < .001$
2014-2015 SBAC Math and ELA Proficiency Rates among Students with Low vs. High Social and Emotional Competencies (uncontrolled for differences)

- **Math:** 21 percentage point difference
- **ELA:** 20 percentage point difference

<table>
<thead>
<tr>
<th>Low SEC (≤ 1 SD below avg.)</th>
<th>High SEC (≥ 1 SD above avg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Proficiency: 23%</td>
<td>Math Proficiency: 44%</td>
</tr>
<tr>
<td>English Language Arts Proficiency: 40%</td>
<td>English Language Arts Proficiency: 60%</td>
</tr>
</tbody>
</table>
2014-2015 Average SBAC Math Scores for Students with Low vs. High Social and Emotional Competencies

Multi-Level Model:
Controlling for grade, gender, IEP, LEP, FRL, and 13-14 CRT scores

- ICC = .16
- SEL: $F(1, 4134.98) = 28.25, b = 8.19, p < .001$
- Risk: $F(3, 4136.26) = 25.63, p < .001$

8 point difference while controlling for potential confounds!
2014-2015 Average SBAC English Language Arts Scores among Students with Low vs. High Social and Emotional Competencies

Multi-Level Model:
Controlling for grade, gender, IEP, LEP, FRL, and 13-14 CRT scores
ICC = .16
SEL: $F(1, 4685.36) = 29.82, b = 7.91, p < .001$
Risk: $b = F(3, 4688.31) = 13.83, p < .001$

8 point difference while controlling for potential confounds!
SBAC English Language Arts Scores among Students with Low vs. High Social and Emotional Competencies by Academic Risk Status

Multi-Level Model:
Controlling for grade, gender, IEP, LEP, FRL, and 13-14 CRT scores
SEL: $F(1, 4688.86) = 14.48, b = 13.23, p < .001$
Risk: $b = F(3, 4685.50) = 12.89, p < .001$
SEL x Risk: $F(3, 4673.33) = 2.86, p = .04$
2014-2015 Average High School Weighted GPA for Students with Low vs. High Social and Emotional Competencies

Low SEC
≤ 1 SD below avg.

High SEC
≥ 1 SD above avg.

Multi-Level Model:
Controlling for grade, gender, IEP, LEP, FRL, and 13-14 weighted GPA
ICC = .25
SEL: $F(1, 1236.68) = 43.63, b = 0.18, p < .001$
Risk: $F(3, 1246.95) = 61.51, p < .001$

- Low SEC: ≤ 1 SD below avg. (73%)
- High SEC: ≥ 1 SD above avg. (89%)
Closing

• What are the implications of these findings or this project to your work?
Can’t Get Enough of This Nerdery?

Come to our extended assessment nerd-fest at 2:45!