New Research on the Links Between SEL And Academic Growth
And What It Means For Your District

Content provided by PANORAMA
New Research on the Links Between SEL and Academic Growth

And What it Means for Your District

Join the Discussion
Dr. Elizabeth Breese
Panorama Education
www.panoramaed.com

Join the Discussion

#SELGrowth
Dr. Tara Chiatovich
Panorama Education
www.panoramaed.com
Chad Cripe
Tippecanoe Valley High School
What are the associations between SEL and academic growth?
Today’s Agenda

- Understand links between social-emotional learning and academic growth

- Share new findings on the relationships between Self-Management and Self-Efficacy and academic growth

- Meet Tippecanoe Valley High School, which has especially strong, positive associations between SEL and academic growth

- Explore how TVHS is using grading policies that build self-efficacy, social-emotional learning data, and RTI at the secondary level to support the success of all of their students
Building Blocks of Student Success

- **COURSEWORK**
- **SOCIAL-EMOTIONAL LEARNING**
- **ATTENDANCE**
- **BEHAVIOR**
Research Questions

- What are the associations between SEL and the ABCs - attendance, behavior, and course performance?
- What are the links between specific SEL topics and academic achievement and growth?
Supporting our students’ academic success with social-emotional learning

SEL as a Remedy for Course Failures?

Research Minute
What is most associated with failing grades?

<table>
<thead>
<tr>
<th>Metric</th>
<th>Traditional Metrics</th>
<th>SEL Metrics</th>
<th>Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Assessment</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELA Assessment</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Management</td>
<td></td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>0.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td>0.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>0.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRPL</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attendance</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tools for Understanding

- These findings are big picture, not a portrait of individual students

- Correlation ≠ Causation

- Correlation = If one measure is high, another measure also tends to be high, and vice versa
SEL and Academic Performance
Adjusting for Demographics

Silly illustration of why we adjust for demographics: Stuffed animals and vocabulary knowledge
SEL and Academic Performance Adjusting for Demographics

In this silly illustration, it turns out the underlying factor is **adulthood**.
SEL and Academic Performance Adjusting for Demographics

This is the link between stuffed animals and vocabulary knowledge net of adulthood.
Net of Student Demographics, How is SEL Linked to GPA?

**Emotion Regulation**
How often are you able to control your emotions when you need to?

**Growth Mindset**
In school, how possible is it for you to change how intelligent you are?

**Grit**
If you have a problem while working towards an important goal, how well can you keep working?

**Self-Efficacy**
When complicated ideas are discussed in class, how sure are you that you can understand them?

**Self-Management**
How often did you get your work done right away, instead of waiting until the last minute?

**Social Awareness**
During the past few weeks, how well were you able to describe your feelings?
Net of demographics, how is SEL linked to GPA?

- Self-Management: 0.41
- Self-Efficacy: 0.33
- Grit: 0.24
- Social Awareness: 0.22
- Emotion Regulation: 0.21
- Growth Mindset: 0.12

Effect Size for GPA
What does the Link Between GPA and Self-Management and Self-Efficacy Mean?

Imagine a school where...
- GPA is measured 0 - 4.0
- Lowest GPA in the school is 1.0 (Straight Ds)
- Highest GPA is 4.0 (Straight As)
- Average GPA is 3.1 (Mostly Bs)

Imagine two students who are...
- 6th grade boys
- Under-represented minorities
- General Education Students

But, there’s one difference...
- Student 1 has very high Self-Efficacy and Self-Management
- Student 2 has very low Self-Efficacy and Self-Management
What does the link between GPA and SEL mean?

- Self-Management - High: 3.4
- Self-Management - Low: 3.0
- Self-Efficacy - High: 3.3
- Self-Efficacy - Low: 2.9

Estimated GPA Based on SEL Skills
Net of Student Demographics, How is SEL Linked to Math Assessments?

**Emotion Regulation**
*How often are you able to control your emotions when you need to?*

**Growth Mindset**
*In school, how possible is it for you to change how intelligent you are?*

**Grit**
*If you have a problem while working towards an important goal, how well can you keep working?*

**Self-Efficacy**
*When complicated ideas are discussed in class, how sure are you that you can understand them?*

**Self-Management**
*How often did you get your work done right away, instead of waiting until the last minute?*

**Social Awareness**
*During the past few weeks, how well were you able to describe your feelings?*
Net of demographics, how is SEL linked to math assessments?

- Self-Management: 0.22
- Self-Efficacy: 0.18
- Grit: 0.07
- Emotion Regulation: 0.06
- Growth Mindset: 0.05

Effect Size for Math Assessments
Imagine a school where...
- Math assessments are scored 0 - 100
- Average math assessment score is 50

Imagine two students who are...
- Girls
- English language learners
- Under-represented minorities
- General Education Students

But, there’s one difference...
- Student 1 has very high Self-Efficacy and Self-Management
- Student 2 has very low Self-Efficacy and Self-Management
What does the link between math assessments and SEL mean?

- **Self-Management - High**: 52
- **Self-Management - Low**: 46
- **Self-Efficacy - High**: 53
- **Self-Efficacy - Low**: 47

Estimated Math Scores Based on SEL Skills
What these findings tell us

- Higher SEL is linked to more positive outcomes

- In particular, higher **Self-Management** and **Self-Efficacy** are linked to higher academic performance

- The links point to the importance of **building habits of learning and students’ belief in their ability to learn**
Supporting Students’ Academic Growth
At Tippecanoe Valley High School
Meet TVHS

- Traditional high school located in northeast Indiana
- Serving 550 students in grades 9-12
- Almost 60% of students qualify for FRPL
- About 20% of students receive special education services
- Our students pursue an array of interests and skills, including athletics, band, choir, art club, and Future Farmers of America (FFA)
Positive Association Between SEL and Assessments Scores

- **Grading Policies and Practices** - Do our grades build self-efficacy?

- **RTI at the HS Level** - To find and support our students before they fail

- **Using SEL Surveys and Character Day to Find Students’ Strengths** - Inspired by positive psychology, we want all student to understand their own social-emotional and character strengths

- **Sharing SEL Results at Parent-Teacher Conferences** - Making SEL part of the conversations we have with parents
By Entering a Grade, Are We Building Self-Efficacy?

### Academics

**What is Joseph's GPA?**

<table>
<thead>
<tr>
<th>GPA Type</th>
<th>3.0 simple</th>
<th>3.0 weighted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What are Joseph's grades?**

<table>
<thead>
<tr>
<th>Term, Semester</th>
<th>Course</th>
<th>Teacher</th>
<th>Changed</th>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td>Math</td>
<td>Integrated Math I</td>
<td>2 months ago</td>
<td>80.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jennifer Gutierrez</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td>English</td>
<td>English I</td>
<td>2 months ago</td>
<td>81.79</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rico Grzywinski</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td>PE</td>
<td>PE 1</td>
<td>2 months ago</td>
<td>90.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Derrick Dourado</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td>Reading</td>
<td>Reading Improvement</td>
<td>2 months ago</td>
<td>87.54</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evelyn Hammond</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td>Spanish</td>
<td>Spanish I</td>
<td>2 months ago</td>
<td>84.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Christopher McBride</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semester 1</td>
<td>Physics</td>
<td>Physics</td>
<td>2 months ago</td>
<td>85.64</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Joseph Skinner</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
By providing proactive supports, we are not waiting for our kids to fail. Instead we:

- Look at formative assessments and other data in Panorama Student Success to understand who needs help.
- Create time in our PLCs for teachers to plan and deliver supports
- Provide data-driven instruction
Character Day

Based on positive psychology

• Give every student tools to understand and appreciate his/ her own character strengths and the strengths of others

• Students take a character strengths survey

• Use videos and shared terminology to norm around remembering and drawing on your character strengths
### How did students respond to each question?

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the past 30 days...How often did you come to class prepared?</td>
<td>81%</td>
</tr>
<tr>
<td>During the past 30 days...How often did you follow directions in class?</td>
<td>81%</td>
</tr>
<tr>
<td>During the past 30 days...How often did you get your work done right away, instead of waiting until the last minute?</td>
<td>49%</td>
</tr>
<tr>
<td>During the past 30 days...How often were you polite to adults?</td>
<td>85%</td>
</tr>
</tbody>
</table>

**TVHS results on Self-Management Panorama SEL Survey items.**
Bringing Students’ SEL Reports into Parent–Teacher Conferences

### Social-Emotional Learning

What are Arlie’s SEL Skills results?

<table>
<thead>
<tr>
<th>Topics</th>
<th>October</th>
<th>January</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grit</td>
<td>5</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>Emotion Regulation</td>
<td>5</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>Growth Mindset</td>
<td>5</td>
<td>4</td>
<td>4.0</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>5</td>
<td>4</td>
<td>3.0</td>
</tr>
<tr>
<td>Self-Management</td>
<td>5</td>
<td>3</td>
<td>2.5</td>
</tr>
</tbody>
</table>
What’s the impact?

• Our staff and our students understand the **power of self-efficacy** - the power of belief in yourself and the “power of yet”

• Panorama identified an especially strong, positive association between our student SEL and assessment scores

• Our school received an **A Letter Grade** for 2017-2018 from both the Indiana and US Departments of Education
Panorama’s Research Brief: SEL + ABCs

Download the resource: bit.ly/sel-abc
Questions & Answers

Join the Discussion | #SELGrowth
Thank You!

Join the Discussion   

#SELGrowth