Social and Emotional Learning in the Bridgeport Public Schools
An Initial Report to the Community
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Joanna L. Meyer, M.A.T. and Michael J. Strambler, Ph.D.

REPORT HIGHLIGHTS

- In partnership with Yale University, Bridgeport Public Schools launched a district-wide initiative in 2014 to support the social and emotional well-being of students and district staff.
- Researchers at Yale University are conducting a multi-year evaluation of the SEL initiative. Nearly all teachers who completed the spring 2016 RULER survey reported implementing two key components of RULER. The majority of teachers felt comfortable teaching RULER lessons and found RULER helpful for teaching social and emotional skills.
- Students reporting more self-control (behavioral self-regulation) had higher grades, fewer absences, and lower odds of having a suspension or expulsion.
- Similarly, students who perceived more student-teacher trust had higher grades and lower odds of having a suspension or expulsion.
- Other school climate measures associated with lower odds of suspensions and expulsions include self-reported emotional regulation, social competence, and school rules and norms.
- Findings suggest that enhancing school climate and social and emotional learning skills may be beneficial for Bridgeport students’ academic and behavioral outcomes.

ABOUT THIS REPORT

This report was designed to provide a summary of some of the key findings from this evaluation. Detailed findings from the SEL/RULER evaluation can be found on Open Science Framework by visiting https://osf.io/nwzrs/. In the spirit of “open science,” which stresses the importance of research transparency, this site also shares information regarding the background of the SEL initiative, the evaluation design, survey items, and partnership agreements. Correspondence concerning this report should be addressed to Michael J. Strambler at michael.strambler@yale.edu.

ACKNOWLEDGEMENTS

This evaluation would not be possible without the collaboration of Bridgeport Public Schools, specifically Fran Rabinowitz, Alana Callahan, Helen Moran, Dyrene Newton and Jessica Gencarelli, as well as the assistance of the BPS Data Management Team in providing data for this report. Many other administrators and teachers contributed to the evaluation by participating in surveys, facilitating the school climate survey for students, and sharing their enthusiasm about RULER. BCAC and several schools shared photos for this report, including Blackham, Central, Hallen, Marin and Winthrop. The authors are grateful to Melody Kingsley and Deeksha Ahluwalia for their research assistance for this evaluation. We thank Amy Griffin for her critical feedback on the report. This evaluation was funded by the Tauck Family Foundation and we greatly appreciate their support.

ABOUT THE CONSULTATION CENTER

The Consultation Center specializes in the design and implementation of community-based clinical and prevention research, as well as program and service-system research and evaluation. The Consultation Center aims to enhance scientific knowledge about risk and protective processes, inform program development and implementation, and enhance public policy. Faculty, trainees and professional staff at The Consultation Center are affiliated with the Division of Prevention and Community Research (DPCR) within the Department of Psychiatry at Yale School of Medicine.
BACKGROUND

Social and emotional learning (SEL) is the process through which children and adults develop the knowledge, attitudes, and skills necessary to understand and manage emotions, reach goals, show empathy for others, build positive relationships, and make responsible decisions. As districts from across the nation explore how to support SEL in their schools, Bridgeport Public Schools (BPS) is in the third year of its district-wide SEL initiative.

BPS is a large urban district that serves approximately 21,000 students in 37 schools (29 elementary/middle, 5 high, 3 alternative). The district serves an ethnically diverse student population (49% Hispanic/Latino, 37% Black/African American, 10% White, 4% other). Bridgeport is one of the poorest cities in Connecticut with 28% of its school-aged children living in poverty.

In the fall of 2013, Bridgeport’s Wilbur Cross School partnered with The Consultation Center at Yale University and the Yale Center for Emotional Intelligence to pilot the RULER Approach, with the support of the Tauck Family Foundation. When Fran Rabinowitz returned to the district six months later as its interim superintendent, she brought a focus on social and emotional learning (SEL). After introducing RULER as the superintendent of another Connecticut district, Superintendent Rabinowitz was confident that it was a good fit for Bridgeport. When she learned about the Yale-BPS partnership focused on SEL at Wilbur Cross School, she asked to extend the effort district-wide.

What is RULER?
The RULER Approach is an evidence-based SEL program that was developed by the Yale Center for Emotional Intelligence. RULER is an acronym that stands for Recognizing, Understanding, Labeling, Expressing and Regulating emotions. RULER is designed to be part of the everyday routine of teaching and learning rather than a separate curriculum. Rigorous evaluations of RULER found evidence that after RULER training, classroom climates improved, teachers taught more effectively, and students were more engaged in learning and performed better.

Launching Bridgeport’s SEL Initiative

During the 2013-2014 year at Wilbur Cross School, teachers and staff at the school participated in RULER training with the Yale Center for Emotional Intelligence and piloted RULER. During the spring, Superintendent Rabinowitz met with partners from Yale University to create a plan for expanding RULER across the district, and the Yale-BPS SEL Partnership was born.
The 2014-2015 school year focused on emotionally intelligent leadership in preparation for full implementation of RULER across the district. Alana Callahan and Helen Moran were hired as the district’s SEL co-facilitators and the SEL task force was formed. School and district leaders participated in leadership development coaching with the Yale Center for Emotional Intelligence. Through this program, leaders learned about emotional intelligence, explored their leadership styles, practiced emotionally intelligent leadership skills, and became familiar with the RULER Approach. Each principal formed a school-based RULER team that would lead RULER implementation.

### TABLE 1: FIVE-YEAR TIMELINE FOR THE SEL INITIATIVE

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
</table>

During the 2015-2016 school year, the RULER teams at all 29 elementary-middle schools led RULER trainings for their colleagues. Teachers and other staff began to introduce the RULER Anchors of Emotional Intelligence in each school (Classroom Charter, Mood Meter, Meta-Moment and Blueprint). RULER teams from all 5 high schools attended High School RULER trainings and began to pilot the 9th grade curriculum. In addition, BPS launched RULER for Families during the 2015-2016 school year, an effort that was led by the Bridgeport Parent Center in collaboration with the Yale Center for Emotional Intelligence. Bridgeport Child Advocacy Coalition (BCAC) partnered with the district to support community engagement in RULER.

### Moving Forward

During the 2016-2017 school year, PK-8 schools are continuing to implement the RULER Anchors of Emotional Intelligence. During the fall, each elementary-middle school’s RULER team will participate in training for the RULER Feeling Words Curriculum, a literacy-focused curriculum that reinforces the knowledge and skills developed through the anchor tools. Over the winter and spring, PK-8 teachers will begin to introduce the Feeling Words Curriculum in their classrooms. High schools are continuing to implement the 9th grade curriculum, and plan to introduce the 10th grade curriculum when it becomes available. The 2017-2018 school year will be focused on solidifying and sustaining RULER implementation, as social and emotional learning becomes a permanent part of the district.

### RULER EVALUATION

The 2014-2017 District Improvement Plan states:

If we cultivate a Professional Learning Community led by exemplary leaders who acquire and apply knowledge of data process/analysis and an understanding of emotional intelligence, then all stakeholders will be able to make decisions that effectively inform instructional practices, and student achievement will increase.

In line with this aspect of the District Improvement Plan, Superintendent Rabinowitz has identified five expected outcomes of RULER implementation:

- Increased academic achievement and growth
- Increased emotional understanding and self-regulation
- Improved school climate
- Reduced absenteeism
- Reduced suspensions and expulsions

### Partnership and Support

At a time when many districts are struggling with budget cuts, the Yale-BPS Social and Emotional Learning Partnership has been funded largely by outside local donors with interests in supporting the social and emotional wellbeing of students. Please see the final page of this report for a complete list of private foundations and other community partners who have supported this work.
To support the Yale-BPS SEL Partnership, The Consultation Center at Yale University is conducting a multi-year evaluation of the SEL initiative. This evaluation has three main goals:

1. To provide data that the district can use to inform the implementation and improvement of SEL practices at the district-, school- and classroom level.

2. To examine the association of school climate and students’ SEL skills with student outcomes.

3. To examine the association of RULER implementation with improvements in school climate, students’ SEL skills, and student outcomes.

**Evaluation Measures**

To address the evaluation goals, the SEL initiative aims to gather information from a variety of sources while limiting the burden on BPS stakeholders as much as possible. Table 2 lists the data sources that are used for the SEL evaluation.

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Completed by</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>RULER Implementation Log</td>
<td>RULER Team members</td>
<td>Monthly</td>
</tr>
<tr>
<td>RULER Implementation Survey</td>
<td>School administrators, teachers and other staff members</td>
<td>2-3 times per year</td>
</tr>
<tr>
<td>School Climate Survey</td>
<td>Students in grades 3-12</td>
<td>Annually for grades 3-8, biennially for grades 9-12</td>
</tr>
<tr>
<td>De-identified student data (grades, attendance, suspensions)</td>
<td>Bridgeport Public Schools</td>
<td>Annually</td>
</tr>
</tbody>
</table>

Plotting emotions on the Mood Meter is part of RULER’s focus on emotional literacy.

Students and teachers wear Mood Meter colors at a school-wide RULER assembly.
**Evaluation Goal 1: Provide Data to Inform and Improve Implementation**

During the **2015-2016** school year, the partnership used two tools to assess the progress of RULER implementation: the monthly RULER Implementation Logs and the fall and spring RULER Implementation Surveys. The evaluation team shared school-level data periodically with the SEL co-facilitators and other district leaders, which the SEL co-facilitators used to inform their work with school RULER teams during school visits. BPS and its Yale University partners also used data from the RULER logs and surveys to inform the design of the two Network collaboration/training sessions that were held in March and May.

Data from the RULER surveys provides a snapshot of what RULER implementation looked like at two different points in time. Several key indicators are summarized in Table 3 below.

<table>
<thead>
<tr>
<th>% of all teacher respondents who reported that they…</th>
<th>November 2015</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had introduced two or more anchor tools to their students</td>
<td>59% (N=313)</td>
<td>98% (N=205)</td>
</tr>
<tr>
<td>Had used the Mood Meter at least once in class during the last week</td>
<td>60% (N=317)</td>
<td>86% (N=204)</td>
</tr>
<tr>
<td>Feel somewhat comfortable, quite comfortable, or extremely comfortable teaching RULER lessons to their students</td>
<td>54% (N=284)</td>
<td>63% (N=199)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of all respondents (teachers, staff, school administrators) who reported that…</th>
<th>November 2015</th>
<th>May 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>RULER had been somewhat useful, quite useful, or extremely useful in terms of teaching practical social and emotional skills</td>
<td>70% (N=464)</td>
<td>72% (N=338)</td>
</tr>
</tbody>
</table>

Participation in the RULER logs and RULER surveys has been uneven across schools, particularly for the spring RULER Implementation Survey. The Yale-BPS SEL partnership has identified several ways to improve response rates during the 2016-2017 school year. With higher response rates, the logs and surveys will yield data that better represents the status of implementation, making the data more useful to the SEL co-facilitators and district leaders.
Assessing School Climate

According to the National School Climate Council, School Climate describes the “Norms, values, and expectations that support people feeling socially, emotionally, and physically safe.” BPS and its Yale partners collaborated in 2014-2015 to develop a survey about student perceptions of school climate. The district uses this survey to fulfill the state requirement that all schools administer a school climate measure at least every two years. In addition, the survey provides data that can be used to evaluate the SEL initiative, as well as other district initiatives. The domains assessed in 2015-2016 include:

<table>
<thead>
<tr>
<th>Personal Safety</th>
<th>Student-Teacher Trust</th>
<th>Academic Engagement</th>
<th>Behavioral Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Safety*</td>
<td>Classroom Behavior*</td>
<td>Emotional Climate</td>
<td>Emotional Literacy*</td>
</tr>
<tr>
<td>Rules and Norms</td>
<td>Sense of Belonging</td>
<td>Emotional Regulation</td>
<td>Social Competence*</td>
</tr>
</tbody>
</table>

* Grades 6-8 only

Evaluation Goal 2: School Climate, SEL Skills, and Student Outcomes

The evaluation team conducted correlational and comparative analyses to understand which School Climate Survey domains seem most relevant to the academic outcomes of Bridgeport students. The most recent climate survey and district administrative data have revealed several domains that are linked with student outcomes.

Academic Grades

- Across the lower and upper elementary school levels, Behavioral Regulation had the highest correlation with academic grades. This correlation was positive, meaning that students who reported higher behavioral regulation had higher grades.

- Specifically, students reporting high behavioral regulation (one standard deviation above the mean) had a grade point average of 3.2 (a B grade) versus 2.8 (a C+ grade) for students reporting low behavioral regulation (one standard deviation below the mean).

- Student-Teacher Trust had weaker, but consistent associations with academic grades across lower and upper elementary levels, with higher trust being linked to higher grades. Students who reported lower student-teacher trust (one standard deviation below the mean) had an average grade of C+, compared to an average grade of B- for students who reported higher student-teacher trust (one standard deviation above the mean).

- Analyses revealed smaller and less consistent positive relationships between academic grades and the domains of Emotion Regulation, and Sense of Belonging.

- In addition to the above findings, Academic Engagement, Emotional Climate, and Social Competence had small and positive associations with academic grades among upper elementary students only.
Behavioral Outcomes

- There was a small association between Behavioral Regulation and absences for lower and upper elementary levels. Specifically, students who were absent more often reported lower levels of behavioral regulation.

- On average, students who reported low behavioral regulation were absent for 1.5% more time, compared to students who reported high behavioral regulation.

- Among lower and upper elementary levels, the odds of having a suspension or expulsion were:
  - 5 times less likely for students reporting high vs. low Behavioral Regulation
  - 5 times less likely for students reporting high vs. low Social Competence
  - 4 times less likely for students reporting high vs. low Student-Teacher Trust
  - 3 times less likely for students reporting high vs. low Emotional Regulation
  - 2 times less likely for students reporting high vs. low perceptions of Rules and Norms

Overall, students’ perceptions of their ability to control their behavior had the strongest and most consistent associations with students’ outcomes. There are several possible explanations for this result. One possibility is that one factor causes the other—that either higher self-control leads to better academic performance or that performing better in school leads to better self-control. Although the design of this evaluation is unable to determine such causality, research literature presents ample evidence of self-control contributing to academic performance. It is possible that continued use of SEL tools such as the RULER Meta-Moment could improve academic performance through improving self-control.

Protecting Student Privacy

To protect student confidentiality, the evaluation team at Yale University never receives data that includes student names, district ID numbers, addresses, or parent/guardian information. The BPS Data Management team has assigned a study ID number to each student, so that the evaluators can link student data over time without ever knowing the identity of individual students. Several additional safeguards are in place, all of which are outlined in an institutional data-sharing agreement developed by BPS and Yale University in accordance with the Family Educational Rights and Privacy Act (FERPA).
Since our self-regulation measures are self-report in nature, another possible explanation of the results relates to social desirability. Higher performing students may be more likely to respond in ways that are consistent with social expectations, rather than reporting their actual skills. Incorporating measures that directly assess students’ SEL skills could address this limitation in the future.

The consistent relationship of student-teacher trust with grades and suspensions/expulsions is also noteworthy, and it is consistent with other research on this topic. Considering the evidence, it stands to reason that equipping teachers and students with tools that enhance their trust in each other could improve student performance.

**Evaluation Goal 3: RULER Implementation and Student Outcomes**

By the end of the 2015–2016 school year, each of the BPS K-8 schools had begun to introduce RULER. RULER implementation will continue to expand and deepen over the course of the 2016–2017 school year as teachers and students become more familiar with the program. At the close of the current school year, the evaluation team will begin to address goal 3, examining the association between RULER implementation and student outcomes.

This process will involve identifying associations between the level of RULER implementation and changes in student perceptions of school climate or students’ SEL skills. For example, will students demonstrate more growth in their SEL skills in settings where RULER is more fully implemented? The evaluation will also examine whether any such associations are linked to improvements in student outcomes such as grades, attendance, and behavior. For example, will student grades increase in settings where RULER is more fully implemented?

To support this aspect of the evaluation, schools will continue to complete monthly RULER Implementation Logs during the current school year. In addition, the district and its Yale partners will work together to administer the RULER Implementation Survey this fall, winter and spring. The School Climate Survey will be administered for a third time in May 2017. Finally, the district will again provide de-identified student data including grades, attendance, and suspensions/expulsions.
CONCLUSION

Over the past two and a half years, BPS has worked to integrate social and emotional learning into the fabric of the district and the community at large. To accomplish this, each of the BPS elementary/middle schools and high schools has introduced its students to RULER, with implementation deepening over time. At the end of the 2015-2016 school year, many teachers were reporting weekly use of RULER anchor tools and indicating that they found RULER useful in terms of teaching practical social and emotional skills.

The RULER evaluation has yielded data that can be used to continuously improve instructional practices and school policies. For example, the district’s SEL co-facilitators have used data from periodic RULER Implementation Surveys to tailor their support to individual schools and to design additional training. In addition, the evaluation has revealed aspects of school climate and SEL skills that are correlated to student outcomes like academic grades, attendance, and suspensions/expulsions. Student-reported behavioral regulation was found to have the largest and most consistent link to outcomes, with higher skills being associated with higher average grades, lower absenteeism and lower likelihood of suspensions/expulsions. Student-teacher trust had smaller but consistent associations with grades and suspensions/expulsions.

During the 2016-2017 school year, the district and its Yale partners will continue to collect data that can be used to improve policy and practice around SEL. The evaluation team will also begin to examine the links between RULER implementation and student outcomes. The aim of these analyses will be to understand whether there is a connection between the degree of implementation and student outcomes and to improve upon implementation.

ABOUT THE AUTHORS

Joanna L. Meyer, M.A.T. is a Research Associate at The Consultation Center in the Division of Prevention and Community Research, which is a part of the Yale School of Medicine. She is the program manager for the evaluation of the Yale-BPS SEL Partnership.

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Endnotes


3 Data from Stanford Education Data Archive (SEDA) at https://cepa.stanford.edu/seda/data-archive.

4 For evaluation studies of RULER please visit: http://ei.yale.edu/evidence/.


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All Our Kin
The First Tee Connecticut
Bridgeport Prosper's CRADLE TO CAREER
Cooperative Educational Services
educationfirst
RYASAP catalyst for community change