

## Using Student-Level Social and Emotional Learning Survey Data to Develop a “Loved, Challenged, and Prepared” Measure

Tim Kautz, Mathematica and REL Mid-Atlantic, [tkautz@mathematica-mpr.com](mailto:tkautz@mathematica-mpr.com)

Kathleen Feeney, Mathematica and REL Mid-Atlantic

Students’ social and emotional learning (SEL) competencies—such as perseverance, self-management, self-efficacy, and social awareness—are related to important life outcomes and can be shaped through education and interventions. SEL competencies rival cognitive measures in predicting long-term outcomes, such as educational attainment, health, earnings, and employment.<sup>1</sup> Interventions can improve SEL competencies throughout grades K–12, suggesting they are a promising avenue through which education can improve the long-term success of students.<sup>2</sup> Inspired by this type of evidence, the District of Columbia Public Schools (DCPS) highlighted SEL readiness and competencies as key outcomes of their 2017-2022 Strategic Plan goal to “educate the whole child”<sup>3</sup> and has begun administering survey-based measures of SEL competencies. However, little formal guidance exists on how to use the resulting data to inform practice and policy. A central issue is how best to create scales and indices of SEL competencies that districts can use to evaluate policies and track progress in students, schools, and the districts themselves.

DCPS staff approached the Mid-Atlantic Regional Education Laboratory (REL) to partner in exploring the properties of their SEL surveys with the aim of developing scales and indices of SEL competencies to identify students who need additional supports, track progress in students, schools, and the district as a whole, and evaluate SEL-related practices and policies. A key component of this project was the development of a district-level “Loved, Challenged, and Prepared” (LCP) Index that reflects progress toward the district’s 2022 goal to have 100 percent of students feel loved, challenged, and prepared at school. The REL team conducted analyses and provided coaching to DCPS staff so that they can conduct similar analyses in the future. This presentation will discuss the development of the LCP Index and describe how the analyses and skills learned can be used to inform decision-making.

To develop the LCP Index, the REL team worked closely with DCPS to (1) provide input in validating its SEL survey and (2) analyze the SEL survey data to develop scales and indices at progressively higher levels of aggregation.

DCPS provided SEL survey data from spring 2018 of 21,557 DCPS students between grades 3 and 12 to build the LCP Index. The DCPS team first took steps to validate the underlying SEL surveys, assessing its reliability and validity, with support from the REL. The project team then collaborated to design business rules for forming the LCP Index and establishing the diagnostic

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<sup>1</sup> (Borghans, Golsteyn, Heckman, & Humphries, 2016)

<sup>2</sup> (Kautz, Heckman, Diris, ter Weel, & Borghans, 2014)

<sup>3</sup> (DCPS, 2017)

checks to support the business rules. The LCP Index was designed to include three sub-indices to capture each key component: loved, challenged, and prepared. DCPS staff consulted with their internal SEL experts to map the survey items and topics that would be included within each sub-index. Each sub-index was formed by using scales that are averages across each student's response to survey questions that correspond to that component, with all responses receiving equal weight. REL staff worked with DCPS to select thresholds for what was considered a positive value within each component, e.g., that they student felt "loved."

Throughout the process, the REL team provided technical support to the DCPS Data & Strategy Team so that they could contribute to critical decisions, and with the intention of building internal capacity at DCPS to conduct similar analyses in the future. The code developed to build and run the LCP Index was discussed and shared in detail to that the DCPS team can continue to use the index in future years and track progress towards their strategic goals and inform district policy and practice.

The presentation will cover a four-stage process for developing the LCP Index that balanced technical rigor with transparency. First, it will cover the validation of the underlying survey on which the index was based. Second, it will discuss how the team mapped items on the survey to each of the three components, drawing both on empirical and theoretical considerations. Third, it will present business rules for aggregating responses on items across students in a way that is transparent to stakeholders. Fourth, it will discuss sensitivity tests that help to establish the robustness of the index. Additionally, it will discuss the context-specific considerations and challenges in constructing such an index. The results of this work will be informative to other educational agencies that would like to track progress in the development of SEL competencies.

As a result of the project, DCPS has more information about how students at various levels of aggregation are performing within the various SEL competencies, and can explore ways to leverage this to improve outcomes for students and schools in their district. DCPS is exploring ways to use SEL measures to identify students who might be at risk of performing poorly in the future and to evaluate interventions and other initiatives that aim to boost student educational outcomes by improving SEL competencies. The project provided helpful insight into how districts might better utilize student-level SEL data to support positive outcomes. Many districts may not currently collect or know how to effectively use SEL data to accurately target and improve the services and supports designed to help students stay in school and succeed.

Findings are embargoed by U.S. Department of Education's Institute of Education Sciences until the study is published, but will be available to share at SREE.

### **Sources cited**

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