## Using existing data to create new diagnostic measures for states and districts

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The data available to states and school districts has exploded in the 21st century, creating new opportunities to develop measures that can be used for a wide variety of purposes at the student, educator, school, and system levels. But most states lack the capacity and resources to take full advantage of their data for diagnosis and improvement. Across the country, research-practice partnerships (RPPs) have been established to address this challenge, connecting educators and policymakers with external researchers who can provide direct analytic support and help the education agencies build capacity to conduct their own analysis. This symposium highlights three research projects conducted in collaboration with state and local policymakers by the Mid-Atlantic Regional Educational Laboratory (REL), all of which used existing data from the agencies to develop new measures.

The RELs are federally funded organizations which, having been in existence for half a century, are arguably the original RPPs. They are tasked by their funder, the Institute of Education Sciences at the U.S. Department of Education, with promoting the use of research in state and local education agencies. This involves disseminating research, conducting applied research studies, and providing coaching and technical support to build local capacity to conduct and use research. For this symposium, we propose to discuss three REL Mid-Atlantic projects:

- 1. A study with the School District of Philadelphia in support of a citywide grade-level reading initiative, using kindergarten entry assessments and third-grade state assessment results to identify a threshold on the kindergarten assessment that predicts the proportion of students who will be proficient in reading by the end of third grade, as an indicator of annual progress of community-based efforts to support children's early development.
- Analytic coaching and technical support for the District of Columbia Public Schools (DCPS) to use student survey data to develop a measure of the fraction of DCPS students who are "loved, challenged, and prepared," in support of one of the district's strategic goals.
- 3. A study with the Maryland State Department of Education (MSDE) to assess the viability of using the state's kindergarten entry assessment to create a school-level student growth measure for grades K-3, in support of enhancing the robustness of the state's school accountability measures.

In all three of these projects, REL researchers worked closely with state or local agency staff and relied entirely on existing data to produce new diagnostic measures. In two of the cases, the researchers created new, city-wide measures of student outcomes that the districts plan to update annually to assess progress toward long-term goals. In the third case, the researchers created a new school-level measure that provides the first statewide look at the performance of the first four grades of elementary schools in terms of the student growth. These are only a few examples of how RPPs can bring researchers together with educators and policymakers,

not only to make better use of the massive amounts of data that state and local education agencies are now collecting, but also to support educators in understanding and annually replicating the analyses themselves.