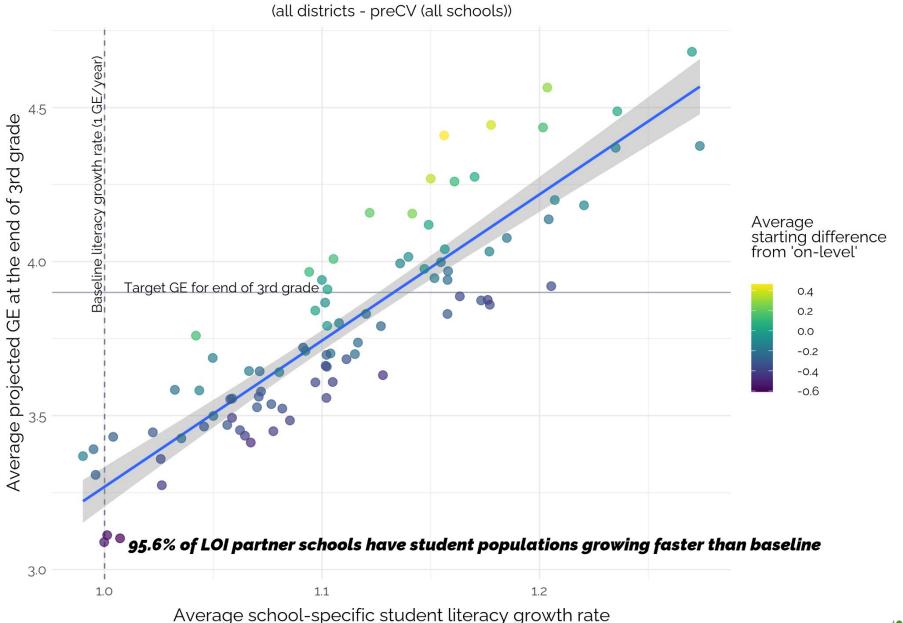
Determinants of GE at end of 3rd grade, school-level:



Schools with faster literacy growth rates have higher projected GEs, which are also influenced by the starting literacy levels of students





We analyzed data from 21,772 students in 90 schools across 17 districts and 4 states in an attempt to understand how the important work being done in classrooms contributes to efforts and interventions that take place outside of the classroom. We used student literacy growth rates as our measure of student learning taking place in classrooms, and student literacy starting points as our measure of learning prior to and outside of the classroom. End-of-3rd grade literacy at the level of individual schools was our measure of student outcomes.

We found that the combination of <u>literacy growth rate</u> & <u>starting literacy level</u> explain 98% of the variation in end-of-3rd grade literacy levels among partner schools. We can break down the relative contribution of these two variables via hierarchical partitioning (Lindeman et al. 1980; Chevan & Sutherland 1991) and multiply the resulting 'relative importance' values by 98% to determine the percentage contribution of each factor.

Our analyses suggest that student literacy *growth rates* accounting for 60% of the variation in student outcomes, reflecting learning in the classroom. In contrast, we found that student literacy levels upon entering school (*starting points*) account for 38% of the variation in student outcomes and reflecting learning *prior to* and *outside of* the classroom (i.e. the community).

References

Chevan A, Sutherland M. 1991. Hierarchical Partitioning. The American Statistician. 45: 90-96 Lindeman RH, Merenda PF, Gold RZ. 1980. Introduction to Bivariate and Multivariate Analysis. Glenview, Illinois: Scott Foresman & Co.

