Identifying North Carolina Students at Risk of Scoring below Proficient in Reading at the End of Grade 3

More than half of North Carolina’s grade 3 students struggle with reading. The percentage of students scoring below proficient in reading at the end of grade 3 was 55 percent in 2017/18. That percentage has remained largely unchanged, at above 50 percent, since 2013/14, when North Carolina passed its K–3 Read to Achieve literacy act.

Read to Achieve required North Carolina schools to use interim assessments of reading proficiency in kindergarten–grade 3 to identify students at risk of not achieving reading proficiency at the end of grade 3. Districts administered screening and progress monitoring assessments at the beginning, in the middle, and end of each school year. This study used longitudinal student achievement data for 2014/15–2017/18 and classification and regression tree analysis to examine how well scores on these interim assessments and the North Carolina Beginning-of-Grade 3 English Language Arts/Reading Test (the BOG3 assessment, a state assessment administered separately at the beginning of grade 3) predicted proficiency status on the state reading assessment at the end of grade 3.

Key findings

• The interim assessments included in the study did not adequately identify students at risk of scoring below proficient on the state reading assessment at the end of grade 3. At each time point tested in the study, less than 80 percent of students who scored below proficient were identified as at risk. These results suggest that the interim assessment system is missing students it is intended to identify and that key opportunities for intervention are being lost. More information is needed to reliably identify students in need of intervention. For example, educators might consider supplementing the interim assessments with informal, curriculum-based assessments to determine instructional objectives and differentiate instruction if they are not already doing so.

• The North Carolina Beginning-of-Grade 3 English Language Arts/Reading Test adequately identified students at risk of scoring below proficient on the state reading assessment at the end of grade 3. The BOG3 assessment correctly identified 83 percent of students who scored below proficient as at risk and 84 percent of students who scored proficient as not risk. This improvement in identification could be because the BOG3 assessment is designed to serve as a pretest for the state reading assessment at the end of grade 3 and the two are thus better aligned with each other than with the interim assessments. Policymakers might consider using the BOG3 assessment development process as a model for other grade-level assessments to further their goal of identifying students who may be at risk of reading difficulties at the end of grade 3.