



National Evaluation of Curriculum Effectiveness

Evidence Matters. Quality Matters. Curriculum Matters.

Each year, schools and districts spend roughly \$12 billion on textbooks and other instructional materials. Recent research suggests that textbooks have an important influence on student outcomes, yet there also can be substantial variation in effectiveness among texts and curriculum materials. Too often, districts and states must make decisions about textbook selection in the absence of empirical evidence of the success of these materials in promoting student achievement. And just as often, teachers must implement these curricula into their classroom without adequate training, resources or support. It is clear that the educational leaders from classrooms to district and state offices can benefit from rigorous and relevant evidence about *which* textbooks and curriculum materials are making a difference for their students.

We believe that state, district, and school leaders should have credible, objective evidence that will help examine and evaluate the myriad of available options for textbooks and curriculum materials. We believe that teachers should have confidence in the quality of the materials. Our goal is to collect and analyze accurate information about the selection and use of curriculum materials so that we can answer this research question:

Are there certain curricula — whether from textbook publishers or from open educational resource providers — which are associated with better student performance on the PARCC or Smarter Balanced assessments?

Study Overview

Our research study, “*Never Judge a Book by its Cover: A National Evaluation of Curriculum Effectiveness*,” is being conducted by the Center for Education Policy Research at Harvard University in partnership with six states: California, Louisiana, Maryland, New Jersey, New Mexico, and Washington. In the study’s first year, we will focus on elementary math. We will conduct the research study in three phases:

- 1. Collect information about textbook/curriculum selections:** We will invite a random sample of schools and districts in these states to tell us which textbooks and online curriculum materials are being used to teach math in fourth and fifth grade classrooms. We will collect information about textbook selection across three school years (2014-15, 2015-16, and 2016-17) and will seek a high response rate to ensure that we have a large, representative sample.
- 2. Conduct a teacher survey:** We will ask teachers to provide us with feedback in a brief (10-min) survey on how they use these curriculum materials in their classrooms and how they are supported in implementation. This will help us understand factors that might influence the efficacy of a given textbook. We will identify 5-7 of “the most commonly used” textbooks, and will survey a small, randomly selected subset of teachers using these texts. Survey questions will provide information about the intensity of teacher use of the text versus other instructional materials, teachers’ background in mathematics, and the types of instructional supports teachers receive.
- 3. Evaluate textbook efficacy:** Finally, we will combine each school’s response with the responses of hundreds of other schools across the country so that we can objectively examine whether and how the use of elementary math textbooks and instructional materials is related to student achievement. To establish a measure of the effectiveness of mathematics textbooks, we will use state administrative data on student achievement to calculate an aggregate metric of student academic growth, which will be matched to each of the textbooks/curricula identified in step 1. We will use these data to examine the association between the use of a specific textbook in a given grade and the median achievement of students in that grade.

The findings from this study will be available in late 2017/early 2018. All participating schools and districts will be provided with copies of the results and select leaders will be invited to join in dissemination events. No schools or districts will be identified by name in the final report.

Focus on: Teacher Survey



The quality of a textbook, online curriculum, or other instructional material is not just the sum of the content that lies inside. The success of any given curriculum is dependent upon whether and how a teacher uses this material in his/her classroom, and on the training and resources he/she receives to support its use. For our study to be a success, it is therefore crucial that we hear directly from teachers.

In early fall 2017, we will send a short online survey to the fourth and fifth grade teachers in a small subset of our overall project sample. Teachers are eligible for the survey if they taught math in the 2016-2107 school year and used one of the seven most commonly used textbooks. Participants will be asked questions about how they use the curriculum to prepare and execute their lessons, what supplemental materials they use (including educational software), and the types and amount of training they receive to support their use of these materials. This information will give us a better picture of the factors that might influence the effectiveness of a particular textbook or online curriculum. For teachers and schools, this also provides an opportunity to describe to district and state leaders – and to textbook publishers – whether and how these curriculum materials support their instructional methods and the learning needs of their students.

Eligibility and Selection Process:

We selected a total of 360 schools for the teacher survey using two criteria. First, we restricted our sample to schools using one of the seven most commonly used textbooks (Envision Common Core, Everyday Mathematics, Eureka/Engage NY, Go Math, Math Expressions, Math in Focus, and My Math) based on data captured from the first stage of the project. Next, we randomly selected a subset of these eligible schools in order to ensure representativeness across all schools in a given state using the same textbook. The sample size for each of these state-by-textbook groups is proportional to the pattern of usage of that textbook across all of our partner states. Each state sample includes between 20 and 120 schools representing at least five of the seven texts.

Survey Administration Details:

- **It is short, easy to complete, and will not interfere with instruction.** The online survey takes only 10 minutes to complete and teachers can respond on their own time. While teachers may be invited to participate prior to school start, the study team will refrain from contacting teachers during the first three weeks of the school year.
- **Teachers and schools will be compensated for their participation.** Teachers will receive a total of \$40 for their participation - \$10 with the initial invitation and \$30 upon completion. Participating schools may also receive compensation or an in-kind contribution for helping the project contact teachers and achieve response rate goals.
- **We will follow all requirements on participant confidentiality and consent.** Responses will be kept confidential and no identifying information will be shared outside of the research team. Prior to contacting teachers, we will provide a list of selected schools to each district and a letter to the principal of each selected school. If required, we will submit applications to the district to conduct research with teachers. Teachers indicate their consent at the start of the survey, and can choose to stop taking the survey at any time.