

High-Quality Curricula

This is one of a series of evidence-based strategies to help states and school districts invest Covid relief aid effectively. Read all 18 strategies in FutureEd's Covid Relief Playbook.

Giving students access to high-quality curricula and in the hands of well-supported teachers can have a powerful influence on learning outcomes. Lost and interrupted learning during the pandemic makes now the perfect time to provide all students with grade-level, content-rich instructional materials. States and districts can use Covid relief money to purchase materials and train teachers and staff to use them.

THE RESEARCH

Research shows that switching to a high-quality curriculum can boost student achievement more than other popular interventions, such as decreasing class size or offering teachers merit pay. Moreover, upgrading instructional materials is a relatively low-cost, high-return investment. The Center for American Progress found that the average cost-effectiveness ratio of switching to a high-quality curriculum was almost 40 times that of class-size reduction. Researchers used price data for instructional materials from the U.S. Department of Education's Institute of Education Sciences' randomized controlled trial on math curricula, along with a cost-benefit framework developed by Tulane University economist Doug Harris in 2009.

A recent study from The New Teacher Project and Zearn looked at aggregated data from over two million students in 100,000 classrooms who used Zearn's K-5 online math platform during the 2020-21 school year. Researchers found students who experienced content from the previous grade woven into the content for the new grade struggled less and learned more than students who started at the same level but received remediation. The

approach was particularly effective for students of color and students from low-income families.

A 2016 study by Northwestern University's C. Kirabo Jackson and Alexey Makarin assessed the impact of high-quality, off-the-shelf online lessons, combined with teacher training in the new materials, on student outcomes. Jackson and Makarin randomly assigned math teachers in grades six through nine in three Virginia school districts to three groups: those with full access to the curriculum and training; those with access only to the curriculum; and those using the same curriculum they had previously used. Students of teachers in the first group showed improvement similar to moving from an average teacher to one at the 80th percentile of quality, or reducing a class size by 15 percent. Math assessment scores were also almost 8 points higher for students with teachers in the first group, and almost 3 points higher for students with teachers in the second group, compared to those whose teachers used the standard curriculum.

Another curricular approach that has led to better achievement is introducing culturally relevant materials for students of different races and ethnicities. Stanford University's Thomas S. Dee and the University of California, Irvine's Emily K. Penner studied the causal effects of a San Francisco ethnic studies curriculum in a 2017 paper. Schools assigned eighth-grade students with GPAs below a threshold to take an ethnic studies course. Dee and Penner used students with GPAs just above the threshold as a comparison group and found that for students assigned to the course ninth-grade attendance increased by 21 percentage points, grade point averages by 1.4 grade points, and credits earned by 23 credits.

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WHAT TO CONSIDER

The adoption of high-quality materials should be accompanied by curriculum-based professional development for teachers. Findings from the 2019 American Instructional Resources Survey by the RAND Corporation found that teachers who reported receiving more evaluative feedback and helpful professional learning on curriculum reported greater engagement in standards-aligned classroom practices among all or nearly all of their students.

School districts trying to identify high-quality, standardsaligned curricula don't have to start from scratch. **EdReports**, an independent nonprofit, provides educator-reviewed reports on the quality of more than 70 English Language Arts and math programs. States such as Delaware, Louisiana, Massachusetts, Mississippi, Nebraska, New Mexico, Rhode Island, Tennessee, and Wisconsin also have created resources to help districts identify and select high-quality materials.

RESEARCH

- The Hidden Value of Curriculum Reform:
 Do States and Districts Receive the Most
 Bang for Their Curriculum Buck?: DRAWS
 ON STRONG STUDIES AS WELL AS COST
 DATA
- Accelerate, Don't Remediate: New Evidence from Elementary Math Classrooms:
 PROMISING
- Can Online Off-the-Shelf Lessons Improve Student Outcomes? Evidence from a Field Experiment: STRONG
- The Causal Effects of Cultural Relevance: Evidence from an Ethnic Studies Curriculum: PROMISING

RESOURCES

- How Instructional Materials Are Used and Supported in U.S. K-12 Classrooms
- EdReports
- Curriculum Implementation Guide
- Curriculum Support Guide
- Successful Implementation of High-Quality Instructional Materials: 5 Case Studies