

Summer Learning Strategies

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](#).

The American Rescue Plan requires states to spend at least 1 percent of the money allotted for K-12 schools—about \$1.2 billion nationwide—for summer learning programs to help students make up lost instructional time. Research shows that well-designed summer programs can lead to gains in reading and math and support the social and emotional development of students who attend regularly. Since the start of the pandemic, student absenteeism rates have spiked across the country and across different learning modes, with the most vulnerable students missing many more school days than in years past.

THE RESEARCH

In April 2021, Brown University's Annenberg Institute released a [meta-analysis](#) of 37 studies of summer programs in math for students in pre-K through twelfth grades. They found an average weighted impact of +.1 standard deviations for standardized mathematics achievement tests when the outcome was restricted to these tests and +.09 standard deviations for social-emotional learning and behavioral outcomes. The authors equate the magnitude of the academic impact to a \$5,000 increase in the future earnings of each student who attended a program. They note through a cost-benefit analysis that the payoff of summer school in student achievement gains may be 40 percent greater than the payoff from reducing class sizes by one-third.

Beth Schueler of the University of Virginia's Curry School of Education conducted a [field experiment](#) in 2020 examining the causal effect of "Vacation Academies," or week-long school break programs for sixth- and seventh-

graders in Massachusetts. Academy Leaders nominated students who struggled with test-taking, attendance, and discipline. However, students with records of chronic absenteeism or extreme behavioral issues were generally not included, to avoid disruptions to the program. Schueler found program attendance increased the probability of a student scoring proficient or higher on Common Core-aligned math exams by 10 percentage points.

The RAND Corporation has [evaluated](#) voluntary full-day summer learning programs in Boston, Massachusetts; Dallas, Texas; Duval County, Florida; Pittsburgh, Pennsylvania; and Rochester, New York since 2011. Through a randomized control trial, RAND researchers found that students who were offered the five-week summer program outperformed students not offered the program on fall mathematics assessments in the first year of the program, with average gains equivalent to five weeks of in-school instruction, although no significant gains were seen in the second year. However, attendance was a key challenge in program implementation, with 20 percent of students who had been offered the program not attending in the first summer and 48 percent not attending in the second summer. Researchers found correlation evidence to suggest that gains may have been larger for students who actually attended the program for 20 or more days, with average gains equivalent to over eight weeks of in-school instruction. However, the research design did not allow researchers to be certain that additional gains were due to program attendance as opposed to other student-level factors.

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Continued

WHAT TO CONSIDER

The RAND researchers suggest programs run at least five weeks and limit groups to 15 or fewer students. Programs should offer both academic and enrichment activities, provide transportation and food, and work with community and other family-facing organizations to encourage high attendance. Given that regular attendance is key to securing positive results, programs should develop strategies to encourage students to show up. Researchers from Brown University's Annenberg Institute also found programs exclusively focused on math had a greater impact on math achievement.

RESEARCH

- [The Impact of Summer Learning Programs on Low-Income Children's Mathematics Achievement: A Meta-Analysis: **INCLUDES STRONG AND MODERATE STUDIES**](#)
- [Making the Most of School Vacation: A Field Experiment of Small Group Math Instruction: **MODERATE**](#)
- [Every Summer Counts: A Longitudinal Analysis of Outcomes from the National Summer Learning Project: **STRONG**](#)

RESOURCES

- [Designing Summer Programs That Students Want to Attend](#)
- [A Summer For Learning & Recovery](#)