

# *i-Ready Personalized Instruction* for Mathematics Positively Impacts State Test Scores

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## Mathematics

Research Summary, December 2023

During the 2021–2022 school year, Curriculum Associates conducted research to examine the impact of *i-Ready Personalized Instruction* for Mathematics on a statewide comprehensive exam, the Massachusetts Comprehensive Assessment System (MCAS) mathematics assessment. This study included students from Grades 5 and 6 in more than 35 Massachusetts schools. Usage of *i-Ready Personalized Instruction* for Mathematics in any amount was associated with significantly higher MCAS mathematics scores in Grades 5 and 6 compared to similar students who did not use *i-Ready Personalized Instruction*. Usage of *i-Ready Personalized Instruction* for Mathematics according to Curriculum Associates' guidance resulted in even greater MCAS mathematics scores in Grade 5. Sample sizes were insufficient for examining usage according to guidance in Grade 6. This study used a rigorous quasi-experimental design that meets the criteria for ESSA Level 2 evidence.

## Key Findings

*Students who used i-Ready Personalized Instruction achieved higher scores on a statewide comprehensive mathematics exam than comparison students.*

- On average, students in Grades 5 and 6 who used any *i-Ready Personalized Instruction* scored 3 points higher than comparison group students on the MCAS mathematics, corresponding to standardized effect sizes of .16 in Grade 5 and .18 in Grade 6.
- Grade 5 students who used *i-Ready Personalized Instruction* according to Curriculum Associates' guidance scored an average of 5 points higher compared to the comparison group. (Grade 6 had an insufficient sample size to conduct an analysis.)
- If the Grade 5 comparison group had improved their MCAS scores by the amount attributed to use of *i-Ready Personalized Instruction* according to Curriculum Associates' guidance, an additional 9% of the comparison group would have been proficient.

## Study Overview

The purpose of this study was to examine usage rates of *i-Ready Personalized Instruction* for Mathematics and its effectiveness on a statewide comprehensive mathematics exam. To examine the effectiveness of different rates of usage, we used propensity score matching to construct two samples. The first sample consisted of students who completed at least one *i-Ready Personalized Instruction* lesson and their comparison group counterpart. The second sample consisted of only the students who used *i-Ready Personalized Instruction* according to Curriculum Associates' guidance and their comparison group counterparts. Students were considered to use *i-Ready Personalized Instruction* according to Curriculum Associates' guidance if they used the program for an average of 30–49 minutes per week during at least 18 weeks and passed at least 70% of the lessons. In Grade 6, there were too few students using *i-Ready Personalized Instruction* according to guidance to conduct the analysis.

After constructing the matched samples, we fit a separate multilevel model for each of the three analyses (i.e., Grades 5 and 6 analyses of any usage, and Grade 5 analysis of usage according to guidance). Each model nested students within schools and predicted students' spring MCAS mathematics scores based on students' fall *i-Ready Diagnostic* scores and demographic characteristics as reported by the school.

[Read the full research report to learn more.](#)

## Full Report Reference

Duncan, M. K. & Holzman, M. A. (2023). *Impact of i-Ready Personalized Instruction on Massachusetts Comprehensive Assessment System mathematics scores in Grades 5 and 6.*

[https://cdn.bfldr.com/LS6J0F7/at/txxpc576hb8vmncxpqwnhs5/Impact\\_of\\_i-Ready\\_on\\_2022\\_MCAS\\_Math\\_Score\\_in\\_Grades\\_5\\_and\\_6.pdf](https://cdn.bfldr.com/LS6J0F7/at/txxpc576hb8vmncxpqwnhs5/Impact_of_i-Ready_on_2022_MCAS_Math_Score_in_Grades_5_and_6.pdf)