

Imagine Math: Increased Performance on the PARCC Assessment

Maryland Case Report

Background

Research indicates that computer-assisted instruction can positively impact students' performance in mathematics development. Imagine Math is a supplemental, research-based program aligning with educational standards addressing skills students need to reach grade-level mathematics proficiency (per state-aligned standards). The program features adaptive learning pathways, differentiated instruction, standards-based instruction, live teacher support, highly engaging content, and regular assessment based on the Quantile framework.

Following the conclusion of the 2017–2018 school year, a school district in Maryland shared PARCC assessment data with Imagine Learning to analyze the impact of the Imagine Math program on student achievement. In total, data for over 1,000 students in grades three through five was shared with Imagine Learning.

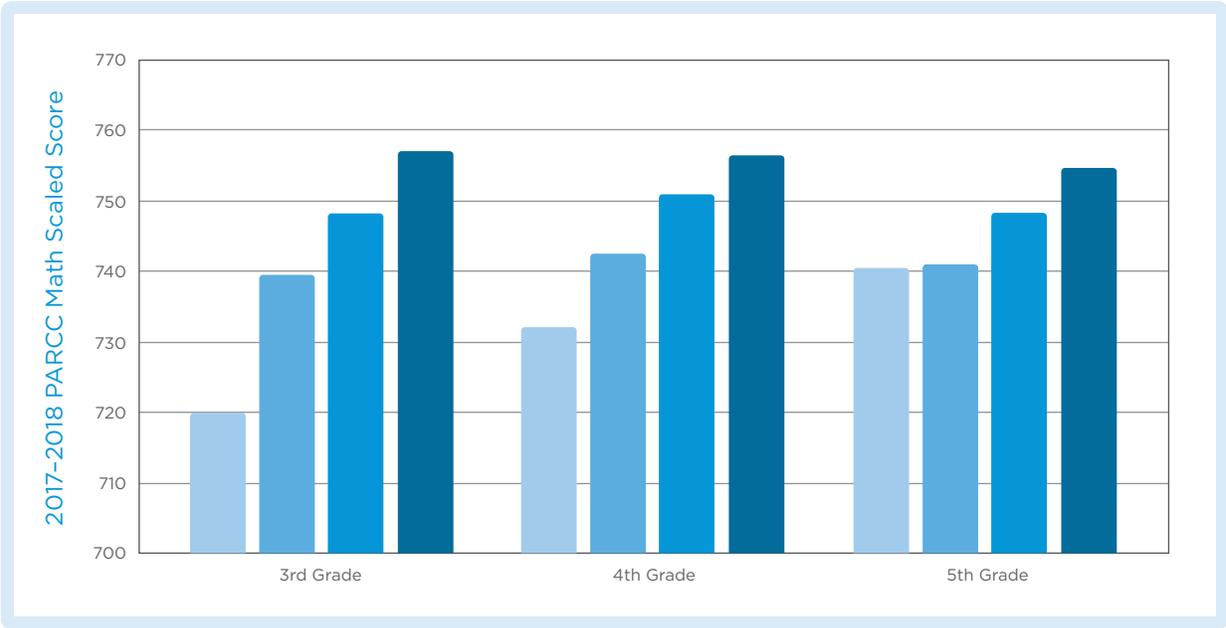
Results

The graphic below depicts the average PARCC Math scaled scores by grade and by usage groups for students who used Imagine Math during the 2017–2018 school year. These results demonstrate that for all three grades examined, increasing use of the Imagine Math program is correlated with higher PARCC scaled scores. Therefore, it appears that use of the Imagine Math program favorably impacts performance on the PARCC assessment.

Conclusions

The results of this study support the role of Imagine Math as a supplementary tool for the development of mathematics achievement. Students who used the program in the Maryland school district for the 2017–2018 school year experienced consistent improvements in math proficiency as demonstrated by performance on the PARCC math assessment. Given these findings, we would expect similar results for other students who use the Imagine Math program with fidelity.

Average PARCC Math scaled scores by grade and by usage group for students who used Imagine Math during the 2017-2018 school year.



Hours in Program

