imagine math®

Imagine Math® Usage in Idaho Correlated with ISAT Math Scores in Grades 4–6

Overview

In the 2021–2022 academic year, an Idaho school district used Imagine Math with 2,018 students in Grades 4–6. On average, students used Imagine Math for 12.4 hours and passed 14.1 lessons. Imagine Learning collected and analyzed 2021 and 2022 Idaho State Achievement Test (ISAT) mathematics data from the district to determine the impact of using Imagine Math on students' mathematics achievement.

Idaho School District

Demographics (*N* = 2,018)	Percent
Female	50.2%
Hispanic	14.0%
Black/African American	0.4%
Asian	0.4%
American Indian/Alaskan Native	0.3%
Free/Reduced Lunch	31.8%
Special Education Status	11.5%
English Language Learner	4.1%

Results

Overall, the proportion of students who met or exceed standards in Spring 2022 on the ISAT was greater for those who passed more lessons in the Imagine Math program (Figure 1). Furthermore, as is indicated by the horizontal dashed lines in Figure 1, the students passing the most lessons far exceeded state averages. Additionally, after matching students based on several demographics[1], it was found that students who passed more lessons in Imagine Math saw statistically significantly greater gains on the ISAT mathematics assessment (Figure 2, *p*-value < .001). These findings demonstrate how usage of Imagine Math can support Idaho students on the ISAT.

[1] Propensity score matching was used to create a matched sample of students based on whether they passed fewer or more than the average number of lessons passed for students in their grade level (6 lessons for Grades 4, 5, and 6). Students were matched on their 2021 ISAT score, grade level, gender, race, special education status, free/reduced lunch status, and English language learner status.

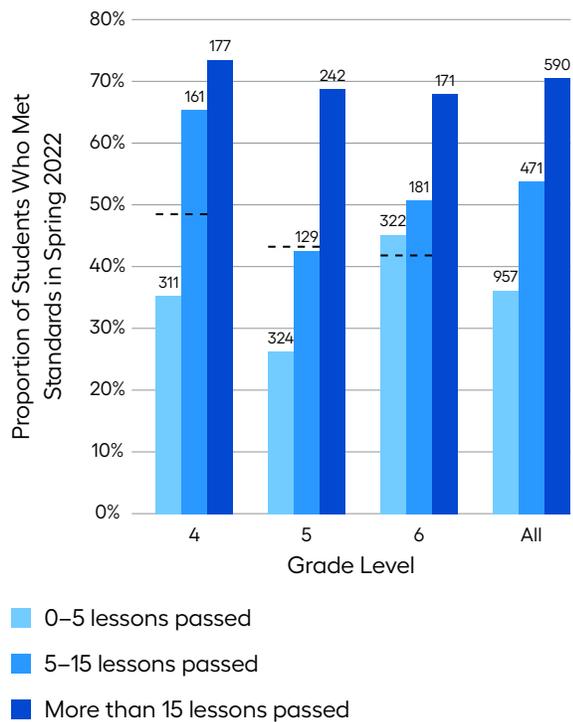**Figure 1.** Proportion of students who met standards in Spring 2022 by number of Imagine Math lessons passed.

Proportion of Students Who Met Standards in Spring 2022

Grade Level

- 0–5 lessons passed
- 5–15 lessons passed
- More than 15 lessons passed

Figure 2. Association between number of Imagine Math lessons passed and ISAT scaled score growth.

Change in 2021–2022 ISAT Scaled Score

Lessons Passed

Fewer Lessons Passed · More Lessons Passed
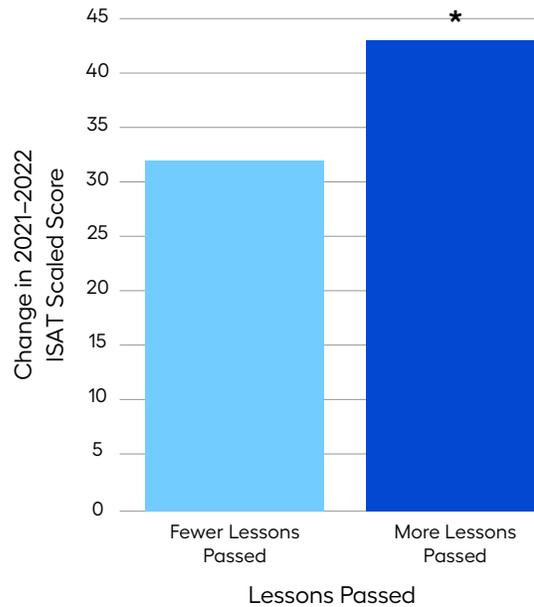
Note: Asterisks denote statistically significant difference compared to lower usage group, *p-value < .001.