Students from Urban School District Using Imagine Math® See Growth on NWEA and ILEARN Assessments

Overview

Indianapolis Public Schools, IN

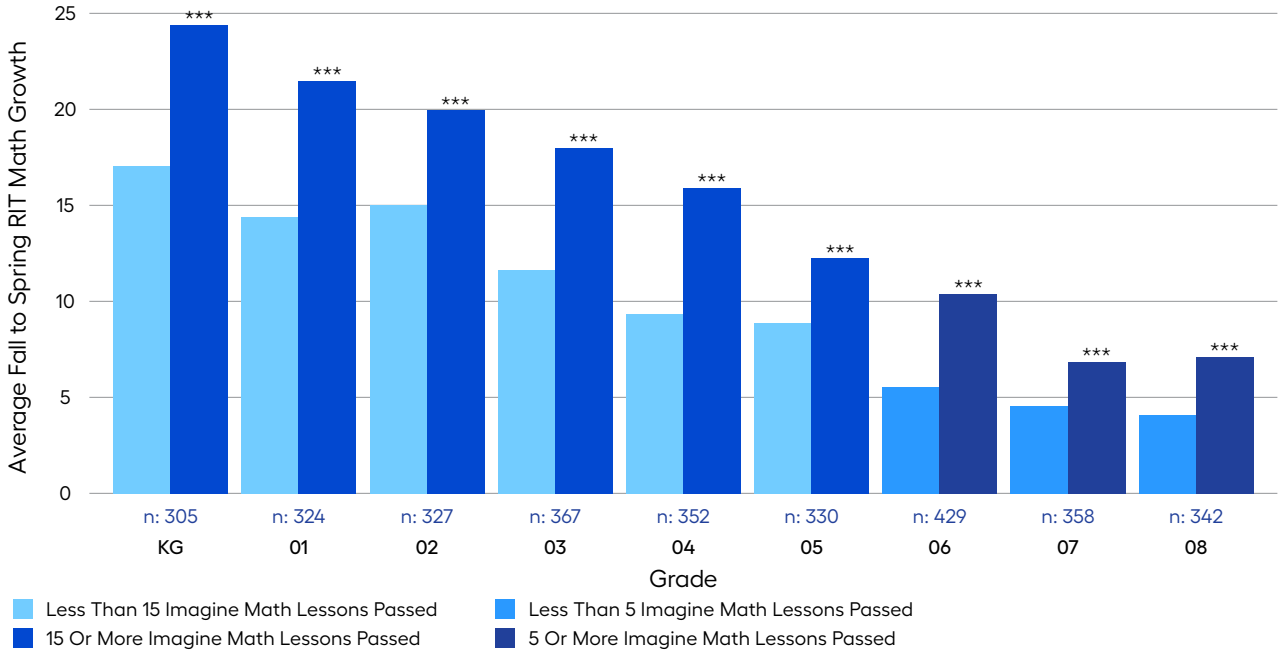
Student Group	Percent
Female	48%
Asian	1%
African American	37%
Hispanic	37%
White	19%
Two or More Races	5%
English Learner	30%
Special Education	18%

During the 2021–2022 and 2022–2023 academic years, Indianapolis Public Schools in Indiana implemented Imagine Math to promote mathematics achievement for Grades K–8 students. During 2021–2022 school year, students who took the NWEA MAP Growth assessment averaged 19.8 hours and 15.7 lessons passed over the course of the year, whereas those who took the ILEARN assessment averaged 21.2 hours and 14.7 lessons passed over the course of the year. During the 2022–2023 school year, students who took the NWEA MAP Growth assessment averaged 16.7 hours and 18.6 lessons passed over the course of the year. Imagine Learning analyzed NWEA MAP Growth and ILEARN mathematics data to determine how usage of Imagine Math was impacting students' mathematics performance. For the analyses, students were matched based on provided demographics which included gender and ethnicity for NWEA analyses and special education classification, English language learner classification, and socioeconomic status for ILEARN analyses. Comparison groups were determined based on median usage levels for elementary and middle school students.

Results

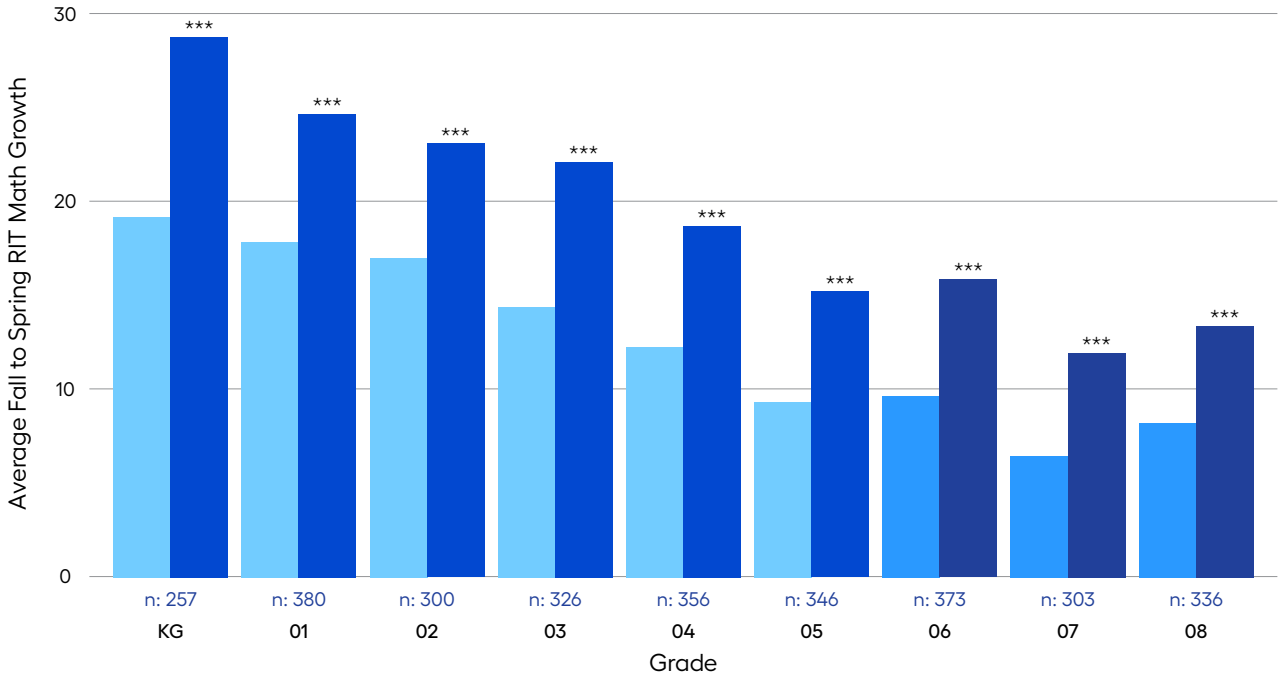
Passing 15 or more lessons was found to be significantly associated with more growth on NWEA MAP Growth Math assessment for Grades K–8 (Figures 1 and 2). Further, when analyzing ILEARN data from the 2021–2022 school year, Grades 3–5 students who passed 10 or more lessons and Grades 6 and 7 students who passed more than 5 lessons achieved statistically significantly better growth on the ILEARN assessment than their lower usage peers (Figure 3). Overall, these results indicate that students who pass more lessons on Imagine Math will achieve greater outcomes on mathematics assessments than their lower usage peers.

Figure 1. Average 2021–2022 NWEA MAP Mathematics RIT Score Growth for Elementary & Middle Grades.



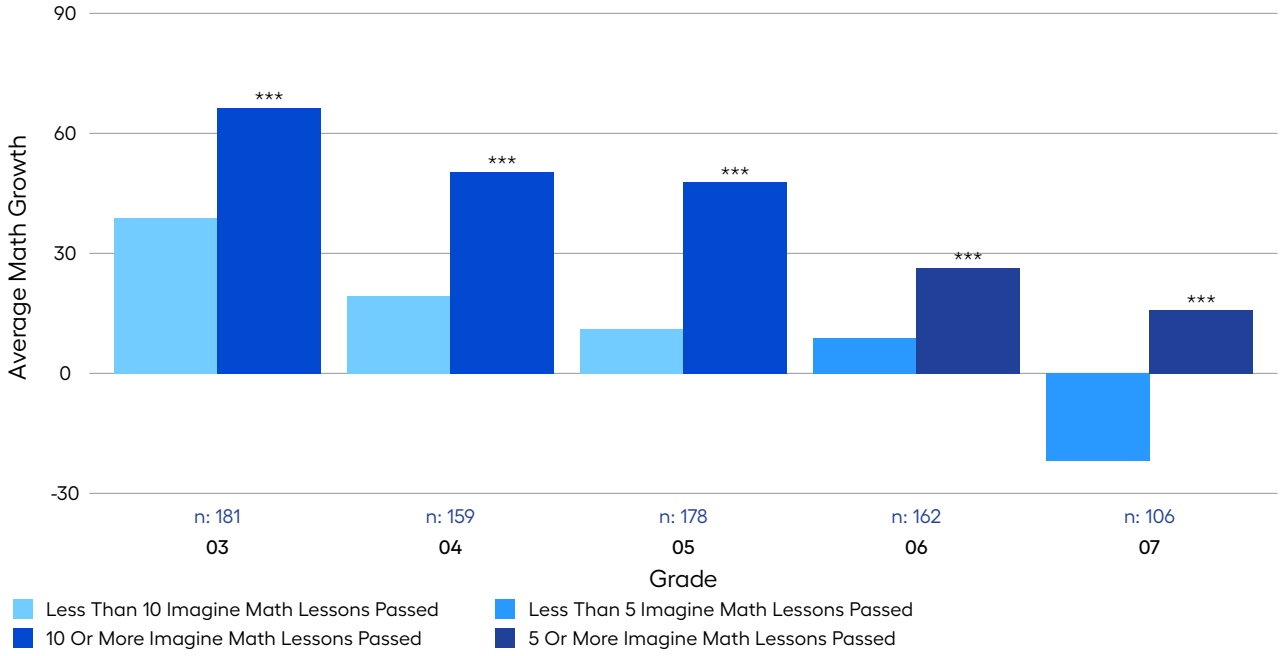
Note: Asterisks denote statistical significance: * $p < .05$, ** $p < .01$, and *** $p < .001$.

Figure 2. Average 2022–2023 NWEA MAP Mathematics RIT Score Growth for Elementary & Middle Grades.



Note: Asterisks denote statistical significance: * $p < .05$, ** $p < .01$, and *** $p < .001$.

Figure 3. Average 2021–2022 ILEARN Mathematics Growth for Elementary and Middle Grades.



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