

New Features in Imagine EdgeEX Improve Student Achievement and Growth in Math

Imagine EdgeEX is a customizable, research-based digital curriculum for initial credit and credit recovery. To improve student achievement, Imagine EdgeEX includes important features such as: rigorous, explicit instruction led by on-screen teachers; motivating, media-rich content; interactive instructional tools; a wide range of tasks; and formative, summative, and authentic assessments.

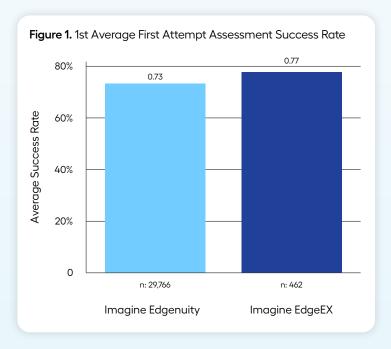
Imagine EdgeEX courses transform the learning experience to propel student achievement. They provide an engaging and accessible learning experience for all students, empower teachers through actionable data and easy-to-use tools, and provide administrators with more visibility and flexibility to customize the student experience. While the portfolio of Imagine EdgeEX courses is continuously expanding, high school mathematics courses were available for the entire 2023–2024 school year. Data for students who were enrolled in an Imagine EdgeEX mathematics course in the 2023–2024 school year were analyzed to investigate the impact of Imagine EdgeEX on student learning.

Content Mastery

Imagine EdgeEX mathematics courses feature several supports that prior versions of the courses do not:

- Answer explanations that outline the solution steps for all math problems in assignments and assessments
- Just-in-time re-teaching in the form of "Show Me" videos that model problem-solving strategies

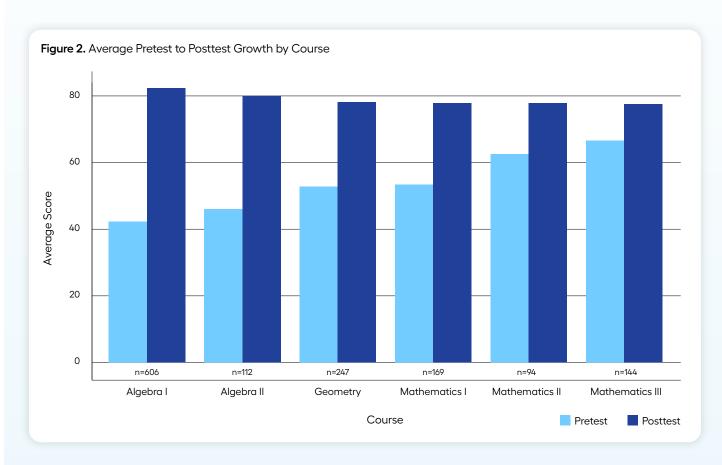
To evaluate the potential impact of these additional content features on student achievement, exam scores in Imagine EdgeEX were compared to those in the prior (Imagine Edgenuity®) version of the course. The results, as displayed in **Figure 1**, showed that students in a school district in Arizona that used Imagine EdgeEX math courses were more likely to earn a score at or above 70% on their first attempt on exams than other Arizona students who used Imagine Edgenuity math courses. This suggests that the new supports for mathematics were effective in helping students master and retain mathematics content. These results were statistically significant.





Growth

Additionally, Figure 2 summarizes the average growth of students that used Imagine EdgeEX. In Imagine EdgeEX, educators have the option to enable pretesting, which requires students to take a quiz at the beginning of the lesson. In 1,372 lessons where pretesting was enabled, students scored an average of 30 points higher on the lesson post-test, demonstrating the impact that the content of Imagine EdgeEX courses has on student learning.



Overall, students who completed courses in Imagine EdgeEX were engaged in the program, progressed through content, demonstrated content mastery, and experienced notable academic growth as they used the program.