A CASE STUDY

eBoost

Imperial College
London

Founded: 1907
Type: Public Research University
Enrollment: 20,454

6 MONTH CASE STUDY

The 6 month pilot of Boost provided scalable, 24-hour support to students and contributed to measurably better test scores in math

Dates: 09.2022 - 04.2023
Department: Bioengineering
Student Users: 176
Videos Studied: 3,000+

PILOT OUTCOMES

- Top Boost users scored 16% higher in mid-year tests
- Boost users reported they were highly likely (4.23/5) to use Boost if it was provided in the future
- Math competency scores for Boost users improved 9% more than students who did not use the platform

In September 2022, the Bioengineering Department at Imperial College London adopted Boost's Math for Engineering collection to scaffold 1st and 2nd year students in foundational quantitative skills. Led by Teaching Fellow, Dr. Maria Parkes, and Learning Technologist, Ms. Julie Hoang, the 6 month pilot of Boost provided scalable, 24-hour support to students and improved test scores in mathematics by 16% for Boost top users.

Ms. Julie Hoang works with a diverse cohort of bioengineering students each year, supporting the department with technology driven initiatives to improve student outcomes. While entry requirements are challenging, the level of mathematics mastery was inconsistent despite a number of digital assessment and test-based resources available to students.

Julie believes customized learning pathways that align with first-year courses will improve student outcomes more effectively than longer videos. "The customizable learning pathways in Boost are the most appealing part of the product" she stated. "Learners can spend a long time searching open access repositories of videos. Having one platform where we can pull together the relevant content without the time investment of creating them from scratch is the real win here."

After reviewing Boost, Julie and Maria believe the learning pathway structure and the subject matter content would be very effective. They specifically like Boost's unique course flow: after students answer an initial practice question incorrectly, they receive a tutorial video explaining how to complete the practice question.

Dr. Maria Parkes
Teaching Fellow

Ms. Julie Hoang
Learning Technologist

> We are seeing an increasing number of students who struggle to keep on top of work or who demonstrate lower performance due to knowledge gaps in foundational concepts across engineering subjects. Our first post-pandemic intake of students had lower test scores and reported struggling with the transition to university and higher education programs. We see many international students in our programs who are reluctant to reach out for and engage with us for additional support.

Dr. Maria Parkes
Senior Strategic Teaching Fellow
Imperial College London

TOP BOOST USERS SCORED 16% HIGHER MID-YEAR

Boost users reported they were highly likely (4.23/5) to use Boost in the future

Qualitative survey feedback was positive, with students noting that the Boost platform was "easy to navigate" and concepts were "extremely well explained [and] much clearer with Boost." The pedagogy was also a component in the high student satisfaction score. One student stated "There are a lot of exercises, and the fact that they show the correct way of doing exercises through video is amazing."

Julie and Maria believe that this pedagogy will support independent, self-led learning more effectively for students reluctant to attend tutoring sessions in-person. After the first 4 months of the Boost pilot program, math competency scores for Boost users improved 9% more than students who did not use the platform. Maria and Julie were very pleased with the learning outcomes for their economically-disadvantaged students, as well as the high learner engagement from their 176 users who studied over 3,000 videos and assessments during the initial pilot period.

Boost
boost-proprep.com