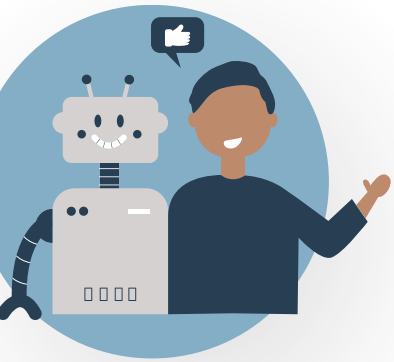
A Human-AI Approach for High-Impact Tutoring

RESEARCH SUMMARY



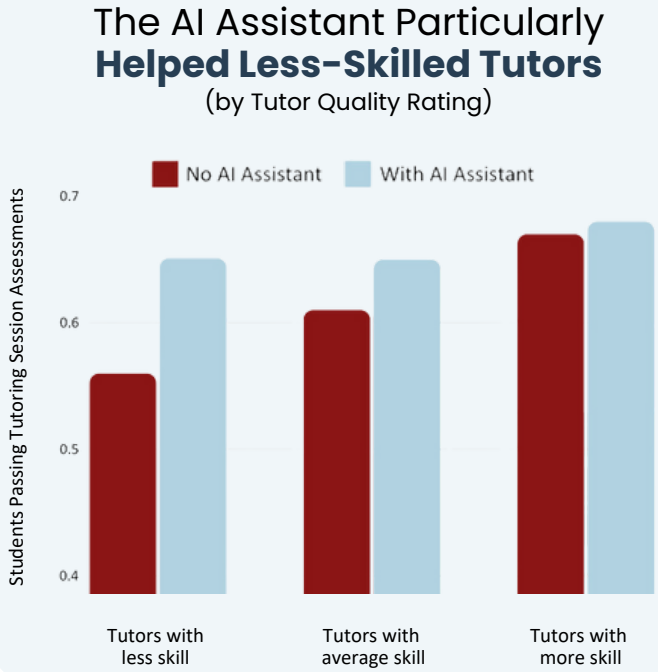
An AI tool helped math tutors and students by providing real-time, expert-backed suggestions to tutors.

In the first ever randomized controlled trial of a human-led, AI-assisted real-time tutoring initiative adopted by FEV, we discovered that an AI tool—Tutor CoPilot—enhanced math tutoring sessions. This led to an **average 9 percentage point improvement in student achievement** for students with less-skilled tutors.

Key Findings:

Boosted Tutor Effectiveness

Tutor CoPilot **helped tutors** by providing educator-curated, AI-driven suggestions on how to address student mistakes, enhancing their ability to guide students effectively through math problems.



Improved Student Outcomes

Students were **10 percent more likely to progress** through math tutoring session assessments successfully when the AI tool was used by tutors. Similar to other studies on tutoring, this approach particularly benefited students who started with low- and mid-level achievement.

Supported Scalability

AI assistance can elevate virtual tutoring quality, making it easier for districts to offer high-quality support. This approach costs approximately $20 per-tutor annually, in comparison to **$3,000+** spent per-teacher annually for professional development.

Reinforced Idea of Human-Led, AI-Assisted Education Practices

This study offered a promising example of **how the combination of AI and human insights can help human tutors**—and novice educators more generally—improve educational outcomes. Tutors were able to use their knowledge to adapt or disregard AI suggestions based on their unique understanding of an individual student's needs.