Zearn Math
Quasi-Experimental Efficacy Study in Tennessee

This research is designed to meet the rigorous standards set by the What Works Clearinghouse (WWC) and qualify as an Every Student Succeeds Act (ESSA) evidence-based intervention.
Zearn in Tennessee

147,000 K-8 students in 147 districts across all 8 CORE regions engaged with Zearn during the 2022-23 school year, representing more than 20% of Tennessee K-8 students. Districts used the platform flexibly across various learning contexts including tutoring, intervention, summer programs, and before/after school. In the 2021-22 school year, the platform engaged 85,000 Tennessee students, and by the 2022-23 school year, participation nearly doubled to 147,000.

Key findings

To analyze the impact of Zearn Math on Tennessee student achievement, researchers used a quasi-experimental research method to measure 2023 TCAP math performance growth differences between students who used Zearn Math consistently and a matched comparison group that did not use Zearn. Drawing from a sample of 3,000 Tennessee students, matched students had similar 2022 TCAP math and English language arts scores and have similar student characteristics across academic and demographic factors.

Researchers found that students using Zearn achieved greater math gains than matched peers who did not use the platform. Students who completed 3+ grade-level lessons weekly experienced a 7-point increase in TCAP math scores, with greater gains across student subgroups. For example, students who were previously lowest scoring saw a 13.8-point increase. Zearn usage resulted in significant upward academic mobility; 64% of the lowest-scoring students advanced by one or more performance levels when using Zearn.

While any Zearn dosage contributes to growth, the most substantial gains were observed in students who completed 3+ Zearn lessons each week.

Impact of Zearn Math on TCAP Scale scores, by Zearn Dosage

![Graph showing the impact of Zearn Math on TCAP Scale scores by Zearn dosage.]

- 3 lessons per month (TN All Corps mandate) contributed to 1.8 points.
- 1-2 lessons per week contributed to 2.4 points.
- 2-3 lessons per week contributed to 3.1 points.
- 3+ lessons per week contributed to 7.2 points.
**KEY FINDING 2**

Consistent Zearn usage resulted in a 7-point increase in TCAP math scores, with notable gains across subgroups.

Impact of Zearn Math on TCAP Scale Scores, by Subgroup

- **Zearn usage**: Orange bars
- **No Zearn usage**: Black bars

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**KEY FINDING 3**

Zearn helped students across all levels of math performance; previously low-scoring students nearly tripled TCAP score growth with Zearn.

Impact of Zearn Math on TCAP Scale Scores, by Starting Performance Level

- **Zearn usage**: Orange bars
- **No Zearn usage**: Black bars

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64% of students who started at the lowest performance level and consistently used Zearn advanced by one or more performance levels.

Impact of Zearn Math for Students Scoring at the Lowest Performance Level on TCAP

**No Zearn usage**

- Moved up at least one level of math performance: 43%
- Stayed at lowest level of math performance: 57%

**Zearn usage**

- 64%
- 36%

100% of students whose starting TCAP performance level was “Below Expectations”

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"I have been using Zearn for my 3rd grade RTI classes, and they are progressing the fastest I have seen in all of my years of teaching."

**RTI/INTERVENTION TEACHER, HENDERSON COUNTY SCHOOLS**

"I truly believe that our TCAP score increases are from Zearn. This has been a game changer for our tutors and teachers."

**INSTRUCTIONAL TECH SPECIALIST, FENTRESS COUNTY SCHOOLS**