Achieve3000®

Achieve 3000 Math™

Achieve3000 Math Accelerates Expected Learning Growth for Middle School Students

SEGMEASUREMENT
BUILDING BETTER ASSESSMENTS / EVALUATING PRODUCT EFFECTIVENESS

Study reveals that sixth-grade users showed 40% more growth than expected, and seventh-grade users showed 66% more growth than expected.

Study Design

The study, conducted by SEG Measurement, employed a mixed-methods approach including a quasi-experimental study of Achieve3000 Math users and nonusers, teacher surveys, and classroom observation of teachers and students. Implemented over a 16-week period in 2016, the study included 828 sixth- and seventh-grade students and 20 teachers in Missouri, New Jersey, and South Carolina. Students were divided into two groups—one that used Achieve3000 Math and one that did not.

Those that used Achieve3000 Math* did so for one hour each week for the duration of the study. Using the Stanford 10 standardized measure of mathematics skills, students were given a pre-test at the beginning of the study and a post-test at the end to assess how much their math knowledge had increased.

Results: Students using Achieve3000 Math see up to a nine-point increase

Analysis of the pre-tests and post-tests of both groups indicated that students in the group who used Achieve3000 Math showed significantly more growth in their mathematics knowledge than students in the group who did not use Achieve3000 Math.

Study Student Population Profile
- Schools in three states (MO, NJ, and SC)
- **828 sixth**- and seventh-grade students
- **20** sixth- and seventh-grade teachers
- Mix of urban and suburban populations
- **Approximately one quarter percent** black, Hispanic, or mixed race

❞ Because every step in Achieve3000 Math's interactive system is tagged with a specific state standard, vital data is collected while students learn. This data allows our teachers to know in real time where progress is being made against state standards. ❞

Dr. Charlene Marchese, Supervisor of Mathematics for Freehold Township School District, in Freehold, New Jersey, who participated in the efficacy study.

Specifically, the scores of sixth graders who used Achieve3000 Math increased about seven points more from pre-test to post-test than those who did not. Seventh-grade users' scores increased about nine points more from pre-test to post-test than nonusers.
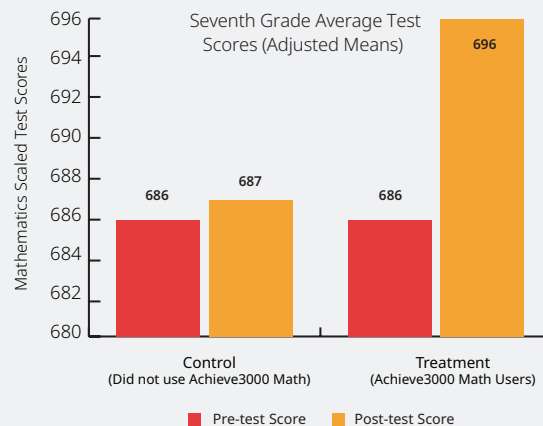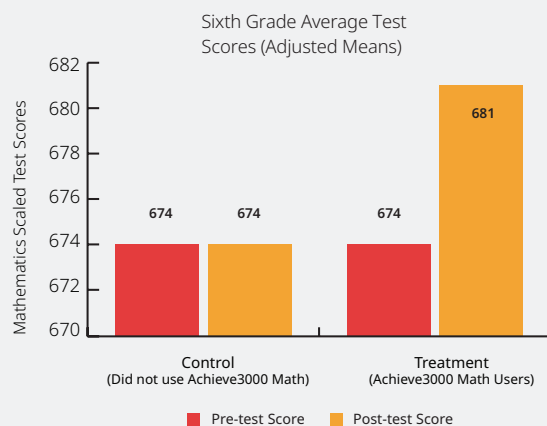
Comparison of Mean Post-test Scores for Treatment and Control Groups Post-test After 16 Weeks

Sixth Grade Average Test Scores (Adjusted Means)

Control (Did not use Achieve3000 Math): Pre-test Score 674, Post-test Score 674
Treatment (Achieve3000 Math Users): Pre-test Score 674, Post-test Score 681

Seventh Grade Average Test Scores (Adjusted Means)

Control (Did not use Achieve3000 Math): Pre-test Score 686, Post-test Score 687
Treatment (Achieve3000 Math Users): Pre-test Score 686, Post-test Score 696

■ Pre-test Score   ■ Post-test Score

How were the results accomplished?

Achieve3000 Math was designed to mimic a one-on-one tutoring session. When students submit an incorrect answer, they are led step-by-step through every prerequisite concept needed to understand the problem originally assigned. Each step uses visuals, videos, hints, and suggestions to give students all the tools they need to find the answer on their own. Data on student knowledge gaps is collected while students learn, saving teachers hours from diagnostic implementation and analysis.

How did math teachers use Achieve3000 Math?

The most common use case for teachers who participated in the study was to teach a concept from their syllabus and then assign Achieve3000 Math as practice afterward to evaluate whether students had understood the lesson. Students could use Achieve3000 Math at school or at home.

A Personalized Learning Solution that Builds Skills and Confidence

A digital mathematics solution for grades K-12, Achieve3000 Math is designed to support math fluency and accelerate students' mastery of skills across grades, standards, and topics. Achieve3000 Math offers a powerful personalized learning experience.
Key features include:

- *Precision assessments based on MetaMetrics' Quantile® Framework*

- *Individualized practice matches lessons to students needs in real time*

- *Targeted scaffolding and feedback, including step-by-step instruction*

- *Comprehensive scope of state standards-aligned math content*

- *Real-time reporting helps find skill gaps and tailor instruction*

85.7% of teachers agreed or strongly agreed that it was easy to help students practice math concepts and skills with *Achieve3000 Math.*

Achieve 3000 Math™

Achieve 3000

A proven instructional process can be used in school or at home.

STEP ONE	STEP TWO	STEP THREE	STEP FOUR	STEP FIVE	STEP SIX
Achieve3000 Math assesses student's skill level using Quantile benchmark.	Teacher assigns lessons and/or system recommends lessons based on benchmark.	Student engages in Achieve3000 Math lesson.	Student receives targeted scaffolding and feedback.	Achieve3000 Math dynamically calculates and reports on student mastery.	Achieve3000 Math recommends prerequisite lessons for students who struggle.

Highlights of Teacher Survey

As part of the study, teachers were given an end-of-year survey. Topics included ease of use, quality of features, and impact on instruction. These are some of the highlights of that survey:

- **85.7%** agreed or strongly agreed it was easy to help students learn and practice math concepts and skills with Achieve3000 Math

- **82.9%** agreed or strongly agreed Achieve3000 Math was well-aligned to their state standards

- **82.8%** agreed or strongly agreed it was easy to configure Achieve3000 Math for their classes

- **77.1%** agreed or strongly agreed Achieve3000 Math was well-aligned to their instructional goals

- **71.4%** agreed or strongly agreed they could track students' progress with Achieve3000 Math

* This study was completed for a math product called LearnBop, which Achieve3000 acquired and updated as Achieve3000 Math. SEG Measurement verified that its findings concerning the efficacy of LearnBop apply to Achieve3000 Math.

About Achieve3000

Achieve3000 delivers a comprehensive suite of digital solutions that significantly accelerate literacy and deepen learning across the content areas. Using personalized and differentiated solutions, Achieve3000 provides equity for remote and on-site instruction, enabling educators to help all students achieve accelerated growth. For more than four million students in grades PreK-12, Achieve3000 improves high-stakes test performance and drives college and career readiness.

To learn more about Achieve3000 Math, please contact **800-838-8771** or visit **achieve3000.com**