



Classtime

LOOKBACK EFFICACY STUDY

Accelerating Math Achievement with
Classtime: The Impact of Tech-
Enhanced Formative Assessment on
CAASPP in Grades 3-6

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EFFICACY STUDY SUMMARY

2022-2023



STUDY SUMMARY

Classtime partnered with LXD Research to evaluate the impact of Classtime during the 2022-2023 school year on math teacher anxiety and state test scores for grades 3-6. The analyses examined students' performance on the CAASPP state test, iReady formative assessments, and teachers' usage of Classtime. Teacher surveys were included to understand math teaching anxiety and feedback about the program. Teachers received beginning-of-year training and short, targeted coaching sessions throughout the year. The schools that did not use Classtime had similar demographics and CAASPP scores in Spring 2022.

PROGRAM DESCRIPTION

Classtime is a digital platform that explicitly teaches Strategic Thinking in Math while practicing targeted grade-level standards. The platform assessments mirror the state-testing experience in a low-stakes environment to counteract both math teaching anxiety and student math anxiety. Teachers are provided with detailed real-time data dashboards to help check students' understanding and address misconceptions, as well as support to explicitly teach strategic thinking skills required to solve different types of problems.

SAMPLE DESCRIPTION

- California School District
- 2021-2022 vs. 2022-2023
- 667 students in grades 3-6
- 3 schools

Demographics

91% Hispanic | 19% ELL
12% SPED | 89% SED

Assessments

CAASPP growth scores for grades 4-6 and iReady growth scores for grade 3 were collected for all students at schools with and without Classtime use at the end of the 21-22 and 22-23 school years.

Implementation

- Classtime was used in grades 3-6 by one elementary school in 22-23
- Most students (58%) used Classtime between 6 and 12 sessions across the year, but usage ranged from 4 sessions to over 20 sessions.

KEY FINDINGS

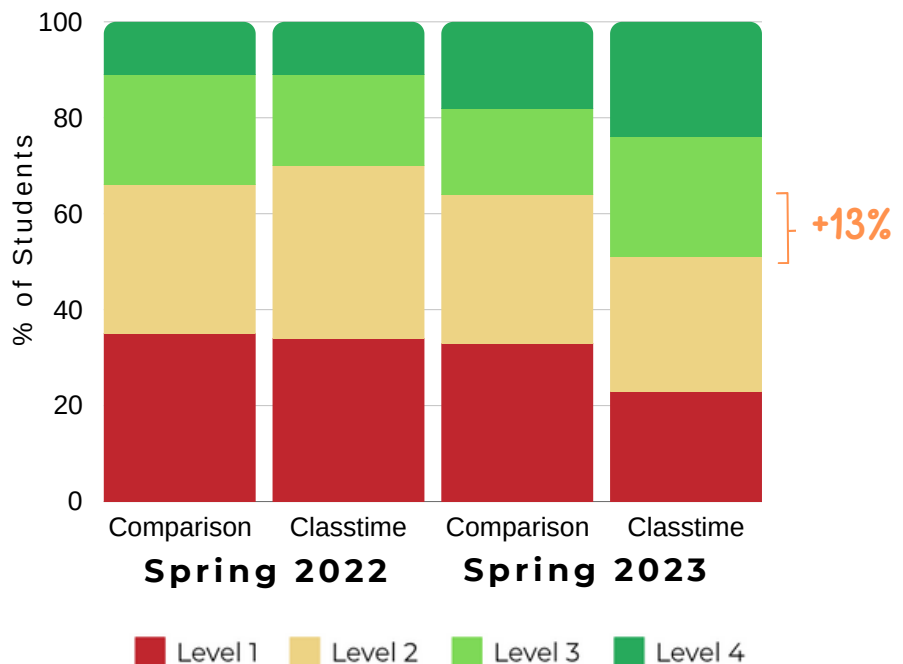
Results showed that Classtime showed strong, positive effects on CAASPP and iReady growth.

- Students of teachers who used Classtime more regularly made double the gains on CAASPP than those with less frequent use.
- The Classtime school's students outperformed the non-Classtime schools' students in terms of year-over-year gains and end-of-year proficiency rates.



Classtime students outperformed non-Classtime students on math assessments.

Proficiency Levels Across Grades by Group and Year



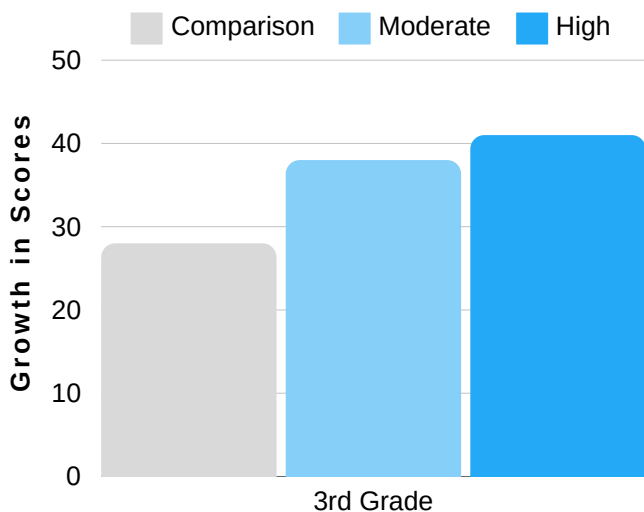
Teacher usage data was gathered to estimate how Classtime use impacts student achievement levels. To support analysis, usage was grouped into one of 3 levels, representing usage a few times a year, about once a month, or a few times a month. Low usage averaged 4 sessions, Moderate usage averaged 8 sessions, and High usage averaged 19 sessions.

Number of Students by Usage Group

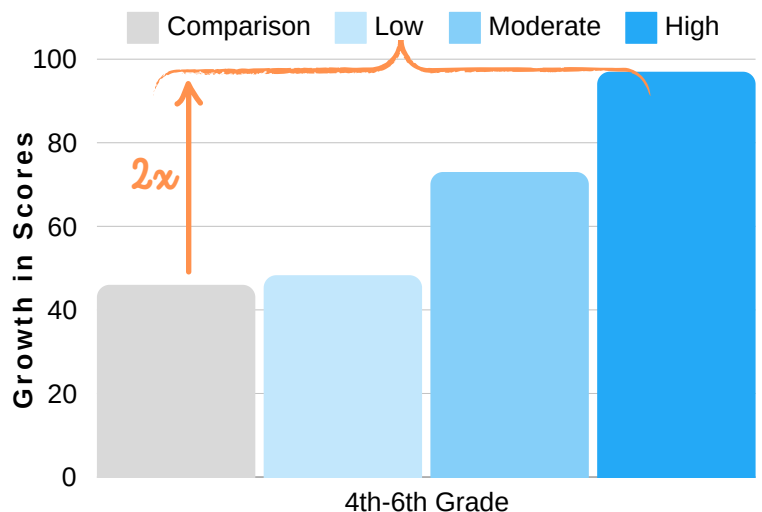
Grade	High Usage	Moderate Usage	Low Usage	Classtime Total	Comparison Total
3rd	20	40	0	60	118
4th	47	0	23	70	122
5th	0	55	27	82	113
6th	0	67	0	67	60
Total	67	162	50	279	480

Classtime shows a greater improvement on test scores the more it is used. The grades with the highest usage showed the most gains (see above) and across grades, students with High Usage had over twice the gains on CAASPP than comparison, non-Classtime students in grades 4-6.

iReady Growth from Fall 2022 to Spring 2023

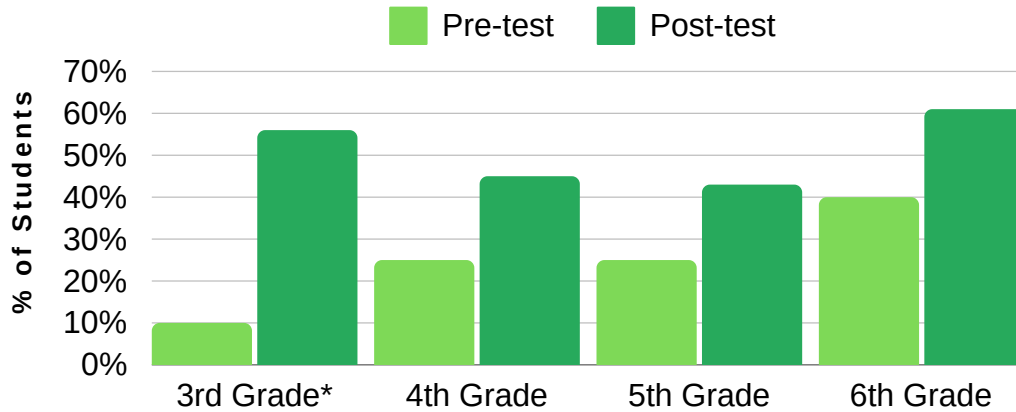


CAASPP Growth from Spring 2022 to Spring 2023



In the school using Classtime, each student was followed over time. Students in all grades showed significant improvement scores from their pretest assessment to posttest. *Third grade uses iReady as the Pre-test and CAASPP as Post-Test.

% Proficient on CAASPP With Classtime Pre- and Post-test

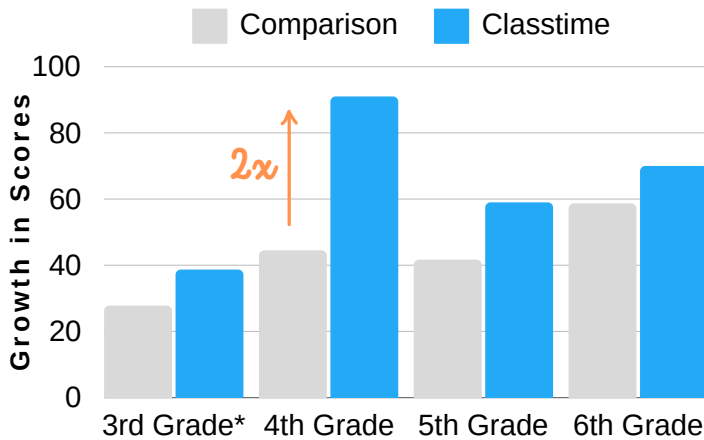


iReady Proficient was considered *Early On, Mid or Above Grade Level*, and *1-3 Grades Below* were considered Not Proficient. CAASPP Proficient was considered Levels 3 and 4, and Levels 1 and 2 were considered Not Proficient.

Comparison Group Results

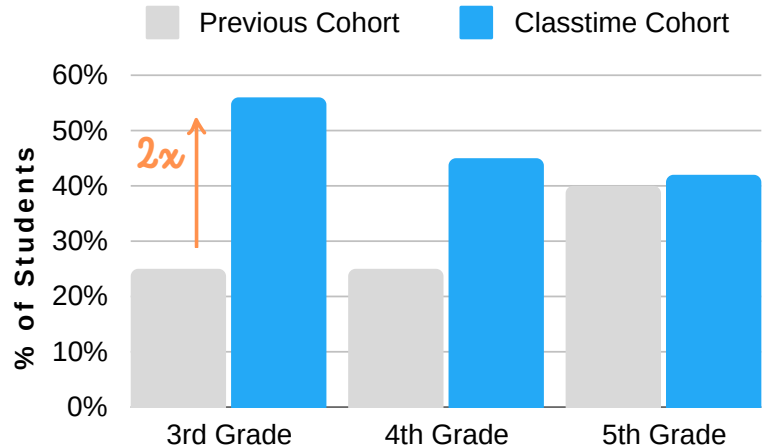
Researchers examined how Classtime impacted annual test score growth for students in each grade. Grades 4-6 compared CAASPP scores from 2022 to 2023, while grade 3 compared Fall to Spring iReady scores. Math CAASPP achievement scores were higher for all grades, with 3rd and 4th grade showing significantly larger gains compared to non-Classtime students. These gains translated into more students reaching proficiency on the Spring 2023 state test across all grades.

Assessment Score Growth



Classtime students vs. comparison students in different schools in the same grade.

% Proficient CAASPP with Classtime and Previous Cohort



Classtime students vs. students in the same school from the previous school year.

LXD Research is an independent research firm that evaluates educational programs with ESSA-aligned methods.

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