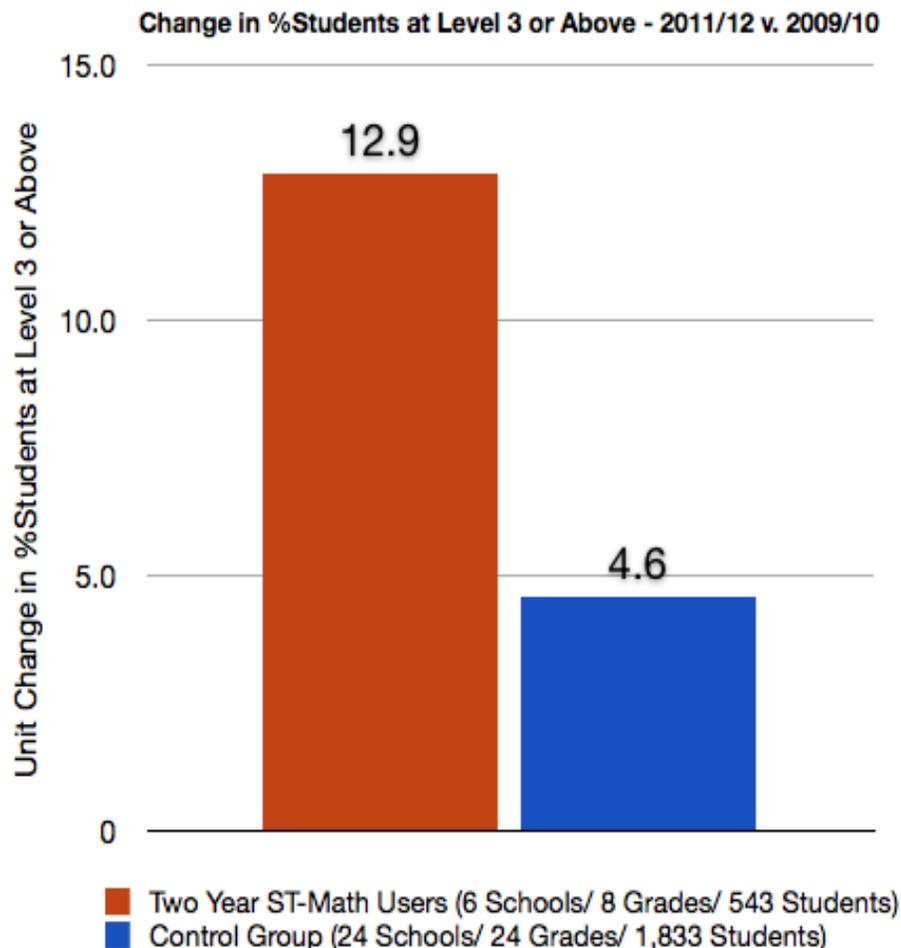


New York City Math Outcomes (Two Years of ST Math Usage)

Subjects: MIND Research Institute analyzed all partner schools in New York City Department of Education for grade-average New York Assessment Test math achievement growth between the 2011/12 and 2009/10 school years. The schools received software licenses from the New York Math Initiative, a philanthropic community partnership designed to increase math achievement at lower performing schools through deployment of a research-based math teaching and learning approach, implemented via blended learning and teacher and student use of visual math instructional software. All grades with two years of ST Math usage (since 2010/11) with average student content coverage of at least 50%, and with at least 85% of their students enrolled in the program in the 2011/12 school year were analyzed. This report focuses on grades from 6 schools, implementing the program at grade 3, 4, and/or 5, with altogether 8 grades and 543 students using the program. The comparison set was chosen to be similarly performing schools, also in New York City, which did not use the ST Math program: 24 schools, 24 grades, and 1,833 students.



Program: In each grade using the program, all students and teachers are licensed to participate. The ST Math ® program consists of supplemental math instructional software which covers New York math standards at each grade level. The software presents the mathematics as a year-long curriculum of interactive, animated visual diagrams, or puzzles, for the students to solve. The students use the self-starting, self-paced instructional software twice per week under the teacher's supervision. The teacher is trained to also use the software's visual representations of mathematics concepts during regular classroom lessons, to connect to the conventional language-intensive math instruction.

Data Collection: The average NYC math scale scores, achievement levels distributions, and student enrollment were collected for each grade level for the years 2009/10, 2010/11, and 2011/12 from the New York Department of Education website. Each year the data indicate the percentage of students at each grade who tested into the 4 different levels of math achievement. The average MIND Research Institute program implementation percentage and student enrollment in the MIND software were collected from MIND's digital usage data.

Analysis Summary: Changes from 2009/10 to 2011/12 in the percent of students at the top 2 achievement levels, Level 3, and Level 4, were evaluated for the ST Math group and also the comparison group of schools. A grade-wise growth comparison was evaluated (i.e. growth in same grade, same school, from 2009/10 school year to 2011/12 school year) and then aggregated across grades and schools.

Results: The grades implementing ST Math on average grew 12.9 points in the percentage of students at level 3 or above, as compared to an average increase of 4.6 points for the comparison group (p-value = 0.19).