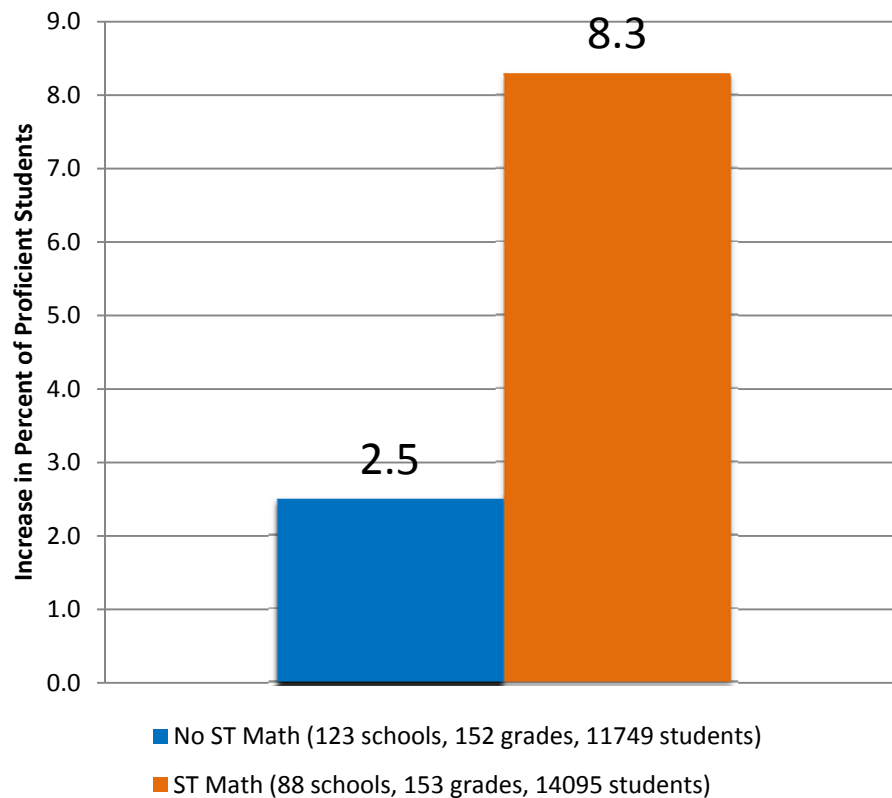


## Orange County (Two Years ST Math Usage) -2011/12

**Subjects:** MIND Research Institute analyzed schools in Orange County for California Standards Test (CST) math proficiency growth from the 2009/10 school year to the 2011/12 school year. All the Orange County grades which deployed MIND's research-based math teaching and learning approach, implemented via student use of visual math instructional software for two years, were analyzed. All grades with two years of ST Math usage, with at least 85% of their students enrolled in the program, and covering on average at least 50% of ST Math content in the 2011/12 school year were analyzed. This report focuses on those 88 schools implementing the program at grade 2, 3, 4 and 5, with altogether 153 grades and 14,095 students using the program. The comparison set was chosen to be similarly performing San Diego schools which did not use the ST Math program: 123 schools, 152 grades and 11,749 students.

**Increase in Percent Students CST Math Proficient | Advanced 2011/12 vs. 2009/10**



**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 California 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 CST math achievement scale scores, proficiency levels distributions, and student enrollment, were collected for each grade level for the years 2009/10 through 2011/12 from the California Department of education website. Each year the data indicate the percentage of students at each grade who tested into the 5 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 usage data.

**Analysis Summary:** Changes from 2009/10 to 2011/12 in the percent of students at top 2 achievement levels, Proficient and Advanced, 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 the same grade, the 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 grew 8.3 points in the percentage of students Proficient or better, as compared to an increase of 2.5 points for the comparison group ( $p < 0.001$ ). This difference is statistically significant under 0.05 level.