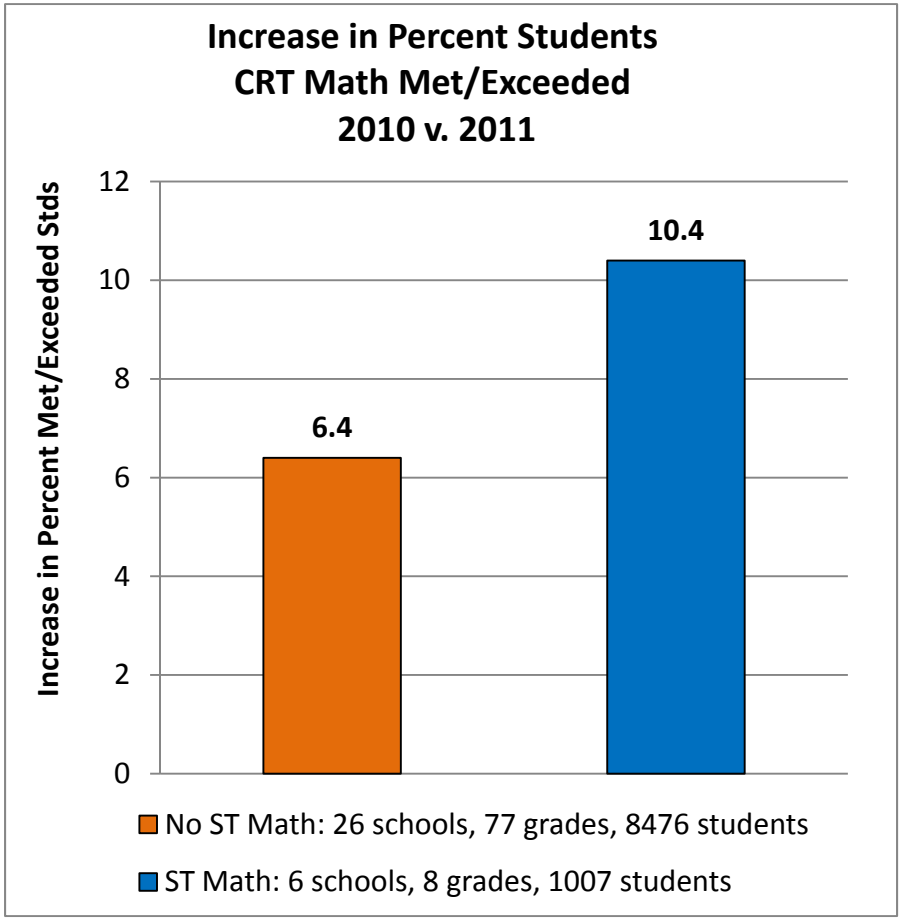
Clark County Math Initiative Cohort 2 Growth 2010-2011

MIND Research Institute

Subjects: MIND Research Institute analyzed Math Initiative schools in Clark County for math proficiency growth in the 2010/11 school year. The Math Initiative, funded by local philanthropy, is designed to increase math achievement at lower performing schools through deployment of a research-based math teaching and learning approach, implemented via student use of visual math instructional software. Eligible schools from a list of the lowest 30% in Nevada's statewide math performance were invited to a launch event in 2010 and applied for startup grants for two selected grade levels (e.g. grades 3 and 4). All schools in Clark County which enrolled and implemented the program with minimal 50% content progress through ST Math content in 2010/11 were analyzed. This report focuses on those 6 schools implementing the program at grade 3, 4, and/or 5, with altogether 8 grades and 1,007 students using the program. The comparison set was chosen to be similarly performing schools in Clark County, also in the bottom 30% of math performance, which did not participate: 26 schools, 77 grades, and 8,476 students. Both the ST Math group and the comparison group in averaged ≤75% Met/Exceeded Standards on CRT Math in 2009/10, the baseline year.



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 Nevada 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 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 CRT math achievement proficiency levels distributions, and student enrollment, were collected for each grade level for the years 2009/10 and 2010/11 from the Nevada Department of Education website. In 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 usage data.

Analysis Summary: Changes from 2009/10 to 2010/11 in the percent of students at the "Met Standards" or better proficiency levels were evaluated for the ST Math group and also the comparison group. A grade-wise growth comparison was evaluated (i.e. CRT growth in same grade, same school, from 2009/10 school year to 2010/11 school year) and then aggregated across grades and schools.

Results: The grades implementing ST Math grew 10.4 points in the percentage Met/Exceeded Standards, as compared to an increase of 6.4 points for the comparison group (with significant $p<0.10$).