MIND Research Institute

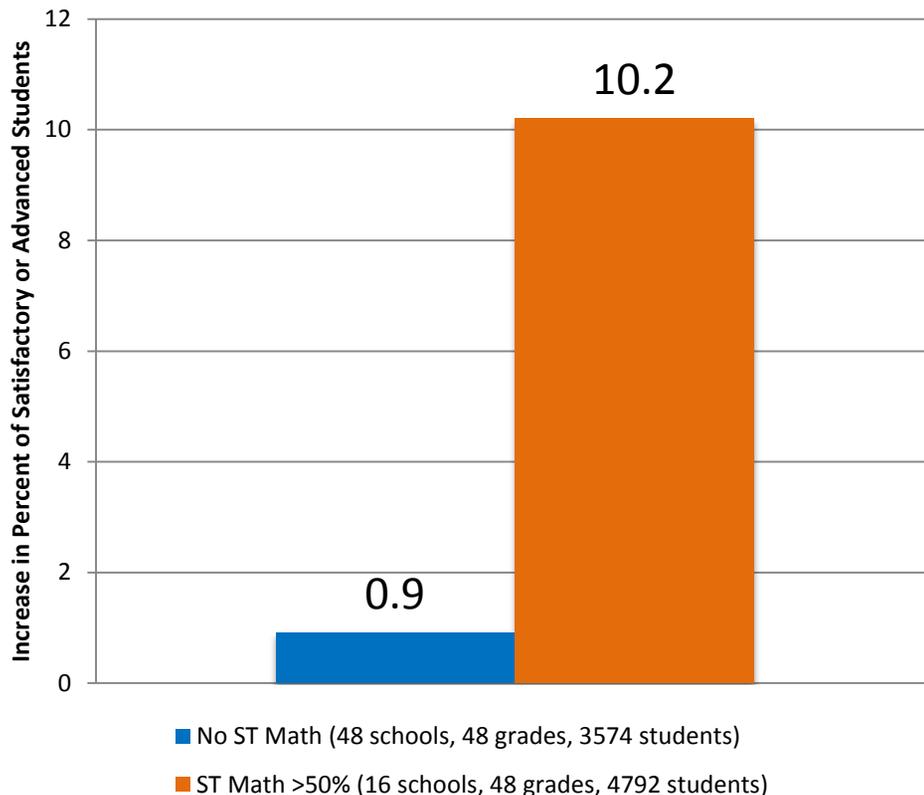<u>**Texas 1 Year 2013/14 to 2014/15**</u>

Subjects: MIND Research Institute analyzed schools in Texas for grade-average STAAR math proficiency growth between the 2013/14 and 2014/15 school years. All Texas grades 3, 4, or 5 using ST Math for the first time in 2014/15, reaching average 2014/15 ST Math program content coverage of at least 50% and ST Math grade-level enrollment of at least 85% were analyzed: altogether 48 grades with 4792 students at 16 schools. The comparison group is randomly matched from across Texas to be similar in initial 2013/14 math performance but to have never used the ST Math Program: 48 grades with 3574 students at 48 schools.

Increase in Percent Students Texas Math STAAR Satisfactory or Advanced 2014/15 v. 2013/14

Y-axis: Increase in Percent of Satisfactory or Advanced Students

- No ST Math (48 schools, 48 grades, 3574 students): 0.9
- ST Math >50% (16 schools, 48 grades, 4792 students): 10.2

Program: In each grade using the program, all students and teachers are licensed to participate. The ST Math® program is based on supplemental math instructional software which covers 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 conventional language-intensive math instruction.

Data Collection: The grade-average STAAR math proficiency level distributions, and student testing counts were received from the Texas Education Agency website, for each school and grade level for the years 2013/14 through 2014/15. Each year the data indicate the percentage of students at each grade at each school who tested into the 3 different levels of STAAR math proficiency (Unsatisfactory, Satisfactory, or Advanced). The average MIND Research Institute ST Math program content coverage percentage and student enrollment in the ST Math software were collected from MIND's digital usage data for 2014/15.

Analysis Summary: Changes from 2013/14 to 2014/15 in the percent of students at the top 2 achievement levels, Satisfactory or Advanced, were evaluated for the ST Math group, and also for the comparison group of schools. Grade-wise growth was evaluated (i.e. growth in same grade, same school, from 2013/14 to 2014/15) and then aggregated across schools and grades.

Results: The grades implementing ST Math on average grew 10.2 points in the percentage of students at Satisfactory or Advanced, as compared to growth of 0.9 points for the comparison group (p-value<0.01).