## MIND Research Institute

Subjects: MIND Research Institute analyzed schools in lowa for grade-average lowa Assessments math proficiency growth between the 2012/13 and 2013/14 school years. All lowa grades 3, 4, or 5 using ST Math for the first time in 2013/14, reaching average 2013/14 ST Math program content coverage of at least $50 \%$ and ST Math grade-level enrollment of at least $85 \%$ were analyzed: altogether 16 grades with 864 students at 6 schools. The comparison group is randomly matched from across lowa to be similar in 2012/13 math performance but to have never used the ST Math Program: 32 grades with 1386 students at 31 schools.

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 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 languageintensive math instruction.

Data Collection: The grade-average lowa Assessments math proficiency level distributions, and student testing counts were received from the lowa Department of Education, for each school and grade level for the years 2012/13 through 2013/14. Each year and grade level for the years 2012/13 through 2013/14. Each year
the data indicate the percentage of students at each grade at each school who tested into the 3 different levels of lowa Assessments school who tested into the 3 different levels of lowa Assessments
math proficiency (Not Proficient, Proficent, or Advanced). The average MIND Research Institute ST Math program content average MIND Research Institute ST Math program content were collected from MIND's digital usage data for 2013/14.
Analysis Summary: Changes from 2012/13 to 2013/14 in the percent of students at the top 2 achievement levels, Proficient 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 2012/13 to 2013/14) and then aggregated across schools and grades.

■ ST Math >50\% (6 schools, 16 grades, 864 students)
Increase in Percent Students Iowa Math Assessment Proficient or Advanced 2013/14 v. 2012/13


Results: The grades implementing ST Math on average grew 6.6 points in the percentage of students at Proficient or Advanced, as compared to growth of 1.1 points for the Comparison group ( $p$-value $=.04$ ).

