Subjects: MIND Research Institute analyzed all partner schools in Florida (Orange County and Seminole County) for grade-average Florida Comprehensive Assessment Test (FCAT 2.0 with 2012 standards) math achievement growth in the 2011/12 school year. The schools received software licenses from the Florida 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 first-year ST Math usage of 2011/12, with average student content coverage of at least 50%, and with at least 85% of students per grade enrolled in the program were analyzed. This report focuses on grades from 15 schools, implementing the program at grade 3, 4, and/or 5, with altogether 17 grades and 1,417 students using the program. The comparison set was chosen to be similarly performing schools, also in Orange or Seminole Counties, which did not use the ST Math program: 41 schools, 51 grades, and 5,509 students.

Program: In each grade using the program, all students and teachers are licensed to participate. The ST Math ® program consists of a blended approach using math instructional software which covers Florida 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 FCAT 2.0 (with 2012 standards) math achievement scale scores, achievement levels distributions, and student enrollment were collected for each grade level for the years 2011/12 and 2010/11 from the Florida 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 digital usage data.

Analysis Summary: Changes from 2010/11 to 2011/12 in the percent of students at the top 3 achievement levels, Level 3, Level 4, and Level 5, 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 2010/11 school year to 2011/12 school year) and then aggregated across grades and schools.

Results: The grades implementing ST Math on average grew 9.0 points in the percentage of students at level 3 or above, as compared to an average increase of 3.0 points for the comparison group (with marginal significant p-value of 0.049).