

# ST MATH™ SOFTWARE TEXAS TRIAL IMPLEMENTATION STUDY

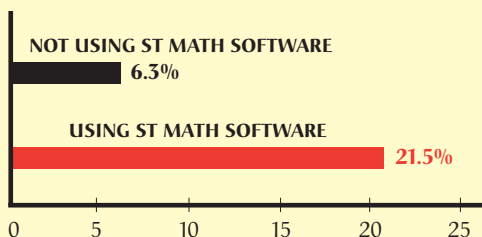


*First grade students from the Pasadena Independent School District participated in a study of the effectiveness of the MIND Institute's ST Math™ place value software, which teaches TEKS skills. The MIND Institute subjects all instructional modules to a rigorous classroom-based Quality Assurance test. ST Math students completed seven 30-minute instructional periods over three days. Participants are compared in both pre and post tests to control students receiving usual (non-computer-based) instruction.*

## RESULTS OF THE STUDY

- *The ST Math™ first graders improved more than three times as much as their non-treatment peers from pre-test to post-test.*
- *Compared to the standard instruction control group, the percent of students achieving proficiency (defined as over 60% correct) was almost 18 points higher for the ST Math™ first graders.*

PRE-TEST TO POST-TEST GAIN IN RAW SCORE



### Reliable, Effective, Efficient Instruction in a Difficult First Grade TEKS.

Place value is an essential mathematical skill introduced in first grade and consistently rated by teachers as difficult to teach and to learn. The MIND Institute has developed a series of computer-based activities that introduce the essential concepts and language of place value using visual representations. Two first grade classrooms comprising 28 students received ST Math, and two control classrooms with 28 total students were also chosen. The two groups were closed matched on raw score on the pre-test (48% vs. 46.7%). On the post-test the ST Math students improved to 69.5% correct, while the control group averaged 53% correct. 64.3% of the ST Math first graders achieved a place value score greater than 60% correct vs. 46.4% of the controls.

*The MIND Institute's ST MATH™ software is a series of computer-delivered games and puzzles that utilize spatial temporal reasoning to teach math concepts, aligned to state standards, from grades K through 5. Spatial temporal reasoning is the innate ability to visualize and manipulate images through a sequence of steps in space and time. This non-language based approach delivers the instruction in a way the brain is hard-wired to receive, and avoids the unnecessary complexity and confusion inherent in a language-first approach. MIND Institute scientists discovered that music training develops spatial temporal reasoning, helping put all students on a level playing field for the ST MATH™ software games. Spatial temporal reasoning is also a highly valuable general problem-solving skill.*

**For a copy of the full report, please call the MIND Institute or email [info@mindinstitute.net](mailto:info@mindinstitute.net).**



**MIND Institute**

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**BOTTOM LINE:** The MIND Institute's ST Math™ Place Value module was validated as effective and efficient in producing concept mastery for Texas first grade students.