



# ST Math®



Uniquely positioned to  
**ACCELERATE  
LEARNING NOW**

ST Math® is a PreK-8 visual instructional program that leverages the brain's innate spatial-temporal reasoning ability to solve mathematical problems, unlocking deep conceptual learning.

ST Math can make a positive impact for students as we work toward learning recovery for this year, and to regain ground in the new school year.



**Higher Math  
Self Beliefs**



**Equitable Access  
for Students**



**Increased Proficiency  
on Grade Level**

## MEETING THE MOMENT

Educators are facing unprecedented challenges and disruptions caused by the pandemic.

After an emotionally difficult year, students will arrive at school at dramatically different starting points, with a wider range of academic and social emotional needs, demanding that teachers adjust their approach to address learning recovery... a complex undertaking for educators who have also experienced a year like no other.

The new school year will demand a lot of everyone, and to make the most of every school day, students must be excited and engaged.

# ST MATH IS DIFFERENT

For years, ST Math has been a powerful tool for millions of students – helping them to see math concepts in a more intuitive way while engaging them in joyful learning that builds their math skills and confidence.

The PK-8 game-based platform is designed to amplify learning and drive student engagement while working alone and in group discussion, so they develop deep conceptual understanding of math standards.

ST Math's visual approach to conceptual math makes the program effective and accessible for **everyone**.



## WORKS FOR ALL STUDENTS

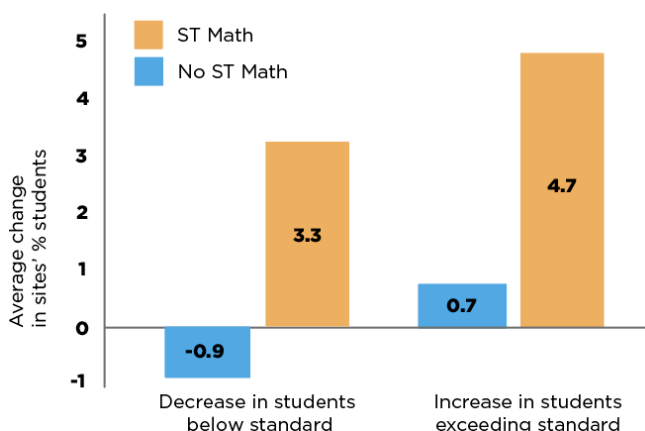
### Behind, above, and on-grade level

ST Math **meets learners where they are** – especially critical when students will return at different levels.

With over 100 efficacy studies, research-based evidence has confirmed ST Math's results for **all students**.

For example, the multi-school study below looked at changes in proficiency levels year over year. The percentage of students below meeting standards decreased when using ST Math, while the percentage of students exceeding standards increased.

Changes in Proficiency Levels – 2016/2017 vs 2015/2016



## MAKES LEARNING FUN

### Develop confident learners

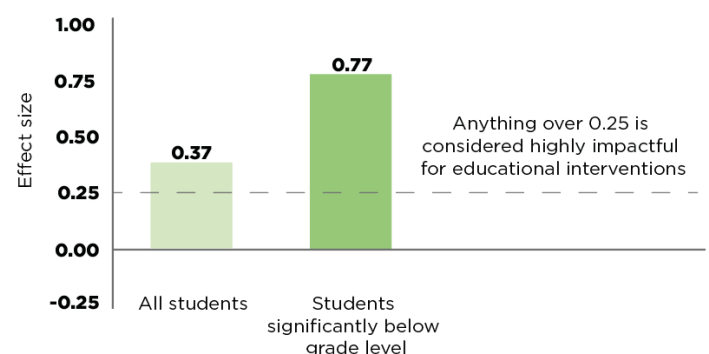
Students have been through a lot. They need joy and the feeling of pride and accomplishment every day.

ST Math captures students' attention, engaging them in productive struggle and creating a motivating learning experience.

We've always known when visiting classrooms and talking to students and teachers that ST Math promotes social-emotional skills and problem solving abilities. **ST Math changes how students feel about math** and now, there's research to prove it!

A recent randomized control trial found students who play ST Math have higher math self-beliefs than non-ST Math students – and the effect is highest for the lowest performers.

Effect Size of ST Math on Student Self Beliefs



# For learning recovery with ST Math, students need just two things...

## KEEP THEM ON GRADE LEVEL

Students make greater learning gains when their teachers hold high expectations about their ability to meet grade-level standards. (TNTP 2018)

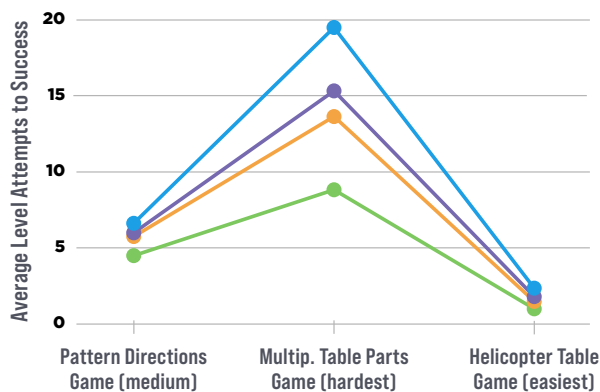
Extensive research shows: **students see the greatest gains when they play their grade-level content.**

ST Math's instructional design has an intentional "low floor." It scaffolds grade-level standards by first presenting concepts visually and then, as a student plays, connecting the ideas to symbols and operations.

With ST Math, students will not play catch up, a situation that too often and disproportionately affects students of color, those from low-income backgrounds, students with disabilities, and English learners.

The graph below shows fourth-grade students who assessed at grades 1-4. All students were able to productively engage with and master grade-level ST Math content, even "hard" games - no matter their starting point. Some just needed more time and practice.

### Students at All Abilities Pass Even ST Math's Challenging Levels



Operations and Algebraic Thinking - Grade 4: Generate and Analyze Patterns

● 3 grade levels behind    ● 1 grade level behind  
● 2 grade levels behind    ● On grade level

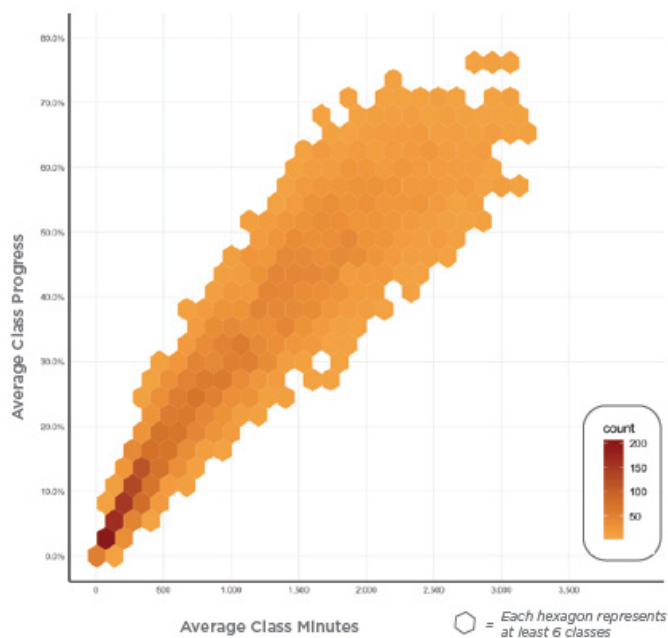
iReady assessment data

## GIVE THEM TIME

We know ST Math will deliver results when used at least 60-90 minutes each week. Educators have proven this. We also know that adding minutes above the minimum assures even greater learning gains.

### Average Progress vs. Average Yearly Minutes per Class

2018-2019 3rd Grade Classes



The graph above shows that achieving progress in ST Math and covering more content simply requires more minutes.

Looking at these data by grade level is what informs our minimum usage targets:

60 minutes per week  
for grades K-1

90 minutes per week  
for grades 2-5



# BEST PRACTICES AND TIPS

## ... for more ST Math minutes

Assign ST Math as homework and set usage goals.

Allow students to choose ST Math in free choice time.

Encourage ST Math for students who finish early and for between-activity transition times above 10 minutes.

## ... for addressing learning recovery

Review ST Math reports and data weekly to see students' conceptual gaps and assign objectives to meet the need.

Focus on games linked to the state's defined power standards, whether for individual students or the whole class.

Play and problem solve together, especially if multiple students are struggling with a particular puzzle.

## ... for even more learning

Make families your partners for ST Math time at home. Communicate usage and accomplishments, and make sure to provide facilitating questions and guidance.

Bring ST Math puzzles into your core math instruction.

Encourage students to share how they persevere through challenging ST Math puzzles.



... for even more ideas, contact your Education Success Manager!



ST Math is created by  
**MIND Research Institute**

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