GREATNESS STEMS FROM IOWANS
GOVERNOR'S STEM ADVISORY COUNCIL

Spatial-Temporal (ST) Math
2017-2018 STEM Scale-Up Program

Overview: Through our instructional software's uniquely visual, non-language approach to teaching math, students across the country are deeply understanding math, developing perseverance and problem-solving skills and becoming life-long learners prepared for success.

Grade Levels: K-6

Program Summary

Spatial-Temporal (ST) Math® is the leader in visual math instruction and represents the highest quality and most effective blended learning math solution in K-12 education. Created by the social benefit organization MIND Research Institute, ST Math is game-based instructional software for K-12, offered as a whole-class instructional supplement and designed to boost math comprehension and proficiency through visual learning. Integrating with classroom instruction, ST Math incorporates the latest research in learning and the brain to promote mastery-based learning and mathematical understanding.

When teachers bring ST Math into the classroom, the software games help students make connections between the visual representations from ST Math and symbolic representations found in their core instruction. The ST Math software, comprised of over 300 math games with thousands of math puzzles, allows students to engage in a personalized, self-paced learning path through Iowa state standards-aligned math objectives. A recent analysis conducted by MIND Research showed that Iowa students in grades using ST Math grew on average 6.6 points in the percentage of students scoring at Satisfactory or Advanced on the ITBS, as compared to a drop in Satisfactory/Advanced of 1.2 points for a comparable group of non-ST Math students in Iowa schools.

Program Objectives and Description

- To ensure that all students are mathematically equipped to solve the world's most challenging problems;
- To utilize cutting-edge research in learning and neuroscience to inform continual improvement of programming;
- To provide students with the opportunity to strengthen neural connections as they learn new concepts, immersing students in richly interactive, hands-on learning;
- To provide educators with meaningful, effective technology resource to engage their students and provide rigorous content;
- And, to provide Iowa students with a program that has a track record of success.

What does the program provide to the educator?

The Annual Single-Student Subscription allows schools to purchase access to the full ST Math content (K-6) for a desired number of students at that site. There is a $4,200 flat fee for up to 145 student licenses per school site. For schools licensing more than 145 students the subscription rate is $29 per student. STEM Council covers all fees for selected participants. Licensing includes: Access to ST Math software at school site and updates; Consultation with MIND to generate a plan for successful and timely implementation; Thorough professional development provided to teachers and administrators for start-up; Post-start-up training and professional development modules, including video and scheduled live webinars, to improve program knowledge, use and outcomes; ST Math Digital Training Manuals; Monthly summary progress reports at school/district-level; yearly data review meeting to set goals; Real-time class/school/individual-level reports, indicating level of math standards mastery and RTI growth; Service and technical support via e-mail, phone, or online chat; and a suite of online support resources.

What is required by the educator in order to implement this program?

ST Math is a cloud-based resource that can be accessed from any Internet-connected computer or tablet. Recommended implementation time for students is 90 minutes per week (60 minutes for K-1). All teachers using ST Math attend professional development either in-person or online prior to implementing to ensure all parties are comfortable, prepared and supported.

Website (with link to Standards): http://www.mindresearch.org/stmath/standards/
Program Videos:
- **Demo Games:** http://mindresearch.org/play/
- **Interactive Introduction to ST Math:** http://learn.stmath.com/courses/c01/
- **Founder's TEDx Talk:** https://www.youtube.com/watch?v=2VLje8QRrwg