

MIND Research Institute

A neuroscience and education research-based non-profit corporation

History

The MIND Research Institute (formerly MIND Institute) is a 501(c)(3) nonprofit organization dedicated to research on learning and the brain, and the application of this research to the development of K-12 math education programs. MIND's education programs teach all children, regardless of socioeconomic or cultural background, how to think, reason and create mathematically. They were designed to meet major challenges facing public education – language barriers and diversity – and to help improve teacher efficacy and efficiency in the classroom.

Born out of neuroscience research at the University of California, Irvine, MIND's unique approach accesses the brain's innate "spatial temporal" reasoning ability. This ability allows the brain to hold visual, mental representations in short-term memory and to evolve them both in space and time, thinking multiple steps ahead. MIND's approach consists of language-independent, animated representations of math concepts delivered via computer software games. Self-paced and self-motivating, the **Spatial Temporal (ST) Math®** programs provide students with immediate, instructive feedback, and deepens problem-solving and reasoning skills. Students gain confidence in their skills and a desire to advance their mathematical knowledge.

In 1999, the organization conducted the first pilot study of its program at an elementary school in South Central Los Angeles (Graziano et al, 1999). Participating students scored in the 65th percentile on the Stanford 9 Math Test (used in California prior to the California Standards Test). Non-participants at the same school scored at the 36th percentile. Since this study, MIND has established a track record of dramatically raising (double-digit increases) the math proficiency of students, whether they are high performers or low performers, in a large variety of settings. MIND's visual approach to teaching math has proven successful for a diverse range of students, despite their cultural or economic backgrounds, and is particularly ideal for English Learners and students with learning disabilities.

Since its founding in 1998 out of UC Irvine, MIND Research Institute has developed a visually-based math education process that taps into the way we are "wired" to learn. In the words of the late Dr. Gordon Shaw, MIND Co-founder and seminal researcher of spatial temporal reasoning, *"All kids are smarter than we think. We just need to give them the opportunity to develop their abilities."* MIND remains committed to envisioning this reality. To that end, MIND's work is guided by the following principles:

- Investigate how the brain functions and learns through continued research
- Apply research to the further development of our education programming
- Reach as many students as possible with our highly effective math education process

Through its very active Research Division, the MIND Research Institute continues its research investigations. MIND collaborates with other prestigious institutions, such as Johns Hopkins University, the University of Pittsburgh, the University of Montreal and the University of South Carolina, in conducting research on learning and the brain. Additionally, MIND continues to enhance and supplement its educational programming to help students achieve math success and teachers improve their effectiveness in the classroom. MIND's outreach efforts are also a critical piece of its growth. In 2011, MIND's programs currently reach over 320,000 students and 13,000 teachers in over 1000 schools in 19 states.

The ST Math®: Integrated Instructional System

In 2010, MIND introduced a new category of comprehensive teaching and learning tools. The ST Math®: Integrated Instructional System takes MIND's formerly "supplemental" instructional software and weaves it into core instruction delivered in a variety of learning environments. Teachers and students access the system in the classroom, lab, or at home, to maximize productive teaching and learning. The Integrated Instructional System features enhanced math content for MIND's award-winning ST Math® instructional software, new embedded assessment, powerful reporting of student learning patterns, and whiteboard integration.

Curriculum Evolution

Throughout the ST Math® program's evolution, participating students' math proficiency levels have continued to improve dramatically. With each version, MIND applies insights gained from the program's built-in feedback system to make our curricula more effective, engaging, and accessible.

MIND's programs include:

- **ST Math®: K-5** – Instructional Software
- **ST Math+Music®: K-5** – Instructional Software and Music Curricula
- **ST Math®: Secondary Intervention** – Instructional Software
- **Algebra Readiness** – Textbook and Integrated Courseware
- **ST Math®: Fluency** – Instructional Software

Awards & Distinctions

The ST Math® courseware has received several awards including:

- The **2006 AEP "Distinguished Achievement Award"** in Educational Software for Math Instruction (Association of Educational Publishers) for ST Math®
- A **2006 "5 Star" Product Review** by MMIS (MultiMedia & Internet @ Schools) for ST Math®
- The **2007 BESSIE Award** in the Upper Elementary Division for Logic Skills from the ComputED Learning Center, San Diego's leading computer education resource
- The **2007 AeA Innovation Award** (OC/Inland Counties) for "*Outstanding Instructional Technology*" (American Electronics Association)
- A **2008 "5 Star" Product Review** by MMIS for ST Math® (MultiMedia & Internet @ Schools)
- The **2008 SIIA //CODiE Award** for "*Best Mathematics Instruction Solution*" (Software & Information Industry Association)
- The **2008 AEP "Distinguished Achievement Award"** in Educational Software for Math Instruction (Association of Educational Publishers)
- The **2008 Tech & Learning Awards of Excellence**
- The **2009 Teachers' Choice Awards for the Classroom**
- The **2009 EdNet Pioneer Award** for MIND Research Institute
- The **District Administration "Top 100 Products of 2010"** for ST Math®