Dr. Matthew Peterson, Co-founder, Chief Operating Officer and Senior Scientist at the MIND Research Institute, is a seasoned speaker and writer on math learning, comprehension, and proficiency, and the science of learning.

Dr. Peterson has spoken at major conferences including, US News STEM Solutions, SXSWedu and TEDxOrangeCoast and has had research published in the Journal of Neurophysiology and the Journal of Neuroscience, among others.

At the forefront of visual-spatial math learning at MIND, an education and neuroscience social benefit organization, Peterson is a thought leader in applying neuroscience and motivational research to the development of visual game-based learning environments. He is an expert in the neural basis of processing information and the acquisition of mathematical reasoning abilities.

With renowned scientists Dr. Mark Bodner and the late Dr. Gordon Shaw, Dr. Matthew Peterson founded MIND in 1998 to apply academic research on the brain to educational programs for elementary school students. The three co-founders shared a vision to teach all children, regardless of socioeconomic background, how to think, reason and solve problems mathematically. Peterson is a pioneer in this cutting-edge field. His focus is on developing math learning environments that initially convey sophisticated concepts visually, rather than verbally, enabling students to gain a conceptual understanding of mathematics regardless of language proficiency.

Peterson, who as a child struggled with traditional language-based instruction due to dyslexia, created the ST (Spatial-Temporal) Math® software program to teach math to students utilizing his unique non-language-based visual approach. The revolutionary ST Math software has proven to raise students’ math scores on standardized tests and currently reaches 890,000 students and 38,000 teachers in 3,000 schools.

Compiled in this media kit is a list of speaking topics, speaking history, writing history, photos, videos, and testimonials for Peterson. For speaking and writing availability, contact Abby Daniels via phone at 949-345-8637 or via email at adaniels@mindresearch.org.
Dr. Matthew Peterson, Co-founder, Chief Operating Officer and Senior Scientist at the MIND Research Institute, graduated with a Bachelor of Arts in Chinese Language and Literature, a Bachelor of Science in Biology, and a Bachelor of Science in Electrical Engineering from University of California, Irvine in 1996. In 2003, Peterson received his Ph.D. in Neuroscience from University of California, Berkeley.

While tutoring math students as an undergraduate, Peterson noticed that the ability to visualize math is useful for all students, regardless of their background or language proficiency. Based on this observation, he began working to develop the Spatial-Temporal (ST) Math games. In 1998, he and two other scientists from the University of California campuses of Irvine and Los Angeles, formed the nonprofit MIND Research Institute to further develop this visual learning software for use in elementary and secondary schools.

MIND’s first randomized pilot study of ST Math in a South Central Los Angeles elementary school confirmed the significant impact of the software on student math proficiency. 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 in the 36th percentile. MIND’s visual approach to teaching math has proven successful for a diverse range of students from many cultural and socioeconomic backgrounds and is particularly ideal for English Language Learners and students with learning disabilities. For 20 years, Peterson has dedicated himself to continuing to develop and refine the ST Math program. Today, he is at the forefront of a learning revolution that utilizes digital technology and games to foster deeper learning and build a new generation of problem solvers.

Peterson has collaborated with countless others who are leading the field of neuroscience and learning, including Dr. Marty Banks, Professor of Vision Science at University of California, Berkeley; Marian Bergeson, former Secretary of Education, Assemblywoman, and Senator in California; Dr. Edward Jones, former president of Society of Neuroscience; and more.

Peterson also authored MIND’s first textbook-software hybrid, core curriculum, A Blueprint for the Foundation of Algebra, which was developed in response to the California Department of Education’s call for Algebra Readiness curricula and adopted in 2007 by the CDE.

For more, visit: [http://www.mindresearch.org/about/who/leadership/#biompeterson](http://www.mindresearch.org/about/who/leadership/#biompeterson).
• Presentation to the New York City Department of Education, July, 2015
• Missouri Association of School Administrators, November, 2014 (Lake Ozark, MO)
• Distinguished Speaker, National Charter Schools Conference, July 1, 2014 (Las Vegas, NV)
• "Neural Networks & Visual Schemas," Virginia Association of School Superintendents, May 5, 2014 (Roanoke, VA)
• "Connecting the Blended Learning Dots," SXSWedu Conference & Festival, March 4, 2014 (Austin, TX)
• "The Neural Foundation for Math: Using Teaching and Technology to Improve Learning," Learning & the Brain Conference, February 13, 2014 (San Francisco, CA)
• "Brain Research and Learning" keynote for Point in Common lecture series, University of Wisconsin, Stevens Point, October 21-22, 2013 (Stevens Point, WI)
• "Blended Learning, Flipped Classrooms, and Other Innovative Teaching Techniques," U.S. News STEM Solutions Conference, June 17, 2013 (Austin, TX)
• "The Neural Foundation for Learning Math," Neuroscience Summit, February, 2013 (Los Angeles, CA), hosted by MIND Research Institute
• GSV/ASU Education Summit, April, 2013 (Scottsdale, AZ)
• Keynote, New Jersey Association of School Administrators, January, 2013 (Atlantic City, NJ)
• "The Neural Foundation for Learning Mathematics," Kids Institute for Development & Advancement, June, 2012 (Irvine, CA)
• National Excellence in Urban Education National Symposium, May, 2012 (San Diego, CA)
• CASTEM Learning Network Early Math Teaching and Learning, April, 2012 (Orange Co., CA)
• "Teaching Without Words," TEDxOrangeCoast, April, 2011 (Costa Mesa, CA)
• National Mathematics Education Panel, 2008
• International Commission on the Study & Improvement of Teaching Mathematics, 2006 (Prague)

**TOPICS**

• Visual-spatial math
• Neuroscience behind math learning
• Math learning, comprehension, and proficiency
• Visual game-based learning
• Game design and mechanics
• Working memory
• Dyslexia
• Early math education and learning (pre-k)
• English Language Learners
• Deeper learning and transferability
• The value of productive struggle
• Growth mindsets

Dr. Peterson is fluent in Mandarin.
The following videos showcase Dr. Peterson's speaking at conferences and interviews:

- **“Fixing Math Education”** by Matthew Peterson and District Administration (2013)
- **“Touching, Feeling, Seeing Math”** by Matthew Peterson at District Administration Leadership Institute (2012)
- **“Teaching Without Words”** by Matthew Peterson at TEDxOrangeCoast (2011)
- **Interview on Real Orange, Orange County, CA (2010)**
- **“Neural Networks and Visual Schemas”** by Matthew Peterson at District Administration Leadership Institute (2013)
“Off the Number Line” is a weekly mathematical cartoon series authored by Dr. Peterson and is hosted on Sums & Solutions.


For more publications from MIND Research Institute, visit http://www.mindresearch.org/results/research/
AWARDS

Dr. Peterson and his work have been recognized for the following awards:

• Bright Spots in Hispanic Education by the White House Initiative on Educational Excellence for Hispanics, September, 2015
• 2015 SIIA //CODiE Award for “Best Game-based Education Solution” (Software & Information Industry Association)
• District Administration “Top 100 Products of 2015” for ST Math
• 2013 Bammy Award Finalist for “Innovator of the Year,” Academy of Arts and Sciences
• Orange County Hispanic Chamber of Commerce Education, Award, April, 2012 (Orange County, CA)
• 2012 Readers Choice Award by eSchool Media, Inc.
• District Administration “Top 100 Products of 2011” for ST Math
• 2009 EdNet Pioneer Award for MIND Research Institute
• 2009 Teachers’ Choice Awards for the Classroom
• 2008 Tech & Learning Awards of Excellence
• 2008 AEP “Distinguished Achievement Award” in Educational Software for Math Instruction (Association of Educational Publishers)
• 2008 SIIA //CODiE Award for “Best Mathematics Instruction Solution” (Software & Information Industry Association)
• 2007 AeA Innovation Award (OC/Inland Counties) for “Outstanding Instructional Technology” (American Electronics Association)

COVERAGE

“Fundador y Presidente de Mind Research Institute” by Para Todos (March 5, 2015)

“To help dyslexic pupils, go to the root of how children learn” by David Cox on The Guardian (September 22, 2014)

“Community Involvement in Math Education: Context Outside the Classroom” on EduTalk Radio (August 20, 2014)

“Teaching math without words” by Natalie Wexler on The Washington Post (June 4, 2014)


“How a Dyslexic Neuroscientist’s iPad App Will Boost Your Kid’s Math Scores” by Claire Martin on TakePart.com (March 28, 2014)


“Beyond Gamification: Cutting-Edge Technology Meets Alternative, Progressive Education” by Jordan Shapiro on Forbes.com (February 6, 2013)

“At some schools, a penguin teaches math” by Teryl Zarnow in the Orange County Register (January 30, 2013)

“Futuristic Rocketship Schools Redefine Teaching” by Greg Toppo on USA TODAY (October 22, 2012)

“Teaching Without Words” by Jon Wai on Psychology Today and The Creativity Post (October 17, 2012)
**TESTIMONIALS**

**US News STEM Solutions Conference, April 24, 2014:**
- “Hats off to @MIND_Research for the first truly engaging keynote of the day! ‘If you fix math, you fix all of edu.’”
- “Thanks for giving such a great presentation!”

**District Administration Leadership Institute, February 28, 2013:**
- “Exceptional presentation. ‘Best of class.’ I would give this presenter a 10!”

**Neuroscience Symposium, February, 2013:**
- “It is always a pleasure to listen to Dr. Peterson speak. I am a huge fan of ST Math and continue to love to hear him speak on new and innovative ways of learning.”
- “Fantastic at engaging the audience in an interactive way. LOVED the hands-on portions.”

**District Administration Leadership Institute, March 29, 2012:**
- “Very engaging.”
- “Very interesting and informative.”
- “Outstanding! Great passion!”

**District Administration Leadership Institute, November 3, 2011:**
- “Fabulous. Effective Speaker. Look forward to trying out the program.”
- “This is cutting edge.”
- “The most powerful part of the summit. A bold vision followed by a breakdown of how this model helps students learn more effectively.”

**District Administration Leadership Institute, September 15, 2011:**
- “One of the most dynamic presentations - he showed us how to do math right. Why didn’t we think of this before?”

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**For more information contact:**

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