

"Quantum is proven effective and provides students, instructors and adult learners with a new generation of artificial intelligence technology for online tutoring, test preparation and homework help."

— Benny G. Johnson, Ph.D.

President and CEO
Quantum Simulations, Inc.

# **Company Overview**

# Who We Are

Funded and supported by the U.S. Department of Education, National Science Foundation and National Institutes of Health, Quantum develops artificial intelligence (AI) tutoring, assessment and professional development software for K-12, higher education and workforce training. Our software is designed to be affordable and accessible to *all* students, including those with special needs.

Founded in 1998, Quantum has addressed the need for on-demand tutoring in science and mathematics where the availability of experienced, qualified teachers continues to be severely lacking. Today, the company has expanded to include business subjects such as accounting and more topics for developmental mathematics.

A "technology think tank", Quantum has leveraged over \$8.5 million in federal funding for the development and distribution of Al-based educational tools for its partners including:

- McGraw-Hill Higher Education, a leading provider of print and electronic materials in higher education.
- Holt, Rinehart and Winston, a Harcourt company and recognized leader in textbook publishing and online learning tools in K-12.
- CyberEd, a PLATO Learning company and award winning publisher of multimedia courseware for science.
- Ohio Board of Regents, the coordinating body for education with all of Ohio's colleges and universities.

As a result of its revolutionary work in the field of AI technology for education, Quantum was awarded the national Tibbitts Award, the highest recognition given by the federal government for exceptional small business achievement in leading-edge research, technology innovation and economic impact.

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## What We Do

#### Quantum Tutors®



Accessed over the Internet, the Quantum Tutors allow students of all ages to receive one-on-one tutoring when an instructor isn't

available to help or answer questions. Just like working with a human tutor, students can ask questions, view next steps and request hints related to their own problems. Because of the "Enter Own Problem" feature, the software is compatible with any curriculum and requires no change to existing lesson plans, textbooks or homework assignments used by instructors. Independent research shows that the Quantum Tutors can increase test scores by as much as 50 percent.

### Quantum Assessment Advisors®



Quantum's formative assessment tool automatically grades actual student work (not a multiple choice test) and

provides immediate feedback on concepts needed to improve test scores. The software eliminates the administrative time and human error associated with grading papers, providing instructors with real-time data for analyzing class and individual student performance by concept, problem and more.

# **Quantum Mentors**<sup>SM</sup>



The Quantum Mentors help new and out-of-field instructors better prepare for teaching difficult subjects by simulating

typical student/teacher interactions in realtime. The software serves as a virtual mentor where teachers can become more familiar with content, effectively respond to student questions and practice proven pedagogical techniques for improving student understanding *before* getting in front of a live class.

# Inspiring students to learn why