



THE PROBLEM

The U.S. is failing to produce and retain sufficient numbers of qualified math and science teachers to keep America internationally competitive. It is estimated that the U.S. will need 280,000 more math and science teachers by 2015. Talented math and science teachers with strong content knowledge are urgently needed to help students reach their potential.

THE NMSI SOLUTION

The UTeach program to recruit and train math and science teachers is transforming the way universities prepare teachers. UTeach produces teachers that are confident and competent in their subject matter. This pace-setting program was developed at The University of Texas at Austin in 1997 and has proved such a success that the model is being replicated nationwide by the National Math and Science Initiative (NMSI) in conjunction with the UTeach Institute.



The UTeach program is in high demand, with 34 universities in 16 states now replicating the program. Enrollment has tripled in the last three years and reached the milestone of 5,500 students enrolled in fall 2011.

UTEACH HAS A TRACK RECORD OF RESULTS:

- UTeach has produced a steady increase in the number of highly trained teachers with a strong background in science, technology, engineering and math (STEM) subjects. The flagship UTeach program at The University of Texas graduates an average of 70 certified teaching candidates annually with degrees in STEM fields.
- Approximately <u>92 percent</u> of UTeach graduates go directly into teaching, even though they have many other opportunities with their credentials in their major areas of study.
- + The retention rate among UTeach graduates is at **80 percent** after five years of teaching, compared to fewer than **65 percent** nationally.
- UTeach draws academically talented students into teaching whose GPAs compare favorably to that of their peers in colleges of mathematics and natural science as well as students in traditional education degree programs.



UTEACH

UTEACH HAS GENERATED UNPRECEDENTED SUPPORT FROM THE ACADEMIC, CORPORATE, PHILANTHROPIC AND POLICYMAKER COMMUNITIES:

- + The Association of Public and Land Grant Universities (APLU) has cited UTeach as an effective strategy for doubling production of highly trained STEM teacher graduates.
- + The landmark National Academies Commission report, "Rising above the Gathering Storm," recommended expansion of UTeach to meet the need for 10,000 new STEM teachers per year in the United States.
- The Presidential Council of Advisors on Science and Technology (PCAST) in its 2010 report to President Obama recommended significant expansion of UTeach to meet the growing need for quality STEM teachers.
- + Congress included the UTeach model when it reauthorized the America Competes Act in 2010.
- UTeach was one of seven "best practice" programs spotlighted by the Change the Equation campaign launched in fall 2010 by the White House and 100 corporate CEOs to improve STEM education.

"To bring more educators into the classroom, the National Math and Science Initiative is working with Texas Instruments and the Dell Foundation to prepare almost 5,000 new math and science teachers in the next five years — through a program that allows young people to earn teaching certificates and science degrees at the same time."

> — President Barack Obama January 6, 2010 "Educate to Innovate" Campaign

 In June 2011, the Clinton Global Initiative selected NMSI to be part of a commitment by 28 organizations to produce 100,000 math and science teachers in 10 years; UTeach will be producing a significant portion of that goal.

THE CORE ELEMENTS OF THE UTEACH FORMULA FOR SUCCESS INCLUDE:

- + Active recruitment and financial incentives, such as offering the first two courses free or providing tuition stipends.
- + A compact degree program that allows students to graduate in four years with a degree and a teaching certification.
- + A strong focus on acquiring deep content knowledge in math and science, in addition to researchbased teaching strategies focusing on teaching and learning math and science.
- + Early and intensive field teaching experience, beginning in the students' first semester.
- + Personal attention and guidance from highly experienced master teachers, faculty and successful public school teachers.

The UTeach Institute estimates that graduates of UTeach programs nationwide will have taught more than **four million students** by 2020, based on the average retention rate for UTeach graduates. It is anticipated that with future funding, UTeach can be expanded to **50 universities** in the next decade, creating a new generation of math and science teachers for a highly competitive new era.

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WE'VE GOT A FORMULA THAT WORKS