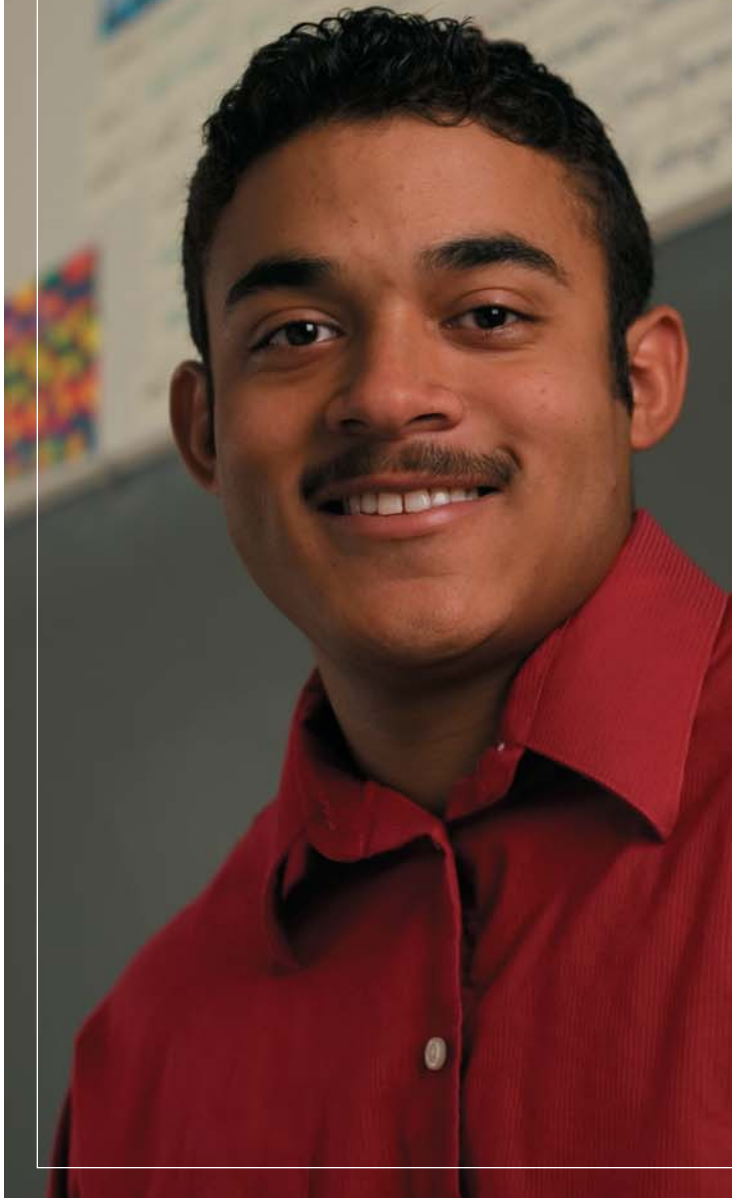




THE  
UTEACH  
INSTITUTE

*“UTeach is doing an incredible  
job in helping me develop  
confidence in my  
ability as an educator.”*



**UTEACH** has been recognized nationally as a model for math and science teacher preparation reform by a number of prominent organizations, including the National Research Council, the U.S. Department of Education and the National Academy of Sciences, the National Academy of Engineering and the Institute of Medicine.

## RECRUITING AND PREPARING OUTSTANDING MATH AND SCIENCE TEACHERS

The National Academies issued a call to action in the recent “Rising Above the Gathering Storm” report. This report reflects the growing concern of our nation’s top scientists, CEOs, university presidents and other distinguished leaders, who predict that the weakening of science and technology in the United States will inevitably degrade social and economic conditions and erode the ability of our citizens to compete for high-quality jobs. Citing many examples of how this country is losing ground in maintaining current leadership in innovation, the first recommendation of the “Gathering Storm” report is that the U.S. should increase the nation’s talent pool by vastly improving K-12 science and mathematics education and adding 10,000 new teachers nationally.

The UTeach Institute has been created to help colleges and universities across the country replicate UTeach, a highly innovative and successful math and science teacher preparation program that is endorsed in the “Gathering Storm” report.

The UTeach program offers a compact degree program that allows students to graduate in four years, having completed both a math, science or computer science degree and the requirements for secondary teacher certification. UTeach teachers develop and foster scientific and numeric literacy in children in order to prepare them to function in a society that is increasingly dependent on science and technology.

*“Laying a foundation for a scientifically literate workforce begins with developing outstanding K-12 teachers in science and mathematics.”*

RISE ABOVE THE GATHERING  
STORM, 2006

## HISTORY

**U**Teach was initiated at The University of Texas at Austin in 1997 by the dean of the College of Natural Sciences, Dr. Mary Ann Rankin, in response to the realization that its current system was not inspiring many math and science students to teach. Dean Rankin convened a group of outstanding high school teachers and administrators, who essentially started with a blank slate to design the “dream teacher preparation program.” They created new cross-university partnerships with the College of Education and the College of Liberal Arts. They also worked closely with motivated professors from all colleges to completely re-engineer and streamline the math and science teacher preparation curriculum. This collaboration and dedication produced systemic change that has had dramatic results. In fact, UTeach at UT-Austin has doubled the number of math and science majors recommended for certification.


Over the last decade, the UTeach program has been so successful in producing significantly more certified mathematics and

science teachers that it has become a national model, providing a blueprint for how other institutions of higher education around the country can achieve similar results.

*“UTeach graduates are great teachers, in high demand and winning awards, and they stay in the teaching profession.”*

DR. MARY ANN RANKIN, DEAN  
COLLEGE OF NATURAL SCIENCES  
THE UNIVERSITY OF TEXAS AT AUSTIN





*“Through extensive field experience  
I have gained a professional identity,  
with a concrete idea of the teacher  
I want to be and the tools needed to  
accomplish my goals.”*

*“The balance of teaching and science is what impresses me most about UTeach. Besides being confident about my teaching ability, I am acquiring a deep understanding of my subject area.”*



## HOW IT WORKS

**U**Teach has shattered the myth that math and science majors aren't interested in becoming teachers. One of the hallmarks of the program is to actively recruit entering freshman who have declared an interest in math or science by offering the first two introductory UTeach courses for free. These students get immediate field experience in elementary and middle school classrooms and can decide very quickly if they do indeed love teaching or if it's not right for them.

Students who enter UTeach together are encouraged to move through the program as a cohort, teaching and motivating one another. They learn to teach effectively, using a variety of instructional strategies that develop critical thinking skills. They have access to the latest research on learning and also focus on using technology effectively in the classroom. More importantly, UTeach students receive personal attention and guidance from highly experienced master teachers, faculty and successful public school teachers.

The UTeach program is sensitive to all of its students' needs. The curriculum has been redesigned so that pedagogy classes focus on how to teach math and science, replacing traditional generic education courses. Because the curriculum is streamlined, it is possible to obtain a teaching certificate and graduate in four years. This compact degree plan is especially important to students who have limited financial resources.

It is also possible to enter the program at later stages. For example, if a junior decides to explore teaching, there are options available that allow flexible entry, with suggested paths for completing all courses and apprentice teaching in the minimum amount of time. If a student has financial needs, there are several options available, including scholarships and paid internships at schools, museums and other education-related organizations.

## IS IT WORKING?

*At The University of Texas, UTeach now graduates over 70 students per year to be math, science or computer science secondary teachers, and 92% go on to teach secondary math and science immediately.*

**I**n The University of Texas at Austin's College of Natural Sciences, the UTeach program has grown from a modest pilot program of 28 students in Fall 1997 to a current enrollment of over 470 students. The program graduates approximately 70 students per year, with bachelor's degrees in chemistry, physics, computer science, biology or math, as well as the requirements for teacher certification. Between Spring 2000 and Spring 2006, a total of 332 students have graduated from the UTeach program. Ninety-two percent of those students have entered teaching. Of those who entered teaching 4 years ago, approximately 82% are still teaching, and almost half of the graduates teach in schools where the majority of students receive free or reduced price lunches.

*"The UTeach math and science teachers are the best-prepared novice teachers that I have. Their transition into teaching is much smoother because of their extensive field experiences."*

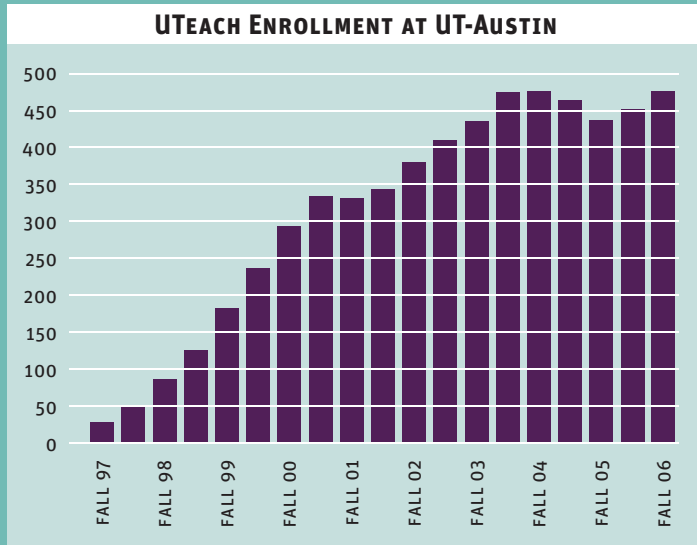
DR. BARBARA H. GIDEON, PRINCIPAL  
DAVID CROCKETT HIGH SCHOOL  
AUSTIN, TEXAS

### UTeach Goals

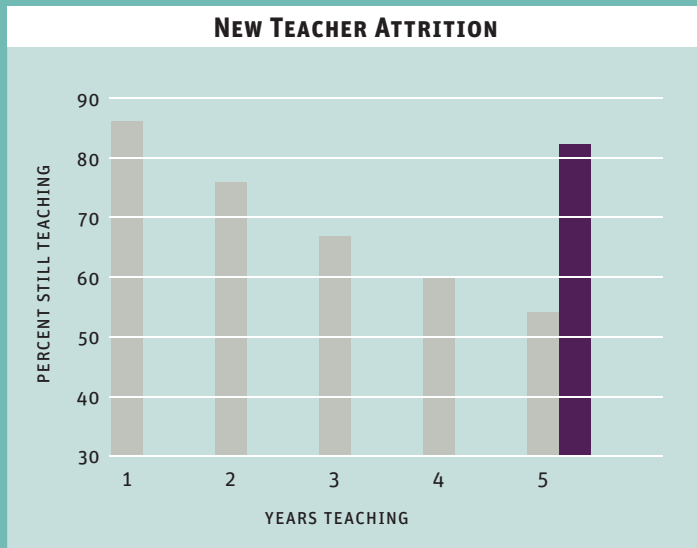
- *To attract and retain more and better students in K-12 science and math career paths*
- *To establish an enriched pre-service curriculum that integrates modern technological teaching tools, opportunities to experience the joy of scientific discovery and mastery of the subject matter*
- *To graduate outstanding science and math teachers every year who are masters of their discipline, know how to use technology to enhance learning and understand and can involve students in scientific inquiry*
- *To build partnerships with school systems and master teachers, thereby enhancing the retention of scientists and mathematicians in the teaching profession*



# THE RESULTS



*Growth of UTeach from 1997 to 2006*



*82% of UTeach graduates (UT-Austin) who enter the classroom are still teaching after 4 years*

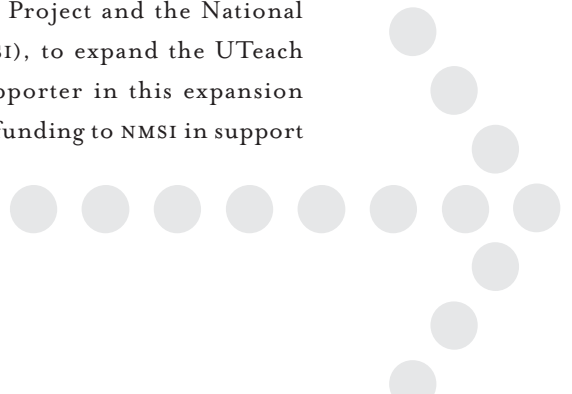
## THE ROLE OF THE INSTITUTE

**D**ue to UTeach's success and the national attention it is receiving, institutions from all over the country have expressed interest in replicating UTeach. The UTeach Institute was created to provide the direction and leadership needed to expand and replicate UTeach at qualified colleges and universities in the United States. By accomplishing this, the Institute will achieve its primary goal, which is to increase the number and quality of math and science teachers nationwide.

The UTeach Institute provides direction and assistance to institutions of higher education with the startup of UTeach programs, including budget assistance, guidance with the implementation of the UTeach Elements of Success, and evaluation and review services to assist colleges and universities with keeping programs on track and achieving goals. Other services include community building for master teachers nationwide as well as training and consulting for faculty teaching UTeach courses. In addition, the Institute has created a number of resources to help replication sites, including courses and course objectives, a UTeach Operations Manual, and a framework for collecting demographic data and conducting evaluations.

## PARTNERS

The UTeach Institute is partnering with several initiatives, including the Texas High School Project and the National Math and Science Initiative (NMSI), to expand the UTeach program. ExxonMobil, a key supporter in this expansion effort, provided major initial gift funding to NMSI in support of UTeach replication.



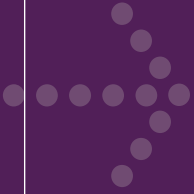
*“UTeach has become the symbol for quality recruitment and preparation, and we are thrilled to be replicating UTeach at the University of Houston.”*

DR. ROBERT WIMPELBERG, DEAN  
COLLEGE OF EDUCATION  
CO-PRINCIPAL LEAD FOR *teach*HOUSTON



### **Hallmarks of the UTeach Program**

- *Collaboration between Colleges of Science, Education and Liberal Arts*
- *Active recruitment of science and mathematics majors to take the two initial UTeach courses free of charge*
- *Early and intensive field experiences throughout the program*
- *Compact degree plans that allow most students to graduate with a degree and certification in four years*
- *A focus on developing deep-level understanding of the subject material and incorporating effective approaches using technology in teaching*
- *Guidance, instruction and inspiration provided by faculty and highly experienced public school teachers who serve as master teachers in the program*
- *Courses taught by faculty who are actively engaged in research in mathematics and science and in the teaching and learning of mathematics and science*
- *Integrated professional development courses that focus on teaching both mathematics and science and are based on recent research in science and mathematics teaching and learning*
- *An array of student benefits, including paid internships that offer opportunities for community outreach*



*The UTeach Institute is responding to the challenge of our nation's leaders with a solution to spur systemic adoption and growth of a highly successful and well-respected math and science teacher preparation program that will cultivate the talent pool needed to keep America competitive. The Institute is moving forward aggressively to achieve all aspects of its goals and objectives. Now is the time to act.*



THE  
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INSTITUTE

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For information about the UTeach program at  
The University of Texas at Austin, please visit  
[www.uteach.utexas.edu](http://www.uteach.utexas.edu).