

UTeach Impact

We prepare teachers. They change the world.

Sept 2017

A strong STEM-capable workforce is critical to U.S. innovation and economic prosperity, but **we are falling behind** in production of STEM professionals. We need at least 1 million more STEM professionals over the next decade—34% more than we are currently producing. Additionally, women and minorities continue to be underrepresented in the pool of STEM graduates.

UTeach has the solution. UTeach prepares teachers with deep content knowledge and inquiry-based pedagogical strategies. UTeach programs produce teachers at a lower cost than other leading programs, and our graduates stay in teaching longer, improve student performance in math and science, and influence students to enter STEM fields.

UTeach is an innovative university-based teacher preparation program working to increase the number of qualified STEM teachers in U.S. secondary schools. STEM majors earn a secondary teaching certification without adding time or cost to their four-year degree.

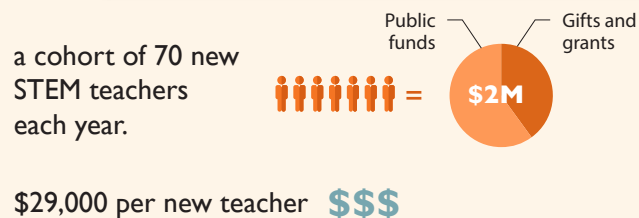
UTeach programs prepare STEM teachers for less

UTeach programs produce teachers at a lower cost than other leading programs.

Leading national post-baccalaureate model



UTeach model



UTeach graduates stay in schools longer.



teachers stay in teaching for an average of 2.1 years, resulting in 142 active STEM teachers.

teachers stay in teaching for an average of 5 years, resulting in 350 active STEM teachers.



Since UTeach graduates stay in teaching longer, the average cost per year of teaching is much lower.

Leading national
post-baccalaureate model

VS.

UTeach
model

\$25,000

Cost per year of teaching

\$5,700

UTeach graduates increase student learning

UTeach uses proven inquiry-based teaching methods to prepare
STEM majors to be inspiring and effective teachers.

**+4
months**

additional learning
in math

**+5.7
months**

additional learning
in science

An independent research study found that secondary students of UTeach graduates gain an additional 4 months of learning in math and 5.7 months in science.



“I teach because we’re preparing citizens. This country will be theirs and we need them making the best decisions possible.”

Michael Ralph,
UKanTeach graduate,
University of Kansas

A UTeach study found significant advantages for students of UTeach graduates of around 9 months of schooling in both Algebra I and Biology for Gifted students, and 5 months of schooling in Biology for Economically Disadvantaged and Hispanic students.

**+9
months**

additional
schooling in
Algebra I & Biology
for Gifted
students

**+5
months**

additional
schooling in
Biology for Economically
Disadvantaged
and Hispanic students



“You engaged us and made us actually look at how things worked and why they worked, not only in problems, but also in practical applications. You really changed my love of science into an understanding of what I want to do for a living.”

Student of a UTeach teacher from
The University of Texas at Austin

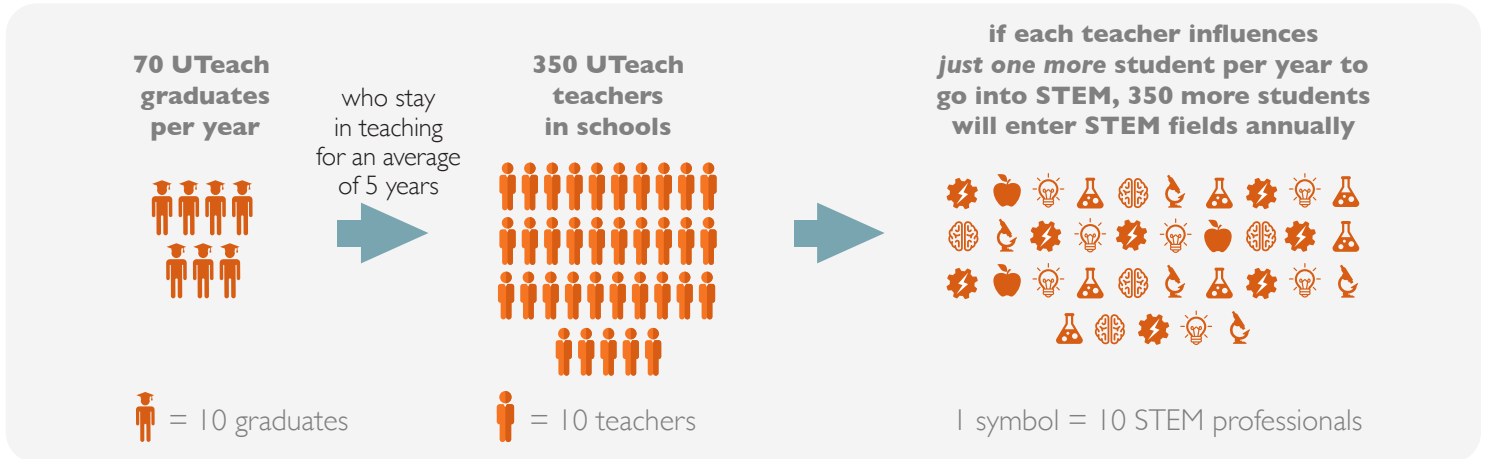
Footnotes

Backes, B., Goldhaber, D., Cade, W., Sullivan, K., & Dodson, M. (2016, working paper). Can UTeach? Assessing the relative effectiveness of STEM teachers. Washington, DC: American Institutes for Research. www.caldercenter.org/publications/can-uteach-assessing-relative-effectiveness-stem-teachers

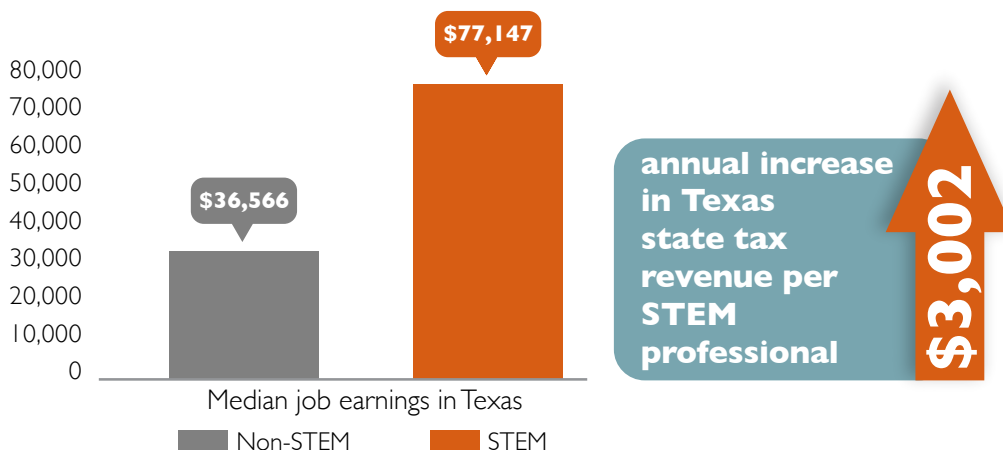
Marder, M., & Hamrock, C. (2016, working paper). Math and science outcomes for students of teachers from standard and alternative pathways in Texas. uteach.utexas.edu/uteach-blog/students-uteach-graduates-learn-more

UTeach provides a high return on investment

UTeach graduates inspire their students and influence them to go into STEM fields.



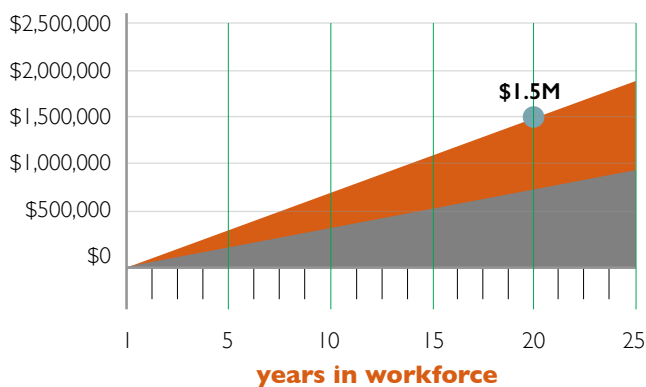
Median STEM vs. non-STEM annual earnings in Texas



“Her love of science helped me discover my own and influenced my decision to go for a science major in college.”

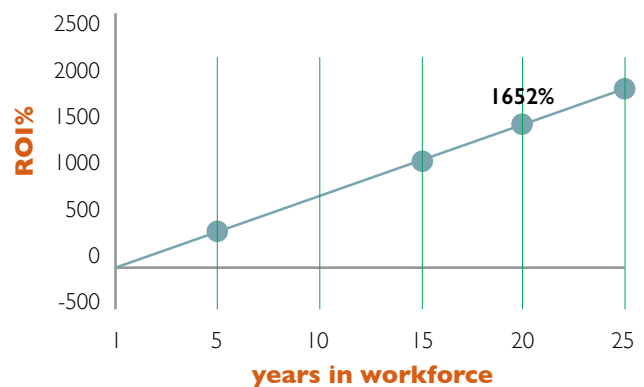
Student of a UTeach teacher from The University of Texas at Austin

Cumulative lifetime earnings



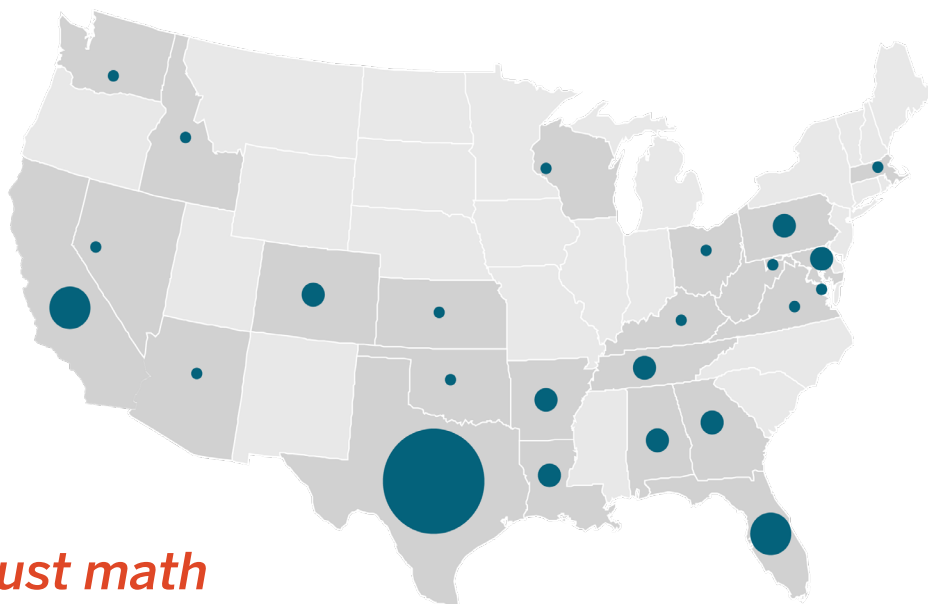
- Cumulative median earnings in a STEM field
- Cumulative median earnings in a non-STEM field

Minimum ROI to the state of Texas



+350 additional STEM professionals created
+\$1M increased government revenue

Since 2006, UTeach has expanded to 46 universities in 23 states and the District of Columbia.



Jill Marshall, Associate Professor, Department of Curriculum and Instruction, The University of Texas at Austin

68% of UTeach graduates are teaching in K–12 schools with a majority low-income population.

2020	6,034
2021	6,870
2022	7,634
2024	9,192
2026	10,760

■ Actual Graduates ■ Projected Graduates

"UTeach is really a remarkable phenomenon. University after university has adopted the mission of preparing more mathematics and science teachers. This cause is very important, and that's why it has spread so well."

Michael Marder, UTeach
Executive Director and
Professor of Physics at The
University of Texas at Austin

UTeach Institute

WE PREPARE TEACHERS. THEY CHANGE THE WORLD.

The University of Texas at Austin | College of Natural Sciences
info@uteach.utexas.edu | www.uteach-institute.org

The UTeach Institute supports a national community that improves STEM education by increasing the number of high-quality teachers and improving access to inquiry-based curriculum. See the technical supplement to this report for more information: uteach-institute.org/uteach-impact.