UTeach Alumni
NATIONAL UTEACH ALUMNI NETWORK

2014 UTeach Alumni Conference
Conference Program

UTeach in the Real World

Friday, July 11
8:00 a.m. – 3:30 p.m.

Commons Learning Center

J.J. Pickle Research Campus, 10100 Burnet Road, Austin, TX 78758

8:00 – 8:45 a.m.	Registration/Check-In and Breakfast	Atrium
9:00 – 9:45 a.m.	Opening General Session	Lil' Tex Auditorium

Keynote Speaker: Katey Arrington

STEM education is awash with transitions and expansions at local, state, and national levels. What are the implications of reform and modernization on the everyday life of science, technology, engineering, and mathematics (STEM) teachers? How might teacher leaders affect the forces shaping our daily work through leadership roles and participation in professional organizations? We will examine current data about the STEM professions and consider the need for teacher leaders to influence their own futures.

About Katey Arrington

Arrington is manager of the Charles A. Dana Center's K–12 Systems Services and oversees the delivery of the center's services for educators and administrators across the United States. She has more than 10 years of experience in Texas public schools, having worked for six years as a high school mathematics teacher and instructional coach. For five years, she served as a mathematics coordinator, first working with grades K–12 and later focusing on secondary mathematics. During this time, Ms. Arrington kept her connection to the classroom by teaching in an alternative high school program and a community college.

Ms. Arrington creates and delivers Dana Center professional development for K–12 educators and administrators across the United States. She also led the high school writing team for the Partnership for Assessment of Readiness for College and Careers (PARCC) Prototyping Project. Ms. Arrington also works with school districts at the system level, focusing on school leadership practices as well as in mathematics and science curriculum and instruction. She is lead for the Dana Center's facilitation of the Urban Mathematics Leadership Network, which brings together district mathematics leaders from across the country several times a year.

Ms. Arrington received an M.A. in mathematics education from the UTeach program at The University of Texas at Austin. She received a B.S. in mathematics, also from UT Austin, and earned her teaching certification through the UTeach program. She is currently a doctoral student in Educational Policy and Planning at UT Austin.

10:00 – 10:45 a.m. Breakout Sessions I

From Beans to Blooms: Activities and Assessments for Biology EOC Student Success **1.130 Longhorn**

Using hands-on activities with simple beans, we will explore Mendel's results and construct explanations that support the chromosomal theory of inheritance. Practice "blooming" up your formative assessments to help you uncover common student misunderstandings regarding Mendelian inheritance. End with a fun way to present Mendel the Monk, inspired by Perspectives on Science and Math.

Presenter: Jennifer Fritz, Lecturer, University of Texas at Austin

Who Should Attend: Science teachers of all experience levels

Discovering the Unit Circle **1.140 Bevo**

This session will model a lesson for the first time students are exposed to the unit circle and radians. Using their knowledge of a Ferris wheel, dividing a circle into 360 degrees, and right angle trigonometry, students will discover the unit circle on their own.

Presenter: Katie Artzt, Math Department Chair, St. Dominic Savio Catholic High School, Round Rock, TX

Who Should Attend: Math teachers of all experience levels

Who Has Time for the 5 Es? **1.138 Stadium**

You've been taught to embrace and practice the 5-E model of lesson planning, but how does that translate into the everyday classroom? Participate in a structured conversation on being prepared, practical, and pedagogical.

Presenter: Robert Gonzales, Science Teacher, Crockett High School, Austin, TX

Who Should Attend: Any teacher

11:00 – 11:45 a.m. Breakout Sessions II

Formative Assessment in Science **1.130 Longhorn**

Gather and share information about FACTS (formative assessment classroom techniques) and discuss mechanisms for planning formative assessment. Get examples of effective examples and strategies, and learn methods to provide feedback based on data obtained from the formative assessments.

Presenter: Mariam Manuel, Science Instructional Coach, Katy Independent School District, Katy, TX

Who Should Attend: Science teachers of all experience levels

Teaching AP Calculus AB **1.140 Bevo**

Participants will discuss valuable resources, tips, and strategies for teaching an AP Calculus AB class. This session will focus on thoughtful and engaging activities to help students explore difficult topics in AP Calculus AB. Participants will explore several activities ranging from Riemann Sums, the definite integral, and mean value theorem. Be prepared to refresh your calculus skills and discover ways to deepen your students' understanding of calculus.

Presenter: Kristi Hardy, Math Teacher, Issaquah High School, Kirkland, WA

Who Should Attend: Math teachers of all experience levels

Engaging the 21st-Century Learner with Video Creation **1.138 Stadium**

Flipping the classroom is a hot topic in education right now, but this shouldn't mean long, lecture-type videos that students spend their time passively watching after the school day. The presenters have created video clip cartoons that use humor and relevance to demystify challenging science concepts. The clips are posted on a YouTube channel called the “Amoeba Sisters." This session will focus on video creation ideas and provide resources for teachers to empower students as active producers—not just consumers—of educational content.

Presenters: Brianna Rapini, Program Coordinator—Science, Klein Independent School District, The Woodlands, TX, and Sarina Peterson, Program Evaluation Specialist, Dallas Independent School District

Who Should Attend: Science or technology teachers of all experience levels, who teach in small or urban school settings

11:45 a.m. – 1:00 p.m. Lunch Atrium

1:00 – 1:45 p.m. Breakout Sessions III

Guided Inquiry in Chemistry **1.130 Longhorn**

This session is an introduction to using guided inquiry labs in pre-AP chemistry to prepare students for AP Chemistry. Copies of multiple inquiry-based labs that are designed to address College Board changes in the AP curriculum will be distributed. Attendees are encouraged to bring current labs to modify.

Presenter: Jenny Stremler Jackson, Science Teacher, Union Public Schools, Broken Arrow, OK

Who Should Attend: Science teachers of all experience levels

Hijacking Field Trips **1.140 Bevo**

The session will include strategies for using field trips and other shared experiences to engage students in mathematical thinking in more contexts, deepening their understanding of mathematics topics, and reinforcing classroom concepts.

Presenter: Lauren Siegel, Former Head of Math, ACE Academy, Austin, TX

Who Should Attend: Math teachers of all experience levels

Flipping Out Over Pedagogy **1.138 Stadium**

Flipped classrooms are misunderstood as being video-driven, overly technical, and anti-lecture. Participants will explore the pedagogy that informs how students should be spending their time in and out of the classroom.

Presenter: Robert Gonzales, Science Teacher, Crockett High School, Austin, TX

Who Should Attend: Any teacher

Extending UTeach Inquiry-Based Learning Practices Through Dual-Credit STEM Courses **Lil' Tex Auditorium**

The University of Texas at Austin is extending the UTeach philosophy in a new dual-credit model featuring Pre-Calculus, Statistics, and Computer Science curricula. OnRamps courses are being taught in Texas by many UTeach alumni who are trained to deliver the courses at an institute developed with UTeach faculty. This session will provide an overview of the OnRamps model, share sample inquiry-based lessons, and explain exciting opportunities for UTeach alumni in Texas and beyond to become OnRamps instructors and offer innovative, inquiry-based dual-credit courses.

Presenters: Tara Craig, OnRamps Professional Development Coordinator, The University of Texas at Austin, and Megan Parry, OnRamps Partnership Coordinator, The University of Texas at Austin

Who Should Attend: Computer science, math, or technology teachers of all experience levels

2:00 – 2:45 p.m. Breakout Sessions IV

TEFL = Teaching English Is Fantastically Legendary **1.130 Longhorn**

Learn tips for how to teach students a substantive subject when they are still learning English.

Presenters: Lauren Hoegen Dijkhof, Intensive English Learning Institute Lecturer and Co-Director, Far East University, South Korea; Maria Negley, Math Teacher, Manor New Tech High School, Manor, TX; and Matthew Thomas, University Lecturer, Far East University, South Korea

Who Should Attend: New teachers (0–3 years), who teach in small or urban school settings and teach ESL students; principals or other leaders in frequent contact with ESL students

Using Games and Highly-Structured Activities to Avoid the Three Deadly Sins of Learning — Worksheets, Lectures, and Copying **1.140 Bevo**

Two teachers will share their strategies for increasing student engagement and individual accountability. Attendees will play games, see examples of student work, and gain access to a website containing ready-to-use resources.

Presenters: Emily Beck, Science Teacher, Rouse High School, Austin, TX, and Jo Ann Tanzer, Science Teacher, Rouse High School, Austin, TX

Who Should Attend: Any math, science, or special populations teachers of all experience levels

Effective PLCs: What's that Like? **1.138 Stadium**

Discover avenues for building strong teams, look at team dynamics, and discuss ways to deal with conflict within a professional learning community (PLC). Discuss and identify the characteristics of an effective PLC and those of a dysfunctional PLC. Additionally, practice creating norms for your team and learn strategies for addressing the violation of norms.

Presenter: Mariam Manuel, Science Instructional Coach, Katy Independent School District, Katy, TX

Who Should Attend: Any teacher

3:00 – 3:30 p.m. Closing General Session Lil' Tex Auditorium