

UTeach Institute

National Math
and Science Initiative

2010 CONFERENCE

May 25–27, 2010

THE UNIVERSITY OF TEXAS AT AUSTIN

Session Schedule

AT&T Executive Education and Conference Center at The University of Texas at Austin

TUESDAY, MAY 25, 2010

12:00 – 1:00 PM

Registration | MEETING LEVEL 2 — LOBBY/REGISTRATION

1:00 – 2:00 PM

General Session | AMPHITHEATER (204)

MARY ANN RANKIN, *DEAN, COLLEGE OF NATURAL SCIENCES, UT-AUSTIN*
MARILYN KAMEEN, *SENIOR ASSOCIATE DEAN, COLLEGE OF EDUCATION, UT-AUSTIN*
TOM LUCE, *CHIEF EXECUTIVE OFFICER, NATIONAL MATH AND SCIENCE INITIATIVE*

2:15 – 3:30 PM

I. How to Get It All Done and Keep Your Sanity | ROOM 101

KRIS SHERMAN, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*; BECKY OSBORNE, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*; KEVIN HUGHES, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*

This session will provide specific tips and management techniques for managing materials, teaches by Step 1 and 2 students, and the roles of interns.

II. Engaging Students in Research Methods: The Cal Teach Berkeley Summer Institute | ROOM 102

ELISA STONE, *MASTER TEACHER, UNIVERSITY OF CALIFORNIA, BERKELEY*; NICOLE NUNES, *PROGRAM DIRECTOR, UNIVERSITY OF CALIFORNIA, BERKELEY*; STEPHANIE MORGADO, *CAL TEACH BERKELEY STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*

Cal Teach students learn cutting-edge scientific research methods and mathematical problem-solving strategies while doing full-time laboratory research in a summer internship program.

III. Making the Most of the TI-Nspire with Nspire Navigator | ROOM 103

PRUDENCE CAIN, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, THE UNIVERSITY OF TEXAS AT AUSTIN*

This session is being limited to the first 15 attendees who arrive. Use the TI-Nspire Navigator System wireless remote learning system to send documents and analyze data; use the Quick Poll feature to check for understanding instantly; and increase student engagement by using the “live presenter” feature. Use pre-made TI-Nspire™ handheld documents to explore the power of the handheld.

IV. Understanding Science | ROOM 104

STEVEN CASE, *CENTER DIRECTOR, UNIVERSITY OF KANSAS*; JUDY SCOTCHMOOR, *ASSISTANT DIRECTOR, EDUCATION AND PUBLIC PROGRAMS, UNIVERSITY OF CALIFORNIA, BERKELEY*

Understanding Science is a free web-based resource that will help deeply engage your students in science content and developing scientific thinking skills.

V. UTeach Course Roundtable: Implementing Step | ROOM 107

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Step courses.

VI. Program Support Special Interest Group Meeting | ROOM 108

Facilitator: LEAH SHIELDS, *ACADEMIC PROGRAM MANAGER, UNIVERSITY OF HOUSTON*

Join program support staff and advisors who will share their experiences launching new UTeach programs and discuss strategies for managing program growth at their various universities.

VII. Can a UTeach-type Teacher Preparation Program Reduce Science Expert Blind Spot by Teaching the Inquiry Cycle? | ROOM 203

DAVID KANTER, *ASSISTANT PROFESSOR, TEMPLE UNIVERSITY*

Temple University's UTeach students were found to have less science expert blind spot (SEBS) than science students, but more than education students. This SEBS was found to be mitigated more by the Step courses than the Knowing & Learning course.

VIII. What is UTeach? | AMPHITHEATER (204)

MELISSA DODSON, *MANAGER, UTEACH INSTITUTE*; KIMBERLY HUGHES, *MANAGER, UTEACH INSTITUTE*

This session is for anyone interested in learning more about the UTeach secondary math and science program at UT Austin. Presenters will describe the hallmarks of UTeach, its organizational structure at the university, the roles of key program staff and faculty, and its partnership with local K–12 schools. Finally, the presenters will review the program's results at UT Austin, including program enrollment and retention, student profiles, and teacher production and retention.

IX. Forming a UTeach Student Organization (Student Session) | BALLROOM SALON A

UTeach students from around the nation will meet and discuss what's been happening with their local student groups, brainstorm ideas, and share strategies for successful student group implementation.

X. CRASH Science! Saving Lives with STEM Lessons | BALLROOM SALON B

GRIFF JONES, *MASTER TEACHER, UNIVERSITY OF FLORIDA*

Use egg-carrying paper car crashes and dramatic crash-testing footage to teach students how science and engineering can save their lives. Free Crash-DVDs.

XI. Tennessee Replication Sites Meeting (closed) | BALLROOM SALON D

Facilitator: LEIGH GOSTOWSKI, *MIDDLE TENNESSEE UNIVERSITY*

This is a closed session for current Tennessee replication sites and will focus on topics of interest and relevant updates.

XII. Voices from the Field: What UTeach Mentors Gain From Hosting Pre-service Teachers | BALLROOM SALON E

SHELLY RODRIGUEZ, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

In this interactive session interview data from several science mentor teachers working with UTeach will be reviewed. In the interviews, teachers reflect on their mentoring experience and describe what they have learned. An overview of findings from the study will be presented and possible implications will be discussed.

3:45 – 5:00 PM

I. Implementing a Teacher Portfolio | ROOM 101

PAIGE EVANS, *SCIENCE MASTER TEACHER, UNIVERSITY OF HOUSTON*; AMBER RUSSOW, *MATH MASTER TEACHER, UNIVERSITY OF HOUSTON*

Come explore how we have designed a web based portfolio that encompasses all teachHOUSTON courses. We will show you which assignments from the teachHOUSTON courses are embedded in the portfolio. This portfolio can be modified to fit any university/state standards and the technology is free. Find out how our portfolios will enhance students' preparation for future employment.

II. The Analytic Framework: A Taxonomy of Design & Innovation in STEM Teacher Preparation and Development | ROOM 102

CHARLES COBLE, *CO-DIRECTOR, SCIENCE AND MATH TEACHER IMPERATIVE, ASSOCIATION FOR PUBLIC AND LAND-GRANT UNIVERSITIES*

The Association of Public and Land-Grant Universities (APLU) launched the Science and Mathematics Teacher Imperative (SMTI) to enhance the quantity, quality and diversity of secondary science and mathematics teachers. An important SMTI tool is the Analytic Framework* for describing and analyzing science and mathematics teacher preparation and development.

III. Rural Delivery of Step 1 and Step 2 | ROOM 103

JANET MCSHANE, *CO-DIRECTOR, NORTHERN ARIZONA UNIVERSITY*; JULIE GESS-NEWSOME, *CO-DIRECTOR, NORTHERN ARIZONA UNIVERSITY*; DEBORAH WOLF, *MASTER TEACHER, NORTHERN ARIZONA UNIVERSITY*

Step 1 and 2 courses provide an outstanding opportunity for students to observe classrooms and try their hand at teaching. But how can these field-intensive courses be offered in rural areas in which a single university quickly overwhelms available local placements? Join this discussion to hear about what we did at NAUteach this past year and to brainstorm alternate placement strategies that may be employed in rural areas.

IV. Technology-Based Step Demonstration Lesson Using the TI-Navigator System | ROOM 104

BRIAN FORTNEY, *MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

This Technology-Based Step 1 Demonstration Lesson will use the TI-Navigator system as an avenue for students to collectively solve an initial problem, then by sending one student's information to the other calculators, solve that student-generated problem, or take that student-generated problem to a higher level. Through the TI-Navigator system, multiple pathways may be used to solve complex problems, creating rich opportunities for interaction between students, thus providing an avenue for the teacher to make student thinking or reasoning visible.

V. UTK's Biology in a Box Project: A STEM Resource for UTeach Courses & Inductees | ROOM 107

SUSAN RIECHERT, *PROFESSOR, UNIVERSITY OF TENNESSEE, KNOXVILLE*

Experience student engagement in scientific inquiry using the permanent materials offered to UTeach partners under UTK's Biology in a Box project. <http://eeb.bio.utk.edu/biologyinbox>

VI. Research Consortium Special Interest Group Meeting | ROOM 108

MELISSA DODSON, *MANAGER, UTEACH INSTITUTE*

Members of the UTeach Research Consortium meet every year at the Institute's Conference. This diverse community of researchers, including social science, science, and educational researchers from UTeach replication sites, is committed to advancing educational research on STEM teacher preparation.

VII. UTeach Institute Data Collection and Reporting | ROOM 203

AARON SMITH, *SITE COORDINATOR, UTEACH INSTITUTE*; DILSHAD SHAHID, *SENIOR SYSTEMS ANALYST, UTEACH INSTITUTE*; ROBIN KAR, *SENIOR SYSTEMS ANALYST, UTEACH INSTITUTE*

What data does the UTeach Institute collect from UTeach Replication Programs and why? How does this data collection benefit your program? How can you help make it a smooth process? Tell us what data analysis you would like to see from the Institute.

VIII. The UTeach Curriculum | AMPHITHEATER (204)

KIMBERLY HUGHES, *MANAGER, UTEACH INSTITUTE*

This session will provide a comprehensive overview of the design and implementation of the UTeach model program curriculum. Each of the ten UTeach courses will be discussed as well as the UTeach program field component.

IX. UTeach Course Roundtable: Implementing Perspectives on Science and Mathematics | BALLROOM SALON A

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Perspectives course.

X. Budgeting for Program Growth: What to Expect as Your UTeach Program Matures | BALLROOM SALON D

MICHAEL MARDER, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; AMY CHAVEZ, *FINANCIAL ANALYST, UNIVERSITY OF TEXAS AT AUSTIN*; TRACY LAQUEY PARKER, *DIRECTOR, UTEACH INSTITUTE*

This session will provide a historical perspective of the UTeach budget at UT Austin and an opportunity for participants to get advice regarding budgeting for their own program growth.

XI. School Site Situated Project Based Instruction | BALLROOM SALON E

MARK SPENCER, *LECTURER, UNIVERSITY OF CALIFORNIA, BERKELEY*; STEPHANIE MORGADO, *STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*; TONY DIAZ, *STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*

The UC Berkeley project-based instruction course is built around school site based projects that enable secondary students to contribute to the sustainability of their school and community. This interactive presentation will review the pedagogical framework that informs the course and will present examples of student developed lessons.

6:00–7:30 PM

Welcome Reception | TEJAS DINING ROOM

Hosted by National Instruments and SMART Technologies

WEDNESDAY, MAY 26, 2010

8:00–8:45 AM

Breakfast | BALLROOM FOYER, MEETING LEVEL 3

9:00–11:00 AM

Open House—UTeach Facilities | REFER TO MAP IN CONFERENCE PACKET

College of Natural Sciences: Painter Hall, 4th Floor

College of Education: Sanchez Building, Room 316

9:00–11:45 AM

Poster Session | ROOM 103

I. The Student Perspective: How Early Field Experience Shapes Their Ideas About Teaching

MICHELLE ALLEN, *STUDENT, UCI CAL TEACH*; MICHELLE MURILLO-MEDINA, *STUDENT, UCI CAL TEACH*; SOUMAR BOUZA, *STUDENT, UCI CAL TEACH*

This poster explores what Cal Teach students feel they are learning from their early field experiences and how those experiences are shaping their ideas about teaching and about working at culturally diverse, high-need schools.

II. Technology-Integrated Tasks in Knowing and Learning

MARIA BENZON, *MASTER TEACHER, UNIVERSITY OF HOUSTON*; PERRI SEGURA, *MASTER TEACHER, UNIVERSITY OF HOUSTON*; CRYSTAL GREMILLION, *GRADUATE ASSISTANT, UNIVERSITY OF HOUSTON*

Tasks are not simply evidence of student learning, but can also be an opportunity to model good teaching practices. Visit our poster and learn about these tasks from Knowing and Learning: Foldable Photos, Vocabulary Flashcards, Constructivism Brochure, Theorist Podcast, Clickers, and more!

III. Classroom Interactions Course: Teach 2 Video Analysis

KATIE APLINGTON, *STUDENT, FSU TEACH*

Teach 2 Video Analysis Presentation

IV. Challenges in Attracting Physics Teachers to VolsTeach

JON LEVIN, *PROFESSOR, UNIVERSITY OF TENNESSEE, KNOXVILLE*

As VolsTeach begins its first year at the University of Tennessee, Knoxville, the Department of Physics and Astronomy seeks to attract high-school students and undecided freshman who might have teaching interest. We will discuss the challenges we face with optimism that conference attendees will have innovative suggestions to address our concerns.

V. So, Why Do You Want to Be a Physics Teacher?

SCOTT BONHAM, *ASSOCIATE PROFESSOR, WESTERN KENTUCKY UNIVERSITY*

SkyTeach's bumper crop of first cohort physics majors were interviewed about reasons about their choice. Several common pre-college and SkyTeach characteristics emerged as themes.

VI. Functions and Modeling Course

BETH HOOD, *STUDENT, UTEACH AUSTIN*

Examples of coursework will be displayed along with student impressions.

VII. Knowing and Learning in Mathematics and Science Course

CHRISTA CHAGRA, *STUDENT, UTEACH AUSTIN*; REBECCA DUVALL, *STUDENT, UTEACH AUSTIN*

VIII. Step 2 Science — Inquiry-Based Lesson Design

SUSIE PARK, *STUDENT, UTEACH AUSTIN*

In Step 2, students plan and teach 3 lessons at the middle school level. On the poster, an example of how a lesson is developed is shown. First the lesson is drafted, then it is taught to a class. With student data, the lesson is revised to its final draft.

IX. Step 1 — Inquiry Approaches to Teaching

CARA SUBRAMANIAM, *STUDENT, UTEACH AUSTIN*; TREVON JONES, *STUDENT, UTEACH AUSTIN*

X. The effects of eutrophication on Lemna minor: potassium nitrate versus potassium phosphate ex situ

LAURA SANDERS, *STUDENT, UTEACH AUSTIN*

Presentation of Research Methods Inquiry 4 assignment.

XI. Apprentice Teaching

CHRISTOPHER MARTELL, *STUDENT, UTEACH AUSTIN*

As an apprentice teacher, your skills, strategies, and presumptions are all tested. Ultimately, it's a learning experience. This poster, which reviews 3 lessons learned, is in fact a response to a job interview question: "What are 3 things you learned in your time as an apprentice teacher?" My response was as follows: 1) Punishment is among the least affective tools for generating a productive learning environment; 2) Collaboration is vital to a teacher's success and professional development; and 3) Perfectionism and empathy must be moderated by practicality and restraint.

XII. LSU Student Organization

CHELSEA DUHON, *STUDENT, GEAXTEACH*; KELSEY HUNDLEY, *STUDENT GEAXTEACH*

Highlight the growth of the GeauxTeach student organization and future plans.

XIII. Math and Science Teachers of Tomorrow: UTeach Austin's Student Organization

RANA GARRETT, *STUDENT, UTEACH AUSTIN*

XIV. Step 2 Math: Inquiry-Based Lesson Design

BRITTANY ALEXANDER, *STUDENT, UTEACH AUSTIN*

XV. The UCI Cal Teach Student Organization

MICHELLE ALLEN, *STUDENT, UCI CAL TEACH*; MICHELLE MURILLO-MEDINA, *STUDENT, UCI CAL TEACH*; SOUMAR BOUZA, *STUDENT, UCI CAL TEACH*

XVI. University of Houston Student Organization

KAMIE SPAIN, *STUDENT, TEACHHOUSTON*

XVII. TUtube - Incorporating Video into Lesson Evaluation

MARY WALIZER, *STUDENT, TUTEACH*; SOFIA FRIEDMAN, *STUDENT, TUTEACH*

Temple University has incorporated video into Step courses. Students will provide an overview of the taping process, show footage from teaching events, and discuss what they gain from this experience.

XVIII. Drinking Water: Is it Chlorine Safe?

TONY DIAZ, *STUDENT, CAL TEACH BERKELEY*

Results from an Inquiry 4 research project in the Cal Teach Berkeley Research Methods course will be presented. The purpose of this investigation was to test the reliability of the instrument and procedure for measuring chlorine, and to examine the relationship between the amount of chlorine in drinking water from different sources.

XIX. Measuring the Age of the Universe from Your Classroom

STEPHANIE MORGADO, *STUDENT, CAL TEACH BERKELEY*

Hands-On Universe (HOU) is a curricular program developed by Dr. Carl Pennypacker's group at the Lawrence Berkeley National Laboratory that uses advancements in inquiry-based technology-driven instruction to teach students physical concepts. During the Cal Teach Summer Institute, a hands-on lesson was developed to teach students how to measure the age of the universe by looking at Type Ia supernovae data collected from the Sloan Digital Sky Survey (SDSS). Results from the evaluation of this lesson will be presented.

9:00–10:15 AM

I. Vendor Presentations: SMART Technologies & National Instruments | ROOM 101

9:00–9:30 AM

SMART Technologies: LUIS MORALES, *SMART TECHNOLOGIES EDUCATION CONSULTANT*

SMART Board Integration into the Math/Science Classroom. Integrating technology into math and science classrooms just got simple. Let's learn how we can use SMART Notebook Math Tools and SMART Response and Document Cameras to bring your curriculum to life. Students and teachers both can write, graph and solve functions with just a click. But wait, we can also collect student data instantaneously without ever having to leave Notebook Software.

9:45–10:15 AM

National Instruments: RAY ALMGREN, *VP SOFTWARE AND EDUCATION*

Use LabVIEW Education Edition to teach STEM concepts in your classroom. With LabVIEW, students can quickly build a program to log data, power a robot, and analyze information. This session will provide an overview of LabVIEW Education Edition, demonstrate how to use it in the classroom, and highlight curriculum resources.

II. From Step 1 to Apprentice Teaching: UTeach Students in the Field | ROOM 102

JASON ERMER, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; SHELLY RODRIGUEZ, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; DENISE EKBERG, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; KELLI ALLEN, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; PAMELA POWELL, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

How do the UTeach field experiences build on one another, beginning in Step 1 and continuing through Apprentice Teaching? Master Teachers from across all field courses at UT Austin will provide an overview of the program's field component and discuss examples of student growth throughout the program: where they start, where they end up, and how they get there.

III. Data Management Tools | ROOM 104

LEAH SHIELDS, *ACADEMIC PROGRAM MANAGER, UNIVERSITY OF HOUSTON*; COLIN BUTLER, *OFFICE COORDINATOR, UNIVERSITY OF HOUSTON*

Explanation and demonstration of MS Excel and MS Access tools used to make the reporting of student and expenditure information easier.

IV. Research Methods for Non-Physicists | ROOM 107

MIKE KLYMKOWSKY, *PROFESSOR/CO-DIRECTOR CU TEACH, UNIVERSITY OF COLORADO, BOULDER*

We hope to catalyze a discussion on how the Research Methods course is being designed and taught at other replication sites, with an emphasis on how to balance the treatment of statistics with respect to other topics and disciplines.

V. Development Special Interest Group Meeting | ROOM 108

Facilitator: TRACY LAQUEY PARKER, *DIRECTOR, UTEACH INSTITUTE*

Join development officers and other fundraisers to discuss networking activities and share fundraising strategies and resources with one another.

VI. Getting the Word Out: How to Market Your Program to Students, Donors and the Media | ROOM 203

RENA PEDERSON, *COMMUNICATIONS DIRECTOR, NATIONAL MATH AND SCIENCE INITIATIVE*

How do you get the word out to students, donors and local leaders about your UTeach program? We'll discuss creative and effective ways to market your UTeach program.

VII. What is UTeach Replication? | AMPHITHEATER (204)

TRACY LAQUEY PARKER, *DIRECTOR, UTEACH INSTITUTE*; MELISSA DODSON, *MANAGER, UTEACH INSTITUTE*

The UTeach Institute has developed a comprehensive approach to supporting the replication of UTeach at partnering university sites. This session provides an overview of the Institute's products and services, including site selection, communication of the UTeach model, operational and instructional support, evaluation services, and networking and community building opportunities. Participants will learn about the competitive RFP process and selection criteria, initiating a UTeach program, planning and budgeting for a UTeach program, and expectations for program rollout and course fidelity.

VIII. Hands-On Science: An Inquiry-Based Integrated Science Content Course for Pre-service Elementary Teachers | BALLROOM SALON A

SACHA KOPP, *ASSOCIATE PROFESSOR DEPARTMENT OF PHYSICS, UNIVERSITY OF TEXAS AT AUSTIN*; CYNTHIA LABRAKE, *SENIOR LECTURER DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY, UNIVERSITY OF TEXAS AT AUSTIN*

In an effort to better serve the needs of future elementary school teachers graduating from UT-Austin, we have developed and will discuss a new inquiry-based multi-semester curriculum in integrated natural sciences (physics, chemistry, geology, biology, astronomy).

IX. Faculty Special Interest Group Meeting | BALLROOM SALON B

Facilitators: COLLEEN EDDY, *ASSISTANT PROFESSOR OF MATHEMATICS, UNIVERSITY OF NORTH TEXAS*; SHERRY SOUTHERLAND, *PROFESSOR, SCHOOL OF TEACHER EDUCATION, FLORIDA STATE UNIVERSITY*

Join education, mathematics, science and liberal arts faculty to discuss issues related to their various roles in the development of STEM teachers.

X. Re-Imagining High School — New Tech High Schools and the New Tech Network | BALLROOM SALON D

PAUL CURTIS, *ASSISTANT DIRECTOR OF SCHOOL DEVELOPMENT, NEW TECH NETWORK*

This session will focus on a non-traditional approach to high school instruction. New Technology High Schools are uniquely characterized by a culture that empowers, project based learning as the primary instructional method and an integrated collaborative technology platform. Students are engaged in their learning through rigorous, standards-based, project learning implemented in a one-to-one computer-student environment. Information about the New Technology High School Network will be provided along with visible examples of how students work and learn in these schools.

10:30–11:45 AM

I. UTeach and Computer Science | ROOM 101

BRADLEY BETH, *PROGRAM COORDINATOR, UNIVERSITY OF TEXAS AT AUSTIN*; CALVIN LIN, *PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

UT Austin's recent initiatives to recruit and support Computer Science majors will be discussed. Presenters will share ideas for extending this initiative to replication partners. and engage participants in a broad discussion of issues relating to secondary Computer Science curricula and teacher certification nationwide.

II. Findings and Recommendations of the National Task Force on Teacher Education in Physics | ROOM 102

STAMATIS VOKOS, *PROFESSOR OF PHYSICS, SEATTLE PACIFIC UNIVERSITY*

Through surveys, interviews, site visits, and literature review, the National Task Force on Teacher Education in Physics (T-TEP) is documenting the current state of physics teacher preparation, identifying best practices, and making recommendations. This session will describe the work of T-TEP (funded in part by the Physics Teacher Education Coalition).

III. A Survey of Student Attitudes Toward an Inquiry-based Capstone Mathematics Course for Pre-service Student Teachers | ROOM 104

MARK DANIELS, *CLINICAL ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*; EFRAIM ARMENDARIZ, *PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

This session will present student attitudinal survey results relating to a capstone mathematics course developed specifically for UTeach secondary preservice mathematics majors.

IV. UTeach Course Roundtable: Implementing Knowing and Learning | ROOM 107

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Knowing and Learning in Mathematics and Science course.

V. Your TI-Nspire has an 84 faceplate, what now? How about TI Navigator? | ROOM 108

PRUDENCE CAIN, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

Participants will explore the features of the updated operating system for the TI-84+ handheld. Participants will also experience the Activity Center of the TI Navigator System using Algebra I topics such as linear functions.

VI. Studying the Cal Teach Berkeley Program: Logic Model and Works-in-progress | ROOM 203

MICHELLE SINAPUELAS, *GRADUATE STUDENT RESEARCHER, UNIVERSITY OF CALIFORNIA, BERKELEY*; REBECCA POON, *GRADUATE STUDENT RESEARCHER, UNIVERSITY OF CALIFORNIA BERKELEY*; ROSARIO RIVERO, *GRADUATE STUDENT RESEARCHER, UNIVERSITY OF CALIFORNIA, BERKELEY*

We describe the Cal Teach Berkeley logic model and works-in-progress that focus on getting at Cal Teach students' beliefs and math/science pedagogical content knowledge.

VII. Co-Director Panel: Supporting Cross-College Collaboration | AMPHITHEATER (204)

Moderator: MELISSA DODSON, *MANAGER, UTEACH INSTITUTE*; Panelists: MICHAEL MARDER, *CO-DIRECTOR, UTEACH AUSTIN, UNIVERSITY OF TEXAS AT AUSTIN*; LARRY ABRAHAM, *CO-DIRECTOR, UTEACH AUSTIN, UNIVERSITY OF TEXAS AT AUSTIN*; SHERRY SOUTHERLAND, *CO-DIRECTOR, FSU TEACH, FLORIDA STATE UNIVERSITY*; SUSAN BENNER, *CO-DIRECTOR, VOLSTEACH, UNIVERSITY OF TENNESSEE AT KNOXVILLE*; SUSAN REICHERT, *CO-DIRECTOR, VOLSTEACH, UNIVERSITY OF TENNESSEE AT KNOXVILLE*

A panel of co-directors from several universities implementing the UTeach model program will discuss the work they do and the challenges they face in supporting cross-college collaboration in the preparation of STEM teachers.

VIII. Apprentice Teaching—Beyond the Seminar—True Professional Growth | BALLROOM SALON A

PAM POWELL, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; KELLI ALLEN, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

This session will focus on actively and productively reflecting on teaching proficiencies as the foundation for the Apprentice Teaching student experience.

IX. Math and Science Doesn't Have to be a Drag: Exploring Air Resistance and Motion Using Technology | BALLROOM SALON B

GRIFF JONES, *MASTER TEACHER, UNIVERSITY OF FLORIDA*; STEPHEN PAPE, *ASSOCIATE PROFESSOR, UNIVERSITY OF FLORIDA*; GLORIA WEBER, *MASTER TEACHER, UNIVERSITY OF FLORIDA*

This interactive lesson focuses on open inquiry using two types of probe-based technology (Texas Instruments TI-NSpire and Pasco SPARKS learning systems). Participants will explore open inquiry utilizing and comparing the data collection capabilities of the technology. This lesson can be used in Step 2 or Knowing and Learning to explore levels of inquiry and integration of technology into student lessons.

X. Providing Student Support Through Internships | BALLROOM SALON D

SHELLY RODRIGUEZ, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

This interactive session will focus on internship programs being implemented across the UTeach family of schools. This session will be a place for universities to put their heads together and discuss issues and questions. Schools will be asked to share the successes of their current internship program as well as challenges. Questions from sites looking to start an internship program will also be addressed.

XI. Attracting the Hesitant Student to Teaching | BALLROOM SALON E

SHARON BESSON, *PROGRAM MANAGER/MASTER TEACHER, LOUISIANA STATE UNIVERSITY*; ROBYN CARLIN, *MASTER TEACHER, LOUISIANA STATE UNIVERSITY*

LSU Master Teachers will share their recruiting strategies that increased enrollment of the Step 1 class from 16 to 120 students. Promotional items will be shared.

11:45 – 12:30 PM

Lunch | TEJAS DINING ROOM

12:45 – 2:00 PM

I. Vendor Presentations: TaskStream & National Science Teachers Association | ROOM 101

12:45–1:15 PM

TaskStream: COLLEEN ARREY, *EDUCATION SOLUTIONS SPECIALIST, TASKSTREAM*

With TaskStream, the UTeach Institute is collecting artifacts from qualified replication sites, using rubrics to evaluate and provide feedback on UTeach program implementations, and generating reports to monitor and track progress. Learn more about TaskStream's flexible web-based systems and how they support other e-portfolio, evidence collection, and assessment needs.

1:30–2:00 PM

NSTA: EDWARD ROCK, *ASSOCIATE EXECUTIVE DIRECTOR, NSTA*; MICHAEL ODELL, *PROFESSOR OF STEM EDUCATION, COLLEGE OF EDUCATION AND PSYCHOLOGY/COLLEGE OF ENGINEERING AND COMPUTER SCIENCE, UNIVERSITY OF TEXAS AT TYLER*

Staff development research points to highly qualified teachers as the key driver of student success. The National Science Teachers Association's (NSTA) online Learning Center provides easily accessible and accountable tools to develop the depth and breadth of a science teacher's content background and pedagogical skills, helping students succeed on both standardized achievement tests and in our increasingly complex and technological world.

II. Revisiting Step 1 Model Lesson Implementation | ROOM 102

SUSAN WILLIAMS, *MASTER TEACHER, UNIVERSITY OF HOUSTON*; MARIA BENZON, *MASTER TEACHER, UNIVERSITY OF HOUSTON*; AMBER RUSSOW, *MASTER TEACHER, UNIVERSITY OF HOUSTON*

An update on the changes teachHOUSTON had made to our Step 1 model — we now focus on providing quality lessons for students to teach which allows them to experience teaching a true inductive lesson.

III. Setting Up the Program Support Structure of a New UTeach Replication Site | ROOM 103

PAM MUSCARELLO, *DEPARTMENT BUSINESS ADMINISTRATOR, UNIVERSITY OF HOUSTON*; LEAH MCALISTER-SHIELDS, *ACADEMIC PROGRAM MANAGER, UNIVERSITY OF HOUSTON*; ELYSE DAVIS, *PROGRAM MANAGER, UNIVERSITY OF HOUSTON*

This session will explore the success and challenges faced in supporting the administrative setup and maintenance of the replication of UTeach. Topics include rolling out a new department, getting pre-established departments on board, setting up and managing the internship and scholarship programs, collecting and reporting cost sharing data, and navigating the bureaucracy with multiple colleges.

IV. Challenge Based STEM Learning "Opportunities and Obstacles" | ROOM 104

JENIFFER HARPER-TAYLOR, *PRESIDENT, SIEMENS FOUNDATION*; DIANE TSUKAMAKI, *DIRECTOR SCHOLARSHIPS & RECOGNITION, THE COLLEGE BOARD*; LANCE ROUGEUX, *DIRECTOR OF TEACHER ENGAGEMENT, DISCOVERY EDUCATION*

An interactive workshop session designed to examine best practices and opportunities to increase and enhance teachers and students participation in challenge based STEM learning.

V. UTeach Course Roundtable: Implementing Functions and Modeling | ROOM 107

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Functions and Modeling course.

VI. Step 2 and Formative Assessment | ROOM 108

CRAIG SCHNEIDER, *MASTER TEACHER, UNIVERSITY OF COLORADO, BOULDER*; MIKE ROSS, *GRADUATE INSTRUCTOR, UNIVERSITY OF COLORADO, BOULDER*

CU Teach has modified Step 2 by strengthening the emphasis on formative assessment both in lesson planning and the final project. We would like to share our experience and solicit input and feedback from the greater UTeach replication community.

VII. Examining UTeach Outcomes: Classroom Observations of UTeach Graduates | ROOM 203

MICHAEL MARDER, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; CANDACE WALKINGTON, *PHD CANDIDATE IN MATH EDUCATION, UNIVERSITY OF TEXAS AT AUSTIN*

We report on a 3-year observational study where we developed a classroom observation instrument for math and science classrooms, and used it to observe UTeach graduates.

VIII. Expanding UTeach Panel: Working with Community Colleges and Satellite Campuses | AMPHITHEATER (204)

Moderator: MELISSA DODSON, *MANAGER, UTEACH INSTITUTE*; Panelists: JANET MCSHANE, *CO-DIRECTOR, NAUTEACH, NORTHERN ARIZONA UNIVERSITY*; STEVE CASE, *CO-DIRECTOR, UKANTEACH, UNIVERSITY OF KANSAS*; RICO TYLER, *MASTER TEACHER, SKYTEACH, WESTERN KENTUCKY UNIVERSITY*

Several universities implementing UTeach face a need to work with local community colleges and/or satellite campuses. In this session, panel members discuss this need and proposed solutions for expanding UTeach program implementation to other campuses.

IX. UTeach Course Roundtable: Implementing Project-Based Instruction | BALLROOM SALON A

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Project-Based Instruction course.

X. The Perspectives Course: Integrating Math and Science Through History | BALLROOM SALON B

ALBERTO MARTINEZ, *ASSISTANT PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

We will discuss the challenges and strategies of integrating math and science content in the Perspectives on Science and Mathematics course: overcoming students' initial skepticism, making the integration a central aim of the course, and selecting topics that include natural connections and that are simultaneously of value to both math and science majors.

XI. Greater Texas Foundation Planning Grant Meeting (closed) | BALLROOM SALON D

This is a closed meeting restricted to invited Texas universities only.

2:15–3:30 PM

I. Vendor Presentations: PASCO Scientific & Delta Education | ROOM 101

2:15–2:45 PM

PASCO Scientific: GARY NICHOLSON, *K–12 EDUCATION CONSULTANT*

Enabling 21st Century Science Education.

Join us for this workshop and learn how to prepare your students for the future: 21st Century science education using 21st Century science methods and tools. Deliver authentic 21st Century science experiences by combining standards-based content and relevant professional development with innovations in modern, electronic measurement.

3:00–3:30 PM

Delta Education: VERNE ISBELL, *REGIONAL MANAGER*

Delta Education will present an overview of the FOSS and DSM programs with an emphasis on the Grades 3–8 modules.

II. UTeachEngineering: Preparing Secondary School Educators to Teach Design-Based Engineering Courses | ROOM 102

DAVID ALLEN, *DIRECTOR AND PRINCIPAL INVESTIGATOR, UTEACH ENGINEERING, UNIVERSITY OF TEXAS AT AUSTIN*; TAYLOR MARTIN, *CO-PRINCIPAL INVESTIGATOR, UTEACH ENGINEERING, UNIVERSITY OF TEXAS AT AUSTIN*; CHERYL FARMER, *PROGRAM MANAGER AND MSP PROJECT DIRECTOR, UTEACH ENGINEERING, UNIVERSITY OF TEXAS AT AUSTIN*; PAT KO, *GRADUATE RESEARCH ASSISTANT, UNIVERSITY OF TEXAS AT AUSTIN*

Interested in the emerging field of secondary engineering education? Learn about early results, current efforts and future plans for this newest UTeach program.

III. A Project-Based Learning Approach to STEM Education | ROOM 103

STEVE ZIPKES, *PRINCIPAL, MANOR NEW TECH HIGH SCHOOL*; DAVID GREINER, *DEAN OF STUDENT SERVICES, MANOR NEW TECH HIGH SCHOOL*

Manor New Technology High School (MNTHS), a Texas science, technology, engineering, and math (T-STEM) academy, has achieved success with its technology integrated, project-based learning (PBL) instructional approach. Manor's approach is student-driven, engaging, and meets the needs of students with varied academic abilities. PBL involves student teams that are given a driving question or an authentic problem that challenges them to find new information and apply it to real world situations. PBL leads to high level learning by recognizing the relevance of the content students study. In this session, learn how Manor delivers state curricula and 21st century skills through PBL, collaboration with peers, businesses, and the community as well as the scale up activities of Think Forward. Think Forward is MNTHS's 4 day PBL Teacher Residency program that is affecting local and national districts throughout the country.

IV. Approaches to Developing High Quality Mentor Teacher Support in the Field | ROOM 104

CINDY DYAR, *MASTER TEACHER, FLORIDA STATE UNIVERSITY*; MALYNN KELSO, *MASTER TEACHER, FLORIDA STATE UNIVERSITY*; CRAIG SCHNEIDER, *MASTER TEACHER, UNIVERSITY OF COLORADO, BOULDER*

During this session, Master Teachers from current UTeach programs will share their strategies for working with mentor teachers to ensure high quality support for students in the field. Discussion topics will include selecting, training, and communicating with mentor teachers as well as expectations for documented feedback.

V. Winning Development Strategies | ROOM 107

KRISTA STEENBERGEN, *SR. DIRECTOR OF DEVELOPMENT, WESTERN KENTUCKY UNIVERSITY*; AMANDA LICH, *DIRECTOR OF DEVELOPMENT, WESTERN KENTUCKY UNIVERSITY*

Securing private support for your program can be a challenging, yet necessary reality in this economic climate. This session will be led by two seasoned development professionals who will offer ideas and strategies for closing all types of gifts to support your program.

VI. UTeach Course Roundtable: Implementing Research Methods | ROOM 108

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Research Methods course.

VII. The UTeach Induction Support Model | ROOM 203

ROBERTO CASTAÑEDA, *INDUCTION COORDINATOR, UNIVERSITY OF TEXAS AT AUSTIN*; KELLI ALLEN, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; PAMELA ROMERO, *MANAGER, UTEACH INSTITUTE*

The UTeach Austin mission to provide personalized support and resources to UTeach graduates will be presented and discussed as we prepare to pilot a Texas statewide induction program.

VIII. UTeach Graduates Panel | AMPHITHEATER (204)

Moderator: AARON SMITH, *SITE COORDINATOR, UTEACH INSTITUTE*; Panelists: MARVELIA DE LA ROSA, *ASSISTANT PRINCIPAL, LANIER HIGH SCHOOL, AUSTIN ISD*; JENNIFER LAZARE, *SCIENCE TEACHER, AUSTIN ISD*; NICOLE RENEAU, *MATH TEACHER, PFLUGERVILLE ISD*; AMY WAGNER, *SCIENCE TEACHER, AUSTIN ISD*; JOON YEE CHUAH, *MATH, SCIENCE AND COMPUTER SCIENCE TEACHER, AUSTIN ISD*

Graduates of UTeach Austin will talk about their experiences as teachers after finishing the UTeach program.

IX. Highlights From Implementation Year 2 | BALLROOM SALON A

PAMELA ROMERO, *MANAGER, UTEACH INSTITUTE*

To date, 21 universities have received grants to replicate the UTeach program. Cohort 1 (13 universities) has completed two years of program implementation. Cohort 2 (eight universities) will complete a planning period in August and implement the first UTeach course in Fall, 2010. This session highlights implementation results, including student recruitment and enrollment, demographics, student satisfaction, and courses implemented.

X. Step 1 and 2 Vertical Alignment and Classroom Management | BALLROOM SALON B

PAIGE EVANS, *SCIENCE MASTER TEACHER, UNIVERSITY OF HOUSTON*; PERRI SEGURA, *SCIENCE MASTER TEACHER, UNIVERSITY OF HOUSTON*; TONYA JEFFERY, *GRADUATE ASSISTANT/DOCTORAL STUDENT, UNIVERSITY OF HOUSTON*

Come explore how teachHOUSTON has implemented classroom management strategies into the Step 1 and Step 2 courses as well as examine how lesson plan development has been vertically aligned between these two courses. Participants will be given access to all of the Step 1 lessons teachHOUSTON has developed.

XI. Implementing Concurrent UTeach Replication and Master's Level Teacher Preparation Programs: Are Dual Program Offerings Possible and Sustainable? | BALLROOM SALON D

LINDA JONES, *STEM ACADEMIC PROGRAM, UNIVERSITY OF FLORIDA*

Challenges, opportunities, and lessons learned from the University of Florida's implementation of dual UTeach education minor and NCATE-accredited master's level science teacher preparation programs.

XII. Physics by Inquiry | SANCHEZ BUILDING 316

JILL MARSHALL, *ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

This session is taking place in SZB 316 located just East of the AT&T center and is being limited to the first 20 attendees to arrive. Participants will experience and evaluate an inquiry-based physics curriculum designed explicitly for teachers by the University of Washington Physics Education Group. Physics by Inquiry is one option for a domain (content) course that incorporates reflection on learning and instruction explicitly.

3:45 – 5:00 PM

I. Budgeting, Financial Reporting and the NMSI Database | ROOM 101

PATTY PICKARD, *CHIEF FINANCIAL OFFICER, NATIONAL MATH AND SCIENCE INITIATIVE*

An overview for NMSI-funded replication sites on budgeting, financial reporting, and entering data into the NMSI financial database.

II. Critical Attributes of the Project-Based Classroom | ROOM 102

SARA HAWKINS, *SCIENCE TEACHER, MANOR NEW TECH HIGH SCHOOL*; TARA CRAIG, *MATH TEACHER, MANOR NEW TECH HIGH SCHOOL*; HEATHER CROUCH, *SCIENCE TEACHER, MANOR NEW TECH HIGH SCHOOL*

How do you establish a project-based classroom, and how do you know it's working? This presentation will cover critical elements of a PBL classroom such as scaffolding 21st century skills, creating PBL assessments, establishing accountability and authoring standards-based curricula. Teachers will discuss their experiences implementing PBL in both a New Tech model and in a traditional classroom.

III. Cutting Corners: a 5E Math Demo Lesson for Step 1 | ROOM 103

KARAJEAN HYDE, *MASTER TEACHER, UNIVERSITY OF CALIFORNIA IRVINE*

Cutting Corners is a fun, 5E math lessons students can do in Step 1 courses to better understand how to write 5E math lessons.

IV. Technology Use in Knowing and Learning with Particular Emphasis on Using NetLogo | ROOM 104

WALTER STROUP, *ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

Technology plays many roles in the Knowing and Learning course. This session will begin by providing a brief overview of some of these roles as well as pointers to resources available for linking topics covered in the course with specific technologies. Then we will spend time introducing one of the more useful and pervasive tools, the NetLogo programming language. This introduction will closely mirror the sequence we use with our students, including some recommended topics for discussion. Participants should come away with a better sense of the rationale for how technology is used, as well as a much clearer sense of the resources that are available for teaching Knowing and Learning.

V. Foundations, Functions, and Regression Models: Exploring and "doing" Mathematics (Functions & Modeling Course) | ROOM 107

MARK DANIELS, *CLINICAL ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

If one does not ask "why" when engaging in "doing" mathematics, then the processes experienced are strictly mechanical. This session takes participants through two activities that provide some insight into the course and philosophy of M315C.

VI. UTeach Graduates Roundtable (Restricted to current UTeach students) | ROOM 108

KATEY ARRINGTON, *COORDINATOR OF SECONDARY MATHEMATICS, PFLUGERVILLE ISD*; AUDREY DEZEEUW, *BIOLOGY TEACHER, LEANDER ISD*; PEDRO MERCED, *MATH TEACHER, MANOR ISD*

Everything you've wanted to know about life after UTeach but have been afraid to ask. At least in front of your instructors. UTeach grads will answer questions regarding finding a job, getting through the first two years, and the realities of teaching using diverse instructional styles in the "real world".

VII. Developing a Five Year Plan for Replication | ROOM 203

STEVEN CASE, *CENTER DIRECTOR, UNIVERSITY OF KANSAS*

During this session, Development of a comprehensive planning document for replication will be discussed, from first course to stable enrollment across the entire course sequence.

VIII. Development Panel: How to Raise Money | AMPHITHEATER (204)

Moderator, MARY ANN RANKIN, *DEAN, COLLEGE OF NATURAL SCIENCES, UT-AUSTIN*

Development Introduction: KAY THOMAS, *ASSOCIATE DEAN FOR EXTERNAL RELATIONS, COLLEGE OF NATURAL SCIENCES, UT-AUSTIN*

Corporate and Foundation Philanthropy Panel: WYNN ROSSER, *EXECUTIVE DIRECTOR, GREATER TEXAS FOUNDATION*; JO ANNE VASQUEZ, *VP AND PROGRAM DIRECTOR, HELIOS EDUCATION FOUNDATION*; TRUMAN BELL, *SENIOR PROGRAM OFFICER, EXXONMOBIL FOUNDATION*

Individual Funder Panel: GEORGE CASEY, ANDY GREENAWALT, TRACY LAQUEY PARKER

This session will discuss the importance of private fundraising to support the sustainability of UTeach programs. Topics will include creating a fundraising task force and understanding donor and foundation expectations. The presenters in this session will include foundation representatives and members of The University of Texas UTeach task force who will discuss what motivated them to support the UTeach program.

IX. NCATE and UTeach Replication | BALLROOM SALON A

JULIE GESS-NEWSOME, *CO-DIRECTOR, NORTHERN ARIZONA UNIVERSITY*; SHARON CARDENAS, *ASSOCIATE DIRECTOR, NORTHERN ARIZONA UNIVERSITY*; TERRY CRITES, *ASSOCIATE PROFESSOR, NORTHERN ARIZONA UNIVERSITY*

The UTeach program contains many of the elements required by the NCATE (National Council for Accreditation of Teacher Education) review process. Synthesizing NCATE requirements with the UTeach program, however, can be a time consuming and somewhat daunting task. During this presentation, Northern Arizona University will demonstrate how they designed NCATE transition points and aligned required SPA assignments with UTeach courses.

X. UTeach Course Roundtable: Implementing Classroom Interactions | BALLROOM SALON B

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Classroom Interactions course.

XI. Research Methods Course Activities | BALLROOM SALON D

MICHAEL MARDER, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*

Participants will carry out two Research Methods course activities. The first comes from the beginning of the course, and shows how instructors interact with students to enable them to construct questions for their first inquiry. The second comes from near the end of the course, and shows how we start with a physical system (a temperature probe in a glass of water) and model it through a recursion relation implemented in Excel.

XII. The UTeach Student Portfolio | BALLROOM SALON E

BRETT WESTBROOK, *UTEACH ADVISOR, UNIVERSITY OF TEXAS AT AUSTIN*; KELLI ALLEN, *ASSISTANT CLINICAL PROFESSOR, MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

This session will provide an overview of the UTeach Austin student portfolio process, requirements, and web-based toolset.

6:30–9:30 PM

Reception and Dinner (Business Attire) | GRAND BALLROOM, SALON C
Hosted by Exxon Mobil Corporation

Keynote Speaker: SALLY RIDE, *PH.D., PRESIDENT AND CHIEF EXECUTIVE OFFICER, SALLY RIDE SCIENCE; PROFESSOR EMERITUS OF PHYSICS, UNIVERSITY OF CALIFORNIA SAN DIEGO*

THURSDAY, MAY 27, 2010

8:00–8:45 AM

Breakfast | BREAK AREA, MEETING LEVEL 1

9:00–10:15 AM

I. Plenary Session: Moving from Implementing Change to Sustaining Outcomes | AMPHITHEATER (204)

Speaker: GENE HALL, *PH.D., PROFESSOR, EDUCATIONAL LEADERSHIP, UNIVERSITY OF NEVADA LAS VEGAS*

Dr. Gene Hall's research and scholarship have centered on understanding the change process in organizational settings. In this plenary session, Dr. Hall discusses the importance of the "implementation bridge", without which there is little reason to expect positive change in outcomes. Dr. Hall will present research-based constructs and tools that can be used to facilitate individuals and organizations in moving across the bridge to sustainable changes in practice and outcomes.

II. WeTEACH: The National UTeach Student Organization (Student Session) | ROOM 103

UTeach students from various universities will lead a discussion of the organization, leadership, direction, and next steps for the national UTeach student group, WeTEACH.

10:30–11:45 AM

I. Research Findings on the Effectiveness of Project-Based Instruction Course Components | ROOM 101

JESSICA GORDON, *GRADUATE RESEARCH ASSISTANT, DOCTORAL STUDENT IN SCIENCE EDUCATION, UNIVERSITY OF TEXAS AT AUSTIN*; ANTHONY PETROSINO, *ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

Descriptive and significance testing differences on the first and second stages of a multi-year longitudinal study of project based instruction will be presented. PBI semester and Apprentice Teaching semester will be discussed.

II. How The Brain Learns | ROOM 102

KARAJEAN HYDE, *MASTER TEACHER, UNIVERSITY OF CALIFORNIA IRVINE*

This session will provide an overview of research on How the Brain Learns used to help undergraduates understand 5E lesson design and other elements of good instruction.

III. Views on Setting Up a UTeach National Alumni Network (Student Session) | ROOM 103

CHAS ANDERSON, *ALUMNI NETWORK DIRECTOR, NATIONAL MATH AND SCIENCE INITIATIVE*; JOHN WINN, *CHIEF PROGRAM OFFICER, NATIONAL MATH AND SCIENCE INITIATIVE*; CANDACE WALKINGTON, *CONSULTANT, NATIONAL MATH AND SCIENCE INITIATIVE*; ALIA MOHMED, *CONSULTANT, NATIONAL MATH AND SCIENCE INITIATIVE*

The Michael and Susan Dell Foundation and the Carnegie Corporation have funded the development of a UTeach Alumni Network designed to provide UTeach graduates their own professional network. This session will be the first step in gathering ideas from students regarding functionality of a Network website and activities that could be sponsored by the Network.

IV. The Importance of a Dedicated UTeach Advisor | ROOM 104

ANNETTE HAIRSTON, *UTEACH ADVISOR, UNIVERSITY OF TEXAS AT AUSTIN*; MELISSA DODSON, *MANAGER, UTEACH INSTITUTE*

In this session, participants discuss the importance of advising. UTeach advisors are supportive of the decision to pursue a teaching career, are well informed about the wide variety of degree plans leading to certification, and help pre-service teachers navigate their complex degree requirements.

V. UTeach Course Roundtable: Implementing Apprentice Teaching | ROOM 107

Bring your questions, comments, suggestions and ideas to this facilitated discussion focused on implementing the UTeach Apprentice Teaching course.

VI. Leadership Special Interest Group Meeting | ROOM 108

Facilitator: STEVE CASE, *CO-DIRECTOR UKANTEACH, UNIVERSITY OF KANSAS*

Join program co-directors, college deans and other university leaders to share experiences launching and sustaining a new UTeach program during an economic downturn.

VII. Setting Up a NMSI Financial Reporting Design to Cover Your Bases | ROOM 203

PAM MUSCARELLO, *DEPARTMENT BUSINESS ADMINISTRATOR, UNIVERSITY OF HOUSTON*; ELYSE DAVIS, *BUSINESS PROGRAM MANAGER, UNIVERSITY OF HOUSTON*; COLIN BUTLER, *OFFICE COORDINATOR, UNIVERSITY OF HOUSTON*

This session will be used to demonstrate a global approach to reviewing institutional and departmental financial systems and processes for determining how to best to collect, compile, and report financial data to NMSI. Specifically, the University of Houston will be used as a case study.

VIII. University Replication Cohort 1 Panel: Lessons Learned | AMPHITHEATER (204)

Moderator: PAMELA ROMERO, *MANAGER, UTEACH INSTITUTE*; Panelists: DEB WOLF, *MASTER TEACHER, CENTER FOR SCIENCE AND TEACHING AND LEARNING, NORTH-ERN ARIZONA UNIVERSITY*; VICKI METZGER, *CO-DIRECTOR, SKYTEACH, WESTERN KENTUCKY UNIVERSITY*; COLLEEN EDDY, *ASSISTANT PROFESSOR, TEACHER EDUCATION AND ADMINISTRATION, UNIVERSITY OF NORTH TEXAS*; RICK SMITH, *ASSOCIATE PROFESSOR/ASSOCIATE CHAIR, MATHEMATICS, UNIVERSITY OF FLORIDA*; PERRI SEGURA, *MASTER TEACHER, UNIVERSITY OF HOUSTON*; MARY WALKER, *MANAGER, UTEACH INSTITUTE, UNIVERSITY OF TEXAS AT AUSTIN*

This panel brings together colleagues from our partner universities (co-directors, faculty members, master teachers, and UTeach Institute staff) to discuss the top lessons learned while implementing a UTeach model program. Panel members will discuss student recruitment, institutional support, implementing courses, field placements, working with colleagues in other departments, and fundraising.

11:45 – 12:30 PM

Lunch | TEJAS DINING ROOM

12:45 – 2:00 PM

I. Integrating NSF GK–12 Fellows into the Research Methods Course | ROOM 101

STEVEN CASE, *CO-DIRECTOR, UNIVERSITY OF KANSAS*; BRAD WILLIAMSON, *MASTER TEACHER, UNIVERSITY OF KANSAS*

A description of how the KU GK–12 project and graduate students are functioning in the UKanTeach Research Methods class. This integration is meeting the needs of both programs.

II. Persistence of Student-Centeredness in Math | ROOM 102

KARAJEAN HYDE, *MASTER TEACHER, UNIVERSITY OF CALIFORNIA, IRVINE*

This study examines the effects of undergraduate, fieldwork-based (Step) courses on the development of a lasting student-centered perspective compared with those in a 5th year credential program.

III. Using Student Surveys, Observational Records and Instructional Review for Continuous Program Improvement | ROOM 103

MARY WALKER, *MANAGER, UTEACH INSTITUTE*

Since its inception, UTeach has ensured program satisfaction and “first-rate” instruction through regular collection and analysis of a variety of student data. To assist UTeach replication sites with successful implementation and continuous course and program improvements, this session focuses on the use of UTeach Institute data collected from student surveys, observational records and the instructional review process.

IV. Master Teacher Special Interest Group Meeting | ROOM 104

Facilitators: BILL NEAL, *MASTER TEACHER, UNIVERSITY OF TEXAS DALLAS*; RICO TYLER, *MASTER TEACHER, WESTERN KENTUCKY UNIVERSITY*

Join master teachers from across the country to share strategies and resources related to field teaching observations and feedback and to discuss master teacher involvement in courses beyond Step.

V. Supporting Student Learning During the Clinical Interview | ROOM 107

MARIA BENZON, *MASTER TEACHER, UNIVERSITY OF HOUSTON*; PERRI SEGURA, *MASTER TEACHER, UNIVERSITY OF HOUSTON*

Conducting clinical interviews as part of the Knowing and Learning course can be a challenging process for undergraduate students. Learn how we supported students by creating learning-rich experiences through a variety of tasks.

VI. Texas Replication Sites Meeting (closed) | ROOM 108

This is a closed session for current Texas replication sites and will focus on topics of interest and relevant updates.

2:00 PM









Adjourn

UTeach Institute-NMSI Annual Conference

TUESDAY, MAY 25, 2010

AT&T Executive Education and Conference Center at the University of Texas at Austin

1:00 - 2:00 pm General Session - <i>Amphitheater (204)</i>						
2:15 - 5:00 pm Breakout Sessions and Workshops						
Room	Amphitheater	101	102	103	104	107
2:15 - 3:30	What is UTeach?	How to Get It All Done and Keep Your Sanity	Engaging Students in Research Methods: The Cal Teach Berkeley Summer Institute	Making the Most of the TI-Nspire with Nspire Navigator	Understanding Science	UTeach Course Roundtable: Implementing STEP
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	Ballroom (Salon E)
	Program Support Special Interest Group Meeting	Can a UTeach-type Teacher Preparation Program Reduce Science Expert Blind Spot by Teaching the Inquiry Cycle?	Forming a UTeach Student Organization (Student Session)	CRASH Science! Saving Lives with STEM Lessons	Tennessee Replication Sites Meeting (closed)	Voices From the Field: What UTeach Mentors Gain From Hosting Pre-Service Teachers
Room	Amphitheater	101	102	103	104	107
3:45 - 5:00	The UTeach Curriculum	Implementing a Teacher Portfolio	The Analytic Framework: A Taxonomy of Design & Innovation in STEM Teacher Preparation and Development	Rural Delivery of Step 1 and Step 2	Technology-Based Step Demonstration Lesson Using the TI-Navigator System	UTK's <i>Biology in a Box</i> Project: A STEM resource for UTeach Courses & Inductees
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	
	Research Consortium Special Interest Group Meeting	UTeach Institute Data Collection and Reporting	UTeach Course Roundtable: Implementing Perspectives on Science and Mathematics	Budgeting for Growth: What to Expect as Your UTeach Program Matures	School Site Situated Project Based Instruction	
6:00-7:30 pm Welcome Reception - <i>Tejas Dining Room</i> Hosted by National Instruments and SMART Technologies						

- | | |
|---|---|
|  About UTeach and UTeach Replication |  Developing STEM Content Knowledge of Pre-Service Teachers |
|  UTeach Organizational Development |  Research Projects Relevant to UTeach and STEM Teacher Preparation |
|  UTeach Instructional Program and Courses |  Supporting and Developing In-service STEM Teachers |
|  Student Recruitment, Retention and Support |  Bridging Education STEM Initiatives |

UTeach Institute-NMSI Annual Conference

WEDNESDAY, MAY 26, 2010

AT&T Executive Education and Conference Center at The University of Texas at Austin

8:00 - 8:45 am Breakfast - Ballroom Foyer, Meeting Level 3

9:00 - 11:00 am Open House - UTeach Facilities (Painter Hall, 4th floor; Sanchez Building 316)

9:00 - 11:45 am Morning Sessions: Breakouts and Workshops

Room	Amphitheater	101	102	103	104	107
9:00-10:15 am	What is UTeach Replication?	Vendor Presentations: SMART Technologies/ National Instruments	From Step 1 to Apprentice Teaching: UTeach Students in the Field	Poster Session	Data Management Tools	Research Methods for Non-Physicists
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	Ballroom (Salon E)
	Development Special Interest Group Meeting	Getting the Word Out: How to Market Your Program to Students, Donors and the Media	Hands-On Science: An Inquiry-Based Integrated Science Content Course for Pre-service Elementary Teachers	Faculty Special Interest Group Meeting	Re-Imagining High School - New Tech High Schools and the New Tech Network	
Room	Amphitheater	101	102	103	104	107
10:30-11:45 am	Co-Director Panel: Supporting Cross-College Collaboration	UTeach and Computer Science	Findings and Recommendations of the National Task Force on Teacher Education in Physics	Poster Session	A Survey of Student Attitudes toward an Inquiry-based capstone Mathematics Course for Pre-service Students	UTeach Course Roundtable: Implementing Knowing and Learning
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	Ballroom (Salon E)
	Your TI-Nspire has an 84 faceplate, what now? How about TI Navigator?	Studying the Cal Teach Berkeley Program: Logic Model and Works-in-progress	Apprentice Teaching - Beyond the Seminar - True Professional Growth	Math and Science Doesn't Have to be a Drag: Exploring Air Resistance and Motion Using Technology	Providing Student Support through Internships	Attracting the Hesitant Student to Teaching













11:45 am -12:30 pm Lunch - Tejas Dining Room

- About UTeach and UTeach Replication
- UTeach Organizational Development
- UTeach Instructional Program and Courses
- Student Recruitment, Retention and Support
- Institutional Support and Program Sustainability
- Continuous Program Improvement
- Expanding the UTeach Model
- Developing STEM Content Knowledge of Pre-Service Teachers
- Research Projects Relevant to UTeach and STEM Teacher Preparation
- Bridging Education STEM Initiatives
- Vendor Presentations

WEDNESDAY, MAY 26, 2010 (continued)

12:45 - 5:00 pm Afternoon Sessions: Breakouts and Workshops						
Room	Amphitheater	101	102	103	104	107
12:45 - 2:00 pm	Expanding UTeach Panel: Working with Community Colleges and Satellite Campuses	Vendor Presentations: TaskStream/ NSTA	Revisiting STEP 1 Model Lesson Implementation	Setting Up the Program Support Structure of a New UTeach Replication Site	Challenge Based STEM Learning "Opportunities and Obstacles"	UTeach Course Roundtable: Implementing Functions and Modeling
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	
	Step 2 and Formative Assessment	Examining UTeach Outcomes: Classroom Observations of UTeach Graduates	UTeach Course Roundtable: Implementing Project-Based Instruction	The Perspectives Course: Integrating Math and Science Through History	Greater Texas Foundation Planning Grant Meeting (closed)	
Room	Amphitheater	101	102	103	104	107
2:15 - 3:30 pm	UTeach Graduates Panel	Vendor Presentations: PASCO Scientific/ Delta Education	UTeach Engineering: Preparing Secondary School Educators to Teach Design-Based Engineering Courses	A Project Based Learning Approach to STEM Education	Approaches to Developing High Quality Mentor Teacher Support in the Field	Winning Development Strategies
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	Sanchez 316
	UTeach Course Roundtable: Implementing Research Methods	The UTeach Induction Support Model	Highlights from Implementation Year 2	Step 1 and 2 Vertical Alignment and Classroom Management	Implementing Concurrent UTeach Replication and Master's Level Teacher Preparation Programs	Physics By Inquiry Location: SZB 316
Room	Amphitheater	101	102	103	104	107
3:45 - 5:00 pm	Development Panel: How to Raise Money	Budgeting, Financial Reporting and the NMSI Database	Critical Attributes of the Project-Based Classroom	Cutting Corners: a 5E Math Demo Lesson for Step 1	Technology Use in Knowing and Learning with Particular Emphasis on Using NetLogo	Foundations, Functions and Regression Models: Exploring and "doing" Mathematics (Functions & Modeling Course)
	108	203	Ballroom (Salon A)	Ballroom (Salon B)	Ballroom (Salon D)	Ballroom (Salon E)
	UTeach Graduate Roundtable (Restricted to current UTeach students)	Developing a Five Year Plan for Replication	NCATE and UTeach Replication	UTeach Course Roundtable: Implementing Classroom Interactions	Research Methods Course Activities	The UTeach Student Portfolio

6:30 - 9:30 pm Reception and Dinner Hosted by Exxon Mobil Corporation - Grand Ballroom (Salon C)

 About UTeach and UTeach Replication	 Expanding the UTeach Model
 UTeach Organizational Development	 Developing STEM Content Knowledge of Pre-Service Teachers
 UTeach Instructional Program and Courses	 Research Projects Relevant to UTeach and STEM Teacher Preparation
 Student Recruitment, Retention and Support	 Supporting and Developing In-service STEM Teachers
 Institutional Support and Program Sustainability	 Bridging Education STEM Initiatives
 Continuous Program Improvement	 Vendor Presentations

UTeach Institute-NMSI Annual Conference

THURSDAY, MAY 27, 2010

AT&T Executive Education and Conference Center at The University of Texas at Austin

8:00 - 8:45 am Breakfast - Break Area, Meeting Level 1				
9:00 - 11:45 am Morning Sessions: Breakouts and Workshops				
Room	Amphitheater	103		
9:00-10:15 am	Plenary Session: Moving from Implementing Change to Sustaining Outcomes Gene Hall	WeTEACH: The National UTeach Student Organization (Student Session)		
Room	Amphitheater	101	102	103
10:30-11:45 am	University Replication Cohort 1 Panel: Lessons Learned	Research Findings on the Effectiveness of Project-Based Instruction Course Components	How the Brain Learns	Views on Setting Up a UTeach Alumni Network (Student Session)
		104	107	108
	The Importance of a Dedicated UTeach Advisor	UTeach Course Roundtable: Implementing Apprentice Teaching	Leadership Special Interest Group Meeting	Setting Up a NMSI Financial Reporting Design to Cover Your Bases
11:45 am -12:30 pm Lunch - Tejas				
12:45 - 2:00 pm Afternoon Sessions: Breakouts and Workshops				
Room	101	102	103	
12:45 - 2:00 pm	Integrating NSF GK-12 Fellows into the Research Methods Course	Persistence of Student-Centeredness in Math	Using Student Surveys, Observational Records and Instructional Review for Continuous Program Improvement	
		104	107	
	Master Teacher Special Interest Group Meeting	Supporting Student Learning During the Clinical Interview	Texas Replication Sites Meeting (closed)	
2:00 PM Adjourn				

About UTeach and UTeach Replication

Continuous Program Improvement

UTeach Instructional Program and Courses

Research Projects Relevant to UTeach and STEM Teacher Preparation

Student Recruitment, Retention and Support

Supporting and Developing In-service STEM Teachers