



Session Schedule

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

UTeach Institute Data Collection and Reporting | 101

INTERACTIVE PRESENTATION

MARY LUMMUS-ROBINSON, DATA COORDINATOR, UTEACH INSTITUTE; ROBIN KAR, SENIOR SYSTEMS ANALYST, UTEACH INSTITUTE; MARTHA PEREZ, DATA COLLECTION AND EVALUATION COORDINATOR, UTEACH INSTITUTE

Preview the UTeach Institute's new interactive data system and find out why the UTeach Institute collects data from UTeach Replication Programs. 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.

Tennessee Replication Sites Meeting (closed) | 102

CLOSED MEETING

MIKE KRAUSE, DIRECTOR OF ACADEMIC AFFAIRS, TENNESSEE HIGHER EDUCATION COMMISSION

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

Making Content Comprehensible for English Language Learners | 103

INTERACTIVE PRESENTATION

MARSHA SCOTT, MASTER TEACHER, UNIVERSITY OF TEXAS AT ARLINGTON

English language learners have some of the highest drop-out rates and are more frequently placed in lower ability groups. It is important that the UTeach students understand the diversity of their classrooms and also have techniques for working with the English language learner. We will discuss strategies for building content and academic language development for our English language learners.

Recruiting Majors into Physics - PhysTEC | 104

INTERACTIVE PRESENTATION

SACHA KOPP, ASSOCIATE DEAN FOR CURRICULUM AND PROGRAMS, COLLEGE OF NATURAL SCIENCES, UNIVERSITY OF TEXAS AT AUSTIN; JOHN RICE, OWNER, COMMON SENSE COMMUNICATIONS

Like many colleges and universities around the country, the University of Texas at Austin has a solid physics program that prepares students bound for graduate physics study. For a variety of reasons, the number of students choosing to major in physics is small, just 200 students in an undergraduate population of about 35,000(0.6%). When compared to other majors on campus, this population was experiencing negligible growth. Retention from freshman to senior year was at 50%. I will describe a campaign launched in our department aimed at recruiting and retention of majors. This campaign includes actual programmatic changes in the curriculum and instruction of majors. Additionally, it includes a direct marketing campaign that attempted to change student attitudes about physics and its relation to their current major. Finally, it includes a program to reach out to local high schools and engage students in a discussion about their career choices before they apply for college. While the campaign is relatively new, it is possible to share some numerical and attitudinal data that suggests positive changes in the student population.

Tuesday, May 24 , 2011

11:30am – 1:00pm

Registration | MEETING LEVEL 2 – LOBBY/REGISTRATION

1:00 – 2:45pm

Joint Plenary with Physics Teacher Education Coalition (PhysTEC) Conference | BALLROOM, SALON C

Speaker: CARL WIEMAN, PH.D., ASSOCIATE DIRECTOR OF SCIENCE, WHITE HOUSE OFFICE OF SCIENCE AND TECHNOLOGY POLICY; NOBEL PRIZE IN PHYSICS, 2001

3:00 – 4:15pm

What is UTeach? (Repeats Wednesday, 1:00 pm) | AMPHITHEATER (204)

INTERACTIVE PRESENTATION

LARRY ABRAHAM, CO-DIRECTOR, UTEACH, UNIVERSITY OF TEXAS AT AUSTIN; ELLE SHELLEY, SITE COORDINATOR, 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.

Introduction to the Colorado Learning Assistant Program – PhysTEC | 107**INTERACTIVE PRESENTATION**

VALERIE K. OTERO, ASSOCIATE PROFESSOR OF SCIENCE EDUCATION, UNIVERSITY OF COLORADO AT BOULDER

This session is intended for faculty who are new to the Learning Assistant (LA) Alliance and are just beginning their efforts in implementing (or thinking about implementing) the Colorado LA model at their universities. In this session, participants will be introduced to the general philosophy of the program and to the nuts n’ bolts of running the program. Participants will work through content and pedagogical materials that are used in the physics department and in the School of Education to support LAs and to transform their large-enrollment courses. Data will be presented to support claims about the efficacy of the program demonstrating its impact on student performance in LA-supported courses, on the learning and preparation of the LAs themselves, and on the dramatic increases in the recruitment of physics teachers. Data that demonstrate the LA program’s impact on teacher performance in the K-12 classroom will also be presented and discussed. The LA program is an experiential learning program; learning is embodied in the experience of serving as an LA. It serves as a supplement to standard teacher preparation programs in which disciplinary faculty and departments play a large role in ensuring content-specific pedagogical preparation. Because it is situated partially in disciplinary departments, the program has also impacted the general philosophy of education in a university setting.

Task Force on Teacher Education in Physics -PhysTEC | 108**INTERACTIVE PRESENTATION**

STAMATIS VOKOS, PROFESSOR OF PHYSICS, SEATTLE PACIFIC UNIVERSITY; JOSEPH HEPPERT, ASSOCIATE VICE CHANCELLOR FOR RESEARCH AND GRADUATE STUDIES AND PROFESSOR, UNIVERSITY OF KANSAS; MICHAEL MARDER, PROFESSOR OF PHYSICS, UNIVERSITY OF TEXAS AT AUSTIN

The Task Force on Teacher Education in Physics (T-TEP) concluded its two-year investigation of the professional preparation of teachers of physics in the U.S. T-TEP, constituted by APS, AAPT, and AIP, was charged with taking stock of the current state of physics teacher education and articulating recommendations to increase the number and improve the quality of physics teachers in the nation. In this highly interactive session, the recommendations of the T-TEP report will be outlined. In addition, session participants will brainstorm ways to leverage the report for the benefit of their institutional programs and will be engaged in part of a national conversation to operationalize one of the major T-TEP recommendations, namely the creation of Regional Centers for Physics Teacher Education. What extant model programs are there, which can serve as nuclei for such centers? What are the research, policy, and funding implications of the creation of Regional Centers? What has the nation learned from previous attempts to create centers that prepare excellent teachers? In what important ways can these Regional Centers serve as models for other discipline-specific efforts to improve teacher education?

An Exploratory Study Investigating the Teaching Perspectives of UTeach Students | 203**INTERACTIVE PRESENTATION**

JOHN PECORE, ASSISTANT PROFESSOR, TEMPLE UNIVERSITY; ANGELA SHELTON, GRADUATE STUDENT, TEMPLE UNIVERSITY

Researchers discuss findings from a study using UTeach students’ teaching perspective inventory and Pratt’s general model of teaching as a framework for teaching classroom interactions.

Growing Your Student Organization | SALON A**INTERACTIVE PRESENTATION**

SUSAN WILLIAMS, MASTER TEACHER, UNIVERSITY OF HOUSTON; IZABEL HLAYHEL, PRESIDENT, TEACHHOUSTON STUDENT SOCIETY; FRANK NGUYEN, VICE PRESIDENT, TEACHHOUSTON STUDENT SOCIETY; RACHAEL SIMON, SECRETARY, TEACHHOUSTON STUDENT SOCIETY

Information will be shared about how the University of Houston has significantly increased membership and student involvement in the teachHOUSTON Student Society. Major goals of developing leadership and community have been instrumental in the growth.

CRASH Science! Saving Lives with STEM Lessons | SALON B**INTERACTIVE PRESENTATION**

GRIFF JONES, CLINICAL ASSOCIATE PROFESSOR, 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 “Understanding Car Crashes” DVDs.

Approaches to Developing High Quality Mentor Teacher Support in the Field | SALON D**INTERACTIVE PRESENTATION**

CINDY DYAR, MASTER TEACHER, FLORIDA STATE UNIVERSITY; MALYNN KELSO, MASTER TEACHER, FLORIDA STATE UNIVERSITY; KAREN ROSE, MASTER TEACHER, FLORIDA STATE UNIVERSITY; KRISTIN SHERMAN, MASTER TEACHER, UNIVERSITY OF NORTH TEXAS

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.

Texas Statewide Induction Strategies | SALON E**ROUNDTABLE DISCUSSION**

PAMELA ROMERO, MANAGER, UTEACH INSTITUTE; BEVERLY BROWN, INDUCTION COORDINATOR, UNIVERSITY OF HOUSTON; LYNDA OLDOW, INDUCTION COORDINATOR, UNIVERSITY OF TEXAS AT DALLAS; ROBERTO CASTAÑEDA, INDUCTION COORDINATOR, UNIVERSITY OF TEXAS AT AUSTIN

Partners from UTeach, teachHOUSTON, and UTeach Dallas will share lessons learned from the pilot implementation of a statewide UTeach Induction model. As the project enters its second year, and now includes the University of North Texas, we welcome suggestions and ideas from our peers as we continue to develop a model to provide high quality induction support services for graduates of all Texas Universities implementing a UTeach program.

Why So Few? Women in Science, Technology, Engineering and Mathematics | 301*INTERACTIVE PRESENTATION*KATIE KIZZIAR, *SR. PROGRAM COORDINATOR, UNIVERSITY OF TEXAS AT AUSTIN*

A presentation of the AAUW report's key research findings and ideas to more fully open scientific and engineering fields to girls and women.

4:30 – 5:45pm**The UTeach Curriculum | AMPHITHEATER (204)***INTERACTIVE PRESENTATION*KIMBERLY HUGHES, *MANAGER, UTEACH INSTITUTE*; JULIA LEE, *INSTRUCTIONAL SUPPORT COORDINATOR, 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.

Why Do We Emphasize What We Do: Mathematics for Pre and In-Service Teachers | 101*INTERACTIVE PRESENTATION*MARK DANIELS, *CLINICAL ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*;EFRAIM ARMENDARIZ, *PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*

We will discuss the importance of both the mathematics topics/content presented in mathematics courses for teachers and the methodology used for instruction.

The UTeach Induction Support Model | 102*INTERACTIVE PRESENTATION*ROBERTO CASTAÑEDA, *INDUCTION COORDINATOR, UNIVERSITY OF TEXAS AT AUSTIN*;KELLI ALLEN, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

UT Austin's mission to provide personalized support and resources to UTeach graduates will be presented and discussed.

UTeach Course Roundtable: Step 1 and 2 | 103*ROUNDTABLE DISCUSSION*

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

Educating Physics Teachers at UTeach Replication Sites – PhysTEC | 104*PANEL DISCUSSION*JILL MARSHALL, *ASSISTANT PROFESSOR OF SCIENCE AND MATHEMATICS EDUCATION,**UNIVERSITY OF TEXAS AT AUSTIN*; RON HENDERSON, *CHAIR, DEPARTMENT OF**PHYSICS AND ASTRONOMY, MIDDLE TENNESSEE STATE UNIVERSITY*; ALAN DORSEY,*ASSOCIATE DEAN FOR NATURAL SCIENCES AND MATHEMATICS, UNIVERSITY OF FLORIDA*;MICHAEL MARDER, *ASSOCIATE DEAN FOR NATURAL SCIENCES AND MATHEMATICS**EDUCATION, UNIVERSITY OF TEXAS AT AUSTIN*; VALERIE OTERO, *ASSOCIATE PROFESSOR**OF SCIENCE EDUCATION, UNIVERSITY OF COLORADO AT BOULDER*

Panelists will describe key features of physics teacher preparation as determined and enacted at their respective institutions. The panel will explore synergies between PhysTEC and the UTeach replication effort to promote collaborations.

Cultivating Learning Assistants' Interest in Physics Teaching with Clinical Interviewing - PhysTEC | 107*HANDS-ON WORKSHOP*HUNTER G. CLOSE, *ASSISTANT PROFESSOR OF PHYSICS, SEATTLE PACIFIC UNIVERSITY*

In this workshop, we journey in depth into the use of the clinical interview as a central activity of the pedagogy component of a Learning Assistant program. We science teacher educators want intelligent and talented undergraduate science students to choose careers in K-12 science teaching. To engage those students, we need to provide objects on which their intellects and talents can act, in ways that are meaningful and specific to the discipline of science teaching. Where does the greatest intellectual challenge for science teaching lie? We at SPU believe the greatest challenge is in understanding student thinking in science and the associated interactions between humans, objects, and concepts. On this premise, we have designed the Physics Interview Project, in which Learning Assistants interview physics students and study the interview records for evidence of thinking. Our goal is to provide deep, direct contact between the potential future teacher and the complex phenomena that form the basis for physics education research and daily teaching practice. This workshop will examine the clinical interview itself and will provide a window into the experience of the LAs as they reflect on their own work and the teaching profession. Workshop participants will become able to replicate a physics interview program for LAs at their own institutions and will reflect on the value of attention to student thinking for their own teaching.

PhysTEC 2011 Solicitation for New Sites: Give Us Feedback and Learn About Intentions - PhysTEC | 108*INTERACTIVE PRESENTATION*THEODORE HODAPP, *DIRECTOR OF EDUCATION AND DIVERSITY, AMERICAN PHYSICAL SOCIETY*

The Physics Teacher Education Coalition (PhysTEC) has funding from the NSF for at least one more addition of new sites. We expect to add an additional half dozen sites again this coming year through a similar procedure that includes pre-and full-proposals, external merit review panel, and site visits. This session will include two components. First, we will describe how we have conducted our solicitation process in the past several years and include likely deadline dates, hints on what made proposals stand out at each stage, and how you might shape your program to be competitive. Second, we will elicit your feedback on how we are targeting new sites, while staying within the guidelines of our project and its national goals. Please come and bring your good ideas. If you are new to PhysTEC, find out what we have funded in the past, and how we are working to improve physics teacher education through this process.

Project-based Learning: Preparing Students to Solve Real World Problems in STEM Disciplines | 203*INTERACTIVE PRESENTATION*MARTHA DAY, *CO-DIRECTOR, WESTERN KENTUCKY UNIVERSITY*; MELISSA RUDLOFF, *MASTER TEACHER, WESTERN KENTUCKY UNIVERSITY*

Join us for an exciting journey into the world of project-based learning where students learn STEM content through situated inquiry to solve real-world problems.

Master Teacher Improv: Classroom Management Strategies |

SALON A

INTERACTIVE PRESENTATION

LYNN KIRBY, *MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*; NITA GANGULY, *MASTER TEACHER, UNIVERSITY OF TENNESSEE, KNOXVILLE*

New teachers often feel under prepared for the classroom management challenges they face. This workshop session will have participants role-play successful strategies which help keep lessons on target and reduce all conflict in the classroom. We will be setting up common behavior challenges and then discussing and acting through possible solutions.

Everyone attending will be actively involved in the workshop!

Using TI nSpire and Navigator in Step 2 and Math Models (Functions and Modeling Courses) | SALON B

HANDS-ON WORKSHOP

BILL GAMMONS, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*; KATIE DONALDSON, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*; FLOYD DORSEY, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*

Come and get a hands-on introduction to TI nSpire Navigator technology and learn how it has been used in both Step 2 and Math Models at UT Dallas.

UTeach Course Roundtable: Perspectives on Science and Mathematics | SALON D

ROUNDTABLE DISCUSSION

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

Research Consortium Special Interest Group Meeting | SALON E

ROUNDTABLE DISCUSSION

ALICIA BETH, *RESEARCH, EVALUATION AND COMMUNICATIONS COORDINATOR, 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.

6:00 – 7:30pm

Opening Reception & Poster Session | BALLROOM, SALON C

Hosted by National Instruments

1. Basic Genetics

Open Topic (Student)

TAMMARA GARRETT, *STUDENT, UNIVERSITY OF TENNESSEE, KNOXVILLE*

This project is an analysis of a teach conducted in a seventh grade science class, detailing the basics of genetics, and has been revised after data from student assessments were taken. Included are the tools used in the teach, including a PowerPoint presentation, handouts, a bingo board, and more.

2. The Classroom Outside the Classroom

Open Topic (Student)

ANTHONY FINELLI, *STUDENT, UNIVERSITY OF FLORIDA*; NICK WHITE, *STUDENT, UNIVERSITY OF FLORIDA*; SETH SHELNUTT, *STUDENT, UNIVERSITY OF FLORIDA*

UFTeach is more than just a minor of classes; it is a community that helps students in all aspects of the program. Peer mentorships help students who are just entering the program, while internships help all students gain valuable experience. The Student Organization creates a community through service and activities.

3. Lions, Tigers and Bats... Are Boring! A PBI Field Experience Project

Open Topic (Student)

SAYBER MITCHELL, *STUDENT, UNIVERSITY OF NORTH TEXAS*

During a preliminary visit to the zoo, we decided the bat exhibit was boring. We created our PBI mini-project around redesigning this exhibit. This involved students investigating the current exhibit, designing and presenting a new exhibit, and the completion of two virtual labs about sound waves and the Doppler effect.

4. Natural Resistance to Sudden Oak Death, Phytophthora ramorum, in Coast Live Oak

Open Topic (Student)

TYLER GRINBERG, *STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*

The relationship between certain phenolic compounds in coast live oak phloem and natural resistance to Sudden Oak Death is being tested in a long-term investigation of trees in California’s Briones Regional Park. This presentation will describe the design of the study, and outline its goals.

5. Once Upon a Time: Math, Science and English as an Interdisciplinary Project

Open Topic (Student)

SERENA HOBBS, *STUDENT, UNIVERSITY OF NORTH TEXAS*

We created and taught a 5-day PBI project at a New Tech High School involving Geometry, Biology, and English. Inspired by The Greedy Triangle by Marilyn Burns, we related children’s books to the zoo. Students read Burns’ book, took a field trip to the zoo, and wrote their own storybook.

6. Professional Development Partners

Open Topic (Student)

KRISTIN WILSON, *STUDENT, THE FLORIDA STATE UNIVERSITY*; ALLIE AUTREY, *STUDENT, THE FLORIDA STATE UNIVERSITY*; KAITLIN GORSKI, *STUDENT, THE FLORIDA STATE UNIVERSITY*

Professional Development Partners (PDP) is a student organization to mentor students in classes from Step 2 to Classroom Interactions. The purpose is to guide students in the early stages of FSU-Teach. PDP will foster a sense of helpfulness and community within FSU-Teach and will better prepare students entering the program.

7. Project TREE: Connecting UTeachers, Scientists and Students to Promote Environmental Education

Open Topic (Student)

ZACH MCCOY, *STUDENT, UNIVERSITY OF TENNESSEE, CHATTANOOGA*; RAVEN CHISM, *STUDENT, UNIVERSITY OF TENNESSEE, CHATTANOOGA*

Project TREE is a five year project that will involve approximately 125 underserved, inner city 6th graders. These students will be engaged in environmental research alongside practicing scientists and will take part in associated environmental activities led by UTeaChattanooga students.

8. Student Involvement in UTeach Arlington

Open Topic (Student)

KAITLIN O'DELL, *STUDENT, UNIVERSITY OF TEXAS AT ARLINGTON*; TERI THOMAS, *STUDENT, UNIVERSITY OF TEXAS AT ARLINGTON*

The poster will highlight student participation in the UTeach Arlington program including the student organization (M&Ms Teach), student teaches and lessons, and internships in the UTeach Arlington, UT Arlington, and surrounding communities.

9. teachHOUSTON Student Society

Open Topic (Student)

IZABEL HLAYHEL, *STUDENT, UNIVERSITY OF HOUSTON*; FRANK NGUYEN, *STUDENT, UNIVERSITY OF HOUSTON*; RACHAEL SIMON, *STUDENT, UNIVERSITY OF HOUSTON*

The poster will represent our officers and members for the spring 2011 semester. It will represent the purpose of our society and everything we have done to achieve it!

10. Technology Based Lesson on Weather Prediction and Data Collection

Open Topic (Student)

JOEL SMITH, *STUDENT, UNIVERSITY OF TENNESSEE, KNOXVILLE*

An overview of a 6th grade Atmosphere and Weather related lesson plan that provided students the opportunity to collect and analyze weather data using proper data collection techniques, various measuring instruments and LabQuest computers.

11. Think Spit: My Oral Activity Compared to Yours

Open Topic (Student)

JUDITH BORCELIS, *STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*

A series of experiments were performed that investigated appropriate methods for using iodine to test amylase activity at different hydration levels. Data will be presented that uncover potential relationships among thirst perception, hydration levels, and the pH and activity of salivary amylase.

12. Used Coffee Grounds: A Plant Pick-Me-Up or a Chrysanthemum Killer?

Open Topic (Student)

LAURA MACK, *STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*

Americans consume roughly 400 million cups of coffee per day, resulting in over 345 million kilograms of coffee ground waste per year. Some claim that using old coffee grounds as fertilizer not only prevents this ecologically unsound waste but also helps plants grow. I test this theory on chrysanthemums.

13. GoogleDocs: A Tool for Planning, Collaboration, and Assessment

Open Topic (Instructor/Staff)

KERI RANDOLPH, *SCIENCE MASTER TEACHER, UNIVERSITY OF TENNESSEE, CHATTANOOGA*; AVALON GOURLAY, *ASSESSMENT COORDINATOR, UNIVERSITY OF TENNESSEE, CHATTANOOGA*

UTeaChattanooga has implemented the use of Google Docs-a unique and simple tool for collaboration and communication. We will give an overview of how we have implemented its use in Step 1 and Step 2 during lesson planning, as well as survey development and assessment throughout the UTeaChattanooga program.

14. Maybe There is a Free Lunch!

Open Topic (Instructor/Staff)

LEIGH GOSTOWSKI, *PROGRAM MANAGER, MIDDLE TENNESSEE STATE UNIVERSITY*; SALLY MILLSAP, *MASTER TEACHER, MIDDLE TENNESSEE STATE UNIVERSITY*

We have collaborated with both a high school and university marketing and advertising class and used the students to help us brand and market our program. We will share our strategies and student products. The purpose is to share unique branding and marketing strategies with other UTeach replicate sites.

15. Student Retention in TUt teach: A Risk Based Perspective

Open Topic (Instructor/Staff)

LINDA JONES, *PROGRAM COORDINATOR, TEMPLE UNIVERSITY*

This study utilizes data from an empirical retention risk model, developed and used at Temple University, to examine three key questions regarding retention. The results suggest that TUt teach students have a distinctive risk profile.

16. What's the Big Idea? Writing Lesson Objectives through 5E

Open Topic (Instructor/Staff)

TERESA WALLS, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*; CINDY WOODS, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*

Do your exploratory students struggle with writing objectives? Increase understanding, improve quality AND model 5E! Using techniques discussed, students will analyze objectives and will disaggregate, discard, or improve them by distinguishing the characteristics of a strong lesson objective.

17. Why Do SKyTeach Students Know More About Learning Than Traditional Teacher Education Students at WKU?

Open Topic (Instructor/Staff)

LISA DUFFIN, *SKYTEACH FACULTY, WESTERN KENTUCKY UNIVERSITY*; KATHRYN CARPENTER, *STUDENT, WESTERN KENTUCKY UNIVERSITY*; CHLOE HARPER, *STUDENT, WESTERN KENTUCKY UNIVERSITY*

The poster disseminates preliminary research findings comparing the depth of conceptual understanding of educational psychology content constructed by pre-service teachers enrolled in one of two teacher education programs at Western Kentucky University (i.e., SKyTeach and Traditional). The research being discussed speculates on possible program-level factors contributing to the difference found.

18. Constellations and Circumference (Step 1)

Course Exposition (Student)

BINTOU FAYE, *STUDENT, MIDDLE TENNESSEE STATE UNIVERSITY*; BROOKE SUTTON, *STUDENT, MIDDLE TENNESSEE STATE UNIVERSITY*

Highlighting exciting, hands-on activities and engagements from our classrooms.

19. Step 2 Science: Adventures in Middle School (Step 2)

Course Exposition (Student)

RAVEN CHISM, *STUDENT, UNIVERSITY OF TENNESSEE, CHATTANOOGA*; ZACH MCCOY, *STUDENT, UNIVERSITY OF TENNESSEE, CHATTANOOGA*

The Step 2 Science course continues the focus on inquiry teaching through the use of the 5E lesson plan in middle school. This poster includes: an overview of two sample student lessons, demonstration lessons taught by the master teachers, uses of technology and assessment, and logistics of the course.

20. Disrupt Their Equilibrium (Knowing and Learning)

Course Exposition (Student)

STEPHANIE BURBA, *STUDENT, WESTERN KENTUCKY UNIVERSITY*; KATHRYN CRAWFORD, *STUDENT, WESTERN KENTUCKY UNIVERSITY*

This presentation highlights Knowing and Learning at WKU. SkyTeach students nicknamed this course "The Brick Wall" due to its challenging design. It forces them to question and justify their teaching methodology by applying the concepts of pedagogy and educational psychology theories.

21. Classroom Interactions

Course Exposition (Student)

MEGAN PURPERA, *STUDENT, LOUISIANA STATE UNIVERSITY*; AMY ELMER, *STUDENT, LOUISIANA STATE UNIVERSITY*

This poster describes the GeauxTeach! Classroom Interactions course at LSU.

22. Project-Based Instruction from a Preservice Math Teacher's Perspective (PBI)

Course Exposition (Student)

SAYBER MITCHELL, *STUDENT, UNIVERSITY OF NORTH TEXAS*; SERENA HOBBS, *STUDENT, UNIVERSITY OF NORTH TEXAS*

Through readings, class discussions, and instructor modeling, we learned about theory, research, and application of PBI in schools. Our field experience was with New Tech High at Coppell. After completing this course, we all agreed that PBI is an engaging form of instruction that should be balanced with traditional methods.

23. Philly Based Instruction – Building Instructional AND Community Relationships Through PBI (PBI)

Course Exposition (Student)

SOFIA FRIEDMAN, *STUDENT, TEMPLE UNIVERSITY*; AMY GUTENKUNST, *STUDENT, TEMPLE UNIVERSITY*

TUteach has formed an exciting collaboration with the Franklin Institute and the Science Leadership Academy to create a unique opportunity for PBI students to teach lessons, on location, at the Franklin Institute. This allows aspiring teachers to directly incorporate museum resources and hands on experiences into our instruction.

24. Sneak Peek: Philosophical Perspectives on Math and Science (Perspectives)

Course Exposition (Student)

LA KEISHA LEONARD, *STUDENT, UNIVERSITY OF NORTH TEXAS*

The Perspectives on Math and Science course at UNT integrates philosophy, mathematics, and science from many perspectives. This poster highlights the concepts and expected coursework, including philosophical readings and analyses, volunteerism, integrated math or science lessons, reflective essays on experiences at an environmental educational facility, and summative assessments over philosophy.

25. Learning about Teaching in Functions And Modeling (Functions and Modeling)

Course Exposition (Student)

SHANNON PHILLIPS, *STUDENT, CLEVELAND STATE UNIVERSITY*; KRISTEN BENTLEY, *STUDENT, CLEVELAND STATE UNIVERSITY*

In this poster we will present a selection of in-class investigations and projects that helped us understand the content and learn how to teach it.

26. Apprentice Teaching: The Student Teacher Experience

Course Exposition (Student)

KATE APLINGTON, *STUDENT, THE FLORIDA STATE UNIVERSITY*

This presentation will summarize the Apprentice Teaching course as it is presented by UTeach.

27. Physics Boot Camp & Interactive Lecture Demonstrations - A Professional Development Recipe For Success

PhysTEC Conference Poster Session

MARK D. GREENMAN, *ALBERT EINSTEIN DISTINGUISHED EDUCATOR FELLOW, NATIONAL SCIENCE FOUNDATION*

Interactive Lecture Demonstrations (ILDs) provide a pedagogical tool that has been shown to improve college and pre-college student's conceptual understanding of ideas in classical physics. Teachers in this PD showed fractional gains in concept understanding ranging from .44 to .75 with participants in every comparison group showing strong gains. Just as encouraging, these gains showed no decay over time.

Wednesday, May 25th

8:00 – 8:45am

Breakfast | BALLROOM LOBBY, MEETING LEVEL 3

9:00 – 11:00am

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 – 10:15am

What is UTeach Replication? (Repeats Wednesday, 4:00 pm)

| AMPHITHEATER (204)

INTERACTIVE PRESENTATION

ALICIA BETH, RESEARCH, EVALUATION AND COMMUNICATIONS COORDINATOR, UTEACH INSTITUTE; PAMELA ROMERO, 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.

Vendor Presentation: SMART Technologies | 101

RON BAKER, MANAGER, TRAINING & PROFESSIONAL DEVELOPMENT DELIVERY, SMART TECHNOLOGIES; ERIC JANSSON, SENIOR EDUCATION ADVOCATE, SMART TECHNOLOGIES; TANIA HABIS, TRAINING SPECIALIST II, SMART TECHNOLOGIES

The presentation will demonstrate how interactive technology products are used to deliver STEM content and are used in teacher professional development. We will show examples of lessons in the STEM areas and how students and teachers benefit from the use of interactive technology in the learning environment.

Reviewing, Reconciling, And Reporting: Financial Management And Accountability | 102

INTERACTIVE PRESENTATION

MARSHA PESCH, GRANT COORDINATOR, FLORIDA STATE UNIVERSITY; AMY CHAVEZ, FINANCIAL ANALYST, UNIVERSITY OF TEXAS AT AUSTIN

Discussion of financial management of UTeach replication site funds and reporting both internally and to funding agencies.

Playing With Dough: Teaching Geometry Concepts | 103

HANDS-ON WORKSHOP

MARSHA SCOTT, MASTER TEACHER, UNIVERSITY OF TEXAS ARLINGTON; KAREN MATSLER, MASTER TEACHER, UNIVERSITY OF TEXAS AT ARLINGTON; LEEANN SNELL-BURKE, MASTER TEACHER, UNIVERSITY OF TEXAS AT ARLINGTON

Teaching middle school and high school geometry concepts using playing dough. This is a hands-on approach that serves as a resource for teachers who want their students actively engaged in the learning process.

From Step 1 to Apprentice Teaching: UTeach Students in the Field | 104

INTERACTIVE PRESENTATION

PAMELA POWELL, 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; PRUDENCE CAIN, CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN; KELLI ALLEN, 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.

UTeach Course Roundtable: Knowing and Learning In Mathematics and Science | 107

ROUNDTABLE DISCUSSION

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

Development Special Interest Group Meeting | 108

ROUNDTABLE DISCUSSION

Development officers and other fundraisers will discuss networking activities and share fundraising strategies and resources with one another.

UTeach Engineering - An Integral Part Of UTeach Chattanooga | SALON A

INTERACTIVE PRESENTATION

CECELIA WIGAL, ASSISTANT DEAN, UNDERGRADUATE PROGRAMS, UNIVERSITY OF TENNESSEE AT CHATTANOOGA; STEPHEN KUHN, CO-DIRECTOR, UNIVERSITY OF TENNESSEE AT CHATTANOOGA; SANDY WATSON, CO-DIRECTOR, UNIVERSITY OF TENNESSEE AT CHATTANOOGA

The University of Tennessee at Chattanooga has successfully designed a 4-year curriculum that allows students to obtain both a B.S.E degree and eligibility for teacher licensure using UTeach.

Envisioning the Future of UTeach: Setting The Stage for Sustainability | SALON B

INTERACTIVE PRESENTATION

BRAD HUGHES, *CO-DIRECTOR, CALTEACH IRVINE, UNIVERSITY OF CALIFORNIA, IRVINE*; AL BENNETT, *DEAN, PROFESSOR OF ECOLOGY AND EVOLUTIONARY BIOLOGY, UNIVERSITY OF CALIFORNIA, IRVINE*

This session will facilitate professional collaboration among advanced replication sites to move beyond mere replication to co-develop sustainable mechanisms for continuous improvement of the UTeach model. Experienced UTeach stakeholders are invited to this documented conversation on innovative strategies for sustaining an evolving, collaborative, national network of UTeach programs.

Poster Session | SALON C

Creating a Collaborative Culture by Building a Common Vision | SALON D

INTERACTIVE PRESENTATION

CARRON COLLIER, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*; MARY HARRIS, *CO-DIRECTOR, UNIVERSITY OF NORTH TEXAS*; KRIS SHERMAN, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*; KARTHIGEYAN SUBRAMANIAM, *ASSISTANT PROFESSOR, UNIVERSITY OF NORTH TEXAS*

Participants explore a collaborative process and activities to focus faculty attention from the development of individual courses to the program's vision of students as future teachers.

Apprentice Teaching Seminar via Web Conferencing for Near and Far Student Teachers | SALON E

INTERACTIVE PRESENTATION

SHARON CARDENAS, *ASSOCIATE DIRECTOR, NORTHERN ARIZONA UNIVERSITY*; DEBORAH WOLF, *MASTER TEACHER, NORTHERN ARIZONA UNIVERSITY*

With increasing enrollment, NAUteach ATS students are placed in local and distant sites. Synchronous webconferencing allows students to collaborate and attend class together. Experience a webinar!

10:30 – 11:45am

Co-Director Panel | AMPHITHEATER (204)

PANEL DISCUSSION

MARY WALKER, *MANAGER, UTEACH INSTITUTE*; MICHAEL MARDER, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; LARRY ABRAHAM, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; HOMER MONTGOMERY, *UTEACH DALLAS CO-DIRECTOR, UNIVERSITY OF TEXAS AT DALLAS*; GREG HALE, *UTEACH ARLINGTON CO-DIRECTOR, UNIVERSITY OF TEXAS AT ARLINGTON*; ANN CAVALLO, *UTEACH ARLINGTON CO-DIRECTOR, UNIVERSITY OF TEXAS AT ARLINGTON*; RAMON LOPEZ, *UTEACH ARLINGTON CO-DIRECTOR, UNIVERSITY OF TEXAS AT ARLINGTON*; MARY URQUHART, *UT DALLAS CO-DIRECTOR, UNIVERSITY OF TEXAS AT DALLAS*; AMY PHELPS, *MTEACH CO-DIRECTOR, MIDDLE TENNESSEE STATE UNIVERSITY*; RICK VANOSDALL, *MTEACH CO-DIRECTOR, MIDDLE TENNESSEE STATE UNIVERSITY*

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.

UTeach-Computer Science: UT Austin as Base Case | 101

Interactive Presentation

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

UTeach-CS provides specific support for computer science students. This session will overview highlights and successes in the program's first year and field discussion on replication.

Creating Shared Instructional Products: UTeach 2.0 | 102

INTERACTIVE PRESENTATION

JULIA LEE, *INSTRUCTIONAL SUPPORT COORDINATOR, UTEACH INSTITUTE*; KIMBERLY HUGHES, *PROGRAM MANAGER, UTEACH INSTITUTE*

Among the benefits of national UTeach replication is the development of a growing community of experts in STEM education all working on solving similar problems and implementing the same program curriculum. Version 2.0 of the UTeach Institute's Secure Resources website, being launched at the conference, is designed to foster the exchange of ideas, construction of a common knowledge-base, and the creation of shared instructional products. This session will include a demonstration of new website features and a discussion of best practices related to collaborating in this environment.

Launching New Perspectives: Philosophy, History, and Experiential Education in Math and Science | 103

INTERACTIVE PRESENTATION

ROBERT FIGUEROA, *ASSOCIATE PROFESSOR OF PHILOSOPHY, UNIVERSITY OF NORTH TEXAS*; JONATHAN PARKER, *TEACHING FELLOW, UNIVERSITY OF NORTH TEXAS*; CINDY WOODS, *MASTER TEACHER, UNIVERSITY OF NORTH TEXAS*; LA KEISHA LEONARD, *TEACH NORTH TEXAS STUDENT IN MATHEMATICS, UNIVERSITY OF NORTH TEXAS*

A philosophical approach to the Perspectives on Science and Mathematics course that incorporates diversity, science policy, and the elementary science curriculum through observation and community-service learning.

Developing and Implementing a Large-Scale Replication at a Small-Scale University | 104

INTERACTIVE PRESENTATION

CATHERINE KELLY, *ASSOCIATE PROFESSOR AND CHAIR, DEPARTMENT OF CURRICULUM AND INSTRUCTION, UCCS TEACH CO-DIRECTOR, UNIVERSITY OF COLORADO AT COLORADO SPRINGS*; CAROLYN FISHER, *MASTER TEACHER, UCCS TEACH, UNIVERSITY OF COLORADO AT COLORADO SPRINGS*; YVONNE WEERES, *PROGRAM COORDINATOR, UNIVERSITY OF COLORADO AT COLORADO SPRINGS*

Replication of the UTeach model at a university with 9,000 students was initially a daunting challenge. This session describes a successful, cross-college/cross-department replication in its' second year.

Sustaining Your Student Organization: Planning a Leadership Transition | 107

INTERACTIVE PRESENTATION

JOSE RAMIREZ, *MANAGER OF STUDENT SERVICES, UNIVERSITY OF CALIFORNIA, IRVINE*

Organize and disseminate your institutional knowledge as you transition out of your leadership role. Also develop a transition binder as a reference for incoming leaders.

Integrating Research Methods into Summer Internships: Measuring How Cal Teach Students Understand the Research Process | 108

INTERACTIVE PRESENTATION

ELISA STONE, *MASTER TEACHER, UNIVERSITY OF CALIFORNIA, BERKELEY*; NICOLE NUNES, *DIRECTOR, UNIVERSITY OF CALIFORNIA, BERKELEY*

New measures for what students learn from doing research identify a growing understanding of research methods, the process of research, and nature of science.

UTeach as a Statewide Initiative: The Tennessee Experience | 203

INTERACTIVE PRESENTATION

MIKE KRAUSE, *DIRECTOR OF ACADEMIC AFFAIRS, TENNESSEE HIGHER EDUCATION COMMISSION*; KATRINA MILLER, *DIRECTOR OF RACE TO THE TOP PROGRAMS, TENNESSEE HIGHER EDUCATION COMMISSION*

Discussion of the challenges and successes of Tennessee's integration of UTeach into a statewide STEM focus.

UTeach Course Roundtable: Apprentice Teaching | SALON A ROUNDTABLE DISCUSSION

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

Incorporating Design Challenges into the UTeach Curriculum | SALON B

HANDS-ON WORKSHOP

JILL MARSHALL, *ASSOCIATE PROFESSOR, UNIVERSITY OF TEXAS AT AUSTIN*; GRETCHEN EDELMON, *MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

Explore ways that design challenges are being incorporated into UTeach curriculum at UT Austin. Participants will take part in the pinhole camera challenge for Classroom Interactions.

Poster Session | SALON C

The Value-Add of UTeach Internships: Community Partnerships and Impact | SALON D

INTERACTIVE PRESENTATION

TAMARA HUDGINS, *EXECUTIVE DIRECTOR, GIRLSTART*; SHELLY RODRIGUEZ, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

In this session, UTeach and Girlstart will highlight the importance of the internship experience and how internships have made a profound impact on the professional development of the UTeach student. At the same time these internships make a difference in the lives of children served by UTeach internship sites.

11:45 am – 12:45pm

Lunch | TEJAS DINING ROOM

Hosted by SMART Technologies

1:00 – 2:15pm

What is UTeach? (Repeats Tuesday, 3:00 pm) | AMPHITHEATER INTERACTIVE PRESENTATION

LARRY ABRAHAM, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; ELLE SHELLEY, *SITE COORDINATOR, 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.

Using Sally Ride Science Materials to Include Math and Science Careers in 5E Lessons | 101

INTERACTIVE PRESENTATION

KAREN FLAMMER, *SENIOR SCIENCE ADVISOR, SALLY RIDE SCIENCE*; LYNN KIRBY, *CLINICAL ASSISTANT PROFESSOR, UTEACH MASTER TEACHER, THE UNIVERSITY OF TEXAS AT AUSTIN*

Pre-service teachers often struggle with writing the engagement and elaboration sections of the 5E lesson plans. This workshop shows how to incorporate The Sally Ride Science (SRS) Cool Careers in Science books and interest surveys into lesson plans to help students examine their own interests and future career possibilities.

Replication Of UTeach at a Small University: Lessons Learned | 102

INTERACTIVE PRESENTATION

MARK LEWIS, *PROFESSOR, THE UNIVERSITY OF TEXAS AT TYLER*; MICHAEL ODELL, *CO-DIRECTOR, THE UNIVERSITY OF TEXAS AT TYLER*; NEIL GRAY, *CO-DIRECTOR, THE UNIVERSITY OF TEXAS AT TYLER*; NATHAN SMITH, *PROFESSOR, THE UNIVERSITY OF TEXAS AT TYLER*; JOHN LAMB, *PROFESSOR, THE UNIVERSITY OF TEXAS AT TYLER*; CYNTHIA SHERMAN, *PROGRAM COORDINATOR, THE UNIVERSITY OF TEXAS AT TYLER*; BAMBI BAILEY, *PROFESSOR, UNIVERSITY OF TEXAS AT TYLER*

This session will describe the unique challenges faced by small institutions in implementing the UTeach curriculum. Panelists will discuss lessons learned from several different perspectives in an interactive format.

Market Your Best Self: Resume Writing and Interview Techniques for Future Teachers | 103

INTERACTIVE PRESENTATION

WHITNEY YOUNG, *STUDENT SERVICES COORDINATOR, UNIVERSITY OF CALIFORNIA, IRVINE*; PAM POWELL, *MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

This workshop is designed for UTeach students. The objective is to assist them with the creation of a solid resume and cover letter. Students will also learn interview etiquette and how they should present themselves to school districts and potential employers. They will also learn what they should keep in their teaching portfolio and how to keep their resumes up to date.

Interactive Notebooking In Step 2 | 104**HANDS-ON WORKSHOP**

KATIE DONALDSON, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*; BILL GAMMONS, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*; FLOYD DORSEY, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*

Teach your Step 2 students to organize, store and PROCESS the strategies and information from your course in an interactive notebook format. Hands-on. CD provided.

UTeach Course Roundtable: Functions And Modeling | 107**Roundtable Discussion**

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

Highlights From UTeach Program Replication: Implementation Year 3 | 108**INTERACTIVE PRESENTATION**

PAMELA ROMERO, *MANAGER, UTEACH INSTITUTE*; MARY LUMMUS-ROBINSON, *DATA COORDINATOR, UTEACH INSTITUTE*; MARTHA PEREZ, *DATA COORDINATOR, UTEACH INSTITUTE*

To date, 21 universities have received grants to replicate the UTeach program. Cohort 1 (13 universities) has completed three years of program implementation, while Cohort 2 (eight universities) has completed the first year of implementation. This session highlights implementation results, including student recruitment and enrollment, demographics, student satisfaction, and courses implemented.

Large-Scale Trial of the UTOP Classroom Observation Instrument | 203**INTERACTIVE PRESENTATION**

MICHAEL MARDER, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; CANDACE WALKINGTON, *IES POSTDOCTORAL FELLOW IN EDUCATIONAL SCIENCES, WISCONSIN CENTER FOR EDUCATIONAL RESEARCH*

UTeach developed the UTOP in order to provide observational data about its graduates, particularly Noyce Scholarship holders. Following a three year development period, we were presented the opportunity to employ the UTOP on approximately 1000 video-taped lessons. We will discuss additional lessons learned from this large-scale trial.

UTeach Course Roundtable: Project-Based Instruction | SALON A ROUNDTABLE DISCUSSION

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

Model Inquiry Chemistry Lessons | SALON B**INTERACTIVE PRESENTATION**

JENNIFER CLAESGENS, *ASSISTANT PROFESSOR, NORTHERN ARIZONA UNIVERSITY*; NICCI NUNES, *PROGRAM DIRECTOR, UNIVERSITY OF CALIFORNIA, BERKELEY*

How does the nose know? During this interactive workshop we will present model lessons and share our experience using the Living by Chemistry curriculum.

2:30 – 3:45pm**UTeach Graduates Panel | AMPHITHEATER (204) PANEL DISCUSSION**

ASHLEY WELCH, *SITE COORDINATOR, UTEACH INSTITUTE*; DANIEL BROWN, *MATHEMATICS TEACHER, REAGAN HIGH SCHOOL, AUSTIN ISD*; MIRYAM CASAS DE UVILLA, *REACH MENTOR, LANIER HIGH SCHOOL, AUSTIN ISD*; TARA CRAIG, *MATHEMATICS TEACHER, MANOR NEW TECHNOLOGY HIGH SCHOOL, MANOR ISD*; STEPHANIE HART, *BIOLOGY & CHEMISTRY TEACHER, MANOR NEW TECHNOLOGY HIGH SCHOOL, MANOR ISD*

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

Vendor Presentation: Siemens Foundation | 101

MICHAEL BRYANT, *DIRECTOR OF INSTRUCTIONAL IMPLEMENTATION, DISCOVERY EDUCATION*

The presentation will be an overview of the Siemens STEM Academy. The Academy is designed to advance science, technology, engineering and mathematics education in the United States by engaging educators from across the country through hands-on and multimedia professional development opportunities that will ultimately improve STEM education for students nationwide. The national Siemens STEM Academy encompasses four elements: Siemens Teachers and Researchers (STARS); Siemens STEM Academy Institute; STEM Academy Online Portal; and Brains of Science Connect Webinar Series.

Strategies for Successful Student Recruiting | 102**INTERACTIVE PRESENTATION**

SANDY WATSON, *UTEACHATTANOOGA CO-DIRECTOR, UNIVERSITY OF TENNESSEE AT CHATTANOOGA*; STEPHEN KUHN, *UTEACHATTANOOGA CO-DIRECTOR, UNIVERSITY OF TENNESSEE AT CHATTANOOGA*

The University of TN at Chattanooga is the second smallest UTeach replication site in the country and the smallest in the state of TN but we have been quite successful recruiting students into the Step Courses. Come to our session and learn some of the strategies we use and many helpful tips to get students interested in trying out teaching with UTeach!

Implementing a Combined Step 1 & 2 Course | 103**INTERACTIVE PRESENTATION**

PRUDENCE CAIN, *MASTER TEACHER, UNIVERSITY OF TEXAS AT AUSTIN*

Participants will explore the Step 1 and Step 2 combination course for seniors and degree holders. Current calendar, syllabus and reading list will be provided. Rationale for field experiences will be discussed as well.

Learning to be a Successful Mathematics Teacher: Reflections on Two Teacher Education Models | 104**INTERACTIVE PRESENTATION**

NICHOLAS WASSERMAN, *MATHEMATICS TEACHER, MARYMOUNT SCHOOL OF NEW YORK*; EDWARD HAM, *ASSISTANT PROFESSOR, BAKERSFIELD COLLEGE*

Two researchers present findings for when beginning teachers from UTeach and California reported acquiring successful attributes of secondary teaching; reflections on success, recruitment, and teacher education.

Budgeting for Program Growth: What to Expect as Your UTeach Program Grows | 108

INTERACTIVE PRESENTATION

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

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

Creating a Successful Development Partnership | 203

INTERACTIVE PRESENTATION

BLUE DEAN, *DIRECTOR OF DEVELOPMENT, UNIVERSITY OF TENNESSEE, KNOXVILLE*; RANDY ATKINS, *ASSOCIATE DIRECTOR OF DEVELOPMENT, UNIVERSITY OF TENNESSEE, KNOXVILLE*

Since becoming an UTeach replication site, UTK development officers have worked together to secure funding and form an active taskforce. In this discussion, Randy and Blue will talk about their approach, what makes their partnership successful, and share the materials they use to engage prospects and recruit taskforce members.

Identifying, Implementing and Sustaining Critical Components of the UTeach Model | SALON A

INTERACTIVE PRESENTATION

JEANNE CENTURY, *DIRECTOR OF SCIENCE EDUCATION, DIRECTOR OF RESEARCH & EVALUATION, CENTER FOR ELEMENTARY MATHEMATICS AND SCIENCE EDUCATION, UNIVERSITY OF CHICAGO*

Universities currently replicating UTeach are encouraged to attend this session where they will be engaged in examining the essential elements of the UTeach model in the context of a research-based conceptual framework of fidelity of implementation. Participants will be introduced to the framework and engaged in considering factors that affect implementation and sustainability of the essential elements in relatively short-and long-term time horizons.

UTeach Course Roundtable: Classroom Interactions | SALON B ROUNDTABLE DISCUSSION

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

4:00 – 5:15pm

Development Panel: Sustaining Your UTeach Program with Private Support | AMPHITHEATER (204)

PANEL DISCUSSION

MARY ANN RANKIN, *DEAN, COLLEGE OF NATURAL SCIENCES, UNIVERSITY OF TEXAS AT AUSTIN*; CAROLYN BACON DICKSON, *EXECUTIVE DIRECTOR, O'DONNELL FOUNDATION*; LINDA ROSEN, *CHIEF EXECUTIVE OFFICER, CHANGE THE EQUATION*; KURT SWIGGER, *PRESIDENT, DESIGNED NANOTUBES LLC*

This session will discuss the importance of private fundraising to support the sustainability of UTeach programs. The presenters in this session will include corporate and foundation donors to the UTeach program and other education initiatives who will discuss what motivated their gift and provide insight into their expectations when providing support.

What is UTeach Replication? (Repeats Wednesday, 9:00 am) | 101

INTERACTIVE PRESENTATION

ALICIA BETH, *RESEARCH, EVALUATION AND COMMUNICATIONS COORDINATOR, UTEACH INSTITUTE*; PAMELA ROMERO, *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.

A Capstone Mathematics Course for Future Secondary Teachers | 102

INTERACTIVE PRESENTATION

JOHN QUINTANILLA, *ASSOCIATE PROFESSOR / CO-DIRECTOR, UNIVERSITY OF NORTH TEXAS*; SAYBER MITCHELL, *STUDENT, UNIVERSITY OF NORTH TEXAS*; SERENA HOBBS, *STUDENT, UNIVERSITY OF NORTH TEXAS*

We present the guiding principles, core components and objectives of UNT's mathematics capstone course which connects advanced mathematics courses back to the secondary mathematics curriculum. This capstone experience is recommended by the Conference Board of the Mathematical Sciences and complements Functions and Modeling, the UTeach course sequence, and math-major requirements.

Social Promotion: Helping Your Website Graduate from Internet Obscurity | 103

INTERACTIVE PRESENTATION

WILEY KOEPP, *SENIOR SOFTWARE DEVELOPER/ANALYST, UNIVERSITY OF TEXAS AT AUSTIN*

A website does nothing by itself. But well-organized information, a plan for conveying it, and the right tools can spread your message far and wide.

Critical Attributes of the Project-Based Classroom | 104

INTERACTIVE PRESENTATION

TARA CRAIG, *MATHEMATICS TEACHER, MANOR NEW TECHNOLOGY HIGH SCHOOL, MANOR ISD*; STEPHANIE HART, *BIOLOGY & CHEMISTRY TEACHER, MANOR NEW TECHNOLOGY HIGH SCHOOL, MANOR ISD*; HEATHER CROUCH, *SCIENCE TEACHER, MANOR NEW TECHNOLOGY HIGH SCHOOL, MANOR ISD*; PAIGE SARTIN, *SCIENCE TEACHER, MANOR NEW TECHNOLOGY HIGH SCHOOL, MANOR ISD*

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.

Student Services and Support Special Interest Group Meeting | 107**ROUNDTABLE DISCUSSION**

JOSE RAMIREZ, *MANAGER OF STUDENT SERVICES, UNIVERSITY OF CALIFORNIA, IRVINE*;
ERIN GONZALES, *ADVISOR, UNIVERSITY OF TEXAS AT ARLINGTON*

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

UTeach Graduates Roundtable (Restricted to current UTeach students) | 108**ROUNDTABLE DISCUSSION**

ASHLEY WELCH, *SITE COORDINATOR, UTEACH INSTITUTE*; RICHARD WRIGHT, *PHYSICS TEACHER, MCCALLUM HIGH SCHOOL, AUSTIN ISD*; NICK WASSERMAN, *MATHEMATICS TEACHER; DOCTORAL STUDENT IN MATHEMATICS EDUCATION, MARYMOUNT HIGH SCHOOL; COLUMBIA UNIVERSITY TEACHERS COLLEGE*; KRISTELA GARCIA, *MATHEMATICS TEACHER, CONNALLY HIGH SCHOOL, PFLUGERVILLE 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, the realities of teaching using diverse instructional styles in the "real world", etc.

NCATE and UTeach Replication | 203**ROUNDTABLE DISCUSSION**

MARY HARRIS, *CO-DIRECTOR, UNIVERSITY OF NORTH TEXAS*

Bring your questions about UTeach replication and NCATE accreditation, including alignment with NSTA and NCTM standards and NCATE's upcoming merger with TEAC to form the Council for Accreditation of Educator Preparation (CAEP).

UTeach Course Roundtable: Research Methods | SALON A**ROUNDTABLE DISCUSSION**

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

Classroom Interactions Lesson Planning Cycle and Sharing Session | SALON B**ROUNDTABLE DISCUSSION**

PAIGE EVANS, *SCIENCE MASTER TEACHER, UNIVERSITY OF HOUSTON*

This session is intended for Classroom Interactions instructors who are new to CI. Lesson planning and general sharing of strategies will be included. Sample materials will be provided.

6:00 – 9:00pm**Reception and Dinner (Business Attire) | GRAND BALLROOM**

Hosted by Exxon Mobil Corporation

Keynote Speaker: LINDA ROSEN, PH.D., *CHIEF EXECUTIVE OFFICER, CHANGE THE EQUATION*

Thursday, May 26th**8:00 – 8:45am**

Breakfast | **BALLROOM LOBBY, MEETING LEVEL 3**

9:00 – 10:15am**Plenary**

Visions of UTeach in the Age of the Common Core Standards, Learning Trajectories, and New Forms of Technology and Assessment | AMPHITHEATER (204)

JERE CONFREY, PH.D., *SENIOR RESEARCH FELLOW AND JOSEPH D. MOORE DISTINGUISHED PROFESSOR, THE FRIDAY INSTITUTE FOR EDUCATIONAL INNOVATION, COLLEGE OF EDUCATION, NORTH CAROLINA STATE UNIVERSITY*; ALAN MALONEY, PH.D., *SENIOR RESEARCH FELLOW AND EXTENSION ASSOCIATE PROFESSOR, THE FRIDAY INSTITUTE FOR EDUCATIONAL INNOVATION, COLLEGE OF EDUCATION, NORTH CAROLINA STATE UNIVERSITY*

Developments in educational policy, technology, and research are promising sweeping changes to the landscape of mathematics and science education in the next few years. Presenters Confrey and Maloney have abroad and varied perspective on many of the impending innovations in mathematics instruction, assessment and accountability. They will outline several of these, including their own research on learning trajectories and development of technology-enable diagnostic assessment, and reflect on how these might change teaching, learning, and assessment, and in particular, their impact on teacher education and professional development. Confrey, a co-founder of UTeach, will reflect on these new developments and their implications for a next-generation UTeach.

Student Plenary

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

In this session, students from partner universities across the country will discuss their wants and goals for the national WeTEACH Student Organization. Students will explore the current status of the group, identify areas in need of attention (officer elections, organizational framework, etc.), and brainstorm ideas for directions, next steps, and articulation plans with the NMSI Alumni Network.

10:30 – 11:45am**University Replication Panel: Lessons Learned | AMPHITHEATER (204)****PANEL DISCUSSION**

PAMELA ROMERO, *MANAGER, UTEACH INSTITUTE*; DON FRANCESCHETTI, *CO-DIRECTOR, UNIVERSITY OF MEMPHIS*; SALLY MILLSAP, *MASTER TEACHER, MIDDLE TENNESSEE STATE UNIVERSITY*; JOHN QUINTANILLA, *CO-DIRECTOR, UNIVERSITY OF NORTH TEXAS*; BILL NEAL, *MASTER TEACHER, UNIVERSITY OF TEXAS AT DALLAS*; KRIS HARPER, *ASSISTANT PROFESSOR OF HISTORY, FLORIDA STATE UNIVERSITY*

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.

ArcGIS in the Project Based Instruction Course | 101**INTERACTIVE PRESENTATION**

JENNIFER CLAESGENS, *ASSISTANT PROFESSOR, NORTHERN ARIZONA UNIVERSITY*; KRISTI FREDRICKSON, *PROFESSIONAL DEVELOPMENT COORDINATOR, NORTHERN ARIZONA UNIVERSITY*

The PBI course challenges the students to integrate technology to solve real-world, authentic problems. This is our story of using ArcGIS to meet the challenge.

Effective Observations Lead to Improved Instruction | 102**INTERACTIVE PRESENTATION**

CAROLYN FISHER, *MASTER TEACHER, UNIVERSITY OF COLORADO, COLORADO SPRINGS*

Observing Step 1 and Step 2 university students as they teach each of their three lessons during the course of the semester is a major component in the role of the Master Teacher. These observations need to be focused, detailed and targeted so as to benefit the UTeach student as they strive to learn from each lesson taught and improve their performance.

UTeach Alumni Network Board Meeting And Student Info Session | 103**INTERACTIVE PRESENTATION**

JOHN WINN, *CHIEF PROGRAM OFFICER, NATIONAL MATH AND SCIENCE INITIATIVE*; ALIA MOHMED, *PROGRAM COORDINATOR, NATIONAL MATH AND SCIENCE INITIATIVE*; CHRISTY HOVANETZ, *ALUMNI NETWORK COORDINATOR, NATIONAL MATH AND SCIENCE INITIATIVE*

To facilitate an in-person meeting for alumni board members and to provide UTeach alumni and students more information about the new network.

The Importance of a Dedicated UTeach Advisor | 104**ROUNDTABLE DISCUSSION**

ANNETTE HAIRSTON, *UTEACH ADVISOR, UNIVERSITY OF TEXAS AT AUSTIN*

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.

Student Perspectives on the Implementation of the Knowing and Learning in Mathematics And Science Course at UC Irvine | 107**ROUNDTABLE DISCUSSION**

KATERINA SCHENKE, *PH.D. STUDENT, UNIVERSITY OF CALIFORNIA, IRVINE*; SUE MARSHALL, *DIRECTOR OF UNDERGRADUATE PROGRAMS, UNIVERSITY OF CALIFORNIA, IRVINE*

A look at how student interviews provide insight into issues of engagement, transfer, and course improvement in the course Knowing and Learning in Math and Science.

Leadership Special Interest Group Meeting | 108**ROUNDTABLE DISCUSSION**

LARRY ABRAHAM, *UTEACH CO-DIRECTOR, UNIVERSITY OF TEXAS AT AUSTIN*; STEVE CASE, *UKANTEACH CO-DIRECTOR, UNIVERSITY OF KANSAS*

Join program co-directors, college deans and other university leaders for a discussion about sustaining the national UTeach network over time.

Using Instructional Program Data for Continuous Improvement | SALON A**HANDS-ON WORKSHOP**

MARY WALKER, *MANAGER, UTEACH INSTITUTE*

How do you use the Student Survey and Instructional Program Data to improve your UTeach courses? This question will be discussed in this session with participants from both UTeach Austin and current replication sites. Please come prepared to share your ideas and examples of where and how you use data to inform program and course-specific modifications.

Curriculum Topic Study as a Lesson Planning Tool in Classroom Interactions | SALON B**HANDS-ON WORKSHOP**

ROBIN SMITH, *ASSOCIATE DIRECTOR, FLORIDA STATE UNIVERSITY*; MALYNN KELSO, *MASTER TEACHER, FLORIDA STATE UNIVERSITY*

Curriculum Topic Study (Keeley, 2005) was used as a lesson planning tool in Classroom Interactions in the Spring 2011 semester at FSU. To initiate planning for the one-day teaching experience, students were introduced to CTS using a modification of the "snapshots" approach in the leader's guide to science CTS (Mundry, Keeley, Landel, 2010). Students developed their own driving question about teaching their lesson topic and used this question to conduct a snapshot investigation using the CTS resources. Planning for the two-day experienced included a full topic study.

11:45am – 12:30pm**Lunch**

Hosted by the Siemens Foundation | TEJAS DINING ROOM

12:45 – 2:00pm**Matrix Of UKanTeach Course Topics: A River Runs Through It | 101***INTERACTIVE PRESENTATION*

CAROL WILLIAMSON, *MASTER TEACHER, UKANTEACH, UNIVERSITY OF KANSAS*;
EDITH ESKILSON, *MASTER TEACHER, UKANTEACH, UNIVERSITY OF KANSAS*; STEVE
OBENHAUS, *MASTER TEACHER, UKANTEACH, UNIVERSITY OF KANSAS*; MIKE
DEGRAFF, *MASTER TEACHER, UKANTEACH, UNIVERSITY OF KANSAS*

UKanTeach instructors identified 5 threads (Assessment, Diverse Learners, Instructional Strategies, Technology, and STEM Content) that run through all of the UKanTeach (UTeach) courses, and created a matrix of topics within each thread to show how future-teacher learning builds throughout the sequence. Join the conversation in this session to examine the matrix that helps us set our course to prepare the next generation of math and science teachers.

Pedagogical Heuristics for Teacher Preparation: Reflections from CalTeach | 102*INTERACTIVE PRESENTATION*

TAMM VISINTAINER, *GRADUATE STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*;
ANGIE LITTLE, *GRADUATE STUDENT, UNIVERSITY OF CALIFORNIA, BERKELEY*; DOR
ABRAHAMSON, *ASSISTANT PROFESSOR, UNIVERSITY OF CALIFORNIA, BERKELEY*

Knowing & Learning students develop pedagogical principles, dispositions, knowledge, tools, and skills through open-ended math/science problem-solving that they apply in classrooms during field placements.

Model-Eliciting Activities | 103*HANDS-ON WORKSHOP*

ADEM EKMEKCI, *GRADUATE ASSISTANT, UNIVERSITY OF TEXAS AT AUSTIN*; GLADYS
KRAUSE, *GRADUATE ASSISTANT, UNIVERSITY OF TEXAS AT AUSTIN*

MEAs are an example of generative activities that students explore primarily in the Knowing and Learning course. Participants will engage in a Model-Eliciting activity and discuss MEA design principles.

Master Teacher Special Interest Group Meeting | 104*ROUNDTABLE DISCUSSION*

DAVE THOMPSON, *MASTER TEACHER, NORTHERN ARIZONA UNIVERSITY*; KERI
RANDOLPH, *MASTER TEACHER, UNIVERSITY OF TEXAS AT CHATTANOOGA*

Developing Surveys for Program Evaluation and Research | 107*INTERACTIVE PRESENTATION*

REBECCA POON, *GRADUATE STUDENT RESEARCHER, UNIVERSITY OF CALIFORNIA, BERKELEY*; NICOLE NUNES, *DIRECTOR, UNIVERSITY OF CALIFORNIA, BERKELEY*

We discuss Cal Teach Berkeley's ongoing work of developing student surveys to inform program improvement and measure program outcomes.

Soakin' Up the Rays with Schizosaccharomyces Pombe | 108*INTERACTIVE PRESENTATION*

LISA HINES, *ASST PROFESSOR, UNIVERSITY OF COLORADO AT COLORADO SPRINGS*;
TOM WOLKOW, *ASSOC PROFESSOR, UNIVERSITY OF COLORADO AT COLORADO SPRINGS*

This presentation will discuss a newly developed and piloted introductory-level, inquiry-based laboratory that employs genetic screening in fission yeast.

Texas Replication Sites Meeting (closed) | SALON A*CLOSED MEETING*

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

Expanding UTeach: Working with Community Colleges and Satellite Campuses | SALON B*ROUNDTABLE DISCUSSION*

MARTHA PEREZ, *DATA COLLECTION AND EVALUATION COORDINATOR, UTEACH INSTITUTE*; JANET MCSHANE, *CO-DIRECTOR, NAUTEACH; CHAIR, DEPARTMENT OF MATHEMATICS AND STATISTICS, NORTHERN ARIZONA UNIVERSITY*; MARTHA M. DAY, *CO-DIRECTOR, SKYTEACH; ASSISTANT PROFESSOR OF SCIENCE EDUCATION, WESTERN KENTUCKY UNIVERSITY*; CYNTHIA SHERMAN, *PROGRAM COORDINATOR AND MASTER TEACHER, UTEACH TYLER, UNIVERSITY OF TEXAS AT TYLER*

Several universities implementing UTeach face a need to work with local community colleges and/or satellite campuses.

During this roundtable discussion, representatives from three UTeach programs lead a discussion of the need and proposed solutions for expanding UTeach program implementation to other campuses.

2:00 pm Adjourn