



Council on Technology and Engineering Teacher Education

2017 Conference Schedule

Wednesday, March 15th

4:00 pm - 6:00 pm in State 3 **CTETE Executive Committee Meeting**

8:00 pm - 11:00 pm in State 3 **CTETE Yearbook Committee Meeting**

Thursday, March 16th

8:00 am - 8:50 am in Cityview 7 **CTETE Presentations**

Title: Achieving True Integration through Engineering Design

Description: Engineering design is often seen as the vehicle in which to apply scientific and mathematical concepts and practices. However, many teachers do not understand the true nature of engineering design and do not identify specifically what should be taught and assessed through engineering design activities.

Presenters: Greg Strimel and Michael Grubbs

1:00 pm - 1:50 pm in Cityview 7 **CTETE Panel Presentation**

Title: Addressing the Challenges of Teacher Recruitment

Description: Technology and engineering education remains a critical shortage area in most states. Join our panel discussion to share marketing strategies for programs and teachers.

Panel Members: Tyler Love, Charlie McLaughlin, Greg Pearson, and David Rouch

2:00 pm - 2:50 pm in Cityview 7 **CTETE Presentation**

Title: Teaching Upcycling & Changing Environmental Attitudes

Description: Environmental attitude changes after Green Prototyping & Upcycling where students upcycled with lasers and vacuum formers, designed green products, and made recycled 3D printer filament.

Presenters: Jim Flowers, Cale Rauch, and Alex Wierzbicki

3:00 pm - 3:50 pm in Cityview 7 **CTETE Paper Presentation**

Title: Validity of Practice: T/E Design Based Learning

Description: Discussed are Design Based Learning strategies for intentionally teaching STEM content/practices. Evidence is presented validating DBL strategies promoting student abilities to respond to cognitive demands.

Presenters: John G. Wells

Thursday, March 16th (continued)

4:00 pm - 5:30 pm in the Exhibit Hall

CTETE Poster Session at the Technology and Engineering STEM Showcase

- **Title:** Recruiting the next generation of Technology Teachers
Description: While there is increased interest in STEM, there are severe shortages of young people entering the Technology and Engineering Education profession. How do we identify quality prospects and create good results.
Presenter: David Rouch and Richard Miller
- **Title:** Integrative STEM for Teachers of Young Students
Description: Get a preliminary overview of the iSTEM4ToYS project. This NSF-supported project investigates selected components of Millersville University's integrative STEM program for early childhood education majors.
Presenter: Sharon Brusic
- **Title:** MonarchTeach: A Model Program for Preparing Teachers
Description: UTeach from UT Austin is replicated in over 35 universities for mathematics and science. Come learn about the first technology teacher program that uses this model.
Presenter: Philip A. Reed and Diana V. Cantu
- **Title:** Practice and Foresight of Programming Education in Technology Education in Japan
Description: This presentation highlights the practice of programming education in the junior high school by using Scratch and robot control. Also we introduce the new Japanese national curriculum for programming education in elementary to high school.
Presenter: Yoichi Miyagawa, Kazunori Shimada, Yasushi Ichihara, and Jun Moriyama
- **Title:** Career Pathways in the Alberta Environment
Description: Career and Technology Studies (CTS) is a provincially authorized curriculum for Alberta secondary schools. The program can provide a pathway to post-secondary education and an apprenticeship program.
Presenter: J. Brian Andrus

6:15 pm - 7:45 pm in San Antonio A **CTETE Yearbook and Awards Dinner**

This dinner is a tradition honoring the individuals and initiatives that represent the best of the technology and engineering teacher education profession (ticket required).

Friday, March 17th

8:00 am - 8:50 am in Citiview 7 **CTETE Paper Presentation**

Title: The Hidden Supports of High School Engineering and Technology Science Fair Winners

Description: Through this presentation we will reveal the hidden supports that motivate and engage state Science Fair winners in the areas of technology and engineering.

Presenters: Mary Margaret Capraro, Robert M. Capraro, and Michael de Miranda

1:00 pm - 1:50 pm in Cityview 7 **CTETE Presentation**

Title: Visual Cues and Effects on Spatial Visualization

Description: A quasi-experimental study was conducted to determine significant effects of visual cues (color blue) on spatial visualization ability for engineering technology students.

Presenters: Petros Katsioloudis & Mildred Jones

2:00 pm - 2:30 pm in Cityview 7 **CTETE Business Meeting (open to all)**

2:30 pm - 3:50 pm in Cityview 7 **CTETE Committee Work Sessions (open to all)**

Journal of Technology Education (JTE) Management Board Meeting (Board members only)

Saturday, March 18th

8:00 am - 8:50 am in Houston B **CTETE Paper Presentations**

Title: Design Cognition Impact of 9-12 Engineering Curriculum

Description: Findings from a study of design practices of 4th-year students of an engineering program are discussed within the context of curriculum and instructional strategies.

Presenters: Susheela Shanta and John G. Wells

Title: Examining design cognition of secondary and post-secondary engineering students

Description: A comparison of preliminary findings of design cognition research with pre-college engineering students and first year engineering majors and its implications for pre-college engineering education.

Presenter: Greg Strimel and Michael Grubbs

9:00 am in Cityview 7

CTETE Executive Committee Meeting