



ITEEA 2012 Conference Schedule

Wednesday, March 14th

4:00pm-6:00pm: CTTE Executive Committee Meeting

8:00pm-11:00pm: CTTE Yearbook Committee Meeting

Thursday, March 15th

1:00-1:50 (2 CTTE Sessions – Separate Rooms)

1) *Knowledge Abstraction in Technological/Engineering Design Activities*

Fred Figliano; John Wells

Developing a Design Log Instrument intended for use in identifying moments of abstraction as evidence of STEM content knowledge transfer.

CTTE Paper/Research Presentation

2) *How Online Teaching Enhances Face-to-Face Instruction*

Richard Seymour

This session will review techniques used to create successful online courses, and how the same instructional strategies can help enhance face-to-face classes.

2:00-2:50 (2 CTTE Sessions – Separate Rooms)

1) *Technology Education in China; Part 1*

Steve Macho, Sue Wang, Jianjun Gu

In 2008, a national mandate required Technology Education be taught in all 552,000 Chinese schools. Part 1 of this research project will describe Technology Education in China.

CTTE Paper/Research Presentation

2) *"Pipeline" Engineering: Collaboration for Teacher Preparation Success*

John Iley, Andy Klenke, Michael Neden

Examples of positive collaborations between proactive Technology and Engineering Education program and engineering technology, industrial technology, educational technology, and other secondary education programs are highlighted.

3:00-3:50 (2 CTTE Sessions – Separate Rooms)

1) *Engineering Concepts Taught in Technology Education: National Study*

Mark Sanders, Patty Watson, Tom Sherman

A report and discussion of findings from a study of engineering content taught by Technology Education teachers across America, and instructional methods employed therein.

CTTE Paper/Research Presentation

2) *Administrator perception of STEM activities and their importance*

David Rouch, Richard Miller, Levi Brown, Zach Freer, Kyle Hibbard, Mick Letcher

This presentation reports on the perceptions of school administrators in Ohio of the importance of STEM integrated activities to the development of students for future success.

4:00-4:50 (2 CTTE Sessions – Separate Rooms)

1) *Sense of Community in Online STEM Courses*

Kelly Schurr, Sabrina Provencher

The researchers highlight findings from their qualitative study on the sense of community experienced by graduate students enrolled in online STEM courses.

CTTE Paper/Research Presentation

2) *Establishing Rural STEM Partnerships*

Brian McAlister, Kenneth Welty, David Stricker

Pooling the resources of a teacher education institution, a regional educational service agency and a school district to implement STEM education in rural areas.

3:00-4:50 (CTTE – NCATE Writers Workshop)

1) *Accreditation of Technology Engineering Teacher Education Programs: Future Options*

Paul Post

Options for future accreditation of technology and engineering teacher education programs will be discussed.

Friday, March 16th

11:00-11:50 (2 CTTE Sessions – Separate Rooms)

1) *Spatial Acuity in Engineering Design Graphics*

Jeremy Ernst, Aaron Clark

Spatial acuity and motivation/satisfaction of learning for university technology education and engineering students was assessed during the completion of an introductory engineering design graphics course.

CTTE Paper/Research Presentation

2) *Learning Transfer: Connecting Concepts during Problem Solving*

Ryan Brown, Raymond Dixon

A discussion of the extent to which PLTW students are able to make connections to STEM concepts learned in the PLTW curriculum when solving problems.

1:00-2:30 CTTE Business Meeting

2:30-5:00 CTTE Committee Work Sessions

5:00-6:00 CTTE Executive Committee Meeting

Saturday, March 17th

9:00am – 11:00am (CTTE Poster Sessions)

1) *High School Student Information Sources and Design*

Jon Pieper, Nathan Mentzer, Kurt Becker

This study analyzed the amount of time and information type students used from paper based information sources compared to internet based sources.

2) *High School Student Design Thinking and Performance*

Nathan Mentzer, Kurt Becker, Jon Pieper

Verbal protocol analysis was conducted on seventy-five high school students engaged in the engineering design process. Results of the NSF Funded study will be presented.

3) *BajaSAE Kansas: Collaborative Success – Design to “Streaming”*

John Iley, Andy Klenke, Michael Neden

College of Technology, Communications, and Information Systems collaborative to design/build a BajaSAE track/competition site; host an international competition; and “stream” it to the world.

4) *The Report of ICTE2011-Japan*

Hidetoshi Miyakawa

The ICTE2011-Japan was held at Nagoya, Japan on November 3 and 4, 2011. This presentation shows the content and method of the conference in detail.

5) *Design a Candy Bar and Featherweight Challenge*

Tyler Love

The presenter will discuss in further detail the candy bar design activity and the featherweight design challenge articles that were published in the Technology and Engineering Teacher.

6) *A Study of the Students’ Self-concept in Technical High Schools in Japan*

Kazunori Shimada, Yasushi, Ichihara, Yoichi Miyagawa, Jun Moriyama, Kazuhiro Sumi, and Phillip Cardon

The purpose of this study is to analyze the formation process of students' self-concept in technical high schools in Japan.

7) *Educational Effectiveness of Robot Learning Using Power Limiter*

Hiroyuki Muramatsu, YasunoriHarayama, Isei Kojima, Jun Kawamata, and Hajime Ashida

This study is intended to verify the effectiveness of robot learning using educational power limiter in junior high school.

8) *Technology Education in Thailand: Past, Present, and Future*

OuppagarnJeeraphanthu

This will address the history of technology education in Thailand, its development, core concepts,current curricular practices, and related issues will be explained.

9:00-9:50 (2 CTTE Sessions – Separate Rooms)

1) *Beyond Standards: Themes and Contexts for ETE*

Michael Hacker, David Burghardt, Marc de Vries, Rodney Custer, Jenny Daugherty, Mark Sanders

This presentation describes results of two studies that surveyed literature and international experts to identify unifying concepts and disciplinary contexts for engineering and technology curricula.

2) *Bio-Related Technology: Activities to Meet the Standards*

Mark Nowak

Are you wondering what lab activities you can implement into your program? These activities have been field tested and best of all, they are inexpensive.

10:00-10:50 (1 CTTE Sessions – Separate Rooms)

1) *Assessing Impacts of Technological Decisions*

Jim Flowers, Mary Annette Rose

Examples from undergraduate and graduate courses in technology education where students work in technology assessment teams, predicting impacts of technological decisions before they are made.

11:00-11:50 (2 CTTE Sessions – Separate Rooms)

1) *Integrating STEM/STEAM for International K-12 Professional Development*

Georgette Yakman

A practitioner's overview of introducing 'integrated STEM/STEAM education' professional development to the first country to mandate its formal inclusion beginning Summer 2011.

2) *Case Study: Authentic Experience Before Student Teaching*

Mark Springston, Michael Nehring

A case study of pre-service teachers' perspectives on teaching in a one-day on-campus field experience, in which they developed 90-minute technological activities for middle school students.