

57TH ANNUAL TEAP CONFERENCE

PRELIMINARY CONFERENCE SCHEDULE

Thursday, November 5th, 2009

8:30 AM

Spouse's Brunch

President's Suite

On Thursday morning, we will visit Strawberry Square in Harrisburg, for lunch, shopping, and spa treatments (optional). We will meet for breakfast in the Presidential Suite and leave for Strawberry Square at 9:30am. Spa treatments must be scheduled before October 16 by calling Lola's Nail Bar for a manicure or pedicure at 717-232-5652. Let her know that you are with TEAP. Book your appointments time between 10am and 12pm. After the spa or shopping, we will go for lunch at Fresco's Café. On Thursday Evening, join us for a Dessert Social, at 8:30pm, in the Presidential Suite.

9:00 AM

Digital Infrared Photography

Keystone A

Mark Snyder, *Ind. and Tech. Faculty, Millersville University*

This session provides information on how to determine whether a camera is capable of infrared captures and how to do so. This session also includes comparing digital to traditional infrared methods and pointers on PhotoShop.

Technology Education Teachers in Demand

Keystone B

Stan Komacek, *Interim Associate Provost,, California Univ. of Pennsylvania*

This session will include current statistics and trends in the Technology Education profession in Pennsylvania including employment status, occupational outlook, salaries, certifications, and other teacher demographics.

Rapid Prototyping and Manufacturing Fundamentals

Keystone C

Tim Varner, *Manager, Synergis Technologies*

This workshop will introduce participants to the world of rapid prototyping and manufacturing technologies and include discussions on the difference between additive and subtractive processes, description of the most widely used additive technologies including: Stereolithography (SLA), Selective Laser Sintering (SLS), Fused Deposition Modeling (FDM), Film Transfer Imaging, and others; materials used in rapid prototyping; and what to consider when purchasing rapid prototyping equipment.

Last Updated on: 10/17/2009

Pennsylvania STEM Girls Collaborative Project

Keystone D

Katherine Weber, *Instructor, California U. of PA*

PA recently became a member of the National Girls Collaborative Project. Come see what resources and out-of-school activities are available to help you encourage female students to pursue interests in STEM. (Mini-grant opportunities available).

WEB 2.0 APPS: A Creative Landscape for the Classroom

Keystone E

Dr. John R. Kallis, *Professor, California U. of PA*

Web 2.0 Apps for the Classroom - A description of web 2.0 apps for educators and students that increases creativity, empowering user ownership of content and is collaborative in nature which features user-generated content.

Just a Hatchet and a Flying Machine

Commonwealth

Jared Bitting, *Tech. Ed. Teacher, Fleetwood Middle School*

Two great elementary or early middle school based activities based on the books "Hatchet" and "My Brother's Flying Machine" will be presented. If time allows, those in attendance will have the opportunity to take part in an abbreviated version of the 'Top Gun Challenge' that is the culminating activity of the 'My Brother's Flying Machine' TLA.

3D Modeling and Animation Using Blender

Senate Board

Mr. Jim Chronister, *Technology Education Teacher, Central Dauphin High School*

Blender is a powerful program that can be used freely in your labs for creating 3D models, animations, and games. This presentation will focus on program features and updates. Free teaching resources will also be discussed.

CNC Routing & Metal Casting: An Improbable Product Design Connection?

Susquehanna

James E. LaPorte, *Teacher Educator, Millersville University*

Learn how the new technology of a CNC router can be merged with conventional technology as students work in teams to design a functional hand tool as a means to learning fundamental concepts of materials and processes.

10:30 AM

General Session I -

Raising the Bar: Technology as Core Discipline

Keystone C-D-E

Dr. Yvonne Spicer is the Vice President of Advocacy & Educational Partnerships at the National Center for Technological Literacy® at the Museum of Science, Boston. Dr. Spicer is a highly sought after national and international speaker and advocate for pre-college Science, Technology, Engineering and Math (STEM) education. She has expertise in technology and engineering education, standards development and school leadership. Spicer was instrumental in establishing the 2001 Massachusetts technology/engineering curriculum framework with Dr. Ioannis (Yannis) Miaoulis, president and director, Museum of Science. Concerned by how many children in the U.S. "are shut out of technology and engineering," Spicer makes a compelling case for closing the gender and minorities gap in engineering. When she earned her doctorate at the University of Massachusetts Boston in 2004, she did her dissertation research on how nine African American female public school principals survived and thrived as educational leaders. Dr. Spicer is the former Director of Career & Technical Education in Newton, Massachusetts and served as the Statewide Technology/Engineering Coordinator at the Massachusetts Department of Education. She earned a B.S. and M.S. in Industrial Arts & Technology from the State University of New York -Oswego. Dr. Spicer is a native of Brooklyn, New York and has made a commitment to improving the opportunities for females and students of color in science, technology, engineering mathematics (STEM) fields. She can be reached at yspicer@mos.org or leadership@nctl.org



In the 21st century, Science, Technology, Engineering and Mathematics (STEM) creates opportunities for our students to have a bright future. The question we need to ask ourselves is; "Are we preparing students for their future or our past?" In the global economy, invention and innovation are challenging us to stay competitive. This presentation will address the state of STEM education, particularly technology and engineering, national initiatives, current resources in the field, and initiatives to deal with a growing concern in the United States—technological illiteracy.

Presentation Abstract

As educators, we have a significant role to play in meeting this challenge, but do we have the necessary tools? According to a report by the National Academies, *Rising Above the Gathering Storm, Energizing and Employing America for a Brighter Economic Future*, "the scientific and technical building blocks of our economic leadership are eroding at a time when many other nations are gathering strength—as educators, I believe we have the ability to raise the bar. At the National Center for Technological Literacy® (NCTL)® located at the Museum of Science, Boston, Massachusetts, USA we have made great strides in transforming the "T" and "E" in STEM education—as a core discipline.

Last Updated on: 10/17/2009

1:00 PM

Formula One in Schools

A Formula for Success in the Tech. Ed. Classroom

Keystone A

Mr. Troy E. Pfoutz, *Department Chair, Donegal Middle School*

Dr. Barry G. David, *Chairman, Millersville University*

Josh Cramer, *Instructor, South Park Middle School*

Our panel discussion will highlight the National Science Foundation sponsored project, Formula One in Schools. We will describe the F1 in Schools project and look at how F1 in Schools has impacted our program, our curriculum, and our community.

Teaching Students to Think Critically about Technology

Keystone B

Joe McCade, *Teacher Educator, Millersville University*

Teaching students about how the Amish make decisions about technology can be a good way to introduce them to developing a technology assessment system for themselves.

An Introduction to Control Technology

Keystone C

Len Litowitz, *Technology Education Program Coordinator, Millersville University*

A review of basic electricity and control logic. Participants will build circuits to solve problems related to control and introductory automation concepts using inexpensive and readily available components suitable for classroom use. 36 participants maximum.

A Timely Research and Restoration Project

Keystone D

Mr. Lee A. Friedman, *Tech. Ed. Teacher, Steinert High School*

Dr. Kenneth P. DeLucca, *Professor, Millersville University*

Learn about the partnership between the National Watch & Clock Museum and Millersville University's Department of Industry & Technology. A historic Pennsylvania tall-case clock needing restoration is matched up with a wood and furniture technologist-the results are outstanding!

Technology Festival

Keystone E

This year, our theme is "*Going Green*". Everyone who will have a table set up at the Technology Festival will have an activity or an idea for an activity that has something to do with recycling or going green. Please remember, this is not a formal presentation but rather a wonderful opportunity for all those in attendance to network and discuss activities that go on in their classrooms. Stop by, and get some great materials to take back with you!

Last Updated on: 10/17/2009

Stormin' the Castle

Commonwealth

Jared Bitting, *Technology Education Teacher, Fleetwood Middle School*

Looking for a great way to excite your students about technology while incorporating STEM concepts? Stormin' the Castle is an exciting and dynamic activity that lets students discover, design, construct, test, and evaluate a variety of catapult technologies.

STEM Smart PA Activities Lead to National Recognition!

Senate Board

Carol Adukaitis, *Statewide Program Manager, Fleetwood Middle School*

Stan Komacek, *Interim Associate Provost,, California University of Pennsylvania*

Barry David, *Chair of Department of Industry & Technology, Millersville University*

STEM activities involved with the PA National Science Foundation (NSF) Advanced Manufacturing Project have resulted in several national titles for technology education teachers. Find out who the technology education teachers are, what national titles they earned, and what our NSF Project has planned for the future.

Turning the Tide: Moving to the New PA-Standards for Technology Education

Susquehanna

Judy Hawthorn, *Technology Education Dept. Chair, Cedar Cliff High School*

The presentation will focus on the transition from the current PA-Standards to the proposed PA-Standards. The Standards are currently at the PA State Board of Education for approval. The approval timeline is January with implementation to occurring in the spring of 2010.

2:30 PM

Teaching in a Virtual World

Keystone A

Rick Zilla, *Tech. Ed. Teacher, Greenville Area School District*

Matt Stockunas, *Tech. Ed. Teacher, Greenville Area School District*

This session will involve practical application of online tools to be used in the classroom. First, Glogster is a great creativity site who's tag is "poster yourself". Next we will explore Moodle which is designed to help educators create online courses.

Elem. Teachers' Attitudes, Perceptions, and Practices: Effects of I3

Keystone B

Dr. Sandra Cavanaugh, *Teacher, Canon McMillan Schol District*

This session presents the findings of a study that examined how regular elementary teachers reported technology in terms of knowledge, attitude, and implementation in the classroom after participating in field testing units for the I3 Project.

An Introduction to Control Technology

Keystone C

Len Litowitz, *Technology Education Program Coordinator, Millersville University*

A review of basic electricity and control logic. Participants will build circuits to solve problems related to control and introductory automation concepts using inexpensive and readily available components suitable for classroom use. 36 participants maximum.

Opportunities with the Real World Design Challenge

Keystone D

William Bertrand, *Technology Education Advisor, PA Department of Education*

Come learn about an opportunity for Pennsylvania teachers to participate in the U.S. Department of Energy's Real World Design Challenge (RWDC). Through the RWDC teachers and students gain access to industry-specific engineering design and collaboration tools. Parametric Technology Corporation (PTC), who is a key partner for the Challenge, will be discussing how teachers can receive a 300-seat license for students to use Pro/Engineer. In addition you will gain tips and techniques from individuals who are experienced with competitions, including the teacher from Pennsylvania whose team won the last year's RWDC state competition and represented our state at the national level.

Design and Build for 4th -7th Grade and Beyond

Commonwealth

Jon Taylor, *Tech. Ed. Teacher, Central Bucks High School West*

Using hand tools, materials from Home Depot, and a little creativity, students built projects over a four day period. Stop by to see how the class was set-up, learn about working with younger students, and see how this and other experiences with younger children can benefit your program at the high school level.

Professional Technology Education Master's Degree-100% Online

Senate Board

Dr. Glenn Hider, *Professor, California University of Pennsylvania*

Earn your Master's degree while teaching; 100% online program provides flexibility, enhancing your teaching and program. Five term program provides professional experiences in: program development, grants, STEM, sustainability, special populations, creativity, assessment, research and more.

Middle School EbD™ in PA.

Senate Board

Curtis Funkhouser, *EbD Curriculum Specialist, Tech. Ed. Teacher, Mars Middle School*

Mike Konzemann, *Tech. Ed. Teacher, Southern Middle School*

This informative session will explain the implementation of ITEA's EbD™ Exploring Technology curriculum in Pennsylvania middle schools. Sample work and access information will also be provided.

4:00 PM

TEAP-CL Forum - "Think Tank"

Keystone A-B

The TEAP Council for Leadership Forum will be continuing with the format they began last year. The TEAP Conference is the largest annual gathering of technology educators in the state. We again look forward to harnessing ideas to solve the most pressing challenges facing our field with a focus this year on how to teach about **Green Technology** in our classrooms. The forum will utilize small groups with each one brainstorming potential solutions to the various challenges. All solutions will be reviewed at the Council's Business Meeting on Friday and will be published in the TEAP Journal and website. Sign up for the forum when you register for the conference. We look forward to the insight you can offer. If you have any ideas for this year's forum, please visit the TEAP Message board or email Council for Leadership President Joanne Trombley at joanne.trombley@teap-online.org.

6:00 PM

Millersville University Alumni

Duke's Riverside Bar & Grille

Please join your fellow Alumni as well as faculty from Millersville University for dinner at Duke's Riverside at 6:00pm. Find out about all the changes to the department, programs, and faculty, as well as some great networking with friends and colleagues. The cost will be around \$20.00 per person with a cash bar, with one free drink provided by the Department of Industry and Technology.

California University of Pennsylvania Alumni

Appalchian Brewing Co.

All Technology Education and Industrial Arts Alumni from California University and their guests are invited. Alumni are encouraged to bring prospective students for the Applied Engineering and Technology Department at Cal U. Refreshments and dinner will be served compliments of Cal U. Find out about all the changes to the department, programs, and faculty. Transportation will be provided to the reception between 5:45 and 7:00 PM. Meet in front of the hotel lobby. Return transportation will be provided between 7:30 and 9:30 PM.

8:00 PM

cWiiantive-Wii Remote Application

Keystone C

Mr. Mike Voicheck, *Tech. Ed. Teacher, North Penn High School*

The presenter will show the process of using a standard Wiimote and an infrared LED to create an inexpensive digital SMARTboard. For schools without SMARTboards, this is an awesome chance to learn how to make one for a fraction of the cost. No programming experience is necessary.

Using ROBOTC for TETRIX

Keystone D

Mr. Robin Shoop, *Carnegie Mellon University*

Come and have some fun with Lego's new TETRIX robot platform. The workshop will include laptops, robots and ROBOTC software. You will be surprised how easy these robots are to program!

8:30 PM

TEAP Board Meeting

Keystone E

This session is the Annual Conference Board Meeting of the Technology Education Association of Pennsylvania. All Executive Board members should attend. If you are a member of the Executive Board and are unable to attend, please contact [Brandt Hutzel](#) and submit a [TEAP Report Form](#) for distribution at the meeting.