

# Friday - October 28, 2016

**Grade Level**  
 MS - Middle School  
 HS - High School  
 CO- College  
 ALL

General Session		ALL
<b>Presentation Title:</b>	<b><u>Preparing for the Workplace in 2020</u></b>	
<b>Description:</b>	Caterpillar, who are we? In this session, I will talk about CATS branding, Preparing for the New Work Place, 4th Industrial Revolution, Gig Economy, Digitization and Millennials, Trends Impacting the Job Market, Responding to a Changing World, Overcoming the Skills Gap and Changes in the Top Ten Skills.	ALL
<b>Presenter(s):</b>	Rhonda Olson - Caterpillar Inc. - Recruitment Manager	
<b>Room &amp; Time</b>	Beaufort: 11:00-12:00 pm	
<b>Presentation Title:</b>	<b><u>Find Your Leadership Style and Make it Work for You!</u></b>	
<b>Description:</b>	Chances are we all spend more time trying to fix our shortcomings and the shortcomings of our students instead of developing strengths. This often prevents people from doing their best. Attend this session to learn about concentrating on strengths instead of trying to fix weaknesses. At the end of the session, each participant will be given the "Strengths Finder 2.0 " book, which contains an access code to take the StrengthsFinder 2.0 assessment. This assessment will help you find your strengths and put them to work. It will also help you look for the strengths in others. After you complete the assessment, you will receive a personalized strengths-based leadership guide. Use the guide for your own benefit and to benefit your students.	HS
<b>Presenter:</b>	Cindy Stover - IACTE - Consultant	
<b>Time - Room</b>	Broadway: 11:00-12:00 pm	
<b>Presentation Title:</b>	<b><u>STEMCampUSA-- Summer STEM Camps for Your Students</u></b>	
<b>Description:</b>	We will discuss how to set up and run successful STEM camps for student enrichment and enjoyment. We will cover recruitment, registration, costs, curriculum, facilities, and projects involved.	HS
<b>Presenter(s):</b>	Steve Skorup Pat Feulner & Mike Terronez - Waubonsie Valley HS - TEE Teachers	
<b>Time - Room</b>	Redbird E: 11:00-12:00 pm	
<b>Presentation Title:</b>	<b><u>SLOs and Google</u></b>	
<b>Description:</b>	This will be a demonstration of how SLOs can be completed through the use of Google Forms and Awesome Tables.	HS
<b>Presenter:</b>	Joseph Sieczkowski - South Elgin High School - TEE Teacher	
<b>Time - Room</b>	Redbird F: 11:00 -12:00 pm	
<b>Presentation Title:</b>	<b><u>Chromebook and the Arduino</u></b>	
<b>Description:</b>	By focusing on the Arduino Uno board, students gain a foundation in procedural thinking and basic electronics. Students at all grades can learn to use a solderless breadboard and common electronic components to perform a variety of tasks. Along the way, they will learn that most all devices today have some sort of programmable logic controller in it and how engineers create the code and processes necessary for today's devices. This session focuses on using the Arduino board with a chromebook and will feature different resources to bring this exciting tool into your classroom.	HS
<b>Presenter:</b>	Michael DeWees - St. Charles East High School -TEE/PLTW POE Master Teacher	
<b>Time - Room</b>	Redbird G: 11:00 -12:00 pm	

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<b>Presentation Title:</b>	<b><u>Vendors Exhibition Time ONLY</u></b>	
<b>Description:</b>	Come check out the latest our exhibitors have to offer on supplies, equipment, textbooks, etc...	ALL
<b>Time - Room</b>	Redbird D: 12:00-12:30 pm	
<b>Lunch</b>	<b>Redbird C - 12:30-1:30 pm</b>	ALL
<b>Presentation Title:</b>	<b><u>Stratasys 3D Printer Maintenance</u></b>	
<b>Description:</b>	Workshop to keep your Stratasys 3D Printer running smoothly. Find out how to prevent head clogs, clear a clog, keep your material fresh and perform maintenance checks.	ALL
<b>Presenter:</b>	Alejandro Lopez - JBH Service Engineer	
<b>Time - Room</b>	Beaufort: 1:30-2:30 pm	
<b>Presentation Title:</b>	<b><u>CTE and T&amp;EE Data Trends</u></b>	
<b>Description:</b>	Presenters will discuss state-wide high school data on Career and Technical Education, with special emphasis on Technology and Engineering Education. The focus of the presentation will be based on data related to students from special populations, trends, and strategies for positive classrooms.	HS
<b>Presenter:</b>	Chris Merrill - Illinois State University - Professor	
<b>Time - Room</b>	Broadway: 1:30-2:30 pm	
<b>Presentation Title:</b>	<b><u>Revit Round Table</u></b>	
<b>Description:</b>	Let's get together to discuss how we are using Revit in our classrooms. I'll share out some things I've learned throughout the time I've spent with the program, and I would love to listen to what you all have learned from your experience. Topics include: Massing Forms, Electrical Plans and Detail Drawings	HS
<b>Presenter:</b>	Dan Leipert - Glenbrook South High School - Instructor	
<b>Time - Room</b>	Redbird E: 1:30-2:30 pm	
<b>Presentation Title:</b>	<b><u>Greening Your School</u></b>	
<b>Description:</b>	This workshop introduces environmental education as a systems thinking priority across school curriculums and campuses through sustainable design opportunities in school, on school campuses and in school communities. Architects, educators, and nonprofit directors present technology enhanced sustainability strategies via online interactive resources for students, teachers and families.	HS
<b>Presenter:</b>	Linda Keane & Mark Keane - Professors of Architecture & Environment Design	
<b>Room-Time</b>	Redbird F: 1:30-2:30 pm	
<b>Presentation Title:</b>	<b><u>Teaching Arduino Microprocessor on a Limited Budget or Large Class Size</u></b>	
<b>Description:</b>	In PLTW Digital Electronics the Arduino microprocessor is utilized to interface to the real world devices. As class sizes increase and budgets decrease it is harder and harder to put hardware/ equipment in each students hands for the hands on activities. By utilizing AutoDesks free Circuit123d Arduino simulation and hardware simulation is brought together in a cloud based application. Participants will walk away with a project to help your students on how to learn Arduino C programming and interface to real world devices without spending a penny. This is a 1 hour session , requiring live	HS
<b>Presenter:</b>	Gary Cotie - Bartlett High School - PLTW Master DE Teacher	
<b>Room-Time</b>	Redbird G: 1:30-2:30 pm	

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**Room-Time:** Redbird D: 2:30-3:00 pm

ALL

**Presentation Title:** SkillsUSA  
**Description:** SkillsUSA improves the quality of America’s skilled workforce through a structured program of citizenship, leadership, employability, technical and professional skills training. SkillsUSA enhances the lives and careers of students, instructors and industry representatives as they strive to be champions at work.  
**Presenter:** Eric Hill - SkillsUSA Illinois - Executive Director  
**Room-Time:** Beaufort: 3:00-4:00 pm

ALL

**Presentation Title:** PERA - Student Growth in TEE  
**Description:** Student growth is at the forefront of educational evaluation in Illinois through the Performance Evaluation Reform Act (PERA). Many teachers in various disciplines have established Student Learning Objectives (SLOs) based on the relevant state and national standards. Join us to discuss our journey in the evaluation of Technology and Engineering Education students as we present one high schools development of student growth assessment.  
**Presenter:** Ryan VenHorst & Nicholas Michalek - Oak Park & River Forest HS - Technology and Engineering Education Teachers  
**Room-Time:** Broadway: 3:00-4:00 pm

HS

**Presentation Title:** Engineering Design of Model Rockets for All Levels  
**Description:** Model rocketry is a fun & captivating learning experience in STEM classrooms at any grade. Even senior engineering design students are challenged and engaged through design, build, test and launch activities. This session will cover a short unit including the design, building and testing of model rockets for a high school engineering class. It is easily adaptable to any grade level. A wealth of helpful curricular information can be found online. Several of those resources will be shared and discussed.  
**Presenter:** Anthony Tegtmeier - Neuqua Valley High School - Technology & Engineering Education Teacher  
**Room-Time:** Redbird E - 3:00-4:00 pm

ALL

**Presentation Title:** Free On-line Design and Architecture Curriculum  
**Description:** Teaching staff will be introduced to two free on-line curriculums. 1. Draw to Build - Arch 100 - Architectural Thinking I - UW-Milwaukee Dept of Architecture now provides it entry level class to regional high school students at no cost. High school credit is delivered and college credit is applied via Prior Learning Assessment at UWM. 2. www.NEXT.cc provides free access to any high school with curriculum based on Next Generation Science Standards. 250+ journeys with 3-5 activities each linked to over 5000 pre-screened global websites.  
**Presenter:** Mark Keane - University of Wisconsin-Milwaukee - Department of Architecture - Professor  
**Time - Room:** Redbird F - 3:00-4:00 pm

HS

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**Presentation Title: Incorporating STEM through Green Architecture****Description:**

Participants will focus on hands-on design process to explore ways to make the world a better place thru design of eco-friendly buildings. Sydney shares specific strategies to develop student research questions and design sketches integrating math and science concepts. Authentic technology will be demonstrated as participants develop ways for student communication of their design thru 3D technology (Sketch up and Revit). Finally, participants will discover the value of business partnerships when students develop genuine design solutions to impact all ages in their community--videos and project examples will highlight Park JHS students working with community groups such as Chicago Metropolitan Agency for Planning.

MS & HS

**Presenter:**

Sydney Schuler - Park Junior High School - PLTW Gateway Master Teacher/STEM Instructor

**Time - Room**

Redbird G - 3:00-4:00 pm

**Presentation Title: TEECA****Description:**

Teaching Lesson and TECA Technology Challenge events

**Time - Room**

Redbird C - 4:00-10:00 pm

**President's Reception John Blackburn Suite - 8:00-9:30 pm**

ALL

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**Breakfast**      **Turner Hall - 8:00-9:00 am**      **ALL**

**Presentation Title:**      **The First 50 Minutes of Autodesk Inventor**  
Everything you need to know to teach your students "the first 50 minutes" of Autodesk Inventor. These tips and helpfully hints will help simplify the rest of the year of teaching Autodesk Inventor. This session will explain how a teacher is in the role of "detective" when teaching the complex software. This is a hands-on session with participants working along with the presenter during the presentation.  
**Description:**      **HS**  
**Presenter:**      Don Whitman - Normal Community High School - TEE-PLTW IED Master Teacher  
**Time - Room**      Turner Hall Room - 9:00-10:00 am

**Presentation Title:**      **Utilizing 3D Scanning Technology in Architecture and Design**  
Digital 3D Scanning technology takes design work from an intricate physical model into a digital model that can be manipulated, and reproduced. Another scanning technology gives precise room measurements in a matter of minutes in comparison to field measuring by hand. We are excited to demonstrate 3D scanning technology during this year's conference and give you the opportunity to scan as well. Three schools who attend our session will be selected to have a room scanner and 3D arm scanner brought to your school for a student workshop.  
**Description:**      **ALL**  
**Presenter:**      Erica Chappellear - University of Wisconsin - Milwaukee, School of Architecture - Outreach Coordinator  
**Time - Room**      Turner Hall Room - 9:00-10:00 am

**Presentation Title:**      **STEM Principles and Concepts in Today's Agricultural Equipment**  
Come hear and witness how STEM principles and concepts are used in today's modern agricultural equipment and machinery. Topics include: GPS, Low Carbon Emissions, Hydraulics, Sensors, Electronic Controls, and more...  
**Description:**      **HS**  
**Presenter:**      Kelly Duzan - AGCO - Key Accounts Manager & Product Specialist  
**Time - Room**      Turner Hall Room - 9:00-10:00 am

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Presentation Title: **TEECA**  
Description: TEECA Finals Awards  
Time - Room: Turner Hall Room - 9:00-12:00 pm  
CO

Presentation Title: **Top-Down Design Process with Autodesk Inventor**  
Description: is an advanced hands-on session using the Top-Down workflow used when designing using Autodesk Inventor. Participants will work along with the presenter in Autodesk Inventor designing several different products during the presentation. when teaching the complex software. This is a hands-on session with participants working along with the presenter during the presentation.  
Presenter: Don Whitman - Normal Community High School - TEE-PLTW IED Master Teacher  
Time - Room: Turner Hall 10:00-11:00 am  
HS

Presentation Title: **Constructing Wildlife Habitat in a Woodworking Course for IDNR**  
Description: This session will give teachers resources, knowledge of material usage, and hands-on experience for constructing IDNR-approved wildlife habitat within high school and middle school woodworking courses. IDNR employees will speak about possible funding available from local IDNR parks and management areas for students to construct the projects and attain common woodworking and design skills that match current curriculum. In addition, the session will provide ideas and possibilities to create a project that is cross-curricular with between Technology and Engineering and science classes like Biology, Environmental Science, or Zoology. Pre-fabricated materials will be provided for attendees to construct IDNR-approved habitat that will then be donated back to IDNR for use at the Shelbyville Fish and Wildlife Management Area.  
Presenter: Stan Duzan - ILDNR - Shelbyville Fish and Wildlife Management Area Site Superintendent  
Time - Room: Turner Hall 10:00-11:00 am  
HS

Presentation Title: **HELP! They want Me to Teach Small Engines!**  
Description: So they want you teach small engine repair but you have no experience in the field: we can help. This session will guide you through the basics to not only survive but to be able to thrive in your program. Participants will disassemble an small engine and be introduced to the "labs" technique to keep things as simple as possible. Engine theory, proper tools and their use, organization and storage, and STEM principles will be covered. Participants are encouraged to dress appropriately.  
Presenter: William Merchantz - Homewood Flossmoor HS - Welding & Manufacturing Instructor  
Time - Room: Turner Hall - 10:00-11:00 am  
HS

