

# Friday - October 27, 2016

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

## General Session

ALL

**Presentation Title:** **Find Your Strengths and Lead with Them**

**Description:** It doesn't take long for every parent/teacher to know what is wrong with a child/student! How about changing the focus to what is right with the child/student? Let's help children/students grow into who they are, not who they aren't, by identifying what they are naturally good at and where they thrive. Attend this session to help understand people better and to value and respect the strengths of others. Characteristics of a Strength Based Teacher, Principal and School will be also be discussed. Attendees will receive a copy of the book, Strength Finders 2.0.

ALL

**Presenter(s):** Cindy Stover - IACTE - Executive Director/Consultant  
**Room & Time** Beaufort: 11:00-12:00 pm

**Presentation Title:** **Careers in Nuclear Engineering, the Future**

**Description:** Nuclear power is the only energy source that can generate electricity cleanly, reliably, and safely to power our society. There has not been such a great need as there is today to train the next generation of nuclear professionals to continue to operate our nuclear fleet. There is a need for students to chose to become operators, engineers, tradesmen, technicians, or administrators to support plant operations. Teachers will play an important role in preparing students for rewarding future careers that can support this essential national energy asset and integral local infrastructure. What are the Future Career Opportunities?

ALL

**Presenter(s):** Thomas Dean - Exelon - Corporate Training Director & Louis Chapdelaine - Nuclear Engineer Operations  
**Room & Time** Redbird A: 11:00-12:00 pm

**Presentation Title:** **Teacher Retirement System Benefit Information**

**Description:** During this session, a TRS benefits counselor will discuss the basics of TRS disability, death and insurance benefits, the retirement process and post-retirement. Following the presentation, the counselor will be available to answer your general questions.

MS & HS

**Presenter:** Renee Troppa - Teacher Retirement System - Benefits Counselor  
**Time - Room** Redbird B: 11:00-12:00 pm

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<b>Presentation Title:</b>	<b><u>Industry Certification with Certiport</u></b>	
<b>Description:</b>	Certiport delivers training and curriculum through unique in-application software that leads to a student's ability to become industry certified while in high school. Certification is proven to increase career prospects and improve academic success and Certiport partners with many of the largest technology companies to provide associate level options that are a great fit for entry into the workforce. Learn about the new in-application Autodesk Certified User content and coding options through Microsoft Technology Associate among other programs for your CTE classes. Certiport is the sole provider of Microsoft Office Specialist (MOS), Microsoft Technology Associate (MTA), IC3 Digital Literacy, Adobe Certified Associate (ACA), QuickBooks Certified User (QBCU), Autodesk Certified User (ACU), Entrepreneurship and Small Business Management (ESB), and Toon Boom Certified Associate (TCA).	HS
<b>Presenter(s):</b>	Justin Barker – Regional Manager – Certiport	
<b>Time - Room</b>	Redbird E: 11:00-12:00 pm	
<b>Presentation Title:</b>	<b><u>Grants, Credentials, and Industry Needs; The Haas Commitment to Manufacturing Education</u></b>	
<b>Description:</b>	Join Toni Neary, Director of Education for your local Haas dealer to understand more about what Haas offers to support educators in the advanced manufacturing arena. The discussion will cover national credentials, funding opportunities from the Gene Haas Foundation and opportunities to participate in teacher training for CNC Technology.	HS
<b>Presenter:</b>	Toni Neary - Hass Factory Outlet Chicago - Director of Education	
<b>Time - Room</b>	Redbird F: 11:00 -12:00 pm	
<b>Presentation Title:</b>	<b><u>Circuit Puzzles</u></b>	
<b>Description:</b>	Investigate properties of LEDs and circuits. Make predictions and build circuit puzzles to explore the possibilities. Each participant will receive a small kit of materials and a classroom ready activity.	ALL
<b>Presenter:</b>	Jana Sebestik - UIUC Office for Mathematics, Science, and Technology Education - Asst. Director of STEM	
<b>Time - Room</b>	Redbird G: 11:00 -12:00 pm	
<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>	Hall: 12:00-12:30 pm	
<b>Lunch</b>	<b>Redbird C - 12:30-1:30 pm</b>	ALL
<b>Presentation Title:</b>	<b><u>Don't Just "Do" Design; Rather, Teach Design Techniques Via Gender-Neutral Activities</u></b>	
<b>Description:</b>	Today's students need to understand innovation and technological design. This session will focus on strategies for teaching design concepts using activities that are attractive to both female and male students.	ALL
<b>Presenter:</b>	Dr. Rich Seymour - Ball State University - Associate Professor of Technology Education	
<b>Time - Room</b>	Beaufort: 1:30-2:30 pm	

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Presentation Title:	<b><u>More than Guidance: Working Collaboratively with School Counselors</u></b>	
Description:	Gone are the days of the traditional "guidance" counselor administering achievement tests and career assessments. Find out about what School Counselors in today's schools actually do and learn how working collaboratively with school counselors can help your students, your program, and the work you do each day.	HS
Presenter:	Dakota Beavers - ISBE - Principal Consultant for School Counseling	
Time - Room	Redbird B: 1:30-2:30 pm	
Presentation Title:	<b><u>Virtual Reality Architectural Renderings</u></b>	
Description:	Learn how to create virtual reality renderings using Autodesk Revit software. These renderings will make you feel like you are standing in the space you just created! In addition to creating these renderings, you will learn how to make your renderings look more realistic by using studio lights, setting up rendering settings, rendering to the cloud, using revitcity.com and how to setup Autodesk educational accounts for students to get unlimited rendering. If possible, please bring a laptop with Revit installed so you can start practicing these new skills.	HS
Presenter:	Kaitlin Rossi Adlai E. Stevenson - Technology & Engineering Education Teacher	
Time - Room	Redbird E: 1:30-2:30 pm	
Presentation Title:	<b><u>Introduction to 2 - Stroke Engines</u></b>	
Description:	Hands on introduction to 2- stroke engine basic theory and maintenance.	HS
Presenter:	Andrew Guetler - STIHL - Technical Specialist	
Room-Time	Redbird F: 1:30-4:00 pm	
Presentation Title:	<b><u>Inventor Escape Room</u></b>	
Description:	Looking for some new and unique activities to do with Autodesk Inventor? Have you heard of the new trend where people are seeking out and going to "Escape Rooms" for fun? This session is going to give you a chance to use your Autodesk Inventor skills to liberate you and your group members from the Inventor Escape Room. Do you think you have what it takes? Corey and Don can't wait to see if you do. Intermediate knowledge of Autodesk Inventor and a laptop with Autodesk Inventor is required for this session.	HS
Presenter:	Corey Duzan, Lockport HS/PLTW IED Master Teacher & Don Whitman, Normal Community HS PLTW IED Master Teacher	
Room-Time	Redbird G: 1:30-2:30 pm	
Presentation Title:	<b><u>Vendors Exhibition Time ONLY</u></b>	
Description:	Come check out the latest our exhibitors have to offer on supplies, equipment, textbooks, etc...	ALL
Room-Time	Hall: 2:30-3:00 pm	

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Presentation Title:	<u><b>Cybersecurity Career Pathways</b></u>	
Description:	The cybersecurity field has grown tremendously over the last 10 years and is expected to continue to grow at a rapid rate. This session will explore the various cybersecurity career specializations and potential pathways to these careers. Learn about the career opportunities, current salaries, projected employment statistics, and job credentials for these careers.	ALL
Presenter:	John Sands - Moraine Valley Community College - Department Chair & Kevin Vaccaro - Moraine Vally Community College - Associate Professor	
Room-Time	Beaufort: 3:00-4:00 pm	
Presentation Title:	<u><b>TEECA</b></u>	
Description:	Teaching Competition	CO
Presenter:	TEECA Students	
Room-Time	Redbird A: 3:00-9:00 pm	
Presentation Title:	<u><b>Using Sketching to Develop Students' Spatial Skills: Two Approaches</b></u>	
Description:	What are spatial visualization skills; can they be assessed, and, more importantly, can they be improved? The focus of this session will be to disseminate preliminary findings of a current National Science Foundation (NSF) Advanced Technological Education (ATE) project grant, and explore and demonstrate new tools being developed to support the teaching of spatial visualization skills. These new tools include interactive, media-rich online content and a new iPad sketching application that mimics a natural, hand drawing experience in a game-like environment that also provides immediate feed-back via a grading algorithm. A hands-on test drive of the materials will be available to participants.	ALL
Presenter:	Bob Mihelich - McHenry County College - Instructor and Chair of Applied Technology	
Room-Time	Redbird B: 3:00-4:00 pm	
Presentation Title:	<u><b>IDEA - Improving Design Education for Illinois Students</b></u>	
Description:	A session for all Drafting, Design, PLTW, and Graphic Design teachers to find out how IDEA can help teachers and students excel in the classroom and the workforce.	HS
Presenter:	Brian Rick - President - Illinois Drafting Education Association	
Room-Time	Redbird E - 3:00-4:00 pm	

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Presentation Title: **Arduino and Pulse Width Modulation Signals for Motor Control**

Description: What does a PCM waveform look like in terms of amplitude , frequency, and duty cycle? As the waveform changes how does it control the operation of a motor? What hardware is required to make this work with an Arduino microprocessor? What software instructions are required to create the PCM signal? Learn about how to combine all these elements to build a controller that is Arduino based.

HS

Presenter: Gary Cotie - Bartlett HS - Retired  
Time - Room Redbird G - 3:00-4:00 pm

Presentation Title: **TEECA**

Description: Technology Challenge / Quiz Bowl

CO

Presenter: TEECA Students

Room-Time Redbird A: 4:00pm....

Presentation Title: **PLTW IED Curriculum Revision Hands-On Workshop (continues on Saturday)**

Description: All teachers trained in IED prior to summer 2017 are encouraged to bring laptop for 6.5 hour hands-on curriculum revision workshop. NEW curriculum activities, projects, problems include Unit 3 Manufacturing a Box; Units 4 and 8 Automata modeling and cams in motion; Unit 5 Force Stability and Reindeer design; other modeling and Automoblox geometrical design updates; and expanded Excel projects in Units 3, 4, 5, 8.

HS

Presenter: Corey Duzan, Lockport HS/PLTW IED Master Teacher - Kyle Thomas, Urbana HS PLTW IED Master Teacher - Don Whitman, Normal Community HS PLTW IED Master Teacher

Time - Room Redbird G - 4:00-6:30 pm

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

ALL

# Saturday - October 28, 2016

## Grade Level

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

Presentation Title:      **PLTW IED Curriculum Revision Hands-On Workshop (continued from Friday)**

Description:      All teachers trained in IED prior to summer 2017 are encouraged to bring laptop for 6.5 hour hands-on curriculum revision workshop. NEW curriculum activities, projects, problems include Unit 3 Manufacturing a Box; Units 4 and 9 Automata modeling and cams in motion; Unit 5 Force Stability and Reindeer design; other modeling and Automoblox geometrical design updates; and expanded Excel projects in Units 3, 4, 5, 8.

ALL

Presenter:      Corey Duzan, Lockport HS/PLTW IED Master Teacher - Kly Thomas, Urbana HS PLTW IED Master Teacher - Don Whitman, Normal Community HS PLTW IED Master Teacher

Time - Room      Turner Hall Room 160B - 8:00-12:00 pm

Presentation Title:      **CNC Model Making**

Description:      This session will walk participants through a comprehensive model making unit that the presenter has used with many students and classes. Participants will practice some aspects of the unit and receive materials in order to successfully implement the unit. This model making unit requires students to practice and show mastery with many technical skills, including, scaling, drafting & design, 3D part design, and CNC manufacturing.

Presenter:      Matt Zawlocki - Neuqua Valley/Waubonsie Valley HS - Technology & Engineering Education Teacher

Time - Room      Turner Hall Room 167- 9:00-11:00 am

Presentation Title:      **Modern tools in hacking: Even amateurs can access sensitive data and computer networks**

Description:      This session will demonstrate some of the most popular open-source (and freely available) tools that are capable of eavesdropping, remotely accessing devices, infiltrating networks and systems, and mining for sensitive data. This session will provide a hands-on opportunity to experience these tools and highlight the need for skilled cybersecurity defenders.

HS

Presenter:      Kevin Vaccaro - Moraine Valley Community College - Associate Professor & John Sands - Moraine Valley Community College - Department Chair

Time - Room      Turner Hall Room 168- 9:00-11:00 am

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Presentation Title: **Drones/Robots in the Classroom: Tips, Tricks and Funding Ideas**  
Description: Come see and program a common drone used for classroom instruction. Talk about tips, funding, and project ideas for introducing drones and robotics to the classroom. Laptop Required.  
Presenter: Troy Blunier - Niles West HS - Engineering and Technology Instructor  
Time - Room: Turner Hall Room 169 - 9:00-11:00 am

ALL

Presentation Title: **TEECA**  
Description: TEECA Finals/Awards  
Awards  
Time - Room: Turner Hall Room 172- 9:00-12:00

CO













