



Date: Monday, March 21, 2016				
Room	Round	Post As	Session Description	Presenters
White River Registration	24 Hour Hold	Certiport Testing Sign-in	Sign-in for Certiport testing	Representatives from Certiport
White River Ballroom G-H	2:00 pm – 3:15 pm	Introduction to the Activity-, Project-, Problem-Based (APB) Instructional Approach	<p>The workshop illustrates how the APB instructional approach scaffolds knowledge, provides opportunities for students to transfer knowledge, and engages students as they apply their new learning to a relevant problem.</p> <p>During this workshop, you will:</p> <ul style="list-style-type: none"> • Develop a conceptual understanding of the activity-, project-, problem-based (APB) instructional approach. • Transfer knowledge and understanding of the APB instructional design while mapping lesson components to the APB instructional design approach • Gain hands-on experience with an activity and a project as the first steps in solving the problem: How do I design a rigorous, relevant APB learning experience for my students? 	Ginger Teague Nicole Beerman – Cadwallader Kristen Champion-Terrell Deborah Calvin Rachel Allard
	3:30 pm – 5:00 pm	Introduction to the Activity-, Project-, Problem-Based (APB) Instructional Approach	<p>The workshop illustrates how the APB instructional approach scaffolds knowledge, provides opportunities for students to transfer knowledge, and engages students as they apply their new learning to a relevant problem.</p> <p>During this workshop, you will:</p> <ul style="list-style-type: none"> • Develop a conceptual understanding of the activity-, project-, problem-based (APB) instructional approach. 	Ginger Teague Nicole Beerman – Cadwallader Kristen Champion-Terrell Deborah Calvin Rachel Allard

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White River Ballroom A-F Exhibit Stage 2	8:00 am – 8:30 am	Student Spotlight: South Bend Riley High School	Student presentation	
	9:00 am – 9:30 am	Student Spotlight: Eastlake High School	Student presentation	
	9:45 am – 10:05 am	(178) Inspiring Future Engineers: The Partnership Between FIRST Robotics and PLTW	Discussing the modern relationship between PLTW and real-world high school robotics teams (specifically FIRST (For Inspiration and Recognition of Science and Technology) robotics)	Vikas Maturi, TechHOUNDS Robotics Team
	10:20 am – 11:10 am	School Spotlight: Grand Rapids Public Schools	Student presentation	
Exhibit Stage 1 (Griffin Hall)	9:15 am – 9:45 am	School Spotlight: Wheaton High School	Student presentation	
	10:00 am – 10:30 am	School Spotlight: Mission Vista Dual Magnet High School	Student presentation	
	10:45 am – 11:15	(169) Achieve Greater Student Success with SkillsUSA	The SkillsUSA Framework supports a balanced program and the mission to empower students to become world-class workers, leaders and responsible American citizens. The Framework is the first step in defining clear, high standards that all students can achieve. As you easily align your curriculum to the SkillsUSA Framework, you are ensuring that all of your students are working toward standards that will	Debbie Peabody, SkillsUSA

			help them reach higher levels of success and be better qualified for college or good jobs.	
JW Grand Ballroom 1-2	2:30 pm – 4:00 pm	CODE: Debugging the Gender Gap - Screening 1	Tech jobs are growing three times faster than our colleges are producing computer science graduates. By 2020, there will be one million unfilled software engineering jobs in the USA. Through compelling interviews, artistic animation and clever flashpoints in popular culture, CODE documentary examines the reasons why more girls and people of color are not seeking opportunities in computer science and explores how cultural mindsets, stereotypes, educational hurdles and sexism all play roles in this national crisis. Expert voices from the worlds of tech, psychology, science, and education are intercut with inspiring stories of women who are engaged in the fight to challenge complacency in the tech industry and have their voices heard. CODE aims to inspire change in mindsets, in the educational system, in startup culture and in the way women see themselves in the field of coding.	
	4:15 pm – 5:45 pm	CODE: Debugging the Gender Gap - Screening 2	Tech jobs are growing three times faster than our colleges are producing computer science graduates. By 2020, there will be one million unfilled software engineering jobs in the USA. Through compelling interviews, artistic animation and clever flashpoints in popular culture, CODE documentary examines the reasons why more girls and people of color are not seeking opportunities in computer science and explores how cultural mindsets, stereotypes, educational hurdles and sexism all play roles in this national crisis. Expert voices from the worlds of tech, psychology, science, and education are intercut with inspiring stories of women who are engaged in the fight to challenge complacency in the tech industry and have their voices heard. CODE aims to inspire change in mindsets, in the educational system, in startup culture and in the way women see themselves in the field of coding.	
Room 103 - 104	8:30 am – 9:30 am	(O36) Project Management Through Trello	Collaborative, project-based learning – clearly the future, but daunting task for students. Teachers are told to manage student groups, but this often presents situations that are awkward to handle and frustrate both the teacher and group members. How do teachers minimize their involvement in student groups while simultaneously maximizing student autonomy and	Michael Burke, Bel Air High School Joshua Clemmer, Bel Air High School

			achievement? Enter Trello – A free, device agnostic, web-based project management tool used extensively in the startup industry! This session will demonstrate the benefits and applications for easily integrating Trello into the PLTW curriculum.	
	9:45 am – 10:30 am	(O61) Using Kahoot in the PLTW Classroom	The session will introduce teachers to Kahoot! And discuss how to use it as a quick formative assessment strategy that engages students. The session will cover how teachers can create their own Kahoots! For use in the classroom. Teachers will learn how to use the search feature to find available Kahoots! Created by peers nationwide.	James Wright, Hazelwood Central High School Brett Baron, Hazelwood Central High School
	10:45 – 11:15 am	Autodesk Integrated CAM for Inventor (Inventor HSM)	Welcome PLTW instructors interested in machining and manufacturing! In this session, you will learn how to create toolpaths to drive your CNC machines, using Autodesk Inventor HSM, which is integrated seamlessly with Autodesk Inventor. Many instructors have already made the switch and are having great success. Autodesk professional HSM CAM users will guide you through the process and answer your questions. Learning resources will be available for classroom use.	Iven May, Autodesk Wayne Griffenberg, Autodesk
Room 107	7:00 am – 8:15 am	Certiport Training Group 1	<p>Teachers have an opportunity to take the <i>Autodesk Certified User Exam</i> and <i>Autodesk Certified Professional Exam</i>. Certiport officials will proctor the testing site. Take the time to test your skills, and hopefully, walk away with your software certification.</p> <p>You may select up to one (1) session per day and up to two (2) sessions total during PLTW Summit 2016:</p> <ul style="list-style-type: none"> • One (1) for your Certified User Exam • One (1) for your Certified Professional Exam <p>You must pass the Certified User Exam before you may take the Certified Professional Exam.</p>	Representatives from Certiport
	8:30 am – 9:45 am	Certiport Training Group 2		
	10:00 am – 11:15 am	Certiport Training Group 3		
	1:45 pm – 3:00 pm	Certiport Training Group 4		
	3:15 pm – 4:30 pm	Certiport Training Group 5		
	4:45 pm –	Certiport Training Group 6		

	6:00 pm			
Room 203-204	8:00 am - 9:00 am	(048) Mobile Lab and Equipment Lending Program	St. Cloud State University (SCSU) has developed a Mobile Lab Program designed to enhance the education of high school, middle school, and elementary students. There are two components to the program: Science Express and Technology & Engineering Express (T&E Express). The Science Express is an 18-wheel trailer with slide-outs designed as a mobile classroom to provide advanced science instruction. The T&E Express is composed of two small trailers designed to move equipment for use in the schools. It provides industry-standard equipment – 3-D equipment, CNCs, robotics, and environmental technologies – and also provides teachers with curriculum and training to teach integrated STEM.	Kurt Helgeson, St. Cloud State University Chuck Hentges, St. Cloud State University
	9:15 am – 10:15 am	(072) SRL Mechanix	Last summer, I had the good fortune of spending two weeks as a Research Experience for Teachers (RET) candidate with Dr. Tracy Hammond and the Sketch Recognition Lab (SRL). My role was to evaluate SRL's 'Mechanix' tool (development driven by an NSF grant) from a high school knowledge and application perspective, provide input regarding enhancements, design practice sessions appropriate for advanced high school students, and participate in the worldwide rollout of the tool. SRL Mechanix is an impactful support tool that can be used for the truss analysis portion of PLTW Principles of Engineering (PoE).	Randy Brooks, Lovejoy High School
	10:30 am – 11:30 am	(141) Automation Competency Model A Pathway For STEM	Discussion of the importance of the Automation Competency as a resource for PLTW teachers	Steven Huffman, Automation Federation
	2:00 pm – 5:00 pm	<u>Bio-Rad DNA Detectives/Bio-Rad ELISA (3 hours)</u>	PLTW Biomedical Science: In a two-part hands-on course, get the skills necessary to easily teach DNA Detectives and ELISA. In this hands-on workshop learn gel electrophoresis, pipetting, and how to work with restriction enzymes to solve the missing persons case in Activity 1.3.1, and prep and run a quantitative ELISA test in the context the bacterial meningitis. Workshop will focus on the labs skills, learning to troubleshoot and being comfortable working with these fantastic tools. Time will also be spent going through the	Tamica Stubbs, Bio-Rad

			prep for the lab, tips/tricks from experts that use these technique routinely.	
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Date: Tuesday, March 22, 2016

Room	Time	Post As	Session Description	Presenters
White River Registration	24 Hour Hold	Certiport Sign-in	Sign-in for Certiport training	Representatives from Certiport
Griffin Hall	1:30 pm – 2:45 pm	VEX Challenge Middle school students only	Middle school students only. We have reserved the room for you! Enjoy the VEX Robotics exhibit with no other guests around. The VEX Robotics team on site will host mini-challenges for you to compete and have fun with other students.	Representative from VEX
White River Ballroom A-B	10:00 am – 10:45 am	(211) Ketchup in the News: A Story of Unexpected Ineptitude	In 2014, PLTW teacher Brett Kisker got quite the shock when a seemingly innocuous story about a student Engineering Design and Development (EDD) project garnered national headlines. Brett has always aimed to expand his network of professional mentors, but he found that his vast pool of engineers suddenly turned out to be completely insufficient for the needs of his students. His students desperately needed immediate advice about things like intellectual property and business plans! And just how important is that engineering notebook? Brett will present on the wealth of knowledge he gained from this experience. Audience members will leave realizing the potential of EDD as a course; knowing why we shouldn't tell students that they can't pursue a problem; understanding how to connect students with STEM and business professionals; and equipped with a tale to share with students upon returning to the classroom.	Brett Kisker, Liberty Public Schools
	11:15 am – 12:15 pm	Explore Your Interests - College and Industry Roundtable	Are you curious how different STEM professionals discovered their career paths? Interested in how they navigated college, first job, and career moves to find success? Perhaps you're just starting to think about all of the options that college could bring and you're not sure where to start. During this speed networking session, you will meet with professionals from PLTW partner universities and companies, who are ready to answer your questions about college, career, and more. Come prepared to engage in dialogue, ask challenging questions, and hear multiple points of view about what it takes to thrive in STEM fields.	

1:30 pm – 2:15 pm	(196) Creating the "Why?" for Students	As adults, we recognize and fully understand the growing importance of filling vacancies in the STEM career field with highly qualified individuals, but do students realize and feel that same fire in their bellies? Our students will lead the next generation to success, and we must equip them with the skills necessary to become college and career ready. Let's determine ways to engage students by creating the 'Why' or purpose for their engagement now, leading to personal, professional, and societal success later.	Ambra Tennery, National FFA Organization
3:00 pm – 4:00 pm	(207) TOYOTA and PLTW: Moving Forward Together	Toyota is a global company known for its quality products and its vaunted lean manufacturing production system. Quality companies are driven by quality people who are, in turn, developed through quality programs. Learn about the Toyota T-TEN Technician development program which produces world class dealer service technicians who maintain world class automobiles, and the Advanced Manufacturing Career Pathways which develops global-best team members for manufacturing and features a K-Masters model.	Richard Lester, Toyota Motors North America Dennis Dio Parker, Toyota Motors North America
4:15 pm - 5:30 pm	(082) Digital Fabrication in the Classroom	In this interactive session, we engage you in an example digital fabrication project you can integrate into a PLTW unit lesson. Using the digital fabrication equipment is interactive, fun and engaging for all ages - a must try! We will create scenarios for teachers, students, administrators, and other personnel interested in the new and upcoming world of digital fabrication.	Caroline McEnnis, FabEd

White River Ballroom C-D	10:00 am – 10:45 am	(165) Realizing ROI by Implementing Certification Autodesk in the Classroom	<p>Competency-based education is on the rise and teachers often feel the pressure to provide measurable outcomes in the classroom. With more focus on the “return on investment” for specific courses, it’s time to consider certification. Certification is a proven method of assessing a student’s knowledge, while also teaching invaluable skills that prepare students for the future. Students who earn certifications demonstrate to employers and colleges they possess verifiable, industry demanded skills.</p> <p>According to the National Center for Education Statistics, a record 21.6 million students attended American colleges and universities in fall 2013, constituting an increase of about 6.2 million since fall 2000. However, despite increasing college enrollment many employers question whether academic institutions are adequately preparing today’s graduates for the competitive work environment. According to “Education to Employment, Designing a System that Works, “ 72 percent of education institutions believe recent graduates are ready for work, but only 42 percent of employers agree.</p> <p>Certification helps ensure that students know how to apply technology in real-world business situations, not just how to use it socially. Individuals who certify open doors to career opportunities by demonstrating verifiable, marketable skills required by today’s workplace.</p>	Mike Maddock, Certiport
	11:15 am – 12:00 pm	(187) PLTW Program Equipment & Supplies 2.0: from cumbersome to streamlined	A sneak peek into PLTW’s Purchasing Guide solution to assist schools with identifying their unique supplies needs and simplifying the ordering process	Nick Gentry, Project Lead The Way Matt Cohen, Project Lead The Way
	1:30 pm – 2:15 pm	(039) Promoting Your PLTW Program to New Heights	Promoting your PLTW program within your school and community is essential to its growth and sustainability. In this can’t-miss session for educators and administrators, learn implementable tips and tactics to increase awareness, enrollment, and support for your school or district’s PLTW program(s). We also encourage you to come prepared with your own successful methods and strategies to share. Promotional areas include within the school and district, external stakeholders, media, and more.	Jennifer Cahill, Project Lead The Way

	3:00 pm – 4:00 pm	(201) High School Computer Science: Why Creativity Matters	<p>PLTW high school computer science courses, like all PLTW courses, employ problem-based learning, inviting students to define authentic problems and then work collaboratively to solve them in creative ways. Participants in this session will hear from high school master teachers in computer science who have worked with a broad range of students on a wide variety of projects.</p> <p>Computer science inspires problem-based learning because it encourages both boundless creativity and imagination from those engaged in it. PLTW computer science appeals to a broad community of learners. Students discover that applying computing in the real world leads to exciting, relevant and satisfying work that affects the people around them.. Prepare to be inspired!</p>	<p>Shaileen Pokress, Project Lead The Way Nathan Nolte, Fox Valley Lutheran High School Bennett Brown, Project Lead The Way Carol Kinnard, Project Lead The Way Angelica Gunderson, Los Alisos Middle School</p>
	4:15 pm - 5:30 pm	(029) What is Environmental Sustainability (ES)?	<p>PLTW-Engineering Pathway's newest course: Environmental Sustainability (ES). In ES, students investigate and design solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Applying their knowledge through hands-on activities and simulations, student's research and design potential solutions to these true-to-life challenges. Please join us to engage in the following topics:</p> <ol style="list-style-type: none"> (1) What is ES? (2) Design, Build and Test a water filter system (3) How to promote ES in the schools throughout your state. 	<p>Jennifer Klecatsky, Brainerd High School Tracy Swedlund, Medford Area Senior High School</p>
White River Ballroom E	10:00 am – 11:00 am	(199) Constant Exposure – Ways to Lead Students into Content Mastery	<p>In this workshop you will experience hands-on science content through a series of learning stations, easily replacing the traditional teaching methods of lecturing, reading, and testing. When teachers combine specific classroom science strategies in stations, they can easily differentiate their classroom and tier assignments to meet the needs of their students. In addition, students will increase their reading and writing skills as they work through the stations and the activities. Equally important, using stations in classrooms promotes real-world applications and best practices aligned to all of the STEM concepts.</p>	<p>Michelle Kirk, VWR, International</p>

11:15 am – 12:15 pm	(117) Creating A Successful Internship Program with PLTW	Learn how Lockheed Martin and the Arlington Independent School District (AISD) use PLTW to create a win-win-win for students, the school district and the company. Using a cross-functional team including Human Resources, Technical Operations, Production Operations and Community Relations, Lockheed Martin provides the complete company commitment necessary to make the Program successful. By including classroom time as part of the student curriculum, the AISD makes sure that the Internship Program is aligned with a state approved course/practicum and follows the state standards outlined for this course. We include a wide-variety of perspectives in the discussion - student, supervision, teacher, hiring professional and others.	Ami Motsenbocker, Arlington Independent School District Normin Robbins, Lockheed Martin
1:30 pm – 2:30 pm	(130) HS Internships: Nuts and Bolts of Implementation	Student readiness for STEM careers fuel American competitiveness in the global economy. High school internships build upon the PLTW curriculum offer students the opportunity to expand their knowledge and experience into the workplace. Since employers seek students with real-world experience, these students have a leg up as they prepare to enter college and the workforce. Come learn the key components of the Arlington Independent School District's successful internship program: Recruitment, Selection, Preparation, Connections and Engagement. The AISD STEM Academy Coordinator along with current PLTW/STEM Interns will share success strategies for successful internships in every phase of the process.	Ami Motsenbocker, Arlington Independent School District
3:00 pm – 4:00 pm	(050) Increasing Student Engagement	Increase student engagement using the Inquiry/Discovery Matrix for lesson design! We instruct you in the use of the Inquiry/Discovery Matrix and examine and discuss modifications to sample lessons leading to increasing the level of student engagement/participation in project-based activities. This session will introduce the use of the Inquiry/Discovery Matrix as a tool for PLTW instructors to examine their lessons. Such adjustments allow for students to address problems the way practicing engineers would.	William Priestley, Bristol Township School District Cosmo Diliegro, Bristol Township School District

White River Ballroom F	10:00 am – 11:00 am	(132) How Being a “PLTW Professional” Can Enhance Your School’s Program and Brand	How do you transform from teacher in the classroom to professional STEM educator? How can you enhance your leadership skills and out-of-school network to build industry engagement, influence policy makers, and grow your enrollment? How do you create your PLTW program brand in your building district as a sustainable and innovative force for STEM learning? This session answers these questions, and more.	Camille Sloan-Schroeder, Iowa State University Kimberly Glenn, Project Lead The Way
	11:15 am – 12:15 pm	(171) K-12 PLTW Launch to College	PLTW in a small town: In this session we will present how our vision to create meaningful and applicable learning for all students through stem education led us to create a viable, K-12 PLTW STEM program in just three years. We will speak about the why, the how, the future vision, as well as give information on the challenges, opportunities, and sustainability of the program.	Phil McAndrew, Gobles Middle-High School Jeffrey Rehlander, Gobles Public Schools Julie Boes, Gobles Elementary School Bob Lisowski, Gobles Middle-High School John O’Neil, Gobles Middle-High School Becky Drayton, Gobles Middle-High School Katy Sundling, Gobles Elementary School
	1:30 pm – 2:45 pm	(148) How to Run an Effective Core Training	Join the conversation in this comprehensive discussion outlining a successful Core Training. Dissect the planning process by dividing tasks into subsets to easily achieve goals. Leave with tips and tricks on how to make the planning process for Core Training more manageable.	Kate Sirk, Project Lead The Way Bruce Westermo, San Diego State University Sarah Pillitere, Rochester Institute of Technology Doug Klein, University of Kentucky Ben Yates, Missouri University of Science and Technology
	3:00 pm – 4:00 pm	(115) Getting Started with AP + PLTW	Students and schools across the U.S. now have greater access to college and career readiness opportunities thanks to an unprecedented partnership between Advanced Placement (AP) and Project Lead The Way (PLTW). Join this session to learn how your students can earn recognition to signify their college and career readiness. During this session, we will share more information on the AP + PLTW program, how to implement AP + PLTW in your school, and student recognition opportunities.	Jasen Ritter, Project Lead The Way Claire Lorenz, Advanced Placement

	4:15 pm - 5:30 pm	(120) Eligible use of Perkins Funds for PLTW	PLTW programs depend heavily on the Carl D. Perkins Career and Technical Education Act, also known as Perkins IV. However, this federal funding accounts for only 5% of public funds spent on CTE nationally, with the remainder coming from state and local sources. Often, confusing funding limitations from these other sources. Come learn about the flexibility of the Federal law and gain a better understanding of how you can utilize Perkins IV funds for PLTW implementation.	Amy Horton, Project Lead The Way
White River Ballroom G-H	10:00 am – 11:00 am	(200) The Computer Science Skills Gap: Industry Perspectives on Workforce Development	Computer Science - the area where the greatest discrepancy exists between what students need and what schools offer, yet most needed for national security and prosperity, career readiness, and most importantly, equity across our classrooms. Projections from the Bureau of Labor Statistics show that 3 out of 5 STEM jobs will require computing skills by the year 2022, leaving over one million unfilled computing positions. Moreover, participation in computing by people from underrepresented groups remains staggeringly low and continuing to wane. This panel of industry experts will share perspectives on the effect of this skills gap on the current and future workforce, and how stakeholders can take part in working toward a solution that works for schools, students, industry, and the economy.	Shaileen Pokress, Project Lead The Way
	11:15 am – 12:15 pm	(215) Billings Public Schools K-8 Implementation	This session explores how Billings Public Schools engaged their community to elevate their time, talent, and philanthropic resources to create positive change in STEM education.	Kim Anthony, Billings Public Schools Krista Hertz, Billings Public Schools Susan Plath, Billings Public Schools Jamie Nixdorf, Billings Public Schools

1:30 pm – 2:30 pm	(144) A Ready Made Employee: Internships, Co-ops, and Apprenticeships	<p>Thanks to strong encouragement from the White House, the executive suite, community colleges, and groups like the National Association of Manufacturers, internships, co-ops and apprenticeships are getting new life as a way to fill jobs while also allowing students and new employees to get the skills, certifications and degrees they need for future success. Numerous top corporations are exploring these models for a variety of STEM occupations.</p> <p>Learn how the Dow Chemical Company has developed such programs and how you might structure these initiatives at your company. An added bonus: Get an inside look at internships and co-ops from three Dow employees who have received such training.</p>	Meredith Morris, DOW Chemical Jason Fiori, DOW Chemical
3:00 pm – 4:00 pm	(091) Montour School District's Implementation Journey	The Montour School District began its journey with PLTW ten years ago, with the implementation of Introduction to Engineering. We are now the first in the State of Pennsylvania to graduate students who completed the full Biomedical Sciences Program. Implementing the Gateway and Launch programs in its middle and elementary schools, along with six engineering courses at the high school level, Montour's STEM Education leads by example in western Pennsylvania. Please join in this panel discussion with members of the school district's administrative team, IED, Launch Master Teachers, and Engineering and Biomedical Sciences Teachers to learn more about their PLTW implementation journey.	Candice Bostick, Montour School District Amanda Mascellino, Montour School District Nick Terpack, Montour School District Megan Foxwell, Montour School District
4:15 pm - 5:15 pm	(189) TBD Partner Best PracticesPLTW Partner Discussion and Networking (Open to current and potential business, corporate, foundation, and individual partners with PLTW)	Join this privately designed session for PLTW business, corporate, foundation, and individual partners and potential new partners for an open discussion about investments in STEM Education and specifically the multiple methods of partnering with PLTW. Attendees will have the opportunity to discuss support strategies and share examples of partnership beginnings and expansion. A private reception will immediately follow, providing an opportunity to continue the conversations and connect one-on-one with fellow partners.	Owners: Development Team

White River Ballroom I-J	10:00 am – 10:45 am	(104) Summer STEM Camps	STEM doesn't need to stop in the summer! Summer STEM camps give students high-quality engaging educational activities disguised as fun. Camps not only provide a great service to your community, but are a great recruitment tool for your school's PLTW program. We present a model of a STEM Middle School summer camp program made up of half day, week long programs for multiple age groups, packed full of hands-on projects and problem solving.	Nathan Nolte, Fox Valley Lutheran High School Alan Nolte, Fox Valley Lutheran High School
	3:00 pm – 3:45 pm	(019) PLTW, HOSA and The Partnership Team	HOSA (Health Occupations Students of America) and Future Health Professionals are organizations with a mission in creating student leadership opportunities as well as allowing students to compete in events in the medical field. Teachers and administration alike will learn how to connect HOSA to the PLTW Biomedical Science classroom and how to incorporate their partnership team in an effective way in a small rural school. The partnership team and HOSA provide enhancement for learning as well as life skills that students must obtain before entering into a medical profession.	Jennifer Doran, New London High School Lena Joch, Wilmot Union High School
	4:15 pm - 5:00 pm	(078) Hosting a PLTW Visitation Day to Leverage Support	Building support and understanding of PLTW at the local and regional level is critical to the development and sustainability of a healthy PLTW program. Leaders of the Elkhorn Area School District will share their template and model for hosting visitation days, which resulted in positive support from legislators, state officials, business partners and other school districts from around the state. You will leave the session with ready to use tools and templates to return home and hold your own PLTW visitation days.	Jason Tadlock, Elkhorn Area School District Chris Trottier, Elkhorn Area School District Eryca Card, Elkhorn Area School District Jerry Iserloth, Elkhorn Area School District
Room 101-102 24 Hour Hold	10:00 am – 11:00 am	(025) Innovation, The Maker Movement and PLTW	Makerspaces, Fab Labs, Innovation Centers and Problem-based learning in education are all exploding in the media. How does that affect your PLTW classroom? Is it different? Is it the same? Come learn about these environments, and all aspects of this movement, and how these tools benefit your students. Find out about the three basic types of Makerspaces and what goes into them. Explore how to implement Makerspaces into your classroom, and how they support the essential questions and allow for higher level thinking. We dive deep into how to explore careers and partnerships using the Community Makerspace.	Terri Tessman, Washington Park High School

11:15 am – 12:15 pm	(174) Introduction to STEM Premier	STEM Premier is the first cradle-to-career online solution that assists students in designing a career pathway, educators in recruiting top talent to their schools, and employers in developing a stable, continuous talent pipeline. STEM Premier creates a world of possibility by bringing students, mentors, resources, colleges, and companies together into a virtual hub.	Casey Welch, STEM Premier Shea Tighe, STEM Premier Channelle Ragland, STEM Premier
1:30 pm – 2:45 pm	(159) Sniffing Out Disease- Using your sense of smell to engineer better detection of Disease.	Researchers commonly employ their senses to solve problems. We utilize a visual inspection of cultures by way of color differentiation as a measure of cellular behaviors and properties. This method uses a less explored sense-smell. The "capstone" investigative piece will explore different smell generating pathways for pathogen detection. A Biobuilder kit implements the basics of genetic engineering to solve every day medical problems and expedite treatments using a sense that we often forget! This workshop is for many levels, from middle school to college classrooms.	Michelle Pagani, Ward's Science
3:00 pm – 4:00 pm	(213) Engaging Partnership Teams as PLTW Capstone Project Mentors and Advisors	This session will highlight a PLTW Partnership Team model that connects partnership team members with capstone course students acting as project mentors and advisors throughout the scope of the course. Students work with and receive feedback, suggestions and guidance from partnership team members on a regular basis. This model allows all partnership team members to play an active, meaningful and important role in curriculum and offers them a deeper insight into their school's PLTW program. Presenter Barry Witte and his partnership team have been working with this model for over fifteen years but the model can be adapted to any size program with any number of partnership team members.	Barry Witte, Colonie Central High School Thomas Spencer, Grassfield High School
4:15 pm - 5:30 pm	(101) DIY Sensors for Every STEM Subject	Many industries rely on sensor-based equipment: including just about every field of engineering, biomedicine, industry, manufacturing, automation, and safety. Other applications of sensors include robotics and related design contests. Just a few select sensor examples, that emphasize a handful of different "languages" that sensors speak, facilitate many other advanced topics in sensor projects. In this fun and engaging workshop, you will gain hands-on experience building and testing sensor circuits and automating measurements by programming a microcontroller to speak some of the most common sensor languages.	Andy Lindsay, Parallax Matthew Matz, Parallax

Room 103-104 24 Hour Hold Computer Room	10:00 am – 11:15 am	Autodesk Inventor Panel Discussion - Ask Us Anything	Don't miss this opportunity to get all your Autodesk Inventor questions answered by PLTW Master Teachers: Aurelien Mansier and Alex Conklin from PLTW's School Support team, and Dan Banach from Autodesk. Ask us anything about Autodesk Inventor, how to introduce Autodesk Inventor into your curriculum and more.	Aurelien Mansier, Autodesk Alex Conklin, Autodesk Dan Banach, Autodesk
	1:30 pm – 2:30 pm	(169) Autodesk Panel Discussion: The Future of Making Things – How will the Cloud Affect your Classroom	In this session you will learn how the future of the PLTW/STEAM classroom will bring deeper collaboration between educators and students through cloud-based and mobile technology with Autodesk® Fusion 360. Learn how schools are successfully embracing the future of design and making things with Autodesk technology. Attendees are welcome to provide feedback to Autodesk and PLTW. There will also be time for Q&A where you can Autodesk anything.	Dan Banach, Autodesk Madhura Krishnan, Autodesk
	3:00 pm – 4:00 pm	Vernier for Biomedical Science Courses	Students gain a deeper understanding of physiology concepts when using sensors to collect their own physiological data. This combined demonstration and hands-on workshop will use a variety of sensors with LabQuest Mini and Logger Pro to conduct experiments from the Project Lead The Way Biomedical curricula (PBS, HBS, and MI).	Representatives from Vernier
	4:15 pm - 5:30 pm	(057) Getting into Git	Learn how to leverage the power of Git and Github. Git is a powerful distributed version control software solution and Github is a cloud based Git storage and collaboration space. Explore how Git and Github can be used to enhance the teaching and learning in the PLTW CS classroom and beyond. We address what Git is and how it can be used with both text-based code and other files. Topics covered will include creating and sharing public and private repositories, forking repositories and creating pull requests, making commits, making branches, merging branches and resolving merge conflicts, and using a GUI and a command line interface.	Nathan Nolte, Fox Valley Lutheran High School

Room 105	10:00 am – 11:15 am	(100) PLTW Model Increases Student Success & Enrollment	A PLTW program's unique model has led to sustained growth and student success in the program over several years. Presenters from a technology center and partner high schools will discuss how they collaborated to create a common vision and implement expanded options to the design of their PLTW program. This model created three entry points for students to enter PLTW Engineering. This session will cover the topics of utilizing the power of the engineering teaching team, recruiting strategies, developing and maintaining relationships, having flexibility in core math and science offerings, and creating a shared vision.	Cole Atkinson, Moore Norman Technology Center
	11:30 am – 12:30 pm	(053) Perry Initiative: Engineering in Medicine	The non-profit Perry Initiative inspires women to become engineers and surgeons through inspiring experiences and mentoring focused on the inter-related disciplines of orthopedic surgery and biomechanical engineering. The Initiative is entering its 7th year of continuous programming, reaching 2500 female high school and 500 female medical students annually through its extracurricular programs. Perry Initiative is proud to partner with PLTW and members of the medical device industry in building a diverse talent pipeline in engineering and medicine.	Jenni Buckley, University of Delaware Amy Tauth-Nare, University of Delaware
	1:30 pm – 2:45 pm	(143) Mathematical Modeling Across Disciplines OR Mathematical Modeling - an Integral Part of STEM	Mathematical modeling attempts to describe things that happen in the real world with mathematics, and to address real-world scientific, social, environmental and financial questions. Mathematical models approximate phenomena using mathematical structures such as graphs, equations or algorithms. Mathematical modeling is a pillar of science and engineering, is necessary in both theoretical analysis and in experimentation, and is a critical tool in problem solving. We also use mathematical models in contexts that on the surface seem distinctly non-mathematical.. With an increase in technological tools to support mathematical modeling comes an increased educational emphasis on mathematical modeling and problem solving. This workshop will introduce a process for developing mathematical models and application examples of their development across disciplines.	Deb Calvin, Project Lead The Way

	3:00 pm – 4:15 pm	(126) Partnerships and Place-Based Resources in Hawaii	New resources in Hawaii provide opportunities for PLTW students to connect with their local economy, communities, and culture. The Learning Coalition (TLC) is a Honolulu-based private foundation dedicated to excellence in Hawaii public schools. TLC supports sustainable school-community partnerships that increase student engagement and ultimately lead to improved academic achievement and attainment. Through TLC's support, a consortium of teachers, community leaders, and cultural experts began developing place-based resources that leverage local expertise and recognize the unique contexts that transform learning experiences for students of Hawaii. Discover the strategies used and the impact on student achievement.	Diana Warren, Project Lead The Way Matthew Lorin, The Learning Coalition
	4:30 pm - 5:45 pm	(154) Being Future-ready	Calling all students! High school has been a great experience. Now is the time to plan for the transition into postsecondary opportunities. This session will help students navigate their postsecondary options. Presenters will provide tips on choosing a college, preparing for college, choosing a major, picking classes, and finding and applying for career opportunities. It is a one-stop shop for career planning beyond high school.	JC Park, Caeden Tinklenberg, Kyle Mattson,
Room 106	9:45 am – 11:00 am	(128) Linking the Core with the Engineering	Learn how PLTW brings real-world context and relevance to an interdisciplinary team via project-based learning. PLTW curriculum drives interdisciplinary projects with PLC core courses. Hear from instructors succeeding at designing and implementing projects at all grade levels at a high school in San Diego, by aligning courses in their Master Schedule that can create teams for linked learning with IED, POE, CEA, CIM and EDD. In addition, see how community and industry partnerships enhance projects and student outcomes.	Timothy Bingham, San Diego Unified School District

11:15 am – 12:15 pm	(203) Measure Model Make ... The Future is Built by You.	This session will introduce PLTW educators to 3D technologies being applied in schools and businesses around the world. The universal workflow of Measure-Model-Make will frame an interactive discussion on what 3D shape tools exist, how to apply them within PLTW programs, and how to connect K-12 schools with higher education and local/regional business. Registered PLTW attendees will receive pre-session-assigned reading on 3D terminology and trends to prime a dynamic in-session discussion on the skills needed for employment in the five general industry segments of: Design, Manufacturing, Animation, Science, and Art. Come to the session and discover how to inspire, engage and empower your tech-savvy students. The Future is Built by You.	Daniel Gustafson, NextEngine
1:30 pm – 2:45 pm	(089) Let Them See It - Using Video and Projects	Every teacher talks about the great work that goes on in classrooms and programs; letting others SEE that great work is something entirely different. In this informative session, you will see how a dying program in Bryant, AR created explosive growth and community interest through a clever combination of radical projects and video documentation. Video, today's media of choice, is easier and cheaper to produce, and more attainable than ever. Promote to student bodies with high-action clips of students having fun while informing administrations and communities with thoughtful documentary approaches. Video will change your programs, and it's not as hard or expensive as you might think. http://engineering.bryantschools.org	John Williams, Bryant High School

	3:00 pm – 4:00 pm	How to successfully implement and sustain a PLTW Internship Program	Internship programs offer a gateway to real-world experience. In this working session, teachers and administrators will hear lessons learned about implementing successful internship programs. Participants will receive essential information necessary to build successful and sustainable internship programs for PLTW students. During this working session, teachers and administrators will brainstorm and collaborate to identify strategies for their own districts to overcome barriers such as scheduling, staffing and transportation for implementation of internship programs. Also, we will work together to identify and develop individual plans for various methods to establish, maintain and nurture internship relationships with industry and your community. The end goal is for each participant to walk away with specific strategies to develop a robust and meaningful internship program.	Ami Motsenbocker, Arlington Independent School District John Becker, Antelope High School Ellie Vandiver, Project Lead The Way
	4:15 pm - 5:30 pm	(022) PLTW, Dual Credit, and the Workforce	This session introduces a unique arrangement between PLTW high schools and a community college to offer dual credit. A dual-credit college course in a career and technical education field is one way to add direct industry connections to a PLTW classroom. We lead you through an exercise to help identify possible collaborations, unique ways to meet both PLTW and college course competencies, and hurdles to overcome in the process. Additionally, we explore the benefits of this type of collaboration.	Julie Fickas, St. Louis Community College Scott Gevaert, St. Louis Community College Brett Richardson, St. Louis Community College Tim Knox, St. Louis Community College
Room 107	10:00 am – 11:15 am	Certiport Training Group 7	<p>Teachers have an opportunity to take the Autodesk Certified User Exam and Autodesk Certified Professional Exam. Certiport officials will proctor the testing site. Take the time to test your skills, and hopefully, walk away with your software certification.</p> <p>You may select up to one (1) session per day and up to two (2) sessions total during PLTW Summit 2016:</p> <ul style="list-style-type: none"> • One (1) for your Certified User Exam • One (1) for your Certified Professional Exam <p>You must pass the Certified User Exam before you may take the Certified Professional Exam.</p>	Representatives from Certiport
	11:30 am – 12:45 pm	Certiport Training Group 8		
	1:45 pm – 3:00 pm	Certiport Training Group 9		
	3:15 pm – 4:30 pm	Certiport Training Group 10		

	4:45 pm – 6:00 pm	Certiport Training Group 11		
Room 201-202	10:00 am – 11:15 am	(127) PLTW: Launching Into the Common Core	How can you use the enthusiasm and engagement of the PLTW Elementary Launch modules to increase reading comprehension and inspire students to meet the Common Core standards for non-fiction reading and writing? Using PLTW Launch modules as the foundation of language arts inspires students to read think critically as they read non-fiction text, research concepts and write with clarity.. As a result, students will expand their vocabulary and benefit from your differentiated instruction. This workshop will explore unlocking the potential of integrative thematic units of study using PLTW Launch Modules as the cornerstone of inquiry to support student inspired research.	Mary Hall, Jackson Elementary School
	11:15 am – 12:15 pm	(210) Top 10 Best Practices...Tried and True	We all believe in best practices for the classroom, but what about best practices in the project based classroom—and how can we find those practices to use every day? Using the results of best practices used by three Gateway Master Teachers with years of experience in the PLTW/Gateway project based classroom, this session highlights practices that work. Among a variety of best practices presented you will hear about grading techniques using the Learning Management System that will help you save time, practicing the design process by linking the process to every lesson, and a great way to incorporate an environment to provide students an opportunity to practice real world work place skills. Finding new ideas and practices to implement in the project based classroom help create working classrooms where students can become independent and productive learners.	Lola Whitworth, Dutch Fork Middle School Renee Brooks, West Oak Middle School Mathew Backs, Wilbur Wright Middle School

1:30 pm – 2:45 pm	(194) Why Computer Science at the Elementary Level?	Students' beliefs about their academic abilities begin to form early, shaping their career interests even before middle school. Yet, many students must wait until high school to experience one of the most rewarding, in-demand fields: computer science. Given an opportunity to experience authentic, problem-based computer science, students are often amazed to find that it's about collaborating with others to solve real-world problems in creative ways. Weaving computing into the school day will benefit all students, especially traditionally underrepresented groups, because early exposure to computing breaks down stereotypes and opens doors for students to see it as an option for themselves. To that end, PLTW now offers a suite of K-5 computer science modules. Launch master teachers will present tools and content, discuss ties to national standards in core subjects, and share experiences from their classrooms. Participants will be inspired by student projects from across the K-5 spectrum.	Shaileen Pokress, Project Lead The Way Paul Schiele, Russell Ranch Elementary School Kelly Wheeler, Santa Rosa Academy
3:00 pm – 4:15 pm	(205) Arduino PD training and tips/tricks/best practices for DE	PLTW introduced the Arduino microcontroller into our DE curriculum last year. This device is robust, easy to use, fun, and has an amazing community. This session will briefly introduce the Arduino, go through suggestions for use in the classroom, and show some fun enrichment possibilities with this digital electronic learning tool.	Michael Karasch, William Fremd High School
4:15 pm - 5:30 pm	(198) Code Like a Kindergartener	Computer science in kindergarten through fifth grade? How does that work? Come to this hands-on session to find out! Beginning with “unplugged” activities, then moving to programming on tablets, instructional designers and master teachers will lead you through engaging computer science activities as experienced by PLTW K-5 Launch students. You will learn how to build games and animations with ScratchJr and Tynker, the blocks-based programming tools used in Launch. Through this hands-on exploration, you will gain new appreciation for the impact computer science has at the elementary level. Participants are encouraged to bring an Android or iPad tablet, but we will loan a limited number of devices. Limited to 30 participants.	Shaileen Pokress, Project Lead The Way Karine Laidley, Project Lead The Way

Room 203-204	10:00 am – 11:15 am	(099) APB-Preparing Young Learners for the Global Stage	Society charges educators with preparing even our youngest learners to be successful 21st century global citizens. Today, it's important for students to have a working knowledge of the world around them, to be critical thinkers, and to work collaboratively to solve relevant real world problems. The Activities, Project, Problem based (APB) learning approach utilized in the Launch curriculum serves as a highly effective and versatile tool for engaging students in an authentic learning environment, presented at an appropriate grade level. You will see how the content of the Launch modules inspires students to solve real world problems and empowers them to become key players on a global stage.	Jeanine Flinton, Galway Central School District James Nair, Saratoga Springs City School District
	11:15 am – 12:15 pm	(145) Overview Biomedical Sciences	An overview of the Project Lead The Way Biomedical Sciences Program. The session will focus on the nuts and bolts of BMS and how our program is different from other electives. Emphasis will be placed on the basics of beginning a program, linking learning with other core classes, skills and introduction to careers, establishing critical relationships with community and industry (HOSA and clinical internships), and an introduction to our partnership with AP.	Ellie Vandiver, Project Lead The Way Rebecca Howell, Center for Advanced Technical Studies
	1:30 pm – 2:45 pm	(119) Empower Student Performance with Digital Badges	Classroom teachers need practical and efficient avenues to assess their students' progress with Inventor software throughout the PLTW Design and Modeling course. Sixth-grade science teachers share their seamless performance assessment approach for DM, a required course for all students at their school. This grade-level, digital-badge system inspires students to learn, engages them in their own progress and empowers them to serve as mentors. Students earn badges for required Inventor tasks as well as community-building actions such as helping others. Concrete takeaways from this interactive session include complete badge system, student badge displays, Google Classroom structure and student reflections from Google Site portfolios.	Mary Iwanski, Merton Intermediate School
	3:00 pm – 4:15 pm	Creativity Tools for iPad	Students need to be able to create and share content which demonstrates evidence of learning. In this hands-on session, you'll explore creativity apps on iPad that let students share their knowledge in compelling new ways. These tools give students and teachers the power to become a filmmaker, have a drawing canvas at their fingertips, or redefine reports with screencasts, books and animations.	Representatives from Apple

	4:15 pm - 5:30 pm	(049) Did You Say 5th Graders Get To Build Robots?	Are you a teacher or administrator who is just getting started with the PLTW Launch Robotics and Automation modules and want to know more? If so, this session is for you! We introduce you to the overall structure of the 5th grade Robotics and Automation modules. In addition, you get to to explore the 3D Inventor Publisher software using an iPad®, experience the PLTW APB approach through hands-on activities, learn successful tips and tricks in the classroom and ask your burning questions.	Stephanie Valli, Ritenour School District
Room 205	10:00 am – 11:15 am	Reauthorization of the Nation's Main K-12 Education Law: From NCLB to ESSA - What You Need to Know	The long-anticipated reauthorization of the 2002 No Child Left Behind (NCLB) Act promised to significantly change the federal paradigm for K-12 education authority, programs, and funding. The new law, the Every Student Succeeds Act (ESSA), was signed by President Obama in December of 2015. This session offers an overview of highlights, analysis of important provisions, describes next steps at the federal and state levels, and identifies the potential impact on PLTW programs.	Tom Luna, Project Lead The Way
	11:15 am – 12:15 pm	(106) The Sweet Success of Reverse Engineering Cupcakes	We discuss the concept of using cupcakes as a hook during the reverse engineering process. First, design a custom cupcake creation with the provided selection of food ingredients. Then, following the reverse engineering guidelines, measure and create a CAD model of your custom cupcake. Create a sample engineering notebook during this hands-on presentation. Laptops with CAD software are useful, but not required.	Ken Albert, Niles West High School Donald Whitman, Normal Community High School
	1:30 pm – 2:30 pm	Showcase Yourself. Discover Opportunities. Connect With Colleges & Companies.	STEM Premier® is an online platform where students (13+) build digital portfolios to showcase their STEM skills and talents, access scholarships and connect with colleges, companies and organizations. Learn how you can create a digital profile on STEM Premier to showcase your skills, discover scholarship and internship opportunities, and connect with colleges and companies.	Channelle Ragland, STEM Premier

	3:00 pm – 4:15 pm	(077) The Synergy of teaching EDD and BI concurrently	The PLTW capstone courses are one of the greatest experiences you can give to your students. Unfortunately, the courses are often cancelled due to small class sizes, FTE concerns, etc. A great answer? Teach them concurrently. This collaboration provides a rich environment for cross-curriculum collaboration, furthers opportunities for students to explore careers, and facilitates teaming on shared projects. I will share some of the opportunities, challenges, and outcomes from various classes using this synergistic scheduling.	Terri Tessmann, Washington Park High School
Room 206	10:00 am – 11:15 am	(055) Integrating PLTW with Gender Equity Initiatives	Gender parity in STEM interest drops dramatically as students approach secondary schooling. All educational stakeholders have an impact on students' decisions to pursue or not pursue STEM coursework. When trying to close the gender gap in adolescent STEM interest, our explicit or implicit assumptions about our students matter. Using both PLTW and a gender parity initiative like the Peer Alliance for Gender Equity, teachers, administrators, counselors, and STEM coordinators can all improve the ways in which they encourage girls and boys alike to pursue STEM coursework, STEM college work, and ultimately, STEM careers.	Mathew Bannerman, Saydel Community School District
	11:15 am – 12:15 pm	(059) Promoting PLTW Through Summer Robotics Camps	Promote PLTW Pre-Engineering programs by facilitating an elementary / middle school summer robotics program that utilizes high school PLTW Pre-Engineering students as camp leaders and teachers. Just think of the enriching and engaging interactions between the campers and the camp leaders! Robotics programs provide PLTW students an opportunity to use their classroom knowledge and skills in a real world environment. Engaging students in summer robotics camps enhances the STEM opportunities within local communities.	Trecia Karinshak, Great Plains Technology Center Laurie Schoening, Great Plains Technology Center
	1:30 pm – 2:45 pm	(212) Leveraging the Senior Capstone Experience to Inspire Entrepreneurship	The senior capstone experience presents a unique opportunity for students to solve real-world problems, but it is often only an academic experience. This session presents a model for strategically supporting students and teachers with workshops and opportunities to connect with mentors and competitions to motivate and recognize students. It also includes an important link to the business community with an end-of-the-year workshop on entrepreneurship.	Ann Zimmerman, KC STEM Alliance

	3:00 pm – 4:30 pm	(108) Perfecting your Protein Labs - Getting the Most From BMS Labs	Join us for an in-depth look at the workflows for the ELISA and GFP labs (bacterial transformation, chromatography, and protein electrophoresis) used in BMS. We'll cover helpful hints for teacher prep, strategies for successfully implementing the labs with your students, and tips for troubleshooting "interesting" lab results.	Representatives from Bio-Rad Laboratories
Room 208	10:00 am – 11:00 am	(092) SkillsUSA As a Vehicle to Apply PLTW Curriculum	SkillsUSA is an excellent platform to demonstrate acquired skills found in all PLTW classes. A student team will speak and demonstrate how documentation and application from PLTW Engineering is used in Applied Engineering, Engineering Technology, Mobile Robotics, and Search and Urban Rescue. In addition, the session will cover advantages of SkillsUSA-PLTW integration for the school, teacher, and students, as well as strategies for increased student involvement.	Jaime Trevino, Foy H. Moody High School Sandra Clement, Foy H. Moody High School Diana Fernandez-Chavez, Foy H. Moody High School Madelyn Perez, Foy H. Moody High School Caroline Downes, Foy H. Moody High School Alex Kuan, Foy H. Moody High School Roland Mower, Foy H. Moody High School
	11:15 am – 12:15 pm	(156) Extending 3D Modeling in the Gateway Classroom, at Home, and in a Virtual Reality	Presenters will demonstrate efficient, effective use of Autodesk Inventor. The session will cover tips and tricks to ensure students' success; how to "flip" the classroom to home using a cloud-based app, Tinkercad; and how to create a digital notebook using Microsoft One Note. Participants will also learn how to present objects in an augmented reality using the program Augment.	Rhonda Brown-Jones, Blue Springs South High School Todd Brockett, Robidoux Middle School
	1:30 pm – 2:45 pm	(027) Carnegie STEM Excellence Pathway	Designed to help schools adopt best practices in STEM education, the Carnegie STEM Excellence Pathway includes a tool and process to assess current STEM programming and create a practical plan for improvement. Schools then select priorities and formulate a timeline and action plan to address goals. The Pathway helps identify and implement the tenets of quality STEM education. The Pathway is non-punitive and envisioned as a long-term, goal-oriented, encouraging approach. Join with Pathway leadership at Carnegie Science Center as well as key partners from the Kansas City STEM Alliance and Missouri Math and Science Coalition to learn about how the Pathway is transforming STEM partnerships across the country.	Alana Kulesa, Science Center Leader Martha McCabe, Kansas City STEM Alliance Brian Crouse, Missouri Chamber of Commerce

	3:00 pm – 4:15 pm	(102) Including Students with Disabilities in Computing	This interactive session will introduce computing teachers to accessible tools and curricula, and to inclusive teaching strategies. You will learn about the Quorum programming language a text-based language that is easy to learn and accessible to students with physical and sensory disabilities. Quorum is a full-featured programming language with support for game programming, audio and speech, and graphics. We will review several accessible programming units interactively. You will also learn about AccessCS10K, a NSF-funded project supporting the inclusive teaching in PLTW K-12 Computer Science pathway courses, including Launch, Gateway, and AP CS Principles and AP CS-A.	Richard Ladner, University of Washington
	4:30 pm - 5:45 pm	(010) STEM Pathway: Organizational Excellence	A STEM pathway is more than just teachers, classrooms, and curriculum. Four powerful pillars help create a dynamic STEM Pathway: Leadership Excellence, Meaningful Experiences, Superior Service, and Sustainability & Legacy. Together these pillars create a culture of common purpose, support, innovation, and collaboration that will inspire for years to come. STEM Pathway: Organizational Excellence is for anyone interested in learning best practices for establishing a strong, lasting program vision, culture, and processes for their organization that inspires its members and community. You will have opportunities to reflect, and begin to define the impact your organization will have on its members and on the community as a whole.	Shawn Hardina, East Valley Robotics Academy
Room 209	10:00 am – 11:00 am	Welcome Reception with Vince (Students Only)	Welcome to PLTW Summit 2016! Vince Bertram, President and Chief Executive Officer of Project Lead The Way, will host a private reception for Summit student guests. Following brief opening remarks, he is eager to hear from you and answer your questions about PLTW, education, preparing for professional opportunities, and any topics that interest you. Please join for this unique opportunity to hear from and share your insights with Vince.	Vince Bertram, Project Lead The Way
	11:15 am – 12:15 pm	VEX Robotics Q&A / Feedback Session	VEX is seeking feedback on their VEX EDR, VEX IQ, and PLTW Launch kit products! Join for an opportunity to provide feedback or suggestions directly to Paul Capioli, President of VEX Robotics, on the products that have inspired learning with your students.	Paul Capioli, VEX Robotics

	1:30 pm – 2:45 pm	(125) The Road to Success is Paved with Capstones - Beginning in Biomed	Designing and implementing student capstones in PLTW Biomedical Science can be a daunting prospect to a teacher new to the process. Where should you begin? How do you facilitate the student brainstorming phase to encourage an elevation in their thinking? How do you manage multiple student projects? How do you know if the project idea is even good enough to be considered a capstone? We will share our different experiences with capstones: one in an urban setting with access to nearby resources and the other in a rural setting without them. Join us for a presentation, brainstorming activity, and discussion.	Lori Lovett, Red River Technology Center Terri Tessman, Washington Park High School
Room 301	10:00 am – 11:15 am	(041) PLTW Value Added Enrichments for your Program	PLTW classes can be stand alone or enhanced to benefit your school and your community. Value added components, such as STEM summer camps, after-school enrichment, community partnerships and STEM outreach to elementary and middle schools, create a program of study that provides students with an experience similar to a magnet/specialized program, all while attending their home school. Make your program exceptional! Share ideas with other schools and districts interested in providing the best possible educational experience to their students.	Erica Harris, Bel Air High School Josh Clemmer, Bel Air High School Michael Burke, Bel Air High School
	11:15 am – 12:15 pm	(192) Using the Student Voice in the Community	Students are the most powerful resource you have to expand and promote PLTW in your school and around the state. Learn from teachers and district delegates who have specialized in getting students out in the community to improve and sustain PLTW programs.	Doug Klein, University of Kentucky Bill Kuch, Hilliard Davidson High School
	1:30 pm – 2:45 pm	(209) Funding 4 Project Based Learning	Do you have trouble acquiring or maintaining the needed materials for lessons? Learn how to easily find funding and goods for your classroom, utilizing funding databases, local resources, and Web tools. Find out about funding sources that take less than 30 minutes to write. Learn to establish local community relationships for ongoing funding and classroom help. Create a community-supported classroom with ease. Let's get started today!	Debra Krikourian, Sutter Middle School Patricia Deibert, Milwaukee School of Engineering

	4:30 pm - 5:30 pm	(031) Partnerships that Work	Partnerships built between institutions of higher education, organizations such as PLTW, and schools benefit all parties. One example is the partnership between PLTW, Carthage College, and the Kenosha School of Technology Enhanced Curriculum (KTEC). Pre-service education students soak in the KTEC curriculum and culture by taking math and science methods classes at KTEC, collaborating with KTEC staff particularly in the areas of STEM, and receiving experience working directly with students. These partnerships require commitment by all parties. The end result is higher performance by students at KTEC and better prepared future educators.	Angelica Andersson, Kenosha School of Technology Enhanced Curriculum Prisca Moore, Kenosha School of Technology Enhanced Curriculum
Room 302-303	10:00 am – 11:15 am	(032) Using the myPLTW Learning Management System (LMS) - Beginner	Find out how Canvas can enhance teaching and learning in this workshop. Those brand new to Canvas or just starting out will learn how to navigate the LMS, adjust settings and set up notifications, make announcements and create sections for different class periods. You'll also learn how to modify your modules, creating assignments, linking documents, adding files and setting up submissions. By the end of this session you'll know how to set up regular assignments as well as discussions and quizzes and how to use the calendar feature for planning.	Heidi Hisrich, Richmond High School
	11:15 am – 12:15 pm	(086) Utilizing Assessments in the LMS	In this technology learn-shop, you will learn to create different types of assessment questions and item banks in the LMS. Question types include multiple choice, numerical answer, essay and file uploads. You will also learn to place images, upload video, and create math equations and format text while creating assessment items. In addition, we cover creating tests from item banks. Finally, you will learn to collect and interpret data from completed classroom assessments, and import and export test data.	Mark McAllister, Rockwood School District
	1:30 pm – 2:45 pm	(190) How Can Assessments Really Help Me?	We use assessments and their results for many purposes. For teachers, improving instruction means focusing on assessment data. Join us as we focus on how the PLTW EoC assessments and EoC scores can help you in your classroom. Information will be provided regarding the meaning of the PLTW EoC score, as well as resources available to help you better understand your students' scores. The session will also include a panel of PLTW Master Teachers exploring ways assessments help them in their classrooms, including assessment strategies, how the results are used, and tips for strategy implementation.	Claudia Guerere, Project Lead The Way Chris Hurd, Cazenovia Central School District Amanda Ooten, Chaminade Julienne Catholic High School

	3:00 pm – 4:15 pm	(214) Using the myPLTW Learning Management System (LMS) - Advanced	Already using Canvas? This workshop will take your LMS skills to the next level as you learn how to help students create e-portfolios, customize notifications, collaborate on the LMS and peer evaluate one another. You'll discover how to make and attach rubrics to assignments, group students for team assignments and set up outcome-based grading. You will make question banks and create quizzes and learn how to interpret quiz statistics and modify settings for students with IEPs. By the end of this session you'll have unlocked many new features of Canvas that can take teaching and learning to the next level in your classroom.	Heidi Hisrich, Richmond High School
	4:30 pm - 5:30 pm	Digital Electronics with myDAQ and Multisim	From smart phones to appliances, digital circuits are all around us. Find out how the Digital Electronics provides the foundation for students who are interested in electrical engineering, electronics, or circuit design. Join NI to learn about industry-leading technologies used in the Digital Electronics course, including NI myDAQ and Multisim circuits teaching environment. Get an overview of new and advanced features for analog and digital circuits education. Target: New and Existing Digital Electronics Instructors	
Room 304-305 - 306	10:00 am – 11:15 am	(056) Innovative Ideas In Biomedical Instruction	The PLTW biomedical pathway provides an extraordinary opportunity to engage and empower students interested in STEM-related fields. Listen to and share ideas on how to personalize the biomedical studies curriculum by supplementing it with other innovative activities to meet the needs of your students. Listen to all three presenters discuss how they connect their prior experience in neuroscience, sports medicine, strength & conditioning, and coaching high school athletes to enhance their instruction.	Jeffrey Crapper, Beaverton Health and Science School David Valenzuela, Madison High School Carlie Harris, Beaverton Health and Science School
	11:15 am – 12:15 pm	(008) Strategies that empower ELL learners with PLTW	Working in a high-poverty community with predominantly monolingual Spanish speaking learners, we always search for researched based strategies to promote ELL learners. As a pilot school for PLTW we use GLAD strategies (Guided Language Acquisition and Design) to create units of study with the PLTW module as the unit theme. Adding Common Core Standards to align our units so that the PLTW modules are used cross curricula thought the school year is a work in progress for our school. K-5 uses backwards planning to provide all students, especially ELL students, the most powerful school experiences in STEM teaching.	Janie Lopez, Toppenish School District Debbie Whitney, Toppenish School District

	1:30 pm – 2:45 pm	(175) Anatomy is BioEngineering; Learn Experiential BioTechnology	<p>The focus of this workshop is STEM in our bones: ways we can use ANATOMY IN CLAY® classroom experiences in self-discovery that can benefit us life-long.</p> <p>We'll examine and discover the characteristics of the evolved skeletal subsystems, clarifying anatomical form and function. We'll then create three-dimensional muscles and nerves of clay, in our hands, and place them on the models. Through forming these models of our own anatomy—we can critically analyze the experimental structures for workability, understanding that our every movement is a form of the Scientific Method.</p> <p>Come experience the disciplines of civil, mechanical, electrical, hydraulic, and chemical engineering, all through building anatomy in clay. “The Mind Cannot Forget What the Hands Have Learned.”™</p>	Jon Zahourek, Zahourek Systems, Inc.
	3:00 pm – 4:14 pm	(054) Speaking Up	<p>There are times when we all feel uncomfortable speaking up. Maybe it's because we are the “only” girl or minority in the room, or because we are afraid of being wrong or making a mistake. Negative self-talk can prevent us from stepping forward and speaking up – how do we overcome that? Learn strategies to help get out of your comfort zone, combat the negative self-talk, and be strong in who you are.</p>	Tola Begbaaji, Aptean
	4:15 pm - 5:30 pm	(033) Orthopedics In Action	<p>Biomechanics represents a unique learning opportunity to teach core mechanics concepts through the lens of anatomy and medicine, which may be more relatable to all students, but particularly underrepresented groups in STEM. Orthopedics In Action (OIA) is a set of standalone, hands-on lessons for middle and high school classrooms that are NGSS aligned and blend well with PLTW engineering and biomedical science curriculum. This workshop will introduce OIA lessons, provide strategies for classroom implementation, and present preliminary evaluative data on OIA effectiveness with students and teachers.</p>	Jenni Buckley, University of Delaware Amy Tauth-Nare, University of Delaware
Room 308	11:15 am – 12:15 pm	(177) Gateway Best Practices Round Robin	<p>Come join this interactive round robin style panel where audience members may join the panel to discuss best practices. The revolving panel will discuss best practices for teaching STEM in middle school, best practices for specific Gateway units including DM and AR, and best practices for implementing a thriving program.</p>	Vanessa Stratton, Project Lead The Way Audience Members

1:30 pm – 2:45 pm	(134) Counselor Super Heroes: With Great Power comes Great Responsibility	The professional school counselor role is critical to the success and sustainability of your PLTW program. This session will speak to school counselors, as well as anyone involved in a PLTW program at a school, to discuss how those influential staff members have a lot of power and responsibility in guiding all students to STEM. We'll share ways to talk about STEM with young people and parents, as well as considerations for school schedules and engagement with PLTW teachers to ensure knowledge of curriculum is shared.	Camille Sloan Schroeder, Iowa State University
3:00 pm – 4:15 pm	(131) Thinking Spatially: A fundamental engineering tool	This session will explore the fundamental skill of spatial visualization and how it affects a student's ability to succeed in the field of engineering. Data show that students in their first two years of college may not be successful in engineering due to their inability to think and reason spatially. In fact, research has shown that spatial ability is a predictor of success in all STEM areas. As a part of the ongoing initiative at University of Maryland, Baltimore County (UMBC) to improve the retention of freshman engineering students, the institution adopted the ENGAGE program, and the spatial visualization exam and class were implemented. Freshman UMBC engineering students were asked to take the spatial reasoning exam and were additionally identified as PLTW students. Furthermore, the session will cover a case study on thinking spatially was performed on PLTW Teachers at Core Training.	Jamie Gurganus, University of Maryland Baltimore County
4:30 pm - 5:45 pm	(162) Experience the New Design and Modeling	Dive into this hands-on session where we will discuss updates to the Design and Modeling Gateway unit and experience a new instant challenge. A question and answer period will conclude the session.	Vanessa Stratton, Project Lead The Way Matt Arnold, Project Lead The Way Joanne Donnan, Project Lead The Way Kristen Donlon, Project Lead The Way

Room 309-310	10:00 am – 11:15 am	(013) Corporate Engagement Opportunities Using the Innovation Portal	The Innovation Portal offers scalable opportunities to PLTW partners to engage their employees in meaningful roles that impact students. This presentation will outline two roles employees can immediately participate in, judging and collaborating. The session is designed for partner representatives to understand the experience they are encouraging employees to volunteer for. Time will also be available for networking between competition administrators and partner representatives.	Elliott Mork, Project Lead The Way
	11:15 am – 12:15 pm	(129) Engaging Science Students with Engineering Design	Engineering design is not just for PLTW classrooms! With the implementation of the Next Generation Science Standards in more and more states across the country, many districts and schools adopt it as a regular part of science instruction. How can engineering design unleash students' creativity for a more motivating and engaging classroom experience? Furthermore, how can teachers incorporate this process into an already jam-packed science curriculum? Learn how engineering design can energize your students in all science content areas in this interactive session, as you design and construct an innovative project to investigate Newton's Laws of Motion!	Kelly Garcia, Los Alisos Middle School
	1:30 pm – 2:45 pm	(075) How to Uncover Resources & Engage Partners Now	Would you like to know some sure-fire, easy ways to find resources for your PLTW program as well as ways to attract, intrigue, and excite potential PLTW partners? Come to this interactive session and learn about educational ecosystems and how they can help you uncover resources and engage partners to grow and sustain your PLTW program. We will explore ways to recognize and leverage personal, environmental, tangible and intangible strengths and resources. We will apply the engineering design process to develop, test, and evaluate different approaches to build and secure partnerships with industry leaders and potential funders and we will consider proven ways to uncover local, regional and national funding sources.	Rusti Berent, Ward's Science

	3:00 pm – 4:14 pm	(105) Hand of Grace- 3D Printed Prosthetics	PLTW Engineering students at Penn High School in northern Indiana designed, tested and 3D printed a prosthetic arm for a 9 year old girl. Experience the amazing journey that changed the lives of a little girl, a family, a school and a community. Find out how you could implement a project like this in your school. Teachers will see an example and resources for prosthetic projects. Administrators and directors will find cross-curricular examples and see community involvement. Come see another example of PLTW teachers and students making a difference and enriching our students' education.	Josiah Parker, Penn High School Jim Langfeldt, Penn High School Chris Dell, Student Adam Dewey, Student Nathan Petrie, Student
	4:15 pm - 5:30 pm	(113) Active Recruiting: Get Girls into Computer Science & Engineering	As high school teachers of computer science and engineering, we all know of the exciting careers available for our students. However, we rarely recruit female students into our classes to get them started in those careers, perhaps due to misconceptions and a sense that girls do not belong. This workshop provides a useful, usable structure and resources for developing plans and messages to attract girls into high school CS and engineering classes. Through brief lectures and hands-on activities, You will learn to create successful approach to attract girls and keep track of their results, using free, research-based resources from the National Center for Women & IT.	Lecia Barker, University of Texas at Austin
Room 312	10:00 am – 11:15 am	(030) Planning & Hosting Female STEM Outreach Events	Michelle Bunn (Associate Affiliate Director at San Diego State University) will discuss their outreach events held at their PLTW affiliate institutes that engage female students in STEM activities and careers. They will also discuss how to plan similar female STEM outreach events in your area, including budgeting for each event, recruitment of students and volunteers, and involvement of college students & community partners.	Michelle Bunn, San Diego State University
	11:15 am – 12:15 pm	(095) Using PLTW to Create Transformational Change	Skills shortages in STEM occupations are obvious, but deliberate steps to truly build a STEM talent pipeline are few. To achieve this, East Power Kentucky Cooperative (EPKC) and PLTW launched the STEM Transforming Eastern Kentucky (STEM-TEK) initiative, which aims to create a future workforce ready for high-skill, high-wage jobs. STEM-TEK was featured at CGI (Clinton Global Initiative) America, and selected by President Bill Clinton as an exemplary approach to addressing critical domestic challenges. We hope that our story will inspire others in the room to take action.	Mark Harrell, Project Lead The Way Brad Thomas, East Kentucky Power Cooperative

1:30 pm – 2:45 pm	(021) Industry and education speak the same language.	Can industry and education speak the same language? Hear Mike Smitley of DENSO Manufacturing describe the numerous benefits his company and other Southwest Michigan manufacturers have seen from rallying behind a STEM/PLTW county-wide implementation model. Come learn how Kalamazoo County in Michigan works to build a pipeline of thousands of young people by investing in a long-term workforce solution, and how you can too. Great things happen when industry and education collaborate with a common purpose!	Jason Luke, Kalamazoo RESA Mike Smiley, DENSO Manufacturing Michigan, Inc. Deb Kolberg, Kalamazoo RESA
3:00 pm – 4:15 pm	(208) How to engage and educate your state representatives as PLTW Champions	Through this session, attendees will learn the importance of engaging state-level policymakers with the work of PLTW. Attendees will learn effective strategies to engage state legislators and the benefits of doing so. Legislators may act as advocates and assist PLTW in eliminating barriers to high-quality teaching.	Ed Dennis, Project Lead The Way
4:15 pm - 5:30 pm	(157) WHeW! Women Helping Women: Developing a network for PLTW Women and students	Given: 1. Women bring unique perspectives to a technical workplace. 2. Attracting and retaining women in a technical workplace (including the PLTW classroom) is difficult. 3. Networking has been shown to significantly increase the chance for landing a successful job and advancing in a successful career. 4. PLTW is the premier provider of STEM curriculum. 5. Successful implementation of PLTW curriculum necessitates interaction of teachers across the nation, beginning in Core Training. Conclusion: Form a network of women professionals from the staff, master teachers, teachers, associate professors, and alumni to assist and support the young women of PLTW.	Teri Fleming, Trumbull Career and Technical Center

Date: Wednesday, March 23, 2016

Room	Time	Post As	Session Description	Presenters
White River Registration	24 Hour Hold – 3:00 pm	DO NOT POST: Certiport Sign-in	Certiport Sign in	TBD
Griffin Hall	7:45 am – 8:45 am	Environmental Sustainability Activity (Students Only)	High school students only. Experience a hands-on activity from PLTW's Environmental Sustainability course.	Ken Kessenich
White River Ballroom A-B	7:45 am – 8:45 am	(066) Getting Started With PLTW Launch	Are you a coordinator, administrator or teacher just getting started with PLTW Launch in your district? If so, this session is for you! You will get an overall view of the PLTW Launch program and goals. We discuss ideas to consider when selecting teachers of Launch, ideas for implementing the professional development model, material organization suggestions, and community partnerships ideas. We conclude with a hands-on experience from one of the modules and with your burning questions.	Stephanie Valli, Ritenour School District
	9:00 am – 10:00 am	(012) Developing A Stronger PLTW Program	During the midst of a significant recession, Kennedy High School, a rural low-income high school in Oregon, implemented both PLTW pathways with less than a \$1000 start-up budget. Within two years, a teacher-led grassroots effort helped secure approximately \$225,000 in funding to become one of the best rural STEM programs in Oregon. Come listen to three different PLTW teachers and hear how they overcame various obstacles and built strategic community partnerships during the implementation of three different schools in Oregon.	Jeffrey Crapper, Beaverton Health and Science School David Valenzuela, Madison High School Carlie Harris, Beaverton Health and Science School
	10:15 am - 11:15 am	(185) The Virtual Hub of STEM Premier	STEM Premier is a platform where students, from middle school to college level, can build virtual portfolios to showcase their STEM skills and talents, access scholarships and connect with colleges, companies and organizations.	Channelle Ragland, STEM Premier Shea Tighe, STEM Premier

White River Ballroom C-D	7:45 am – 8:45 am	(o81) Add Some Sizzle to STEM: Transforming education through K-16 Collaboration	Do your students see themselves in a STEM career? Do they get a chance to get hands-on experience? As more STEM jobs come open – and go unfilled – we need to inspire the next generation with real-world, hands-on activities. We will help you add some sizzle to your STEM program through a live case example of how Purdue Polytechnic addressed this challenge by integrating STEM and Liberal arts classes. Learn how the PLTW curriculum aligns with many career paths for students and uncover resources to continue to create student success models.	Terri Schulz, Project Lead The Way Kevin Kaluf, Purdue University
	9:00 am – 10:00 am	Challenge Based Learning: Take Action and Make a Difference	Challenge Based Learning (CBL) is an engaging multidisciplinary approach that encourages learners to leverage the technology they use in their daily lives to solve real-world problems. CBL is collaborative and hands on, and asks students to work with peers, teachers, and experts in their communities and around the world to ask great questions, develop deeper subject area knowledge, accept and solve challenges, take action, and share their experiences. Because Apple products are designed with these core ideas in mind, they make Challenge Based Learning more accessible for teachers to integrate into their lessons.	Representatives from Apple

	10:15 am - 11:15 am	(166) Realizing ROI by Implementing Certification Autodesk in the Classroom (Repeat)	<p>Competency-based education is on the rise and teachers often feel the pressure to provide measurable outcomes in the classroom. With more focus on the “return on investment” for specific courses, it’s time to consider certification. Certification is a proven method of assessing a student’s knowledge, while also teaching invaluable skills that prepare students for the future. Students who earn certifications demonstrate to employers and colleges they possess verifiable, industry demanded skills.</p> <p>According to the National Center for Education Statistics, a record 21.6 million students attended American colleges and universities in fall 2013, constituting an increase of about 6.2 million since fall 2000. However, despite increasing college enrollment many employers question whether academic institutions are adequately preparing today’s graduates for the competitive work environment. According to “Education to Employment, Designing a System that Works, “ 72 percent of education institutions believe recent graduates are ready for work, but only 42 percent of employers agree.</p> <p>Certification helps ensure that students know how to apply technology in real-world business situations, not just how to use it socially. Individuals who certify open doors to career opportunities by demonstrating verifiable, marketable skills required by today’s workplace.</p>	Mike Maddock, Certiport
White River Ballroom E	7:45 am – 8:45 am	(146) Sneak peek at Computer Science Applications. What is the value of adding the CS pathway instead of tucking it under Engineering?	The session will contain information about the PLTW Computer Science program’s Computer Science Applications (CSA) course and how the demand for computer science is outpacing all other STEM fields during the next five years. The session will explore the current curriculum’s problem-based approach, as well as the timeline for future courses in the pathway. The session will also provide insights into the new partnership between PLTW and The College Board, covering how The College Board’s AP testing fits with the PLTW curriculum and expands career and college opportunities for students.	Kevin Clevenger, Blue Springs High School Lewis McKenzie, North Kansas City High School

	9:00 am – 10:00 am	Getting Started with AP + PLTW	Students and schools across the U.S. now have greater access to college and career readiness opportunities thanks to an unprecedented partnership between Advanced Placement (AP) and Project Lead The Way (PLTW). Join this session to learn how your students can earn recognition to signify their college and career readiness. During this session, we will share more information on the AP + PLTW program, discuss how to connect your AP and PLTW courses, and highlight student recognition opportunities.	Jasen Ritter, Senior Director of School Engagement, PLTW Claire Lorenz, Director, AP Outreach, Advanced Placement Owners: Dorothy Gorman & Stephanie Cox
	10:15 am - 11:15 am	(176) The Importance and Impact of Introducing Computer Science to Middle School Students	The U.S. Bureau of Labor Statistics projects that 50 percent of the 2.8 million job openings in STEM-related fields through 2018 will be for computer specialists and cites a critical need in more than 180 industries for people who have skills and expertise in software development, cyber-security, information technology and computer support. It's more important than ever to provide students with early access to computer science courses to prepare them for the increasingly technology-based economy. Join us to hear from middle school teachers, students, and industry leaders on the importance of introducing computer science to student as early as possible. During the session, ICS students also will share examples of their outstanding work and talk about the impact ICS has had on them.	Owners: Dorothy Gorman & Stephanie Cox

White River Ballroom F	7:45 am – 8:45 am	(093) Creating a Premier Program: Empowering Teachers Panel	Come learn how to best support PLTW Biomedical teachers within the classroom. Listen to a panel of master teachers and administrators from across the nation share their experiences teaching PLTW courses. Learn the unique needs of a PLTW teacher and how to support the development of a robust biomedical program. Panelists will offer advice on topics such as budget, equipment and supplies, ordering, class size and use of technology. We will take time for questions throughout the workshop.	<p>Carlie Harris, Beaverton Health and Science School</p> <p>Gina Greil, Wilmot Union High School</p> <p>Kathryn Eilert, Middleton High School</p> <p>Jennifer Doran, New London High School</p> <p>Lena Joch, Wilmot Union High School</p> <p>Michael Juech, Wilmot Union High School</p> <p>Jeff Crapper, Beaverton Health and Science School</p> <p>Joe McCollum, University High School</p> <p>Sherry Jackson, Caddo Kiowa Technology Center</p>
	9:00 am – 10:00 am	(087) LAUNCH at Midway!	Midway Elementary School of Science and Engineering, located in Anderson, South Carolina, is a K-5 magnet school that has been involved with PLTW since 2009. As the only school in its district to offer PLTW Launch, Midway provides a seamless transition to the district's middle and high school PLTW programs. Partnerships with Clemson University and Tri-County Technical College afford authentic STEAM learning opportunities, as representatives from these partnerships are also an integral part of the school community. Join this session to learn more about PLTW Launch and the successes and challenges of Midway's PLTW Launch implementation from the perspective of a teacher, an administrator, and school board representative.	<p>Sandy Bradhsaw, Midway Elementary School of Science and Engineering</p> <p>Gary Bruhjell, Midway Elementary School of Science and Engineering</p> <p>Rick Bradshaw, Anderson School District 5 School Board</p>
	10:15 am - 11:15 am	(069) PLTW all day	How do you take the PLTW modules and integrate them throughout the day in order to make the learning even more meaningful to students? We will explore PLTW modules and expand them to encompass the instructional day. We will take time to look at an academic day in a new way. We will cover CCS integration, close reading strategies, problem solving, standards of mathematical practice, design thinking and other 21 st century skills. We allow for discussion, questions, hands-on work and collaboration.	<p>Christina Adamson, Stone Ranch Elementary School</p>

White River Ballroom G-H	7:45 am – 8:45 am	(063) “Launch”ing into Biomedical	We introduce you to the Biomedical curriculum of Launch through the exploration of the 5 th Grade Module: Infection Detection. First, we explore transmission of infection, agents of disease, and mechanisms the body uses to stay healthy. Conclude with a hands-on fictional disease outbreak scenario, requiring participants to examine evidence to deduce the agent of infection, the likely source of the outbreak, and the path of transmission through a fictional scenario.	Chris Reynolds, Union Public Schools Kristen Robinson, Union Public Schools Suzanne Martin, Union Public Schools Aaron Parsons, Union Public Schools
	9:00 am – 10:00 am	(135) Empowering the Next Generation Leaders Through the HOSA–PLTW Partnership	You will identify key elements for integrating HOSA–Future Health Professionals instructional strategies into the PLTW Biomedical Science program. Evidence suggests students who are focused on finding the “right” responses have enhanced creativity and problem-solving abilities and are motivated to learn. Through this collaboration, HOSA members and PLTW students apply academic and technical knowledge, develop leadership skills, and expand career awareness opportunities in health and biomedical science professions. Learn how successfully affiliating a HOSA chapter and fully implementing HOSA strategies can add powerful engagement for your students and provide a successful recruitment tactic for your PLTW BMS program!	Nancy Allen, HOSA
	10:15 am - 11:15 am	Building the PLTW student experience of the future	As PLTW students and alumni, you have up-close experience with PLTW courses in the classroom, and now Project Lead The Way wants to hear from you! During this session, we will work in groups to discover more about your interests, how you decide what courses to take, what you liked and didn’t like about the courses, and what you wish you could have experienced or learned about. Your input will help us make the PLTW experience of the future even better for students like you.	Gaby Keefer, Project Lead The Way

White River Ballroom I-J	7:45 am – 8:45 am	(116) From Seed to STEM: Our PLTW Journey	What would prompt a high-performing, National Blue Ribbon School in rural Alabama to turn their world upside down and become a STEM school? By the way, 80% of the teachers are 40 or older! How did they begin? What motivated them? Where did the non-Title school find money? What did their training look like? How did the community respond? What were the benefits? What are the pitfalls? In this session the PLTW Lead Teachers and Principal of Barkley Bridge Elementary in Hartselle, Alabama outline their own STEM journey. Though their State test scores remained strong and their reputation remained solid, they saw the wave of change and chose to surf it rather than drown in it. And the students' performance? That's the best part!	Susan Hayes, Barkley Bridge Elementary School Kim Jared, Barkley Bridge Elementary School Angie Harris, Barkley Bridge Elementary School
	9:00 am – 10:00 am	(058) 21 st Century Skills: PLTW and Community Outreach	Learn how to use the PLTW curriculum to engage students in the 21 st century skills of critical thinking and problem solving, collaboration and leadership, adaptability and agility, initiative and entrepreneurship, effective oral and written communication, accessing and analyzing information, and finally curiosity and imagination. You will see how students master the content knowledge AND develop the important 21 st century skills needed for success in careers outside of the classroom. We allow you to experience firsthand lessons students have created utilizing PLTW curriculum and how they took these lessons to a new level of understanding and engagement.	Lori Egan, Northglenn High School
	10:15 am - 11:15 am	(158) Offering More PLTW Programs Equals More Opportunities	Administrators from three schools discuss the benefits to students and teachers when multiple PLTW programs are offered at a high school: Jim Mackin, principal of Hendrick Hudson High School in New York, George Phillips, supervisor of CTE Education at Washington County Public Schools in Maryland, and Kathleen Casey, principal of the all-girls Institute of Notre Dame in Baltimore that offers all three PLTW high school programs. Students create personalized programs of study by taking courses from multiple programs, students in different programs can work collaboratively on joint projects to enhance their learning, and teachers can coordinate and plan cross-disciplinary projects.	Jim Mackin, Hendrick Hudson High School Kathleen Casey, Institute of Notre Dame George Phillips, Washington County Public School District

Room 101-102	7:45 am – 8:45 am	(024) myPLTW Professional Development Beginner (Eventsforce)	Dive into this interactive BYOD (bring your own device) session on myPLTW Professional Development (Eventsforce). Learn how to effectively use the system to plan your event, register attendees, and leave with a completed event that you can use for your next PLTW event. This session focuses on the Affiliate experience in Eventsforce. If you do not have the required log in credentials and are an affiliate, please contact Affiliate Support.	Kate Sirk, Project Lead The Way
	9:00 am – 10:00 am	(150) myPLTW Professional Development Intermediate (Eventsforce)	Dive into this interactive BYOD (bring your own device) session on myPLTW Professional Development (EventsForce). Learn how to maintain your event and successfully retrieve reports. This session focuses on the Affiliate experience in EventsForce, and log in credentials are required. If you do not have log in credentials and are an affiliate please contact Affiliate Support.	Kate Sirk, Project Lead The Way
	10:15 am - 11:15 am	(124) FEMINEERS: A Model Program Inspires Girls in STEM	California State Polytechnic University Pomona developed a unique school-based, creative robotics and wearable technology program to engage girls in STEM. The skills students in the Femeineers program learn include programming, teamwork, public speaking, and creativity. This interactive session will highlight strategies to replicate this model program, attract and retain girls from underrepresented backgrounds, and prepare them for college and STEM careers. You will learn about the hands-on curriculum for the Femeineers program and how the curriculum works in a variety of schools, then brainstorm ideas for how to bring this curriculum to your school.	Cordelia Ontiveros, California State Polytechnic University
	9:00 am – 10:00 am	Digital Electronics with myDAQ and Multisim	From smart phones to appliances, digital circuits are all around us. Find out how the Digital Electronics provides the foundation for students who are interested in electrical engineering, electronics, or circuit design. Join NI to learn about industry-leading technologies used in the Digital Electronics course, including NI myDAQ and Multisim circuits teaching environment. Get an overview of new and advanced features for analog and digital circuits education. Target: New and Existing Digital Electronics Instructors	Owners: Bryan Kelley, Matt Cohen, Thomas Shepard

	10:15 am - 11:15 am	Vernier for Biomedical Science Courses	Students gain a deeper understanding of physiology concepts when using sensors to collect their own physiological data. This combined demonstration and hands-on workshop will use a variety of sensors with LabQuest Mini and Logger Pro to conduct experiments from the Project Lead The Way Biomedical curricula (PBS, HBS, and MI).	Representatives from Vernier Owners: Bryan Kelley, Matt Cohen, Thomas Shepard
Room 105	7:45 am – 8:45 am	(155) Economic Development with PLTW partner success in a small rural Kansas community	Fluency in STEM subjects and their practical application help students understand the world around them and solve problems through critical thinking, discovery, and innovation. In Kansas, as in states all over the nation, need better public-private partnerships to build STEM literacy and 21 st century skills in the workforce. Through USD 465, Winfield Economic Development (WED), and local business and industry partnerships, one small Kansas community built a \$600,000 STEM Center for Innovation where students, community members, and industries are part of a STEM collaboration for global leadership. The center took a transformational approach to help eliminate the distance between the classroom and the real world. In this session, you'll hear how the community achieved success by improving their teaching of STEM courses, by collaborating with business and industry partners, and by connecting students with real world and project-based learning experiences.	Carey Lybarger, Winfield High School
	9:00 am – 10:00 am	(076) Clinical Internships for Biomedical Sciences	Internships provide seniors in the PLTW BMS capstone course Biomedical Innovations the opportunity to use the sequential knowledge gained from the BMS Pathway and observe how the learning from the classroom transfers into the workforce. Working with industry and community, PLTW BMS allows teachers to collaborate with industry and establish meaningful long-term relationships to develop internship programs. Through development of clinical internships for over 14 years, I understand the logistics necessary to produce an effective program.	Ellie Vandiver, Project Lead The Way

Room 106	9:00 am – 9:30 am	(035) The Profound Experience of the Independent Project	Students can create and experience amazing things when working in real-world scenarios for the Independent Project in Biomedical Innovation. Although the task may seem daunting, the process is invaluable in teaching students the application of the skills they have been learning and practicing in their PLTW courses. This session will show how a high school student can create a profound career experience on his or her own when the Independent Project is properly designed and supported by a school utilizing the PLTW Biomedical Science curriculum.	Joshua Clemmer, Bel Air High School Michael Burke, Bel Air High School
	10:15 am - 11:15 am	(085) Motivating the Elementary Classroom	Let's "Ted Talk" about the importance of PLTW STEM Elementary curriculum to our youngest learners. Time spent cultivating the interests and inquisitive nature of elementary students pays dividends for the student during module work and carrying forward in their education. Both our students and teachers feel great pressure to prepare for statewide assessments. While these assessments have a place in education, better ways exist to motivate and teach students core skills in all curricula. We will look at basic module and subject matter for Engineering, Biomedical, and Computer Science across grades K-5.	James Nair, Lake Ave Elementary Amy Shaw-Tingley, Lake Ave Elementary
Room 107	7:45 am – 9:00 am	Certiport Training Group 12	<p>Teachers have an opportunity to take the Autodesk Certified User Exam and Autodesk Certified Professional Exam. Certiport officials will proctor the testing site. Take the time to test your skills, and hopefully, walk away with your software certification.</p> <p>You may select up to one (1) session per day and up to two (2) sessions total during PLTW Summit 2016:</p> <ul style="list-style-type: none"> • One (1) for your Certified User Exam • One (1) for your Certified Professional Exam <p>You must pass the Certified User Exam before you may take the Certified Professional Exam.</p>	Representatives from Certiport
	9:15 am – 10:30 am	Certiport Training Group 13		
	10:45 am – 12:00 pm	Certiport Training Group 14		
	11:30 am – 12:45 pm	Certiport Training Group 8		

Room 201-202	7:45 am – 8:45 am	(045) Seeing the Future: Engaging Students	Engaging and retaining urban students in engineering and science courses requires a roadmap. This session will focus mainly on the role mentorship plays in the classroom, and one school's journey introduced this system into a freshman classroom and continuing through senior year. We discuss and outline successes and failures, and investigate successful PLTW programs and classes from other schools and district.	Christopher Wyant, East High School
	9:00 am – 10:00 am	(188) PLTW Program Equipment & Supplies 2.0: from cumbersome to streamlined	A sneak peek into PLTW's Purchasing Guide solution to assist schools with identifying their unique supplies needs and simplifying the ordering process	Nick Gentry, Project Lead The Way Matt Cohen, Project Lead The Way
Room 203-204	7:45 am – 8:45 am	(042) Girls and STEM	What is the source of the STEM gender gap, and what can teachers do to help? I will share results of research on this gap, conducted during my all-girls engineering course this year and supported by current and relevant academic research. The 25-year gender gap in engineering endures, almost without change, while the gap in computer sciences is getting larger. Recent research into the "leaky pipeline" of women in STEM fields suggests that girls make career plans before college. Thus, we must reach girls and help them to realize their potential during their elementary, middle and high school years.	Mariel Kolker, Morristown High School
	9:00 am – 10:00 am	(079) Tips and Tricks for Assessments & Feedback	This session will provide a glimpse into the collaborative environment of the New Trier High School STEM/Project-Lead-The-Way Classroom. I will provide an overview of the paperless assessment and feedback process for student assignments using Canvas, as well as how to accomplish this seamlessly in a 1:1 environment. You will see a wide array of ways to document student learning and understanding: Math, Labs, Robotics, Small Group Projects, Entire Class Projects and Participation Tracking. You will also see how to leverage Canvas in grading these various artifacts while maintaining the human connection.	Nathan Silvers, New Trier High School

	10:15 am - 11:15 am	(028) Create Community Connections to Empower Students	This session will present a variety of ways to enhance PLTW courses through community involvement. Topics will include how to: motivate and educate teachers to find community connections, engage students in biomedical science through professionals in the field, inspire students to think beyond the grade or assignment and envision what they can do with the field experience, empower students to continue their community involvement through volunteer work and networking, and focus on necessary presentation and interpersonal skills. We discuss specific examples, distribute templates for community communication, and examine possible issues in this informative session.	Kelly Bozoian, The McKenzie Center for Innovation and Technology Rebecca Schini, Greenfield-Central High School
Room 205	7:45 am – 8:45 am	(136) WhiteBox Learning demonstration	Engage your students in the complete Engineering design process. WhiteBox Learning is a standards-based, web-based STEM/Engineering curriculum and learning system that allows students to engineer and simulate their designs virtually, before building.... Students in grades 6-12 can compete virtually, from any browser, 24/7, all around the world... how cool is that?! STEM Applications include Gliders2.0 (part of the GTT Flight and Space unit), Dragster2.0 (an option in the GTT D&M unit), and GreenCar2.0 (an option in the GTT ST unit). Additional STEM Apps include Prosthetics2.0, Structures2.0, Rockets2.0, MousetrapCar2.0, Rover2.0, SurvivalShelter2.0, and KidWind 2.0. A fully-integrated LMS is included, that measures the link between content knowledge and knowledge application. In this session, WhiteBox will demonstrate Gliders 2.0 and Dragster 2.0, and will take all questions and suggestions.	Graham Baughman, WhiteBox Learning
	9:00 am – 10:00 am	(123) Baseball as a Metaphor for Learning PHP	Metaphors are powerful learning agents. We use the game of baseball as a metaphor to structure and segment the topic into discrete, bite-sized pieces. Teachers, and by extension students, will benefit by learning how to make this topic more accessible. If you teach php/MySQL, or want to learn it, this session is for you. Participants should come prepared to work on a laptop, install the needed text editor, and access the internet.	Bill Petry, Rangeview High School

	10:15 am - 11:15 am	(204) Building an Effective PLTW Launch Program	This PLTW Launch workshop will focus on providing instructional strategies based on best practices and project-based instruction with an emphasis on teaching students identified as English-limited learners and children in a dual-language learning environment. This session will focus on ways to motivate and support these young students in a STEM learning environment.	Sonia M. Cuellar, Bellaire Elementary School
Room 206	7:45 am – 8:45 am	(011) What does innovation look like?	Since opening the Owensboro Innovation Academy, we have been continually learning what innovation looks like for high school students. By partnering with other school districts, community members, and post-secondary institutions, we think we are on the right path and are continuing to grow every day. Without buy-in from students and teachers, however, the strides we've made in innovation would not be possible. In this session, you will have the opportunity to hear from students on how schools and community leaders can foster their innovation and what we at OIA are doing to help students on this quest.	Mark Moore, Owensboro Innovation Academy Stephanie Gray, Owensboro Innovation Academy
	9:00 am – 10:00 am	(186) STEM Premier: Connecting to STEM Talent	STEM Premier is an online platform where colleges and companies can easily identify the emerging students with interests and skills in critical areas of discipline such as STEM and directly connect with them for recruitment.	Casey Welch, STEM Premier Donald Tylinski, STEM Premier
	10:15 am - 11:15 am	(052) Why Computer Science? It's a Math Thing!	Learn about misconceptions and realities of computer science education, why it is important to encourage students to take CS courses, and how PLTW's computer science pathway cultivates student interest and preparation in CS. This session will also provide attendees with a great introduction to PLTW's Computer Science and Software Engineering (CSE).	Timothy Phelps, Lakeland Junior Senior High School
Room 208	7:45 am – 8:45 am	(195) The New Generation of STEM The Development of a STEM Program: Today's Students are Tomorrow's Innovators	From Costa Rica to Iceland, STEM programs continue to increase their dedication to make their schools globally competitive while preparing students for the competitive job market. Step inside our world to see how a PLTW STEM program was launched, how it grew and how it developed a major partnership. Look inside of the Pickerington Biomedical Science program and how we got the opportunity to design and build a classroom inside of The OhioHealth Pickerington Medical Campus. The discussion will include the importance of branding strategy and creating a buzz in your community. Learn about the student opportunities and the importance of relying on student leadership to generate ideas. Join us to discuss why some STEM programs are gaining STEAM.	Andy Harris, Pickerington Local School District

	10:15 am - 11:15 am	(073) Taking Design to the Real World: Prosthetic Design	In this hands-on session, you will work in small groups to explore prosthetic design through developing a basic understanding of limb development. You will brainstorm, sketch and create a prototype of a missing limb for a patient who has suffered a debilitating amputation. Participants are encouraged to take this activity a step further and bring their laptop loaded with Autodesk Inventor so that they can extend the activity by designing their prototype in Autodesk Inventor once they have a prototype created.	Sherri Mode, Hadley Middle School
Room 301	7:45 am – 8:45 am	(151) Preparing Students with Summer Camps	How do you prepare incoming students for the rigors of and perspective provided by the PLTW curriculum? Why not start before the school year even begins? A summer orientation camp for incoming freshmen is a great way for students to settle into the program, learn lab skills, practice PLTW conventions, and even have an early exposure to the real-world career connections of the PLTW curriculum.	Joshua Clemmer, Bel Air High School Michael Burke, Bel Air High School Erica Harris, Bel Air High School
	9:00 am – 10:00 am	Acing the Interview	What are your greatest strengths? Where do you see yourself in five years? Why are you interested in this job? These are among the many questions you will face as you interview for college or jobs. During this session, PLTW's team of human resources professionals will share best practices for acing an interview and feeling confident in your answers. You will have an opportunity to practice new skills through mock interviews, receive feedback from PLTW experts, and leave with tips and tools to help you prepare for your next interview.	Kristy Applegate, Project Lead The Way
	10:15 am - 11:15 am	(064) Launch to Engineering; A K-12 Success Story	Our school district started with PLTW Engineering and PLTW Biomedical Science in one high school eight years ago. Since then, we have added PLTW Launch, PLTW Gateway, and CSE, bringing access to PLTW's curriculum to nearly all 16,874 students in the district. This came about in large part due to the tremendous support from our community's educational foundation, a nonprofit organization whose mission is to enhance the education excellence of our school district. Come learn from our inspiring story of growing a thriving K-12 program across our district, and hear about how we've overcome some challenges along the way.	Thomas Pachera, Skyline High School Bill VanLoo, A 2 STEAM @ Northside

Room 302-303	9:00 am – 10:00 am	(034) Discover the Hidden Powers of LMS Collaboration	Unleash the power of collaboration through the Canvas LMS and take your PLTW class to a transformative level. Maximize the intellectual capabilities of you and your students through the use of discussion boards and peer-reviewed assignments. Learn how simple collaboration strategies can truly engage, inspire, and empower you and your students to produce mastery level work. The PLTW Learning Management System has the infrastructure to connect PLTW teachers in a way that diminishes our miles of separation and augments our abilities and skills. Discover how big and small the PLTW community really is.	Devin McKinnon, Eisenhower High School Angelica Gunderson, Los Alisos Middle School
	10:15 am - 11:15 am	(023) Self paced PLTW classes using the LMS	Maintaining engagement can be a challenge when students within the same classroom learn at different rates. The myPLTW Learning Management System (LMS) is a useful tool to address this challenge by turning your classroom into an independent, self-paced environment that is beneficial to every student. Implementing this approach can help motivate students, develop college and career readiness skills, and help all students deepen their learning and master standards without creating superficial learners. This session will demonstrate the self-paced classroom from a PLTW Biomedical Science point of view but can be applied to all PLTW programs.	Chad Shelly, Colonel Richardson High School
Room 304-305 - 306	7:45 am – 8:45 am	Foot Orthosis Instant Design Challenge	Middle school students only. Dive into this hands-on session where you will experience a new instant challenge. You will find that there are many ways to solve a problem. In this challenge you will design, test, and build a model solution for patients with a movement disorder called cerebral palsy. You will put on your engineering hats to document and explore the steps you use to solve this problem.	Vanessa Stratton
	9:00 am – 10:00 am	(133) PLTW School Administrator Best Practices	This session showcases what school administrators need to know about PLTW, from the importance of the LMS to how to support their PLTW teachers at Core Training – what works, what doesn't and dynamic implementation while still upholding high PLTW quality. At the last summit, we presented a similar session to PLTW SLAD to show school administrators how they could do this during Core Training. Furthermore, we used this session in our summer "Administrator Training" for the past two years.	Camille Sloan Schroeder, Iowa State University

	10:15 am - 11:15 am	(137) Leveraging the State Conference for State PLTW Network Engagement, Development and Growth	A state conference should enhance the development and growth of a PLTW-engaged network within your state, as well as make strong connections to out-of-network schools. We share Missouri's successful model, and examples of 4 years of successful outcomes. Ask your burning questions at the end of the presentation.	Ben Yates, Missouri University of Science and Technology
Room 308	7:45 am – 8:45 am	(047) Overcoming “See, Hear, and Speak No Engineering”	In this session, we will share our experiences of working with students needing special attention to reach their potential in life, while highlighting the joy these students find as they realize they can succeed and have a bright future in fields that they may have never before considered. Attendees will develop awareness of students who have special educational challenges and can benefit greatly from the PLTW program and curriculum.	William Small, McKinley Senior High School Chad Weaver, McKinley Senior High School
	10:15 am - 11:15 am	(074) STEM Conservationist	Many schools, administrators, and teachers have the desire to offer additional STEM engagement for students but are not sure how to do it or where to begin. The amazing outcomes from delivering Project Lead The Way curriculum in the classroom can instill some hesitation to create “homegrown” STEM experiences. Will it be good enough? Will the kids learn it as well? Recognize that PLTW modules and pathways not only promote student learning, but also enhance teacher instructional strategy. Those skills, along with community stakeholders and higher ed partners, need to work in concert to form a functioning STEM ecosystem. Learn how to become a productive conservationist of this fragile ecosystem, and STEM will thrive.	William Murphy, Union Public Schools
Room 309-310	9:00 am – 10:00 am	(193) How to Share Your PLTW Experience on Social Media and Attract Advocates	You will walk away understanding the current social media landscape, with tips on how to share your PLTW experiences with others, invite others to engage with their social media efforts, and attract advocates through social media to support their PLTW program(s).	Joseph Parker, Project Lead The Way Cameron Halcomb, Project Lead The Way

	10:15 am - 11:15 am	(110) Collaborations with Launch: CTE in the Ele. Class	This presentation will outline how high school PLTW programs – specifically PLTW Biomedical Science and PLTW Engineering – can collaborate with PLTW Launch programs. The session will include specific examples from schools in the district of Scott County, Kentucky – a PLTW Certified School District. Elkhorn Crossing School formed a collaboration in spring 2015 with Lemon’s Mill Elementary to help build a STEM pathway for all K-12 students. High school PLTW teachers and students regularly collaborate with the new PLTW Launch teachers and students. The goal of this presentation is to discuss how administration, teachers, and students can establish an exciting learning environment for many levels of learners, maximize resources, and develop a STEM-centered focus for the entire school district.	Julye Adams, Elkhorn Crossing School
Room 312	7:45 am – 8:45 am	(153) Higher Education’s Impact and Expectations	A panel of experts from Oklahoma State University College of Engineering, Architecture and Technology (CEAT) will cover expectations for incoming higher education students. The session will delve into PLTW’s impact on students pursuing higher education, as well as those entering the workforce. In addition, the session will review the complete cycle/pipeline of PLTW and show the impact of PLTW Professional Development on students’ college and career readiness.	Brandy Mays, Oklahoma State University John Nazemetz, Oklahoma State University Ed Kirtley, Oklahoma State University Raman Singh, Oklahoma State University
	9:00 am – 10:00 am	(118) Large scale STEM events	Carrie Rogers-Whitehead knows event planning, bringing in thousands of youth since 2013 to various large-scale events with the Salt Lake County Library system. One of these is a successful STEM Hackathon with numerous partners. Carrie has learned that the pathway from an idea to execution has many steps, but the payoff is substantial. In this session, she shares her tips from PR, social media, forming partnerships and sponsorships, logistics, and more to create your own signature STEM event and to push your organization’s STEM initiatives.	Carrie Rogers-Whitehead, Salt Lake County Library

	10:15 am - 11:15 am	(197) Stimulating Engagement in Bio Med Science: New Activities from ANATOMY IN CLAY® Learning System	Get hands-on at our ANATOMY IN CLAY® Learning System Workshop during PLTW Summit 2016! You will build parts of the human body using modeling clay and MANIKEN® models, and in doing so, experience cause and effect, problem-solving skills, and ways of teaching to all learning styles. This innovative system embodies a pedagogy of collaborative teaching, with both peers and instructors alike. Our workshops combine PLTW disciplines that meet and exceed the current Human Body Systems Curriculum. We allow students to learn and love science like never before. "The Mind Cannot Forget What the Hands have Learned." TM	Teri Fleming, Trumbull Career and Technical Center
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