PLTW Conference Sessions (10-10 revised)

– Registration Rubin Campus Center
Light refreshments available

8:30 am – 9:30 am – Welcome and Opening Speakers
Opening Speakers: Kayleah Griffen, WPI Student
Laurie Leshin, WPI President
David Dimmett, PLTW Sr. VP

9:40 am – 10:25 am – Concurrent Sessions

AP+PLTW Student Recognition [HL 102]
Jennifer Caccavale, Carol Malstrom
Are your high school students getting the full recognition and credit that is available when they take PLTW courses? This session describes all of the opportunities and wraps up with a Q&A.
Intended Audience - Counselors and Administrators

Student Voices: How PLTW has been an Influencer [HL 116]
Madison Oppenheim, Alexa Smith, Nicole Stover, Ceilidh Higgins, Alyson Rankin & Will Woodring of Medway
PLTW students, from Medway high school, will share their perspectives on how the classes they have taken had positive outcomes and provided them with important skill sets.
Intended Audience - Program Administrators, Prospective Schools

STEM Premier: Get Connected [SL 104]
Channelle Ragland
As a national partner of PLTW, STEM Premier is a free service to any student age 14-21 that is rostered through PLTW. Learn how students can use STEM Premier to build a comprehensive digital portfolio showcasing their talent, receive guidance, discover scholarships, and get noticed by organizations who can directly connect with them to start a conversation.
Intended Audience - ALL

High-Quality College and Career Pathways in Massachusetts [SL 115]
Bob LePage

Massachusetts recently launched the "High Quality College and Career Pathways" initiative to significantly expand student access to high-quality career pathways with a focus on underserved populations, particularly in STEM fields. Come learn how high school PLTW programs can be a part of this exciting initiative.
Intended Audience - ALL

Group Dynamics: Setting Middle School Students up for Success! [SL 105]
Eric Kolifrath, Ashley Puopolo

This session will present some ideas and focus on different methods and tools that can be used to help students succeed in your Gateway courses.
Intended Audience - Gateway Teachers

Completely "VEXed" [SL 305]
Rob Smith

This session will explore the two types of VEX kits required for PLTW Launch. Teachers will get to experience the kits as the elementary students do.
Intended Audience - Launch Teachers

Design & Modeling: What's New and How to Best Implement the Update? [SL 402]
Steve Thering

Are you trying to figure out the pacing of the new Design & Modeling course? Looking for some teaching tips to help you be as effective as possible? This Gateway session is for you.
Intended Audience - Gateway Teachers

Cooking the Books: Data Manipulation [SL 406]
Brett Kisker

Leave this session actually understanding and being able to use Excel. Included are some useful techniques in Excel and Google Sheets that will help save time in the classroom.
Intended Audience - Gateway, Engineering, Biomedical Science, Computer Science Teachers

Quick wins to boost End of Course Scores [SL 411]
Matt Connors, Ryan Dailey

Do you wish that your high school students performed better on the PLTW End of Course Exam? Focused on helping your students earn college credit? Come and learn some of the approaches that have proven successful.
Intended Audience - Engineering Teachers

Hot Topic: Building a K-12 Biomedical Science Program [HL 102]
Carol Malstrom

The Biomedical Sciences are incorporated throughout the PLTW curriculum. Come and learn how the concepts are incorporated from K-12 and how to build the program in your school or district.
Intended Audience - Program Administrators, Prospective Schools

Project Lead The Way 101 [HL 116]
Mary Laturnau

New to PLTW? This session will introduce you to PLTW, a non-profit organization that engages and empowers students and teachers. Learn about the K-12 Biomedical Science, Computer Science, and Engineering Pathways.
Intended Audience - Program Administrators, Prospective Schools

Using the New myPLTW Interface for Program Administrators [HL 218]
Terri Shultz

Program administrators will learn the basics of how to effectively use the new PLTW interface for managing the curriculum and students. Explore the different support offered through the network Communities.
Intended Audience - Program Administrators, Prospective Schools

High School Biomedical Science: Making it Work Well [SL 104]
Alison Riordan

PLTW's high school Biomedical Program is a rich exploration for students in becoming college and career ready. There are many connections to traditional science pathways with this program that are worthy of consideration.
Intended Audience - Program Administrators, Prospective Schools

Getting the most out of the new myPLTW Interface for Teachers [SL 105]
Brett Kisker, Suzie Snow

Teachers will learn the basics of how to effectively use the new PLTW interface for managing the curriculum and students. Explore the different supports offered through the network communities.
Intended Audience - Launch, Gateway, Biomedical Science, Computer Science, Engineering Teachers

Models of Engineering Implementation/Sequencing in CVTE Schools [SL 115]
Matt Connors, Mike Garland

Different models of successful implementation in Career Vocational Technical Education (CVTE) Schools will be shared. Learn how you can best integrate PLTW in your vocational program.
Intended Audience - Program Administrators, Prospective Schools

Launch Teacher Networking Session [SL 305]
Stephanie Cunningham
Looking for a new tip or technique to use? Curious about other parts of the program? Attend a program specific open session to meet and network with other teachers doing what you are doing.
Intended Audience - Launch Teachers

Engineering Notebooks: Paper and Pencil vs Digital [SL 402]
Ashley Puopolo, Steve Thering
Documenting the engineering design process is a critical component to a successful Gateway program. Come learn two different approaches from teachers and decide for yourself which is better -- paper and pencil or digital.
Intended Audience - Gateway, Biomedical Science, Computer Science, Engineering Teachers

Engineering Design & Development Showcase: Getting Students Ready [SL 406]
Ryan Dailey
Prepare your students to professionally present and discuss the capstone projects. Proven strategies and steps will be shared with session attendees that they can use with their students.
Intended Audience - Biomedical Science, Computer Science, Engineering Teachers

Getting up to Speed with Introduction to Engineering Design [SL 411]
Todd Rathier
Are you trying to figure out the pacing? Looking for some teaching tips to help you be as effective as possible? This Engineering session is for you.
Intended Audience - Engineering Teachers

11:30 am – 12:15 pm **– Lunch and Awards**
Recognition of Outstanding Massachusetts PLTW Programs - Massachusetts Secretary of Education, Jim Peyser

12:25 pm – 1:10 pm **– Concurrent Sessions**

STEM Premier: Get Connected [HL 102]
Channelle Ragland
As national partner of PLTW, STEM Premier is a free service to any student age 14-21 that is rostered through PLTW. Learn how students can use STEM Premier to build a comprehensive digital portfolio showcasing their talent, receive guidance, discover scholarships, and get noticed by organizations who can directly connect with them to start a conversation.
Intended Audience - ALL

PLTW and the MA STE Framework [HL 116]

Alison Riordan, Carol Malstrom

Dive into the PLTW curriculum to see how its multidisciplinary programs align to standards and provide schools with flexibility to tailor to local context. Participants will see examples of alignments and learn how to get more information about standards and alignments.

Intended Audience - Program Administrators, Prospective Schools

Hot Topic: Administrative Levers to Enhance your PLTW Program [HL 218]

Gabby Abrams, Kathy Martin, Jason Colombino

Answer your questions, share your experiences, and brainstorm administrative moves to enhance PLTW programming. Administrators will have the chance to discuss common programming questions around scheduling, course sequencing, providing honors credit/weighting, and driving student enrollment.

Intended Audience - Program Administrators, Prospective Schools

Hot Topic: Building a K-12 Computer Science Program [SL 105]

Karine Laidley

PLTW has a full computer science pathway K-12. The program offers rigorous hands-on learning for students and comprehensive training for teachers. Come see how to build the program in your school or district.

Intended Audience - Program Administrators, Prospective Schools

Computer Science Teacher Networking Session [SL 115]

Joe Mazzone

Unanswered questions?? Looking for a fabulous new tip or technique to use? Curious about other parts of the program? Attend a program specific open session to meet and network with other teachers doing what you are doing.

Intended Audience - Computer Science Teachers

Hands-on Glimpse of Launch in the Classroom [SL 305]

Stephanie Cunningham

After a brief introduction to the Launch program, teachers will get an opportunity to be the "student" and work through part of a PLTW lesson.

Intended Audience - Launch Teachers

Gateway Teacher Networking Session [SL 402]

Ashley Puopolo, Eric Kolifrath

Unanswered questions?? Looking for a fabulous new tip or technique to use? Curious about other parts of the program? Attend a program specific open session to meet and network with other teachers doing what you are doing.

Intended Audience - Gateway Teachers

Engineering Teacher Networking Session [SL 406]

Matt Connors, Ryan Dailey, Mike Garland, Todd Rathier

Unanswered questions?? Looking for a fabulous new tip or technique to use? Curious about other parts of the program? Attend a program specific open session to meet and network with other teachers doing what you are doing.

Intended Audience - Engineering Teachers

Biomedical Science Teacher Networking Session [SL 411]

Nancy Rozak

Unanswered questions?? Looking for a fabulous new tip or technique to use? Curious about other parts of the program? Attend a program specific open session to meet and network with other teachers doing what you are doing.

Intended Audience - Biomedical Science Teachers

1:20 pm – 2:05 pm **– Concurrent Sessions**

School Grants to Support PLTW Adoption in Massachusetts [HL 116]

Calli Mason, Katherine Skrivan, Mary Laturnau

Considering implementing PLTW in your school? Come learn about a grant opportunity intended to help schools with program adoption.

Intended Audience - Program Administrators, Prospective Schools

Launch Your Elementary Computer Science Program [HL 218]

Karine Laidley

Are you ready to engage your elementary students in hands-on problem solving and creative learning? Join us to learn more about our Elementary program in general and its K-5 computer science modules in particular. Experience what it's like to be a computational thinker and participate in a hands-on group activity used in the curriculum.

Intended Audience - Program Administrators, Prospective Schools

Quick wins to boost End of Course Scores [SL 115]

Matt Connors, Ryan Dailey

Do you wish that your high school students performed better on the PLTW End of Course Exam? Focused on helping your students earn college credit? Come and learn some of the approaches that have proven successful.

Intended Audience - Engineering Teachers

Connecting PLTW Students to Industry Through Student Events [SL 104]

Faith McDuffie, Jamie DePace, Kristie DeJesus

Give your students the chance to interface with industry professionals. This session will share the exciting opportunities that are being organized by Mass STEM Hub and offer tips from teachers and industry professionals about how to utilize the events.

Intended Audience - Teachers

What Materials do I really need for IED and POE?! [SL 105]
Todd Rathier

The practicality of course materials; this session will cover what is needed and what extras are a benefit to have.
Intended Audience - Engineering Teachers

Real world use of 3D Printers [SL 402]
Matt Weaver

Take the 3D printer beyond the curriculum and show students how computer generated models are useful in real world applications.
Intended Audience - Teachers

1:20 pm – 3:00 pm – Double Block, Hands-on Teacher Sessions

If you build it, they will come! – Double Session [SL 305]
Rob Smith

If you can build it, so can your students!! Experience a VEX project build in PLTW Launch to see and feel the course from the "student" perspective. Can you finish the entire build?? Optional: bring your own VEX kit so that you can take your fully built project back to your classroom.
Intended Audience - Launch Teachers

Practice, Practice: Using Vernier Sensors and Arduino. – Double Session [SL 406]
Jackie Bonneau

This hands-on session will have you using Vernier sensors and Arduino to measure a variable and correct the condition. You will use free software to program the Arduino to take in input from the sensor, create the condition, and trigger the output.
Intended Audience - Teachers

What's this new Computer Science for Innovators and Makers? – Double Session [SL 411]
Steve Thering

After a brief introduction to the new CSIM Gateway Unit, teachers will get to work through one of the activities of the units to see and feel the course from the "student" perspective.
Intended Audience - Teachers

Life after the Birthday Project… How to use the CMOD to make it through Section 3 of Digital Electronics. – Double Session [SL 407]
Mike Garland

Bring your common Digital Electronics issues, Multisim errors and any problems you commonly encounter during Section 3 to this hands-on practice with CMOD projects, including troubleshooting tips, and which projects to use the CMOD for. Talk about common issues

encountered with the Paper Jam, Phone Number, and Tollbooth projects, including wiring projects and using the PLTW curriculum to explain State Machines.
Intended Audience - Engineering Teachers

– Concurrent Sessions

School Grants for Expanding Existing PLTW Programs in Massachusetts [HL 116]
Calli Mason, Katherine Skrivan, Mary Laturnau
      Are you a current PLTW school looking to increase student participation or add a new PLTW program? Come learn about a grant opportunity intended to help schools grow and expand high-quality PLTW programs.
Intended Audience - Program Administrators

How Can Your Students Get College Credit for Taking PLTW Classes in High School? [HL 218]
Julie Chapman, Martha Cyr
      Are your high school students getting the full recognition and credit that is available when they take PLTW courses? This session describes all of the opportunities and wraps up with a Q&A.
Intended Audience - Counselors

Getting up to Speed with Principles of Engineering [SL 104]
Todd Rathier
      Are you trying to figure out the pacing? Looking for some teaching tips to help you be as effective as possible? This Engineering session is for you.
Intended Audience - Engineering Teachers

Medical Detectives 101: Practices, Logistics, Techniques, and Workflow [SL 105]
Eric Kolifrath
      Are you trying to figure out the pacing? Looking for some teaching tips to help you be as effective as possible? This Gateway session is for you.
Intended Audience - Gateway Teachers

Automation & Robotics: Getting up to Speed [SL 402]
Ashley Puopolo
      Are you trying to figure out the pacing? Looking for some teaching tips to help you be as effective as possible? This Gateway session is for you.
Intended Audience - Gateway Teachers