

Illinois PLTW Counselor & Administrator Conference Agenda - November 6, 2015

8:15-9:00 am Registration and Coffee (Lobby and Salon BC)

9:00 -10:00 am OPENING GENERAL SESSION (Salon A)

Welcome and Introductions--*Steve Parrott, ISBE Consultant and PLTW/Engineering State Leader*

PLTW Curriculum and Program Overview --*Sena Cooper, PLTW Director of School Engagement/Illinois*

My PLTW STEM Story— Student/Alumni Reflections on the PLTW Experience

Kelsey Philippe, Lincoln MS/District 57 Gateway; Prospect HS PLTW Class of 2018

Alex Straczek, Lincoln MS/District 57 Gateway; Prospect HS PLTW Class of 2015; Rose-Hulman Mechanical Engineering Class of 2019

Angela Wiscons, St. Charles East HS PLTW Class of 2014; U of Illinois at Urbana-Champaign Mechanical Engineering Class of 2018

Cristian Valadez, Barrington HS PLTW Class of 2012; U of Illinois at Chicago Electrical Engineering Class of 2016

Patrick Slade, Libertyville HS PLTW Class of 2012; U of Illinois at Urbana-Champaign Mechanical Engineering Class of 2016

Taylor Leahy, Oswego East HS PLTW Class of 2008; U of Illinois at Urbana-Champaign Agricultural and Biological Engineering Class of 2012 and MS Class of 2014; Environmental Engineer, CDM Smith, Chicago

Illinois 10-Year PLTW School Recognition—*Brenda Pacey, U of Illinois PLTW Affiliate Director*

10:10-11:00 am Concurrent Sessions #1

11:10-12:00 Concurrent Sessions #2

**12:00-1:00 pm LUNCHEON GENERAL SESSION (Salons A, B, C)
“P-20 STEM Collaborations”**

Buffet Lunch and Illinois PLTW Student Exhibits

Speaker: Chancellor Michael Amiridis, University of Illinois at Chicago



Michael Amiridis assumed the role as chancellor of the University of Illinois at Chicago on March 16, 2015. As Chancellor, he oversees a nearly \$2 billion budget, 12,000 faculty and staff, and 15 academic colleges, including the nation's largest medical school. Prior to arriving at UIC, Chancellor Amiridis served as executive vice president for academic affairs and provost at the University of South Carolina at Columbia. He earned his Ph.D. in chemical engineering from the University of Wisconsin at Madison.

1:10-2:00 pm Concurrent Sessions #3

2:10-3:00 pm Concurrent Sessions #4

3:00 pm Evaluations; Certificates of Attendance, PDH's; Door Prizes (Lobby)

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Concurrent Session 1 - 10:10 - 11:00 AM

E = Elementary, MS = Middle School, HS = High School, A = Administrator, C = Counselor, P = Partnership

Presentation Title: **Engineering Design and Development (EDD) Competition**
Description: Overview of the 2016 Illinois Engineering Design Competition open to all Illinois EDD students via the Innovation Portal. The competition is designed to recognize and reward outstanding student projects and highlight the importance of engineering design and problem solving in STEM education. Prizes totaling \$5,000 will be awarded! See the winning projects from the Inaugural 2015 competition.
Presenters: Sena Cooper, PLTW; Mark Schroll, PLTW Innovation Portal; Stephen Buchs, Woodstock HS; Bartlett HS EDD Students
Room: LaGrange
Target Audience: HS, A, C, P

Presentation Title: **Launch Elementary Curriculum**
Description: Overview of the PLTW K-5 Elementary STEM curriculum's 24 modules (4 per grade level) aligned to national standards, 12 of which are new for 2015-16, focusing on the human body and computer science.
Presenters: Illinois Master Teachers Kathy Feser and Emily Schaefer
Room: Elmhurst 3
Target Audience: E, A, C, P

Presentation Title: **PLTW Biomedical Science Program: Just What the Doctor Ordered**
Description: Overview of the high school Biomedical Science program and how the program is different from traditional science courses.
Presenters: Terry Aukeman, PLTW Associate Director of School Engagement for Northern Indiana; Rick Burchell, Director, Fox Valley Career Center; Sheilagh DeLorenzo, Jeff Robinson, Huntley HS
Room: Elmhurst 4
Target Audience: HS, A, C, P

Presentation Title: **High School Engineering Curriculum Foundation Courses - Intro to Engineering Design and Principles of Engineering (IED/POE)**
Description: See the Engineering Foundation courses in action.
Presenters: Illinois Master Teachers Don Whitman, Corey Duzan, Ken Albert, Paul Zurek; Michael DeWees, St. Charles East HS
Room: Salon D
Target Audience: HS, A, C, P

Presentation Title: **Middle School Gateway Curriculum Foundation Units - Design and Modeling and Automation and Robotics (DM/AR)**
Description: See the Gateway Foundation courses in action.
Presenters: Illinois Master Teachers Patrick Kirk, Kathryn Rabolt, Elizabeth Straczek, Sydney Schuler
Room: Salon E
Target Audience: MS, A, C, P

Presentation Title: **PLTW Support Resources for District Administrators, Teachers, and Students**
Description: Introduction of My PLTW and other online resources, including Learning Management System, Student Rostering, End-of-Course Assessment, Purchase Manual/technology support, standards alignment tools, and STEM Premier.
Presenters: Illinois Master Teachers Jason Huber and Paul Zurek
Room: Salon F
Target Audience: E, MH, HS, A

Presentation Title: **PLTW Computer Science Curriculum - Intro to Computer Science and Computer Science Engineering (ISC/CSE)**
Description: Introduction of the new PLTW Computer Science pathway, with special focus on demonstrations of ICS (for MS or HS implementation) and CSE, the first two courses available in the evolving program.
Presenters: Master Teacher Mike Crowhurst (Pulaski HS, KY) and CSE pilot teacher Angie Hankes (Niles North HS)
Room: Salon G
Target Audience: MS, HS, A, C, P

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Concurrent Session 2 - 11:10 - 12:00 PM

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- Presentation Title:** **Getting Started with PLTW - or Adding New Pathways to Existing PLTW Programs**
Description: Administrators of districts/schools interested in implementing PLTW programs (as well as those from schools/districts intending to add to their current PLTW STEM pathways) will learn more about next steps for implementation. Focus will be on PLTW Agreement and Program Requirements, overall planning issues, program startup grant opportunities and available collaborative program consulting. Administrators are encouraged to attend an earlier session on specific program curriculum.
Presenters: Sena Cooper, PLTW Director of School Engagement/Illinois
Room: LaGrange
Target Audience: A
- Presentation Title:** **Project Lead the Way Assessment System - 2015-16 School Year Updates**
Description: Assessments play an important role in providing meaningful feedback to students, teachers, administrators, and PLTW. PLTW is moving to a balanced assessment system, with both summative and formative assessments. The HS End of Course assessment is a key part of the summative system and will be highlighted in this session. The HS End of Course assessment is a key part of the summative system and will be highlighted in this session.
Presenters: Terri Schulz, PLTW Senior Director of School Engagement, Midwest Region; Brenda Pacey, U of Illinois
Room: Wheaton
Target Audience: HS, A, C
- Presentation Title:** **Trends and Tools for Counselors**
Description: This session will share ISBE and Curriculum Revitalization updates on STEM advising as well as Counseling Tools on ilcte.org, and facilitate counselor/advising discussions related to PLTW program and student support. Participants will receive access to MyCAERT online tools.
Presenters: Leah Brock, Counselor Facilitator, ISBE Curriculum Revitalization Project
Room: Elmhurst 3
Target Audience: E, MS, HS, A, C
- Presentation Title:** **Introduction to the APB Instructional Approach - Activity, Project, and Problem-Based Framework for K-12 PLTW Curriculum**
Description: Interactive session will introduce just-released PLTW professional development workshop resources for exploration and development of conceptual understanding of the APB approach through reflective practice, video presentation and APB course content mapping.
Presenters: Brenda Pacey, U of Illinois PLTW Affiliate Director and Illinois Master Teachers
Room: Elmhurst 4
Target Audience: E, MS, HS, A, C
- Presentation Title:** **High School Engineering Curriculum Specialty Courses Overview**
Description: Digital Electronics (DE), Civil Engineering and Architecture (CEA), Computer Integrated Manufacturing (CIM), Aerospace Engineering (AE), and the new Environmental Sustainability (ES).
Presenters: Illinois Master Teachers Gary Cotie, Jason Huber, Michael Karasch, Stephen Buchs
Room: Salon D
Target Audience: HS, A, C, P
- Presentation Title:** **Middle School Gateway Curriculum Specialty Units**
Description: Energy and the Environment (EE), Green Architecture (GA), Medical Detectives (MS), Science of Technology (ST), Magic of Electrons (ME), Flight and Space (FS).
Presenters: Illinois Master Teachers Patrick Kirk, Kathryn Rabolt, Elizabeth Straczek, Sydney Schuler
Room: Salon E
Target Audience: MS, A, C, P
- Presentation Title:** **PLTW Support Resources for District Administrators, Teachers, and Students**
Description: Introduction of My PLTW and other online resources, including Learning Management System, Student Rostering, End-of-Course Assessment, Purchase Manual/technology support, standards alignment tools, and STEM Premier.
Presenters: Illinois Master Teachers Jason Huber and Paul Zurek
Room: Salon F
Target Audience: E, MS, HS, A
- Presentation Title:** **ISBE College and Career Readiness Division STEM CTE Pathways**
Description: The Illinois STEM CTE Pathway Courses are designed to support college and career readiness for all students. A partnership between the State of Illinois' education and LEA, the Illinois STEM CTE Pathways supports local programs that empower students to explore their academic and career interests. ISBE's CTE-CIP Course listings related to PLTW course implementation in Biomedical and Engineering will be discussed.
Presenters: Steve Parrott, ISBE Consultant and PLTW State Leader
Room: Salon G
Target Audience: MS, HS, A, C

Concurrent Session 3 - 1:10 - 2:00 PM

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Presentation Title: **Successful K-12 Collaborative PLTW Program Planning Snapshots**
Description: Representatives of districts/schools which have implemented more than one PLTW program and/or one program on a large scale across a district share their experiences—Launch, Gateway, Engineering in one small charter school cluster setting; large Biomed program joined by a new, growing Engineering strand in one HS; multi-building K-12 implementation; and Engineering and Gateway program implementation collaboration on a multi-district wide scale with strong community college and business community support.
Presenters: Sena Cooper, PLTW Director of School Engagement, Facilitator; Dawn Sandoval, Principal, Catalyst Maria Charter School; Shelly Kish, Associate Principal, Huntley HS; Michael DeWees, PLTW teacher, St. Charles D303; Martha Eldridge-Stark, Executive Director, NSERVE
Room: LaGrange
Target Audience: E, MS, HS, A, C, P

Presentation Title: **Engaging Special Populations Students in the Technology and Engineering Education Classroom**
Description: Session focuses on resources and strategies developed by the Illinois State University's Special Populations and CTE project. Session introduces special populations groups, shares data about special population students in Illinois, and provides resources available to technology and engineering education teachers.
Presenters: Sally Arnett-Hartwick, Illinois State University
Room: Elmhurst 3
Target Audience: MS, HS, A, C, P

Presentation Title: **Is Your School Ready for AdvancED STEM Recognition?**
Description: PLTW schools involved as members of the AdvancED school improvement network are invited to become familiar with AdvancED's recently piloted K-12 STEM Certification process, as complementary to the PLTW HS program certification process.
Presenters: Scott Davidson, Senior Education Innovation Specialist, AdvancED
Room: Elmhurst 4
Target Audience: E, MS, HS, A,

Presentation Title: **AP + PLTW Partnership**
Description: Project Lead The Way has announced a partnership with the College Board to recognize students who participate in one of three pathways—Engineering, Biomedical Science, and Computer Science—involving PLTW foundation and specialization courses, along with one or more AP courses. This session will provide an overview to this new collaboration.
Presenters: Effie Rouse, Director K-12, Midwest Regional Office, College Board; Terri Schultz, Senior Director of School Engagement, Midwest Region
Room: Salon D
Target Audience: HS, A, C

Presentation Title: **NGSS and the PLTW Curriculum - Standards Alignment**
Description: All PLTW curriculum courses/units are aligned to the Next Generation Science Standards. This session focuses on selected Elementary Launch, MS Gateway, and HS Principles of Engineering examples of how the PLTW curriculum design aligns to the Standards.
Presenters: Illinois Master Teachers Emily Schaefer, Sydney Schuler, and Paul Zurek
Room: Salon E
Target Audience: E, MS, HS, A, C

Presentation Title: **Diversity and Gender Equity Opportunities in PLTW STEM Programs**
Description: Panelists share experiences—Women in math; action research to recruit and retain more Hispanic students in HS PLTW courses; career opportunities and role models for recent STEM graduates—and invite audience discussion.
Presenters: Dara Randerson, Senior Project Manager, ComEd, facilitator; Amy Frankel, Associate Professor of Mathematics, Waubesa College; Erica Tuke, PLTW Teacher, Highland Park HS; Taylor Leahy, Environmental Engineer, CDMSmith
Room: Salon G
Target Audience: E, MS, HS, A, C, P

Concurrent Session 4 - 2:10 - 3:00 PM

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- Presentation Title:** **Q and A adn Assistance from Sena Cooper**
Description: Individual and small group discussion/consulting for PLTW program planning.
Presenters: Sena Cooper, PLTW Director of School Engagement/Illinois
Room: LaGrange
Target Audience: E, MS, HS, A, C, P
- Presentation Title:** **Project Lead the Way Assessment System - 2015-16 School Year Updates**
Description: Assessments play an important role in providing meaningful feedback to students, teachers, administrators, and PLTW. PLTW is moving to a balanced assessment system, with both summative and formative assessments. The HS End of Course assessment is a key part of the summative system and will be highlighted in this session.
Presenters: Terri Schulz, PLTW Senior Director of School Engagement, Midwest Region; Brenda Pacey, U of Illinois PLTW Affiliate Director
Room: Wheaton
Target Audience: HS, A, C
- Presentation Title:** **Roundtable Discussion Topics**
Description: Informal Round Table topic discussions about topics of common interest, including but not limited to: K-12 PLTW collaborative efforts; Career Center/Feeder HS PLTW collaborative planning; Counselor best practices for student recruitment and advising; Technology troubleshooting; Biomedical Sciences; Gateway; Launch; Computer Science; Engineering; Environmental Sustainability; Special event and competition sponsorships; OR invite attendees to join you for discussion of a shared topic of interest!
Room: Elmhurst 3
Target Audience: E, MS, HS, A, C, P
- Presentation Title:** **High School PLTW Certification Planning**
Description: Information work session for representatives of high school Engineering and Biomedical Sciences programs which are offering three or more courses.
Presenters: Brenda Pacey, U of Illinois PLTW Affiliate Director
Room: Elmhurst 4
Target Audience: HS, A, C, P
- Presentation Title:** **Math in Action in the HS PLTW Classroom - An Overview for Counselors and Administrators**
Description: Examples from several HS PLTW courses are shared.
Presenters: Bob Becker, U of Illinois Chicago PLTW Affiliate Professor; Dara Randerson, Senior Project Manager, ComEd
Room: Salon D
Target Audience: HS, A, C
- Presentation Title:** **Math in the Middle School PLTW Gateway Classroom: An Overview for Teachers, Counselors, and Administrators**
Description: Examples of math in action in the Gateway curriculum.
Presenters: Elizabeth Straczek, Gateway Master Teacher
Room: Salon E
Target Audience: MS, A, C, P
- Presentation Title:** **University Engineering and Engineering Technology Program Updates**
Description: Representatives of U of Illinois Chicago, U of Illinois Urbana-Champaign, Northern Illinois University share news about current and emerging undergraduate engineering and STEM higher education opportunities.
Room: Salon F
Target Audience: HS, A, C, P
- Presentation Title:** **Building Successful Community Partnerships**
Description: Panelists share examples of local partnership teams; use of STEM Premier for student internship opportunity support; business/industry grants to PLTW programs; industry involvement in STEM student outreach activities.
Presenters: Bob Bloompott, Illinois Central College, Facilitator; Gary Cotie, Bartlett HS; Jason Huber, Woodstock HS; Michael DeWees, St. Charles East HS; Jim Nelson, Vice President, Illinois Manufacturers Association
Room: Salon G
Target Audience: E, MS, HS, A, C, P

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8:15 - 9:00 AM Registration and Refreshments in Lobby and Salon BC

	9:00-10:00	10:10-11:00 Session 1	11:10 - 12:00 Session 2	12:00 - 1:00 Exhibits	1:10 - 2:00 Session 3	2:10 - 3:00 Session 4
Salon A	Opening General Session			Luncheon General Session		
LaGrange		Engineering Design and Development EDD Competition	Getting Started with PLTW or Adding New Pathways to Existing PLTW Programs		Successful K-12 Collaborative PLTW Program Planning Snapshots	Q and A and Assistance from Sena Cooper
Wheaton			Project Lead the Way Assessment System - 2015-16 School Year Updates (repeated Session 4)			Project Lead the Way Assessment System - 2015-16 School Year Updates
Elmhurst 3		Launch Elementary Curriculum	Trends and Tools for Counselors		Engaging Special Populations Students in the Technology and Engineering Education Classroom	Roundtable Discussion Topics
Elmhurst 4		PLTW Biomedical Science Program: Just What the Dr. Ordered	Introduction to the APB Instructional Approach - Activity, Project, and Problem-Based Framework for K-12 PLTW Curriculum		Is Your School Ready for Advanced STEM Recognition?	High School PLTW Certification Planning
Salon D		High School Engineering Curriculum Foundation Courses - Intro to Engineering Design and Principles of Engineering (IED/ POE)	High School Engineering Curriculum Specialty Courses Overview		AP + PLTW Partnership	Math in Action in the HS PLTW Classroom -- An Overview for Counselors and Administrators
Salon E		Middle School Gateway Curriculum Foundation Units - Design and Modeling and Automation and Robotics (DM/AR)	Middle School Gateway Curriculum Specialty Units		NGSS and the PLTW Curriculum - Standards Alignment	Math in the Middle School PLTW Gateway Classroom: An Overview for Teachers, Counselors, and Administrators
Salon F		PLTW Support Resources for District Administrators, Teachers and Students	PLTW Support Resources for District Administrators, Teachers and Students (repeat of Session1)			University Engineering and Engineering Technology Program Updates
Salon G		PLTW Computer Science Curriculum - Intro to Computer Science and Computer Science Engineering (ISC/CSE)	ISBE College and Career Readiness Division STEM CTE Pathways		Diversity and Gender Equity Opportunities in PLTW STEM Programs	Building Successful Community Partnerships

3:00 PM

Lobby - Evaluations, Attendance Certificates, ISBE Prof Development Hours (PDH), Door Prizes