Track 1: College Readiness and Support in STEM and Transition to College	Track 2: The STEM Gap: Representation, Access and Retention in STEM	Track 3: Higher Education STEM-Improved Learning though Teaching and Communities	Track 4: Industry & Technology Partnerships Improve STEM Education
Break-out Session 1: 10:10 a.m. to 11:00 a.m.			
Student Technology Access in an Urban STEM High School: The Missing Variable Brian L. Sersion, Cincinnati Public Schools and Douglas M. Stevens, University of Cincinnati and Cincinnati Public Schools Paper Presentation	**Identification of Strategies that Overcome Barriers to Women and Minorities in STEM** A. A. Ilumoka, University of Hartford Paper	**Interdisciplinary Service Learning: Two Approaches to Solving One Problem** Maleka P. Hashmi and Kitrina M. Carlson, University of Wisconsin-Stout Paper	**Industrial and STEM Partnership Creates Engineering Student Leaders** Bruce DeRuntz et al.. Southern Illinois University-Carbondale Paper
High Performance Math: College Ready and Transition to College Wendy Zinn, San Bernardino Community College District and Craig Reisgen, High Performance Math Paper	**A Comparison of Epistemological Beliefs of African American Engineering Students** Bethany King Wilkes, Oklahoma State University Paper Presentation	**Lyman Briggs College: An Innovative Living-Learning Community for STEM Education** Ryan D. Sweeder and Aaron M. McCright, Michigan State University Paper Presentation	**Seeing the Forest for the Trees – An Industry & Academic Partnership** Michael R. Bowman and Glendali Rodriguez, University of Wisconsin-Stout Paper

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Break-out Session 2: 11:10 a.m. to 12:00 p.m.			
Inspiring and Engaging the Next Generation in STEM Through PLTW and REAL Cordelia Ontiveros and Elena Alvarez, California State Polytechnic University, Pomona-College of Engineering Paper Presentation	**Applied Universal Design for Learning in STEM Education** Kevin W. Tharp, Renee Howarton, Dean Wirtanen, Glendali Rodriguez and Xuedong (David) Ding, University of Wisconsin-Stout Paper Presentation	**Organizational Learning in STEM Education Contexts: Analyzing the "Stickiness" of High Impact Practices** Jo Ann Oravec et al. University of Wisconsin at Whitewater Paper	**Building STEM Partnership Teams in Suburban Districts** Christopher Reis, School District of Kettle Moraine (WI) Paper Presentation
Using Hands-on Robotics Projects to Engage and Strengthen High School Students Participation in STEM Education Andy S. Zhang et al. , New York City College of Technology of CUNY Paper Presentation	**Creating a Pipeline: An Analysis of Pre-College Factors of Students in STEM** Erica Harwell and Derek A. Houston, University of Illinois at Urbana-Champaign Paper	**Improving Mathematics Success Through Enhanced Support Services** Alexander Basyrov, Christopher P. Bendel, Seth Dutter and Benjamin F. Jones, University of Wisconsin-Stout Paper	**Collaborative Educational Experiences through Higher Education-Industry Partnerships** Thomas E. Pinelli, Langley Research Center(NASA) and Cathy Hall, East Carolina U. Paper Presentation
Luncheon Keynote: Baldrige, STEM Engagement and Learning Communities For Handout, Click HERE			

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Break-out Session 3: 1:35 p.m. to 2:25 p.m.			
Using Cognitive Acceleration Materials to Develop Pre-service Teachers' Reasoning and Pedagogical Expertise Nathan Moore and Dennis Poirier, Winona State University, and Jacqueline O'Donnell, Rochester STEM Academy Paper **Leveraging Simple Problems to Introduce Engineering Principles and Ways of Thinking** Kenneth Welty and David Stricker, University of Wisconsin-Stout Paper	**The STEPS Difference: 16 Years of Attracting Girls to Careers in Science, Technology, Engineering & Mathematics (Includes Tour of STEPS summer program)** Brenda S. Puck and Wendy R. Stary, University of Wisconsin-Stout Paper	**An ABC Sampler of Best Practices: NSF STEM Scholar Program at UW Platteville** Lisa M. Landgraf, Tammy Salmon- Stephens and Irfan Ul-Haq, University of Wisconsin-Platteville Paper Presentation **A Philosopher Looks at STEM Quality in Higher Education from a Liberal Arts and Sciences Perspective** Jeremy A. Gallegos, Friends University Paper	**Service Learning in Non-Majors Biology: Learning Outcomes and Lessons from the Field** Amanda M. Little, University of Wisconsin-Stout Paper Presentation **STUDENTfacturED : Providing a Way to "STEM" Out from Behind Old School Walls and Into the Real World Workplace** Vivian Ngan-Winward, Salt Lake Community College Paper Presentation

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Break-out Session 4: 2:40 p.m. to 3:30 p.m.			
The 4-H Tech Wizards Program: Engaging Underserved Youth in STEM Joanna M. Skluzacek et al. , University of Wisconsin-Extension. Paper **Dual Enrollment: A STEM/Engineering Initiative** Tecca Larrick, Kent State University-Tuscarawas Paper	**Diversity Awareness Education in an Introductory Seminar Course to Promote Social Responsibility** Krista C. James and Kitrina Carlson, University of Wisconsin-Stout Paper	**Preparing Students for STEM Research at the Lyman Briggs College** Ryan D. Sweeder and Philip E. Strong, Michigan State University Paper Presentation **Teaching History of Science and Technology at a Polytechnic Institution** David Seim, University of Wisconsin-Stout Paper	**Gesture-Based Software Development with Undergraduate Teams** Trudi Miller et al. University of Wisconsin-Stevens Point Paper

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