



# 122nd ASEE Annual Conference & Exposition

June 14 - 17, 2015  
Seattle, WA

*Making Value for Society*

## 2015 ASEE Annual Conference and Exposition Schedule

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### SAMUEL A MALACHOWSKY

#### Sunday June 14, 2015

- Sun 4:15 PM to 5:45 PM     **ASEE Division Mixer** ASEE Board of Directors  
Washington State Convention Center, Ballroom 6 A, B & C
- Sun 6:00 PM to 7:30 PM     **FOCUS ON EXHIBITS: Welcome Reception Sponsored By NCEES** ASEE Headquarters  
Washington State Convention Center, Exhibit Hall 4 ABC

#### Monday June 15, 2015

- Mon 7:00 AM to 8:30 AM     **Entrepreneurship & Engineering Innovation Division – Innovative Course Offerings** Entrepreneurship & Engineering Innovation Division  
Washington State Convention Center, Room 618  
Moderated by Dr. William M. Jordan P.E.

##### Presentations

- An Undergraduate Course in Intellectual Property Law**  
Dr. David G. Novick (University of Texas, El Paso)
- Improving Entrepreneurial Skills Through Problem-based Learning on Sustainability**  
Dr. David R Mikesell (Ohio Northern University), Dr. Taillian Chen (Gonzaga University), Prof. Jianfeng Ma (Aerospace and Mechanical Engineering, Saint Louis University), and Dr. Ahad Ali (Lawrence Technological University)
- Innovation Sandbox: Engineers in a Multidisciplinary Playground**  
Dr. Robert S Crockett (California Polytechnic State University), Dr. Jonathan L. York (Cal Poly San Luis Obispo), and Dr. Thomas M. Katona (California Polytechnic State University)
- Intrapreneurship: A Collaborative Learning Approach Between Industry and Academics to Build Critical Skills**  
Dr. Leo E. Hanifin (University of Detroit Mercy) and Dr. Ross A. Lee (Villanova University)
- Introducing Entrepreneurship and Innovation to Engineering Students Utilizing a Mobile App Development Tool**  
Dr. Rolfe Josef Sassenfeld (New Mexico State University) and Prof. Luke Nogales (New Mexico State University)
- The Product Archaeology Canvas**  
Prof. Joe Tranquillo (Bucknell University)



Mon 10:30 AM to 12:00 PM **FOCUS ON EXHIBITS: Brunch** ASEE Headquarters  
Washington State Convention Center, Exhibit Hall 4 ABC

Mon 12:30 PM to 2:00 PM **Flipped Electrical and Computer Engineering Classrooms 1** Electrical and Computer Division  
Washington State Convention Center, Room 310  
Moderated by Dr. Stephen M. Williams P.E.

Presentations

**A Hybrid Approach to a Flipped Classroom for an Introductory Circuits Course for all Engineering Majors**  
Dr. Steven G Northrup (Western New England University) and Dr. John J. Burke P.E. (Western New England University)

**Increasing Student Learning and Interest in a Flipped First-year Electrical and Computer Engineering Course**  
Dr. Kumar Yelamarthi (Central Michigan University) and Dr. Eron E. Drake (Central Michigan University )

**The Flipped Classroom: It's (Still) All About Engagement**  
Dr. Cory J. Prust (Milwaukee School of Engineering), Dr. Richard W. Kelnhofner (Milwaukee School of Engineering), and Dr. Owe G. Petersen (Milwaukee School of Engineering)

**Transition to New Personal Instrumentation in a Flipped Classroom**  
Prof. Kenneth A Connor (Rensselaer Polytechnic Institute), Dr. Dianna Newman (University at Albany/SUNY), Dr. Meghan Morris Deyoe (University at Albany, SUNY), and Jessica M Lamendola (University at Albany/SUNY)

Mon 12:30 PM to 2:00 PM **Online Teaching** Computers in Education Division  
Washington State Convention Center, Room 618  
Moderated by Dr. Patricia R Backer

Presentations

**An Empirical Study of Face-to-Face and Distance Learning Sections of a Core Telecommunication Course**  
Omaira Almatrafi (George Mason University), Dr. Khondkar Islam (Affiliation unknown), Dr. Aditya Johri (George Mason University), Mr. Karthik Nagappan (George Mason University), and Mr. Aref Modanlu (George Mason University)

**MOOC on a Budget: Development and Implementation of a Low-cost MOOC at a State University**  
Dr. Paul Morrow Nissenson (California State Polytechnic University, Pomona) and Dr. Angela C. Shih (California State Polytechnic University, Pomona)

**Teaching an Electrical Circuits Course Online**  
Dr. Carlotta A. Berry (Rose-Hulman Institute of Technology)

**The Myth of the Six-Minute Rule: Student Engagement with Online Videos**  
Dr. Larry Lagerstrom (Stanford University), Petr Johanes (Stanford University), and Mr. Umnouy Ponsukcharoen (Stanford University)

**Time Management Skills and Student Performance in Online Courses**  
Prof. Susan L. Miertschin (University of Houston (CoT)), Dr. Carole E. Goodson (University of Houston (CoT)), and Dr. Barbara Louise Stewart (University of Houston)

Mon 2:15 PM to 3:45 PM

**Entrepreneurship & Engineering Innovation Division – Program Development & Desired Outcomes** Entrepreneurship & Engineering Innovation Division  
Washington State Convention Center, Ballroom 3A  
Moderated by Dr. Thomas H. Byers

Presentations

**A Program to Develop Resiliency, Self-confidence, Intrinsic Motivation, and a Sense of Purpose in Young Adults**

Dr. Sergio William Sedas (Tecnológico de Monterrey)

**Effect of Comfort Zone on Entrepreneurship Potential, Innovation Culture, and Career Satisfaction**

Dr. Ikhlaz Sidhu (University of California, Berkeley) and Dr. Paris Deletraz (IE Business School)

**Innovative Confidence: What Engineering Educators Can Do and Say to Graduate More Effective Innovators and Intrapreneurs**

Dr. Leo E. Hanifin (University of Detroit Mercy) and Dr. Ross A. Lee (Villanova University)

**Instilling the Entrepreneurial Mindset by International Development Project Work**

Dr. Pritpal Singh (Villanova University) and Maria Virginia Moncada (Affiliation unknown)

**Stimulating and Supporting Change in Entrepreneurship Education: Lessons from Institutions on the Front Lines**

Elizabeth Nilsen (VentureWell), Ms. Victoria Matthew (VentureWell/Epicenter), Dr. Angela Shartrand (VentureWell), and Dr. Thema Monroe-White (SageFox Consulting Group)

**Students Seeking Different Paths to Entrepreneurial Education**

Dr. Sergio Celis (Universidad de Chile) and Dr. Aileen Huang-Saad (University of Michigan)

Mon 2:15 PM to 3:45 PM

**Faculty Development II** Educational Research and Methods Division  
Washington State Convention Center, Room 609  
Moderated by Ms. Kaitlin Mallouk and Dr. Jacqueline McNeil

Presentations

**I Like Therefore I Learn! Engineering Student Motivation to Learn in Their Least and Most Favorite Courses**

Dr. Louis Nadelson (Utah State University), Dr. Kimberly Kristine Hardy (Boise State University), and Dr. Dazhi Yang (Boise State University)

**Instructor Concerns and Use of Resources in the Development of Course Materials**

Grace Panther (Oregon State University), Dr. Devlin Montfort (Oregon State University), and Dr. Shane A. Brown P.E. (Oregon State University)

**Reflecting on Reflection: How Educators Experience the Opportunity to Talk About Supporting Student Reflection**

Dr. Jennifer A Turns (University of Washington), Dr. Brook Sattler (University of Washington), Dr. Lauren D. Thomas (University of Washington), Dr. Cynthia J. Atman (University of Washington), Mr. Richard Brown Bankhead III (Highline Community College), Dr. Adam R Carberry (Arizona State University), Dr. Kristine R. Csavina (Arizona State University, Polytechnic campus), Dr. Patrick Cunningham (Rose-Hulman Institute of Technology), Dr. Douglas Karl Faust (Seattle Central College), Dr. Trevor Scott Harding (California Polytechnic State University), and Dr. Ken Yasuhara (Center for Engineering Learning & Teaching, University of Washington)

**Sometimes, Faculty Matter: The Contribution of Faculty Support to Future Engagement**

Dr. Denise Wilson (University of Washington), Prof. Diane Carlson Jones Ph.D (University of Washington), Prof. Rebecca A Bates (Minnesota State University, Mankato), Dr. Tamara Floyd Smith (Tuskegee University), Dr. Melani Plett (Seattle Pacific University), and Dr. Nanette M Veilleux (Simmons College)

**Faculty Autonomy in Teaching Development Groups**

Prof. Jill K Nelson (George Mason University) and Dr. Margret Hjalmarson (George Mason University)

- Mon 4:00 PM to 5:00 PM     **FOCUS ON EXHIBITS: Summertime Social Sponsored By Columbia Video Network** ASEE Headquarters  
Washington State Convention Center, Exhibit Hall 4 ABC
- Mon 7:00 PM to 9:00 PM     **Purdue Sponsor Reception** Sponsored Sessions  
Sheraton Seattle, Grand Ballroom B

## Tuesday June 16, 2015

- Tue 8:45 AM to 10:15 AM     **Software Engineering Constituent Committee Technical Session 2** Software Engineering Constituent Committee Division  
Washington State Convention Center, Room 212  
Moderated by James Valino

### Presentations

#### **A Force-Directed Program Graph Visualizer for Teaching White-Box Testing Techniques**

Dr. Weifeng Xu (Gannon University), Mr. Aqeel Raza Syed (Gannon University), and Dr. QING ZHENG (Gannon University)

#### **Teaching Software-engineering Concepts through Industrially Used Tools Early in the Undergraduate Curriculum**

Dr. Temesghen Kahsai (Carnegie Mellon University), Dr. Liam O'Reilly (Swansea University), and Prof. Markus Roggenbach (Swansea University)

#### **Software Engineering Learning in HFOSS: A Multi-Institutional Study**

Heidi J. C. Ellis (Western New England University), Dr. Gregory W Hislop (Drexel University (Eng. & Eng. Tech.)), Dr. Sarah Monisha Pulimood (The College of New Jersey), Dr. Becka Morgan (Western Oregon University), and Dr. Ben Coleman (Moravian College)

- Tue 12:30 PM to 2:00 PM     **FOCUS ON EXHIBITS: Lunch & ASEE Division Poster Sessions: Sponsored by Northrop Grumman Corporation** ASEE Headquarters  
Washington State Convention Center, Exhibit Hall 4 ABC

- Tue 2:15 PM to 3:45 PM     **Software Engineering Constituent Committee Division Technical Session 1** Software Engineering Constituent Committee Division  
Washington State Convention Center, Room 206  
Moderated by QING ZHENG

### Presentations

#### **Spanglish Software Engineering: A Curious International Learning Experience**

Prof. Barbara Victoria Bernal (Kennesaw State University, Marietta) and Dr. Jeffrey Chastine (Southern Polytechnic State University)

#### **Introducing Software Specifications to an Undergraduate Software Engineering Program**

Dr. Anna Koufakou (Florida Gulf Coast University)

#### **Are Automated Assessment Tools Helpful in Programming Courses?**

Mr. Raymond Scott Pettit (Abilene Christian University), John D. Homer (Abilene Christian University), Ms. Kayla Michelle Holcomb (Abilene Christian University), Nevan Simone (Abilene Christian University), and Dr. Susan A. Mengel (Texas Tech University)



Tue 4:00 PM to 5:30 PM

**Entrepreneurship & Engineering Innovation Division – Epicenter Session** Entrepreneurship & Engineering Innovation Division  
Washington State Convention Center, Room 619  
Moderated by Dr. Sheri Sheppard P.E.

Presentations

**Developing Practice Fields for Interdisciplinary Design and Entrepreneurship Exposure**

Mr. Gregory Wilson II (University of Georgia)

**Exploring the Interest and Intention of Entrepreneurship in Engineering Alumni**

Miss Janna Rodriguez (Stanford University), Dr. Helen L. Chen (Stanford University), Dr. Sheri Sheppard (Stanford University), Prof. Larry Leifer (Stanford University), and Dr. Qu Jin (Stanford University)

**Exploring What We Don't Know About Entrepreneurship Education for Engineers**

Dr. Sheri Sheppard (Stanford University), Dr. Shannon Gilmartin (Stanford University), Dr. Helen L. Chen (Stanford University), Dr. Mary E. Besterfield-Sacre (University of Pittsburgh), Dr. Nathalie Duval-Couetil (Purdue University, West Lafayette), Dr. Angela Shartrand (VentureWell), Ms. Laurie Moore (National Center for Engineering Pathways to Innovation (Epicenter)), Mr. Emanuel Costache (SageFox Consulting Group), Ms. Andreea Mihaela Fintoc (Affiliation unknown), Dr. Qu Jin (Stanford University), Mr. Calvin Ling (Stanford University), Mr. Florian Michael Lintl (Stanford University), Dr. Leticia C. Britos Cavagnaro (Stanford University), Ms. Humera Fasihuddin (VentureWell), and Miss Anna K Breed (Affiliation unknown)

**Integrating Entrepreneurship into Capstone Design: An Exploration of Faculty Perceptions and Practices**

Ms. Victoria Matthew (VentureWell), Dr. Thema Monroe-White (SageFox Consulting Group), Ari Turrentine (VentureWell), Dr. Angela Shartrand (VentureWell), and Dr. Amit Shashikant Jariwala (Georgia Institute of Technology)

**Starter or Joiner, Market or Socially-Oriented: Predicting Career Choice Among Undergraduate Engineering and Business Students**

Mr. Florian Michael Lintl (Stanford University), Dr. Qu Jin (Stanford University), Dr. Shannon Gilmartin (Stanford University), Dr. Helen L. Chen (Stanford University), Dr. Mark Schar (Stanford University), and Dr. Sheri Sheppard (Stanford University)

**Using an Intention–Uncertainty Matrix to Categorize Entrepreneurship Education Offerings**

Mr. Jacob Dean Wheadon (Purdue University, West Lafayette) and Dr. Nathalie Duval-Couetil (Purdue University, West Lafayette)

## Wednesday June 17, 2015

Wed 8:45 AM to 10:15 AM

**Engineering Management Division Technical Session 5** Engineering Management Division  
Washington State Convention Center, Room 613  
Moderated by Dr. S. Jimmy Gandhi

Presentations

**Implementing Project Managers in the Software Engineering Classroom**

Mr. Samuel A. Malachowsky (Rochester Institute of Technology)

**Blended Classes: Expectations vs. Reality**

Dr. Susan L. Murray (Missouri University of Science & Technology), Mrs. Julie Phelps (Missouri University of Science & Technology), and Dr. Kelly L. Jones (Affiliation unknown)

**Improving Undergrad Presentation Skills**

Dr. Gene Dixon (East Carolina University) and Mr. Gordon Thomas Beverly III (East Carolina University)

**Building a Broadband Community with a Baldrige-Based Approach**

Dr. Michael Browder (Bristol Tennessee Essential Services), Dr. Andrew J. Czuchry (East Tennessee State University), and April Eads (Affiliation unknown)



Wed 6:00 PM to 7:30 PM

**ASEE President's Farewell Reception Sponsored By Dassault Systemes & Lockheed**

**Martin** ASEE Board of Directors

Washington State Convention Center, Ballroom 6 A, B & C

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