Pacific Southwest Regional ASEE Conference  
Continuous Improvement in Engineering Education  
Northern Arizona University, Flagstaff, AZ  
Radisson Woodlands Hotel, March 27-28, 2008  

Thursday Morning  

8:00 – 8:30  Registration, Vendor Displays, Continental Breakfast  
8:30 – 8:50  Opening Remarks  
Welcome to the Conference (Debra Larson, Conference & Acting Section Chair)  
Welcome to NAU and CENS (Barry Lutz, Interim Dean)  
Welcome to Education (Linda Shadiow, Director, Office of Faculty Development)  

8:50 – 9:30  Don Carter, Director of e-Learning at NAU, Three Emerging Technologies in Higher Education  

9:30 – 9:45  Coffee Break & Vendor Displays  

9:45– 11:45  Concurrent Session Presentations  

Kaibab  Recruitment, Retention, & Related  
Moderator: Walt Loscutoff  

- Elizabeth Brauer, et al., STEP UP: Summer Engineering Camp for High School Girls  
- Christos Valiotes, Improving Conceptual Understanding and Problem Solving Skills in Introductory Physics Courses Using the Socratic Dialogue Method  
- Jeffrey S. Burmeister, et al., What is Engineering? – a MESA Program/Johns Hopkins University Partnership  
- John Tester, et al., Assessing the Motivational Impact of Including Rapid Prototyping into a Freshman CAD Class  
- Paul Blowers, et al., A Toolbox for Integrating Information Literacy into Engineering Courses: Helping Students Help Themselves  

Laboratory & Modeling Innovations  
Moderator: David Scott  

- Porbaha, Ali et al., Development of a Friction Pendulum Bearing Base Isolation system for Earthquake Engineering Demonstration  
- Constantin Ciocan, et al., A Problem Solving Approach in Teaching Engineering Laboratories  
- Larry Jang, Internet-based Control Systems with Demonstration of Real-time, Real-world Control Experiments  
- Brian P. Self, et al., Using Model Elicitation in Mechanical Engineering  
- Edward J. Smaglik, Integrating Traffic Engineering Field Hardware and Research Methodologies into Transportation Engineering Education  

12:00 – 1:00  Lunch with Speaker David N. Wormley, Immediate Past President ASEE and Dean, College of Engineering, Penn State: The Challenges of Engineering Education in Rapidly Changing Times  

NORTHERN ARIZONA UNIVERSITY  
Engineering Talent Pipeline – William & Flora Hewlett Foundation’s Schools of the West Initiative, College of Engineering and Natural Sciences, Faculty Development Program
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Thursday Afternoon

1:15 – 3:15

Concurrent Session Presentations

Kaibab

Integrating Contemporary Issues I
Moderator: John Tester
• Paul Blowers, et al., Integration of Sustainability into A Chemical Engineering Senior Capstone Design Course
• Christine Pauken, Engineering Perspectives on Biological Systems: A Course for all Engineering Students
• Thomas N. Duening, Preparing Engineers for 2025: A Master’s Program in Enterprise Systems Innovation & Management
• Daniel Walsh, et al., The 4+1 Accelerated Masters Degree Program: An Empowering Entry Level Degree for Professional Engineers
• Richard Theis, The Pedagogies of Sustainability and the Ideologies of Engineering Faculty: Intersections

Canyon

Topics in Design and Projects
Moderator: Chell Roberts
• Dieter Otte, Optimal team composition in project-oriented Software Engineering classes
• Keith Curtis, Training the Renaissance Engineer of 2025
• Jiancheng Liu, et al., Enhancing Machine Design Course through Introducing Design and Analysis Projects
• Taufik, Experience Learned: Incorporating Industry Supported Project in Power Electronics Course to Improve Learning
• Bryan Cooperrider, The importance of Divergent Thinking in Engineering Design

3:15 – 3:30  Coffee Break & Vendors

3:30 – 5:00  A guided tour of NAU’s LEED Platinum Applied Research & Development Building (one of the three greenest buildings in the world) and Gold Engineering building. Host: Richard Bowen, Associate VP, NAU. Meet in the hotel lobby at 3:30 to depart by bus.

6:00 – 6:30  Reception (Cash Bar)

6:30 – 8:00  PSW ASEE Banquet:

Awards (Moderator – John Tester) Outstanding Community College Educator Amelia Enriquez, Best Section Paper, Best Section Presentation

Speaker - Ron Roedel, Professor of Electrical Engineering, Ira A Fulton School of Engineering, ASU: The Potential Impact of the American Competes Act

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Friday Morning

8:00 – 8:30  Vendor Displays and Continental Breakfast  Kaibab
8:30 – 9:15  Ray Landis, Dean Emeritus of Engineering, Computer Science, and Technology, CSU-LA, Student Development: An Alternative to Sink or Swim  Kaibab
9:15 – 10:15  Concurrent Session Presentations

Kaibab  Applications of Technologies I  Moderator: Rich Phillips

- Elizabeth Brauer, WebWorK Development in Electric Circuits
- Bruno Osorno, Online Teaching of Electrical Power Systems in Electrical Engineering; Experiences and Myths
- Reza Raesi, Applying Embedded Systems Design for Distance Learning

Integrating Contemporary Issues II  Moderator: Dieter Otte

- Peg Pankowski, Assessment for Accreditation and Beyond
- William R. Peterson, Academe and Industry - Where Is the Disconnect?
- David B. Lanning Jr., Evaluation of Prerequisite Skills Testing for Solid Mechanics

10:15 – 10:30  Coffee Break and Session Discussions

10:30 – 11:45  Concurrent Session Presentations


- Paul Blowers, Application of Multimodal Software Tools to Teach Problem Solving Skills
- Jeff Hays, Group Projects in Chemical Engineering Using a Wiki
- Kyu-Jung Kim, Efficient Use of Computational Tools in Machine Design
- Keith Holbert, Removing an Unsupported Statement in Engineering Education Literature
- Kurt Colvin, A Distributed Systems Engineering Curriculum
- Kevin Gary, et al., The Software Enterprise at ASU’s Polytechnic Campus

11:45 – 12:00  Closing Remarks (Debra Larson, Conference & Acting Section Chair)  Conference Adjourn  Kaibab

12:45 – 3:00  ASEE PSW Section Executive Board Meeting with Lunch (Acting Chair Debra Larson)  Eng. Bldg