

**Sessions and Presentations Sponsored by the Technological Literacy
Constituent Committee**

**American Society for Engineering Education
2008 Annual Conference
Pittsburgh, Pennsylvania
June 22-25, 2008**

Session 2588: Improving Technical Understanding of All Americans

Sponsor(s): Technological Literacy Constituent Committee

The National Academy of Engineering advocates that all Americans know more about technology. This includes the broad range of technology developed by engineers, not just computers and the internet. This session addresses a range of questions surrounding the issue including: technical self-efficacy, technology assessment, teacher recruitment, critical thinking, and integration with mathematics and science education.

285: TECHNOLOGY ASSESSMENT: A GRADUATE COURSE TO BUILD DECISION-MAKING SKILLS

Mary Rose, Ball State University
Jim Flowers, Ball State University

625: THE VIRGINIA TECH FIRST ROBOTICS PROGRAM PARTNERSHIP: TECHNOLOGICAL LITERACY THROUGH SELF-EFFICACY

Mary Kasarda, Virginia Polytechnic Institute and State University
Brenda Brand, Virginia Polytechnic Institute and State University
Michael Collver, Montgomery County Public Schools
Gabriel Goldman, Virginia Polytechnic Institute and State University

641: INVENTION, INNOVATION AND INQUIRY - ENGINEERING DESIGN FOR CHILDREN

Daniel Engstrom, ITEA/Cal U

688: RECRUITMENT IN ENGINEERING/TECHNOLOGY TEACHER EDUCATION: FACTORS THAT INFLUENCE FEMALES

Kara Harris, College of Technology - Purdue University

1110: CRITICAL THINKING IN ENGINEERING AND TECHNOLOGY EDUCATION: A REVIEW

Elaine Cooney, Indiana University-Purdue University-Indianapolis
Karen Alfrey,
Steve Owens, Indiana University - Purdue University-Indianapolis

Session 2688: Engineering for Nonengineers: Ideas & Results

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Engineering schools are now offering courses for non-engineering students. Teaching service courses is a new development for engineering programs. This session highlights new ideas, best practices, and results from successful courses.

684: MINORS IN ENGINEERING STUDIES: TEACHING TECHNOLOGY TO NON ENGINEERS, FIRST RESULTS

Mani Mina, Iowa State University

1344: TECHNOLOGICAL LITERACY AS A SCIENCE GE COURSE IN CALIFORNIA'S UC, CSU AND CCC SYSTEMS

Vince Bertsch, Santa Rosa Junior College

1732: TECHNOLOGY IN CONTEXT: INTEGRATING TECHNOLOGICAL "LITERACY" WITH SCIENCE REQUIREMENTS FOR NON-MAJORS

Kathryn Neeley, University of Virginia

W. Bernard Carlson, University of Virginia

Sarah Pfatteicher, University of Wisconsin - Madison

Bruce Seely, Michigan Technological University

Douglass Klein, Union College

Ronald Miller, Colorado School of Mines

1800: BUILDING ENGINEERING LITERATE NON-ENGINEERS

Deborah Mechtel, U.S. Naval Academy

Andrew McCue, U.S. Naval Academy

Keith Kintzley, U.S. Naval Academy

Robert Voigt, U.S. Naval Academy

2140: TEACHING ASPECTS OF TECHNOLOGICAL LITERACY FROM A HISTORICAL PERSPECTIVE

Gregory Zieren, Austin Peay State University

John Blake, Austin Peay State University

2316: TECHNOLOGY LITERACY AS A PATH TO "ENGINEERING SOLUTIONS IN A GLOBAL AND SOCIETAL CONTEXT"

David Ollis, North Carolina State University

Wednesday, June 25, 2008

Session 3188: Service Courses for Non-Engineers

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The National Academy of Engineering is promoting a greater appreciation and understanding of technology by all Americans. This includes both IT and the broad spectrum of technologies produced by the engineering profession. In this session several models of technological literacy courses are presented.

805: TECHNOLOGY COURSES FOR UNDERGRADUATES: DEVELOPING STANDARD MODELS

John Krupczak, Hope College

David Ollis, North Carolina State University

2372: INFORMATION TECHNOLOGY LITERACY FOR NON-ENGINEERS

William Suchan, United States Military Academy

Susan Schwartz, United States Military Academy

Edward Sobiesk, United States Military Academy

807: A FRAMEWORK FOR DEVELOPING COURSES ON ENGINEERING AND TECHNOLOGY FOR NON-ENGINEERS

John Krupczak, Hope College

Timothy Simpson, Pennsylvania State University

Vince Bertsch, Santa Rosa Junior College

Kate Disney, Mission College

Elsa Garmire, Dartmouth College

Barbara Oakley, Oakland University

Mary Rose, Ball State University