

## CAEE Presentations, Special Session, and Booth 2009 ASEE Conference

### Session and Paper Information

	Time	Session	Location	Title
<b>Monday June 15</b>	10:30 – 12:00 pm	1331	ACC 7	<ul style="list-style-type: none"> <li>More to Say. Analyzing Open-ended Student Responses to the Academic Pathways of People Learning Engineering Survey.</li> </ul>
	12:30 – 2:00 pm	1431	ACC 15	<ul style="list-style-type: none"> <li>I'm Graduating This Year! So What is an Engineer Anyway?</li> <li>Exploring Gender and Self-confidence in Engineering Students: A Multi-method Approach.</li> <li>Does Major Matter? A Look at What Motivates Engineering Students in Different Majors.</li> </ul>
<b>Tuesday June 16</b>	7:00 – 8:15 am	2130	ACC 8A	<ul style="list-style-type: none"> <li>Considering Life Cycle During Design: A Longitudinal Study of Engineering Undergraduates.</li> </ul>
	2:15 – 4:00 pm	2530	ACC 6B	<ul style="list-style-type: none"> <li><b>Special Session: Findings from APS – Overview and Panel Discussion</b></li> </ul>
	2:15 – 4:00 pm	2592	Hilton 412	<ul style="list-style-type: none"> <li>Competence in Engineering: A Tale of Two Women.</li> </ul>

- **Special Session 2530: dedicated to Academic Pathways Study results and discussion**  
→ **Stop by booth #437 at the Exposition to talk with CAEE research team members**

The **Center for the Advancement of Engineering Education (CAEE)** began research in January 2003 with funding from two NSF Directorates, Engineering and Education and Human Resources. The papers and Special Session listed above focus on CAEE's **Academic Pathways Study (APS)** which combines longitudinal and cross-sectional studies of engineering undergraduates at 26 U.S. universities. The **CAEE Leadership team** includes Cindy Atman (PI), Reed Stevens, Jennifer Turns, and Phil Bell, University of Washington; Lorraine Fleming, Howard University; Larry Leifer and Sheri Sheppard, Stanford University; Ron Miller and Barbara Olds, Colorado School of Mines; Karl Smith, University of Minnesota/Purdue University; and Ruth Streveler and Robin Adams, Purdue University.



**CAEE research** is focused on the following areas of investigation:

- **Academic Pathways Study (APS) Longitudinal Cohort**—an exploration of the learning experience of 160 engineering undergraduates on four campuses over four years using mixed methods that included the Persistence in Engineering (PIE) survey, structured interviews, ethnographic interviews and observations, and engineering design tasks. (2003-2009)
- **APS Broader Core Sample**—a cross-sectional study of over 800 engineering undergraduates at the four Longitudinal Cohort campuses that used the Academic Pathways of People Learning Engineering Survey (APPLES) a shorter version of the PIE survey. (2006-2008)
- **APS Broader National Sample**—a cross-sectional study of over 4,200 engineering undergraduates at 21 campuses across the U.S. that used the APPLES instrument. (2007-2009)
- **Targeted Studies**—shorter studies of difficult concepts in engineering and the role of mathematics in engineering education and practice. (2004-2006)
- **Transition to the Workplace**—a cross-sectional study, using a mixed-methods approach, of over 50 early career engineers employed in a range of private companies and public agencies. (2006-2009)
- **Studies of Engineering Educator Decisions (SEED)**—investigations of the teaching decisions of 31 engineering faculty that used a semi-structured interview protocol. (2006-2009)
- **Engineering Teaching Portfolio Program (ETPP)**—a study of the use of teaching portfolios to enhance the professional development of engineering graduate students that used a semi-structured interview protocol and field observations with approximately 150 participants. (2003-2006)
- **Institute for Scholarship on Engineering Education (ISEE)**—three year-long Institutes dedicated to expanding the engineering education research community and developing models in engineering education research (involving 47 researchers from thirteen institutions) with a companion study of the pathways of scholars into engineering education research. (2003-2008)

**Research briefs summarizing the results and implications** of CAEE publications are available on the CAEE website at [www.engr.washington.edu/caee/portal\\_research\\_briefs.html](http://www.engr.washington.edu/caee/portal_research_briefs.html).

Research briefs are listed under the following topics:

- Understanding Student Experiences and Pathways
- Examining Student Learning and Skill Development
- Exploring Issues of Diversity
- Building Community and Developing Models for Engineering Education Research
- Developing Effective Teaching Practices

To request additional information, please contact CAEE at [caee@engr.washington.edu](mailto:caee@engr.washington.edu) or visit our Web site at [www.engr.washington.edu/caee](http://www.engr.washington.edu/caee).

