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> STUDENTS: Providing significant insight into the learning of engineering across diverse student populations and environments through longitudinal, cross-sectional, and targeted studies; portfolio tools created to assist engineering graduate students prepare for careers in teaching.

> FACULTY: Enhancing the effectiveness of strategies to help engineering educators improve their teaching.

> RESEARCHERS: Fostering a diverse cadre of leaders and change-agents in engineering education who can conduct high impact research.

**NUGGETS from CAEE Research**

**STUDENTS:** Learning and Pathways To Engineering

- seniors are less satisfied with instructors, although they interact with them more. Sheppard et al. Exploring the Engineering Student Experience: Findings from the APPLE Survey. *CAEE Technical Report TR-10-01.*
- some students remain uncertain about what it means to be an engineer even in their fourth year. Matusovich et al. I’m Graduating This Year! So What IS an Engineer Anyway? *Proceedings of the 2009 ASEE Conference.*

- over the four years of their engineering education, male students have higher confidence than women in their math and science abilities and their ability to solve open-ended problems. Chachra et al. Exploring Gender and Self-confidence in Engineering Students: A Multi-method Approach. *Proceedings of the 2009 ASEE Conference.*

**FACULTY:** Research Into Effective Teaching Practices

- differences in students that educators pay attention to are often not aligned with the differences that education researchers or educational policy makers suggest they should address. Sattler et al. How Do Engineering Educators Take Student Difference into Account? *Proceedings of the 39th FiE Conference* (2009).
- while explicit concerns for addressing student motivation were infrequent in educators’ accounts of self-selected teaching decisions, many of the educators’ reported actions (e.g., demonstrating relevance and creating a supportive classroom climate) are theoretically and empirically linked to positive enhancement of student motivation. Turns et al. How Engineering Educators Take Student Motivation into Account. *Proceedings of the 2009 REES.*

**RESEARCHERS:** Building the Engineering Education Research Community

- storytelling provides a method for scholarly discourse in engineering education to make implicit knowledge more explicit, promote reflective practice, and provide entry points into a community of practice. Adams et al. Storytelling in Engineering Education. *Proceedings of the 2007 ASEE Conference.*

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**National Affiliates:** NACME (National Action Council for Minorities in Engineering), WEPAN (Women in Engineering ProActive Network), CASEE (Center for the Advancement of Scholarship on Engineering Education), CIRTL (Center for the Integration of Research, Teaching, and Learning)

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Poster Citations


Matusovich, Holly, Ruth Streveler, Ron Miller, and Barbara Olds. 2009. I'm Graduating This Year! So What IS an Engineer Anyway? In the Proceedings of the American Society for Engineering Education Annual Conference, Austin, TX, June 14-17, 2009.


