

Aimed at those interested in improving their teaching practice from the known literature in engineering education. The target audience ranges from the new instructor to experienced, senior faculty interested in advancing the quality of the teaching practice. This workshop provides an overview of relevant research literature, and provides participants with hands on advice on choice of research approaches, data collection methods, and analysis techniques in the Scholarship of Teaching and Learning in Engineering.

Full-day workshop at FIE2016: Wednesday, October 12th, 2016

The workshop consists of presentations, group discussions and review of case studies in the engineering education literature. Workshop activities and materials are drawn from engineering faculty development courses in engineering education offered at Uppsala University, Sweden since 2010. Registration and additional information available at http://FIE2016.org

Workshop Participants Will:

- Acquire portfolio of best practices in STEM education
- Read and discuss selected articles from the STEM higher education research literature
- Review models for systematic investigation of learning phenomena
- Reflect on application of STEM education theories to their own teaching
- *Result*: equipped to conduct evidence based innovation and evaluation

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associate professor of computing education research at Uppsala University, Sweden. Widely published in computing and engineering education, he is an active member of the IEEE Computer Society, where he is chairman of the Special Technical Community

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John Heywood MSc, PhD, is a Professorial Fellow Emeritus from Trinity College Dublin and a Fellow of the ASEE and the IEEE. Author of the award-winning

Engineering Education, Research and Development in Curriculum and Instruction and the 2016 book The Assessment of learning in Engineering education. Practice and Policy. He has published widely and won multiple awards for his work in engineering, science and technology education.



Registration Fee: \$200 (Limited to 25 participants)

All proceeds beyond expenses go to the Frontiers in Education Conference.



6-hours IEEE-CS Professional Development Units (PDUs)

Participants receive IEEE-CS certificate of participation and PDUs earned.