Strategies for Effective Assessment for Outcome-Based Education

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2:00 – 6:00 pm, Jan 5, 2020

Assessment of student performance plays a vital role in all educational institutions from preparing a student for a career upon graduation, to establishing the quality of instruction in the institution, to helping the course instructors of effectively manage the content and delivery of the course, and finally, to helping educational institutions evolve and transform their curricula over time. In this workshop, the focus will be on (a) developing strategies for effective assessment at the course level, and (b) linking the assessment to effectively manage program objectives and outcomes. A top-down and bottom-up approach will be taken to illustrate the role assessment plays in linking program objective and outcomes to the learning process that takes place in a course. Key elements in an effective assessment process - Bloom's Taxonomy, designing fair and balanced assessment instruments, understanding and designing grading rubrics, providing constructive feedback to the students, defining and staying within the bounds of ethical behavior, and managing limited resources, will be emphasized via case studies.

Prof. Subramaniam D. Rajan is a Professor of Civil, Aerospace and Mechanical Engineering at Arizona State University. He has been actively involved with IUCEE helping teach the *Effective Assessment* module in the IIEECP Certification Program since its inception. His teaching interests include solid mechanics, STEM education and ABET accreditation. His research interests include constitutive finite element modeling and laboratory characterization of composite materials, design optimization, and high-performance software development. Prof. Sanjeev M. Kavale is an Assistant Professor of Mechanical Engineering at KLE Technological University. He has worked with Prof. Rajan in the IIEECP Certification Program helping teach and assess the *Effective Assessment* module. His engineering education research areas include project-based learning, active learning strategies and multi-disciplinary engineering. His technical research area involves linear elastic fracture mechanics.