



WORKSHOPS

Thurs 11 July 2019

Workshop 1

Title: *Unpacking the Writing and Publishing Process for Engineering Education Researchers*

Facilitators: Lisa Benson, Adam Carberry, Jennifer Case, Kristina Edström, Cindy Finelli, Kate Le Roux, James Swart and Maartje van den Bogaard

Description: The process of getting an article published in an academic journal can be difficult to navigate. Authors typically wonder what editors and reviewers seek, how to focus their manuscripts, and how to expand conference papers to a level acceptable for journal publication. The goals of this workshop are to guide individuals in writing manuscripts that meet the aims and scopes of engineering education journals, to outline steps in extending a conference paper to a journal paper, and to make transparent the process of getting to publication. Workshop activities and discussions will be facilitated by editors from engineering education journals.

Workshop 2

Title: *Design for Communities: Lessons on teaching engineers to design for people.*

Facilitators: Engineers Without Borders South Africa.

Description: While engineering curricula often teach students to “understand people’s needs”, there remain challenges in teaching design for low-income communities. This workshop will feature the experiences of Engineers Without Borders (EWB) with their Design Challenge (which annually provides nearly 6000 UK students with a design brief focused on a low-income community, and is now being piloted in SA). The University of Cape Town’s (UCT’s) Chemical Engineering Department will talk about teaching students to design an anaerobic digester for an informal urban context. The workshop will include smaller discussions to allow participants to dig deeper into the lessons learnt with these efforts.

Workshop 3

Title: *Decolonizing Engineering Education: Where do we start?*

Facilitators: Susan Lord and J. Alex Mejia – Integrated Engineering, University of San Diego; Kathy Luckett – Sociology, University of Cape Town, and Nicky Wolmarans – Civil Engineering, University of Cape Town

Description: What does it mean to decolonize engineering? Why is it necessary? Is engineering decolonizable? Is engineering an instrument for colonization? As universities begin to recognize the multitude of backgrounds present at their institutions, engineering programs are faced with the challenges emerging from calls to decolonize the curriculum. The process of decolonization requires rethinking our roles and relationships as educators and researchers with the communities we work with. The purpose of this workshop is to examine foundational concepts in decolonial education that can help engineering educators and researchers engage in reflective practices to challenge uninterrogated and institutionalized norms.

Workshop 4

Title: *Developing and Planning Engineering Education Research*

Facilitators: Keith Willey – University of Sydney; Anne Gardner – University of Technology Sydney.

Description: Keith and Anne facilitate the Australasian Association for Engineering Education Research Winter School. In this workshop, participants are guided through a research cycle beginning with:

- Identifying phenomenon
- Situating this phenomenon in the literature to identify a research question
- Using theories as lenses
- Methodologies and evidence
- Methods of collecting and analysing evidence to produce discussion and findings.

The workshop will conclude by participants with shared research interests drafting a research cycle and establish connections to initiate collaborative research. The workshop will suit new researchers and those transitioning to engineering education research. Established researchers are also welcome to contribute their experience, expertise and join collaborations.