







WORKSHOP

Curriculum Influence: Learning from a National Approach to increasing Focus on Human and Social Context

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OVERVIEW OF WORKSHOP

The <u>Engineering Futures Initiative</u> (EFI) has been established by the Australian Council of Engineering Deans (ACED) to deliver a coherent, visible, and national approach to achieving progressive implementation of the Engineering Futures 2035 recommendations for change in engineering education (Crosthwaite 2019). The pilot phase has focused on expansion of industry connections with emphasis on human and social dimensions of engineering. The EFI has engaged experts in the field, conducted benchmarking of existing practices, and initiated a National Student Projects scheme. This workshop will bring together engineering educators from across Australasia to explore drivers of change in previous shifts in engineering globally, and examine and critique the current activities the EFI.

ACTIVITIES

Together, workshop attendees will explore markers of successful and unsuccessful attempts to influence engineering education at a national level, and collate these as workshop outputs. We will also examine selected precedents in terms of shifts in engineering education and practice and theoretical perspectives on change processes to evaluate the current course of the EFI. The proposed format is:

- 1. Brief overview of the EFI and its current approach (10 mins)
- 2. Discussion on past paradigm shifts in engineering (education or practice). 1 case study per group. Report back on enablers/characteristics that supported the change process (40 mins)
- 3. Overview of theoretical perspectives on change processes (15 mins)
- 4. Critical evaluation of the EFI's current course against enablers/characteristics discussed in steps 2 and 3 (whole group or breakouts 25 mins)

TARGET AUDIENCE

Engineering Educators, Industry, and affiliates with a keen interest in national level change and those interested in becoming involved in the Engineering Futures Initiative are encouraged to attend.

OUTCOMES

Participants will gain insights into characteristics of change processes which may be applicable to engineering education. Participants will also have the opportunity to influence the directions of the Engineering Futures Initiative and become involved in future activities.

KEYWORDS

Change, Socio-technical engineering, industry engagement

PRESENTERS' BACKGROUNDS

A/Prof. Tom Goldfinch is co-chair of the EFI and Associate Dean (Teaching and Learning) at the University of Sydney. Justine Lawson is coordination lead of the EFI and has a background in teacher education and academic development. Prof. Elisa Martinez-Marroquin is co-chair of the EFI and former Executive Dean, Associate Dean Education and Head of Discipline at the University of Canberra. Professor Anne Gardner is concluding her post as Associate Dean (T&L) at UTS for retirement, and is a past president of AAEE and chair of the ADTL Network. Steven Goh is an Associate Professor in Mechanical and Mechatronic Engineering at the University of Southern Queensland and the outgoing President of AAEE.