Abstract

During the course of the research reported in this workshop, it has become apparent that the term ‘Aboriginal Engineering’ is not widely recognised or understood. When engineering is defined as “a problem-based, practically oriented discipline, whose practitioners are concerned with finding the most effective solutions to engineering challenges, technically and economically” it is evident that all human societies practice ‘engineering’. The problem then becomes one of establishing what ‘kind’ of engineering was practiced by pre-contact Aboriginal societies - a task that has become a central theme of this work.

In part, this OLT-funded project aims to provide engineering educators with –

- Guidelines for Indigenous cultural values and their relationship to engineering education and engineering epistemology and design
- An elective subject that links indigenous perspectives on country and connectedness to local engineering projects
- A model for development and implementation of elective course content focusing on indigenous cultural appreciation that is applicable to other design oriented fields

To achieve these, and related goals, the project team began with some fairly conventional perceptions, which were quickly challenged by what we were finding.

These challenges are the subject of this workshop which will briefly report on the initial concepts and then use two interactive processes to engage participants in their own exploration of concepts, terms and meanings associated with ‘Aboriginal Engineering’. Participants will have the opportunity to engage with the interdisciplinary nature of the project and explore new perspectives on Aboriginal society.

Speakers

Dr Elyssebeth Leigh

Dr Elyssebeth Leigh is an educator and researcher. She has been a teacher in secondary and tertiary education and has worked in various capacities in government and private sector contexts. She has written extensively about the use of experiential learning and simulations and games for learning, and for this project her eclectic study and work profile contributes to the cross-disciplinary nature of the emerging outcomes.

Dr Tom Goldfinch

Dr Tom Goldfinch is a Senior Lecturer in Engineering Education at the University of Wollongong and vice-president of the Australasian Association for Engineering Education. He has worked on engineering education research and development projects since 2006 in Australia, Chile, Saudi Arabia, Sri Lanka and the UK. He has led two OLT projects Integrating Indigenous Student Support through Indigenous Perspectives Embedded in Engineering Curricula (2013-15) and Exploring Intercultural Competency in Engineering (2010-12). His key research interests are engineering mechanics education, and the social and cultural aspects of engineering education and practice.

Notes for participants

RSVP:
Please register your attendance to fase-ecm@uwa.edu.au by Wednesday 28 January.

There will be a light lunch, refreshments and an opportunity to network informally from 12.30pm followed by the presentations.