Australasian Association for Engineering Education
ALTA Forum 2012

Duncan Campbell
Immediate Past President AAEE
Agenda

• AAEE in context
• Community
• Initiatives 2011, 2012
• Awards
• Research quality
• Conferences
• Groundhog day!
AAEE in Context

AAEE

ACED (NZ Deans)

Engineers Australia

AAESEAP

SEFI

IFEES

cdio

American Society for Engineering Education

Australian Association of Engineering Education

New Zealand Deans
Recent Initiatives

Communication and Connectivity

- eNewsletter
- Facebook Forum
  - An open forum for all of those interested in tertiary engineering education
  - 43 members
- AAEE Champions
  - Champions and interested engineering education leaders to discuss topics and issues around engineering education, and to provide collegiate support amongst peers.
  - LinkedIn site
- AAEE Scholar (wiki)
  - Research and L&T resources
    http://aaee-scholar.pbworks.com
Professional Development 2011

• Evaluating Learning and Teaching Strategies Workshops

• The Inaugural AAEE Postgraduate Winter School for Postgraduates in Engineering Education
  – Planned and facilitated by Dr Lesley Jolly, Professor Caroline Baillie and Dr Matt Eliot.
  – 13 participants from 10 universities attended.
  – Followup workshop will be conducted at the AAEE 2011 conference.

• Joint Engineers Australia/AAEE Accreditation Workshops, Duncan Campbell, Prue Howard, Roger Hadgraft, Peter Hoffmann and Alan Bradley; and Robin King, Ian Cameron, Peter Gibbings and Tim Lever. Being cast to the New Zealand context.
Joint Engineers Australia/AAEE Accreditation Workshops

- To build an appreciation and commitment to holistic and systematic educational development and delivery.

*the teacher's fundamental task is to engage students in learning activities...*

*what the student does is actually more important ... than what the teacher does.* (Shuell 1986)
Joint Engineers Australia/AAEE
Accreditation Workshops

Agenda

11.30am   Top–down curriculum design, constructive alignment and addressing the competencies
12.30pm   Working lunch
1.00pm     Exemplars and competency mapping activities
2.00pm     Closing the loop - Reporting back and reflections
2:25pm     Closing comments, and opportunity for arrivals/ departures for Accreditation Workshop
2012 Winter School
Developing Educational Research Skills

• Noosa North Shore Resort (as last year)
• Late June or Early July
• Objectives/outcomes:
  – provide an opportunity for peer-review of work, and the development of academic writing skills
  – build community and a reference group for those whose interests are often unique in their home departments
• Engineering and ICT Discipline support strategy: $5k
• Participants (or their home departments) contribute the cost of airfares to Queensland and $100 each towards catering.
Closing the Loop: Good Practice to Good Research to Good Practice 2012

• Two workshop series at a minimum of 3 host universities
• Motivation
  – Many engineering education submissions are rejected based on: not well read in domain knowledge, research, best practice
  – Opportunities lost in terms of impact in terms of research outcomes, and education practice
• Outcomes
  – Better understanding of how to read and conduct educational research leading to higher number of papers in engineering education meeting formal metrics
  – Better understanding of the uses of educational research
  – Increased implementation of best practice strategies in engineering education
3 Phase Program

• Phase 1: Identifying participants
• Phase 2: First workshop “Moving into Engineering Education Research” – How, situational awareness
• Phase 3: Second workshop “Implementing Educational Research Findings” - ‘closing the loop’ by exploring how to make use of research results in teaching and learning practice
Excellence Awards 2011

• **Australian Council of Engineering Deans National Award for Engineering Education Excellence** – Awarded for excellence in learning outcomes via degree programs, discipline majors or other significant initiatives that have produced outstanding and enduring outcomes.
  **Prize** - $10000 plus framed certificate

• **Award for Engineering Education Research Design** – Award for rigorous, innovative and transferable research design in the field of Engineering Education.
  **Prize** - $5000 plus framed certificate

• **Award for Engineering Education Engagement** – Award for fostering an excellent standard of engagement with colleagues or students recognising a collegiate approach to learning and teaching, research and a sharing of expertise.
  **Prize** - $5000 plus framed certificate
Engineering Education Research and Scholarly Publication Quality

- Australasian Journal for Engineering Education (previous ERA B pushing for A)
- Implementing strategies to further improve the quality metrics of AJEE, eg. Impact Factor
- Applying for listing on SCOPUS
- Implications for H-index/H-factor
- Workshops themed on Engineering Education Research planned for 2012
- “099999” or new FOR code
Conferences

- 2012 Australasian Association for Engineering Education (AAEE) Annual Conference
  3rd - 5th December 2012 – Swinburne University

- 2012 International CDIO Conference
  1 – 4 July 2012 – QUT
  http://www.cdio2012.com

- ASEE (US), SEFI (Europe)
Groundhog Day

• Drivers
  – Attraction/retention
  – Engineering skill shortage
  – Gender imbalance

• Issues
  – Career progression
  – Research L&T *nexus*
  – Gender imbalance