



QT Canberra | Australia

29 April – 1 May 2019

SYSTEMS ENGINEERING TEST AND  
EVALUATION CONFERENCE 2019



SYSTEMS SCIENCE & ENGINEERING FOR A BETTER AUSTRALIA [SETE2019.COM.AU](http://SETE2019.COM.AU)

## SETE and Vocational Training

Margot Schelling CPENG (T) Eng Exec

# Topics

- Vocational Education and Training (VET)
- Engineering and Technology
- Case Studies (2)
  - Career Perspective
  - Training Course
- Strategy and Evolving VET Needs

# Vocational Education and Training (VET)

- What is VET?
  - Skills for work
- Who offers VET?
  - Registered Training Organisation (RTO)
  - Courses developed by Industry
  - Nationally recognised Qualifications
    - Certificate 1-IV
    - Diploma
    - Advance Diploma
    - Vocational Graduate Certificate/Diploma
- VET verses University?
  - Different focus
  - Same curriculum with transferable credits
  - Entry from Year 10
- VET is competency based
- Instructors must remain current

# Engineering and Technology

- Many specialisations and fields:
  - Engineering: civil, electrical, electronic, mechanical telecommunications, renewables
  - Technology: automotive, processing, production, aviation, electronics, transport, logistics
- Practical and focused on industry skills
- All qualification levels
- Generally:
  - Cert I to III - Trades
  - Cert IV and above – specific engineering careers in roles supporting professional engineers

# Case Study: Career Margot Schelling

- 1979 – joined Woman's Royal Australian Navy (WRAN)
  - Electronic Technical Communications (Radio Trade – NSW)
- 1980 to 1991 – worked through ranks to be the first Chief Petty Officer Technician in RAN
- 1991 – promoted to officer core as Weapons Electronics and Engineering Officer
- 1991 to 2004 – promoted through to LCDR and posted to various ships and establishments
- 2004 to now – consulting work, increased vocational training, Training manager of an RTO

# Case Study: Test and Evaluation Training

- 2008 – Certificate IV & Diploma Public Safety (Test and Evaluation)
- 2012 – Certificate IV & Diploma Test and Evaluation
- 2016 - Performance Needs Analysis (PNA) for Joint Test and Evaluation - Defence
- 2017 – Certificate IV & Diploma Test and Evaluation (updated iaw PNA)

# Pragmatic and Practical T&E Training Delivery

- Case Study: Highlighting of Evolving Client Needs for VET
- Training Focus to support targeted delivery of T&E Outcomes
  - Teaming Solutions: Combination of Specialists and Practitioners
  - Need for a mix of skills and experience
  - Cross-skilling pathways to develop recognised skills and build capacity from other sectors
  - Harness existing experience e.g. Project/Risk Management, Engineering/Technology et al
  - Meet Industry needs and demand
  - Practical training with experiential learning approach

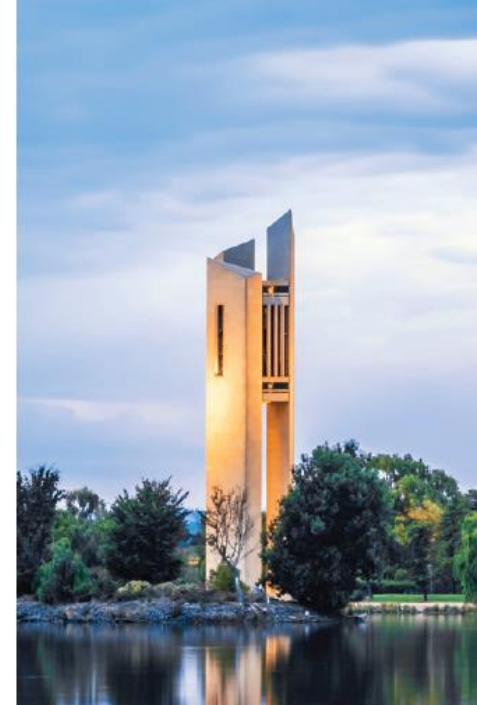


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Conclusion and Questions