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# **Towards Effective Exploitation of the ALTC Discipline Support Strategy (2009-12) ALTC Discipline Learning Network (2011-13) in Engineering & ICT**

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# ***ALTC discipline-based initiatives: history***

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- **ALTC discipline-based scoping projects in Engineering (2007-8) and Information & Communications Technologies (2007-9) – produced mostly similar outcomes**

# findings, recommendations and emerging issues

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1. **Students** - attraction and motivation, attrition, low enrolments by women
  2. **Curriculum** – improve design, increase industry links, increase inclusivity, work-integrated learning, authenticity
  3. **Best-practice pedagogy** - student-centred active learning
  4. **Student assessment** – with links to well-defined learning outcomes
  5. **Academic staff** - need support to implement best-practice
- Engineering emphasised - **sharing of staff and resources**
  - ICT emphasised – the **teaching-research-industry nexus**
  - **several ALTC projects have addressed these issues**

# ***ALTC discipline-based initiatives: history***

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- ALTC discipline-based scoping projects in Engineering (2007-8) and Information & Communications Technologies (2007-9) – produced mostly similar findings, recommendations and emerging issues
- ALTC proposed **10 discipline groupings** (end-2008), including Engineering & ICT
- ALTC funded the **Discipline Support Strategy** from August 2009 against a joint proposal from ACED & ACDICT (ACED as manager) – to run to Feb 2012
- ALTC funded **Discipline Scholars for Engineering & ICT** - produced Threshold Learning Outcomes (2009-10)
- ALTC will fund **Discipline Learning Network** from August 2011 against joint proposal from ACED & ACDICT (ACED Inc. as manager) – to run to August 2013

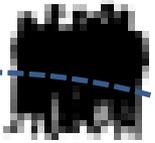
# Accreditation Bodies

Engineers Australia

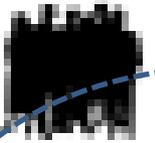
(JC – SWE)

Aust. Computer Society

higher education providers  
faculties and schools



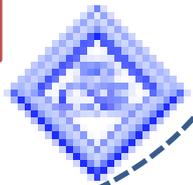
**Engineering and  
ICT academics**



Education Leaders - Associate Deans (Teaching & Learning) and other champions



associations and communities of Engineering & ICT educators



# Engineering & ICT Discipline Support Strategy activities (to April 2012)

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- supporting ALTA and Associate Deans (T & L) groups for **T & L project dissemination and priority setting**
- developing a **comprehensive web portal** for Engineering & ICT teaching and learning resources
- **“Learning to Teach in Engineering & ICT”**
  - **2 day-workshops focussing on pedagogy and curriculum design for new (and old) academics, plus**
  - **building training capacity in every university/city**
- **project dissemination workshops to assist systematic improvements in quality of engineering and technology education (from ~15 ALTC projects & fellows completed since 2008)**
- **Project Manager (half time): Dr Jocelyn Armarego (Murdoch Uni) since Feb 2011**

# Engineering & ICT Learning Network activities (to August 2013)

- **continuing support** of ALTA and Associate Deans (T& L) groups for project dissemination and priority setting
- **community use** of the comprehensive web portal for Engineering & ICT teaching and learning resources
- **“Learning to Teach in Engineering & ICT”**
  - **6 two-day workshops focussing on pedagogy and curriculum design (and assessment) for new (and old) academics, with training capacity now in every university/city**
- **8 project dissemination workshops to assist systematic improvements in quality of engineering and technology education (from ~30 ALTC projects & fellows to be published by 2012)**
- **Project Manager (1.5 day per week): not yet known**

# the way forward

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- How can the DSS - LN assist **YOU** to support your academics and education quality improvements
  - academic professional development (KPI's)
  - responding to TEQSA
  - develop the ICT community practice in T & L through workshops & other (to be as strong as engineering)
- Can **YOU** identify ICT education experts (across the sector) to complement (general) educational development skills (for workshops)
- What short-term and medium term projects in ICT education do **YOU** want to have supported?

## Ideas & Questions ?