Engaging Industry as Students and Teachers: Some examples from Engineering courses

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Ways to Engage with Industry

- Industry Experts as **Guest Lecturers**
- Industry Staff as **Students**
- Industry Staff as **Mentors and "Clients"**
Industry Experts as Guest Lecturers

- Advantages
  - Creating **New Material** for New Courses
  - Provide Latest Info *"from the Coalface"
  - **Specialist Help** with Labs & Fieldwork
  - **Credibility** in the Eyes of the Students
Industry Experts as Guest Lecturers cont'd

- But...
  - Coordination of Multiple Guest Lecturers
  - May need a close eye on Content
  - Vetting them for Presentation/"Marketing"
  - Some will Charge you for their Efforts
Industry Staff as Students

- How to Attract them (and their Bosses)
  - **Block Courses** for part-time/distance study
  - **Local Case-study** Assignments
  - **Industry-related** Research Projects
Industry Staff as Students cont'd

- Advantages
  - Interaction with Full-time students
  - More Classroom Discussion?
  - (Generally) Good Communication Skills

- But...
  - Consultancy reports vs Academic rigour
  - Workload from the day-job
  - Boundaries when teaching "Colleagues"
Industry Staff as Mentors/Clients

- Very Useful for Design Courses
  - Base the Course on **Realistic/Real Project**
  - **Regular Meetings** with Assigned Groups
  - **Assessment/Feedback** of Project Work
ENCI498 Transport Design Project
Weekly Mentor Meetings...
Helping with Fieldwork...
Industry Open Evening...
Industry Staff as Mentors/Clients cont'd

- Advantages
  - Students see the *relevance* of the work
  - Provide *"Reality Check"* of what's important
  - Industry understands *what you teach*

- But...
  - **Cost** (although usually < Market Rates)
  - Need to **Find Enough** to go around
  - **Consistency** of different Mentors?

*Constant Communication is Vital*
Other Ways to Engage with Industry

- Field Trips hosted by Industry
- Research Project Co-Supervisors
- Industry Liaison Committees
- Sabbaticals within Industry
Thank You!

- Questions / Discussion?