

Engaging Industry as Students and Teachers:

Some examples from Engineering courses

Dr Glen Koorey

Dept of Civil & Natural Resources Eng'nrg
University of Canterbury

Spotlight on Tertiary Teaching, Christchurch, Mar 2010

Ways to Engage with Industry

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



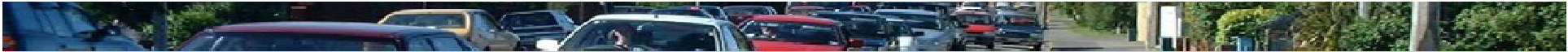
Industry Experts as Guest Lecturers

- 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



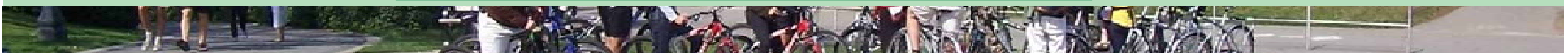
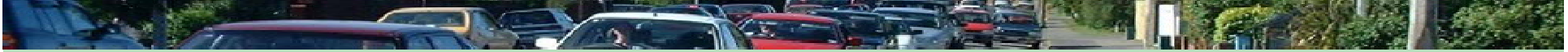
Industry Experts as Guest Lecturers cont'd

- 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

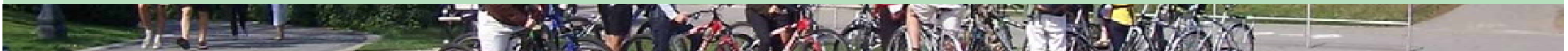
- How to Attract them (and their Bosses)
 - **Block Courses** for part-time/distance study
 - **Local Case-study** Assignments
 - **Industry-related** Research Projects



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"

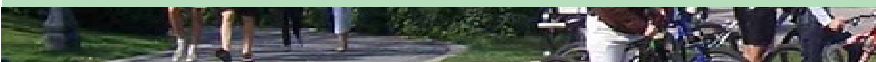
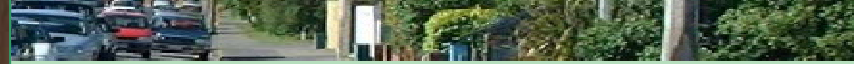


Industry Staff as Mentors/Clients

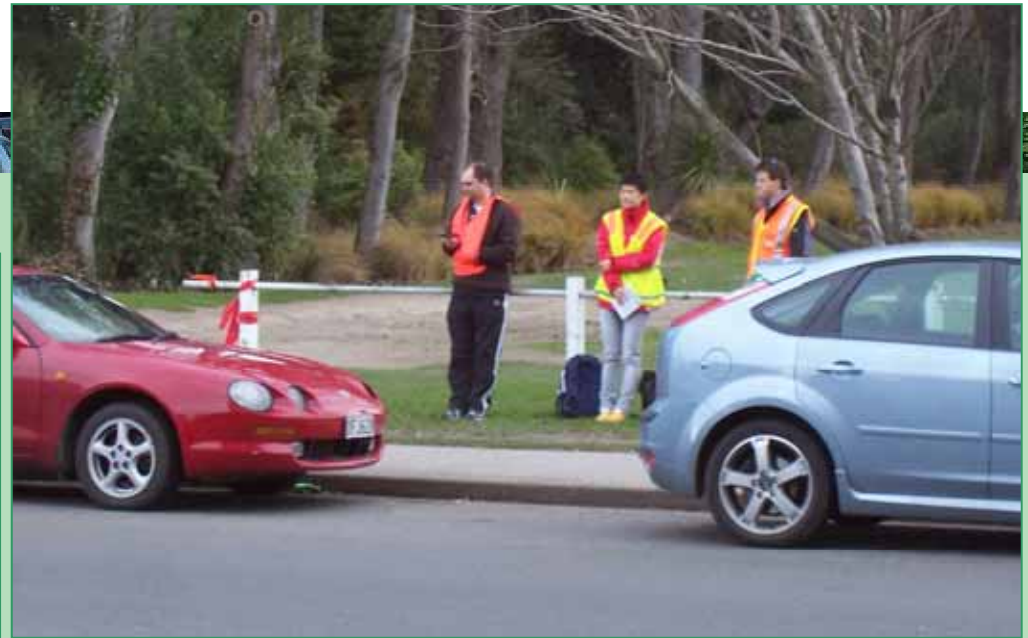
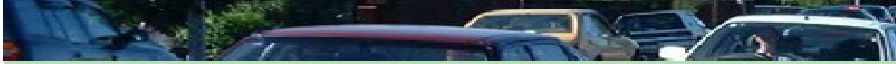
- Very Useful for Design Courses
 - Base the Course on **Realistic/Real Project**
 - **Regular Meetings** with Assigned Groups
 - **Assessment/Feedback** of Project Work



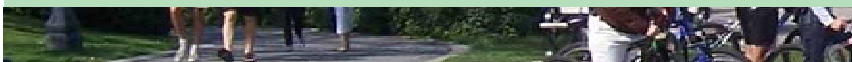
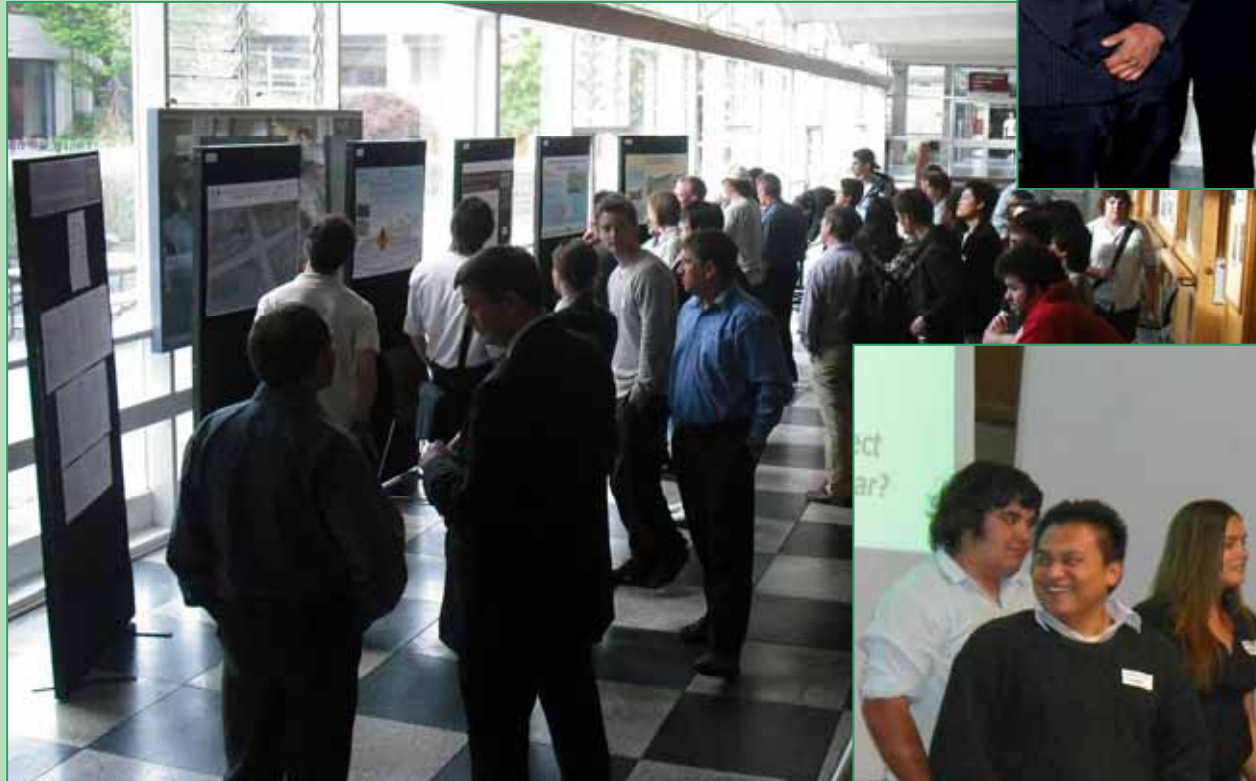
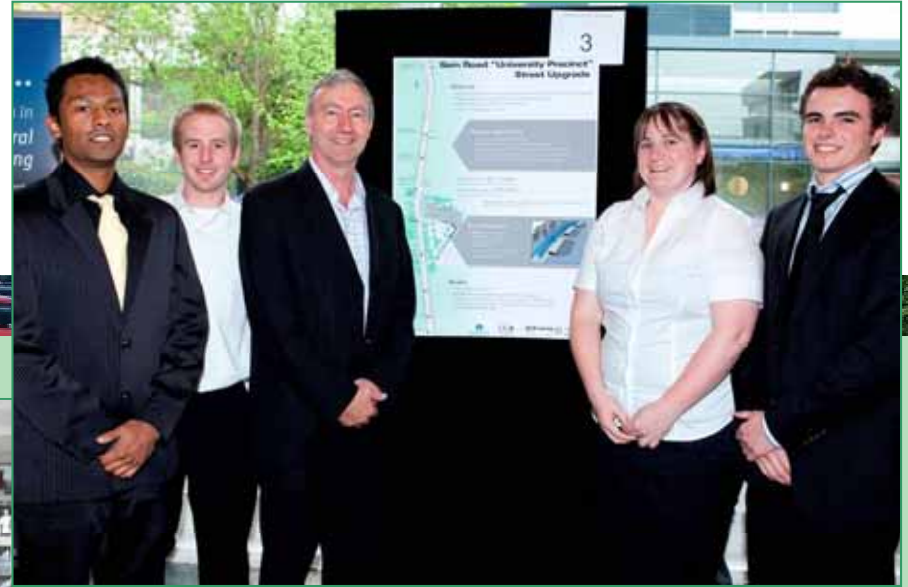
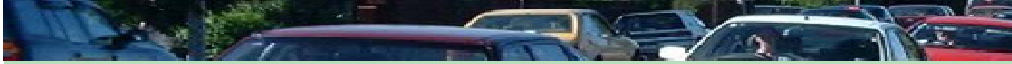
ENCI 498 Transport Design Project Weekly Mentor Meetings...



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?

