Global Engineering Challenge – inspiring student engineers

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Drivers - the gap

Cross-faculty interdisciplinary interactions

International / global dimension

Global Engineering Challenge

Examine less

Employability awareness

University L&T
Strategy

Project aims / spec

Project Aims

- Skill development
 - -Multi-disciplinary team-working
 - —Independent learning
 - -Problem-solving
 - —Professional issues: global / cultural / ethical awareness
 - -Plagiarism
 - -Communication / presentation
 - Reflection on own learning
 - -Career planning

Project spec

- 1-week project
- 900 students
- zero credits
 - formative assessment & peer assessment
- Project-based accessible to all
- Challenging & engaging
- Interactive "taught" elements
- Competitive

Global Engineering Challenge Week

900 students

- ~150 groups = 25 hubs, 6 groups of 6 students
- Multi-disciplinary 9 departments in faculty
- Project based on EWB Challenge
 - Sustainable development theme appropriate for global and professional issues
 - Widespread student interest EWB Sheffield very strong
 - Adapt project specifications
 - Develop assessment criteria
- Hubs led by PG facilitators

Global Engineering Challenge Week

- •Mon Fri 9am 5pm
- Independent project work interspersed with
- interactive "taught" sessions
 - —Intro & finale 3 large lecture theatres
 - -facilitated sessions hub rooms
- Employability implicit in skills development
 & project work

Evaluation – Student, Facilitator, Staff

Main motivators:

- Group work
- Meeting new students
- Working with people from other department / nationalities

Project work – a real project

The facilitators

Summary – what went well

- Overall very well received by students (as well as facilitators & staff)
- Multi-disciplinary group working
- Project-basis of the week
- Selecting & training PG facilitators
- Employing UG resource developers
- Involvement of Alumni

Summary – what have we learned

- Time for resource development
 - Some re-development after next year...
- Communication with students and staff
- 9 to 5 is not popular!
- Negative impacts of some students rules for non-engagement
- Zero credits but put in a module list

Conclusion

 Overall worth it – positive feedback, buzz in final presentations

 Some re-development, but it will be going ahead next year

GEC Video