Enhancing Student Employability through Academic-Employer Engagement – the GWizards Approach

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The Employability Issue

- Decline in Graduate Training Schemes

- Employers want Universities to provide workplace-ready graduates (2 yr. exp. equiv.)

- Offshoring of entry-level jobs in Computing

- Universities are not domain workplaces!
Computing Science (CS) unemployment

- BME students sector wide have worse unemployment across all subjects, for computer science its 5-8% worse.
- All subjects - 25% in Russell group, for CS its 13%, 10% of those are BME students.
- 51% of BME graduates obtained 1st or 2:1 degree classes compared with 67% of white graduates, across all subjects, computing similar proportions.
- CS has proportionally more students in the Post-92 universities, which tend to award fewer ‘good’ degrees.
- CS also has a higher proportion of BME graduates who also tend on average to obtain lower degree classes.
- Russell group BME unemployment rate for CS is 16.7%
Relationship to Local Community

- *Ivory Tower* model of Universities
  - Research-intensive focus does not tend to support working with local community

- Loss of community engagement model in University expansion era

- Universities should play a central role in communities they primarily source
Research & Consultancy Projects

- FEC costing makes University research far too expensive for many organisations, especially SMEs, voluntary organisations etc.

- Consultancy models can be less expensive, but are generally individual and short-term – typically a few months.

- Technology transfer through KTP and TSB offer a good model, but the accounts requirements can be a problem for voluntary sector and SME
Student Projects

- Many courseworks attempt to contextualise skills and techniques to actual problems
- Real-world problems and projects are beneficial in grounding student project activity and developing work skills
- Final year projects are often applicative
- Students can produce “good enough” outputs for local organisations
The GWizards Concept

- **Virtuous Circle**
  - Need for practical work-based experience for students
  - Organisations need work at low cost or no cost
  - University needs students to get employability skills, and wants to be seen as central in local community

- **GWizards attempts to address this virtuous circle:**
  - Offer students real-world project activity in academic, voluntary, and basic pay models
  - Offer a socially responsible computing service
  - Students build active portfolio from all activities
GWizards Student Company

- GWizards is an internal vehicle in CMS
- Full company operation, advised by academics
- Aim to provide large part of management to students who prove their abilities
- Cost recovery service model, for local voluntary, public sector and financially-constrained SME
GWizards Student Support Team

- Students themselves, cannot all be offered front-line project work – can develop skills at backend through e.g. testing
- Academic staff, internally for project and coursework, externally for on-site project support and client liaison
- Administrative and business staff, ensuring properly managed processes, contracts, etc.
Summary

- Engagement with employers means students gain real skills and employment opportunities, and develop active portfolio.
- **Socially Responsible Computing** allows organisations (particularly voluntary and public sector) to gain practical technical help for little or no cost.
- Academic staff to gain project experience and publishing opportunities.
Questions????

http://cms1.gre.ac.uk/gwizards/

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