

## **International Perspectives on Undergraduate Research and Inquiry**

### **Group discussions – Group 10**

Chair: Nicola Simmons (University of Waterloo, Canada); Reporter: Andrew Edwards-Jones (University of Plymouth, UK); Group members: Sean Brawley (University of New South Wales, Australia), Gail Sanders (University of Sunderland, UK), Sidbas Ghosh (Dominican University of California, USA), John Grew (New Jersey City University, USA), Michael Clump (Marymount University, USA)

### **Conceptual/International Issues**

Prior to Tom's talk, the group used this session partly as an opportunity for delegates to introduce themselves and partly to offer an insight into a key issue or two around UGR that featured within each institution:-

*Sunderland, UK* – not research-intensive. The UGR concept 'flicked a switch' within the institution, but 2 main issues – 1/ How to embed this within traditional teaching culture? and 2/ A lot of top-up students from colleges who have been spoon-fed previously.

*New South Wales, Australia* – Research intensive. If asked, students would say yes, they do a lot of research. But, it would be ideal if a more apprentice style approach was adopted.

*Marymount, USA* – Attempting to institutionalise student research, particularly at Masters level.

*Dominican University of California, USA* – A small liberal arts institution with many ethnic groups represented. UGR varies with disciplines. UGR research experience was too intensive, so they broke it down over 4 semesters resulting in less pressure. This was started in a few schools, then expanded.

*New Jersey City University, USA* – The Natural Science Department tripled in recent years. Retention has been a primary concern. The offer of a research intensive experience is intended to help with retention. There is no umbrella structure around UGR. Also, tight financial constraints makes something like UGR difficult to institutionalise.

*Waterloo, Canada* – Very research intensive. Student placements help to develop research skills.

Main issues raised from discussion:-

It was thought that there probably needs to be an institutional practice for embedding UGR, but there appear to be many barriers to this, including

- Financial constraints
- Culture of traditional practices
- Inter-disciplinary variation in attitudes to UGR
- Retention

- Pockets of good practice, rather than large scale
- Differing goals i.e. student = a degree, teacher = a publication

How can research-intensive staff be persuaded to reflect on their teaching in order to engage students more in UGR?

Need to promote the positives for students to staff.

Need to persuade staff that engaging with UGR is not an add-on, but can support existing goals.

Need to get students involved in researching teaching and learning within their own institution.

Following the first talk by Tom Wenzel, the group queried the definition of UGR, particularly the issue of originality. The general consensus was that the research experience is critical to the UG journey – the process is more important than the discipline-oriented outcomes. It is important for students to learn research skills (including how to work in collaboration).

Should 'original contribution' be replaced by 'new knowledge'?

Some disciplines do not lend themselves to following a natural research experience over one semester i.e. business management.

Is there a distinction between research and inquiry? Is research skill 'doing something' that comes after, say, two years of learning the discipline i.e. the skill is embedded, or is inquiry a distinct concept that could be developed as a stand-alone one i.e. from an initiative, a course, an experience etc. This latter option could be expensive. A number of the posters displayed seemed to emphasise and support this latter approach.

### National Perspectives

Within national systems, how is UGR and inquiry based research signposted, funded and implemented?

National variation in structure of UG/Masters degree programmes i.e. 3 years, 3 + 2 years, 4+1 years etc. Also varies between disciplines.

Repeated issue of whether UGR should be embedded in disciplinary programmes or extra-curricular.

What 'umbrella' and strategic principles and practices could be introduced? Is this feasible? Or is UGR driven from discipline level effort/energy/ideas? In the UK, in terms of the government-led RiT initiative, was much of this money used to set up institutional

practices, or did the money mostly support discipline-based initiatives? How did these approaches impact on sustainability?

Following the group's observations of the posters, a question raised was 'Is it actually possible to have a truly national umbrella strategy for UGR?'

In countries that appear to have a strong research influence, such as in Scandinavia, is this driven by more independent thought/critical thinking being introduced at school level? Should there be more attention focussed at this level by other nations?

Work-based learning opportunities appear to be increasing across nationalities.

### Institutional Perspectives

Issues arising following examination of posters – selectivity; any examples of a student generated debate?

The group's main issue was: - how to get an institutional embracement of UGR?

- Need reward – link to retention rates, publications
- Need to identify barriers – these will differ across institutions and nations
- Need to make UGR engagement 'part of the load'. A problem when time-intensive i.e. mentoring
- Lack of integration evidenced by cases – need to build UGR into curriculum

Andrew Edwards-Jones  
University of Plymouth, UK  
<http://www.plymouth.ac.uk/staff/aedwards-jones#>