

*The Higher Education Academy Physical Sciences Centre
Professional Development Workshop*

Research-Teaching Links in the Physical Sciences: Politics and Practice

**The Reinvention Centre at Westwood, The University of Warwick
Wednesday 18th March 2009**

Conclusions from the workshop

The Thrift Report provides an interesting framework for discussion of RTL, since it focuses attention on “pinch points” instead of curricula. In our case, the secondary/tertiary and the undergraduate/postgraduate transitions move centre stage.

RTL across the secondary/tertiary transition

The workshop concluded that engaging students with “real” research early in their undergraduate course is highly desirable. Positive outcomes would include better preparation for subsequent research experiences (*cf* proposed National Research Experience Programme) and better contextualization of “theory” by showing how it relates to real world needs (macro to micro). Challenges include decisions on whether to make research experience voluntary or part of the curriculum (do students get credit for their research?), students being “at sea” because they are unprepared for research (lacking information literacy) and identifying resources (of course). We noted that issues around assessment are less problematic at Level 1 where marks count less.

Action Points

- engage project work at ‘A’ level and equivalent
- engage with undergraduate ambassador scheme
- engage with industry in these discussions

RTL across the undergraduate/postgraduate transition

The workshop noted that framing research skills as key “graduate attributes” is likely to be profitable in engagement with Learned Societies, Research Councils and other influential bodies. In this context it is essential that our community compiles evidence of how linking teaching and research “delivers” desirable graduate attributes. A major challenge is to make space for research in crowded curricula, arguing that what is lost in *breadth* is gained in *depth*.

Action Points

- engage with the concordat on research careers
- promote inclusion of evidence of RTL in course accreditation and course review documentation
- share good practice relating to undergraduate journals and conferences
- look to increase funding for undergraduate research from research grant awarding bodies

Notes

The workshop agreed that diversity and equality issues were central to these policy developments. Collaborative models showcased in case studies may be helpful in this regard.