

Subject Centre Support

The Centre for Bioscience is keen to support bioscientists who wish to undertake pedagogic research. Below are some of the ways we do this.

Events

We organise and fund events around pedagogic research providing bioscientists with opportunities to meet and share ideas. Reports are available from these days e.g. www.bioscience.heacademy.ac.uk/events/oxfordbrookes.aspx and www.bioscience.heacademy.ac.uk/events/pedr111007.aspx

Funding

The Centre for Bioscience offers grants to fund pedagogic evaluations and research. Individuals can apply for up to £3,000 while up to £15,000 is available for department-level projects. See www.bioscience.heacademy.ac.uk/funding/ for the announcements of upcoming funding opportunities.

Filtered resources

The Centre's dedicated wiki pages are aimed at bioscientists who are interested in developing their teaching activities with a view to research leading to publication. The wiki highlights issues involved in educational research, and directs readers to appropriate resources to explore those issues in greater depth. Includes links to additional funding sources. http://heabiowiki.leeds.ac.uk/wiki/index.php/Getting_Started_in_Bioscience_Education_Research

A place to publish

Bioscience Education is a, peer-reviewed, bi-annual journal of original articles on tertiary level biosciences education. The journal is produced by bioscientists, for bioscientists and consequently read by bioscientists. www.bioscience.heacademy.ac.uk/journal/



Useful Publications

The following references highlight pedagogical research publications as recommended by speakers, delegates and Centre staff.

Educational Research: Biologists Finding their Voice Orsmond, P. (2007) www.bioscience.heacademy.ac.uk/journal/vol9/beej-9-c1.aspx

Developing Evidence-Informed Practice in Undergraduate Teaching and Learning at the University of Cambridge Carmichael, P., Johnstone, K., Jordan, K., Tracy, F. and Truscott, H. (2007) University Cooperation for Innovation: Lessons from the Cambridge-MIT Institute, Rotterdam: Sense Publishers.

Research Methods in Education Cohen L., Manion, L. and Morrison, K. (2007) (6/e) London: RoutledgeFalmer. See a review in *Bioscience Education* at www.bioscience.heacademy.ac.uk/journal/vol10/beej-10-r1.aspx

Educational Research Abstracts Online (ERA) – A database of abstracts covering the current international research in education. www.informaworld.com/smpp/title~content=t713417651

Linking Teaching & Research and Undertaking Pedagogic Research in Geography, Earth and Environmental Sciences. Planet Special Edition 5 (2003) www.gees.ac.uk/planet/#PSE5

Getting Started in Pedagogical Research in the Physical Sciences. Reid, N. (2006) A Physical Sciences Practice Guide.

<http://dbweb.liv.ac.uk/ltsnpsc/guides/PedagogResearch/GettingStarted.pdf>

An annotated Bibliography of Research into Teaching and Learning Update 2003-2006. A Physical Sciences Practice Guide. Edited by Roger Gladwin.

www.heacademy.ac.uk/physsci/publications

Research into Higher Education: an A-theoretical Community of Practice? Tight M, (2005) Higher Education Research & Development, Volume 23, Issue 4.

www.informaworld.com/10.1080/0729436042000276431

Sources of Advice on Evaluation

The following list serves as a starting point in understanding the complexities of evaluating pedagogical research.

Evaluation Cookbook Harvey, J. 1998. The Evaluation Cookbook is aimed specifically at lecturers. www.icbl.hw.ac.uk/ltdi/cookbook/cookbook.pdf

Explorations in Learning & Instruction The Theory Into Practice (TIP) database is a tool intended to make learning and instructional theory more accessible to educators.

<http://tip.psychology.org/>

Evaluating a Materials Course – A guide for lecturers on how to evaluate a Materials Science course. It includes topics such as standard methods of evaluation, when to evaluate, how to frame questions and designing your own evaluation.

www.materials.ac.uk/guides/evaluating.asp

Research groups, projects and programmes

Various groups around the world have focused on issues in higher education such as pedagogical research.

Australian Council for Educational Research a leading educational research centre committed to creating and distributing research-based knowledge, products and services to improve learning. www.acer.edu.au/

The **Teaching for Learning Network (TfLN)**, has grown out of pedagogical development activities, initially in collaboration between the University of Cambridge and MIT, and has been designed as a network supporting both intensive collaboration within its constituent projects and 'at-a-distance' sharing of approaches, interpretative frameworks, findings and outcomes.

www.tfln.org

Enhancing Teaching-Learning (ETL) Environments in Undergraduate Courses

This ESRC-TLRP project of collaborative research (based at the University of Edinburgh) was underpinned by research into the quality of student learning and how it is influenced, not just by teaching and assessment, but by the whole teaching-learning environment.

www.tla.ed.ac.uk/etl/publications.html

Ako Aotearoa New Zealand's National Centre for Tertiary Teaching Excellence with examples of NZ higher education pedagogical practices. <http://ako.aotearoa.ac.nz/>

Carnegie Academy for the Scholarship of Teaching and Learning, CASTL, is a major initiative of The Carnegie Foundation to support developments in teaching and learning.

www.carnegiefoundation.org/programs/index.asp?key=21

The **Australian Learning and Teaching Council (ALTC)** aims to promote excellence in higher education. www.altc.edu.au/carrick/go/home