



The day brought together bioscientists with previous experience of pedagogic research. The morning consisted of presentations and the afternoon facilitated discussion. This event aimed to take forward educational research within bioscience and give those working in the field the opportunity to discuss areas of common interest.



Welcome and introduction to the day

Steve Maw, Centre for Bioscience, opened the day with a brief summary of the event and how the Centre for Bioscience supports pedagogic research.

Social Science Research Methodologies

Bonnie Green, University of Leicester and Genie Cetl

As a social scientist now working with bioscientists Bonnie was much in demand throughout the day. In her introductory talk Bonnie outlined the different approaches of qualitative and quantitative methodologies and how these can often be complementary. She used questionnaire and action research as examples of two approaches before going on to highlight some of the resources available to those wishing to investigate further qualitative research methodologies. Finally Bonnie dealt with quality criteria which are very different in quantitative and qualitative research, though they do map on to each other.

Teaching about bioethics through authoring of websites

Chris Willmott, University of Leicester

Chris described what he classed as an ‘entry-level’ piece of educational research, describing both the activity and instruments for evaluation. Then in true ‘warts n all’ fashion Chris outlined what he did right, followed by what he would do differently with the benefit of hindsight.

Opportunistic Action Research into Peer and Self Assessment

Mark Langan and Rod Cullen, Manchester Metropolitan University

Mark and Rod gave a personal account of their journey into pedagogic research, one initiated by their desire to know if what they did was effective. Using examples from their own research (into peer and self assessment and learner networks) Rod and Mark raised some of the questions that moving in to pedagogic research brings. They highlighted how they incorporate the findings back into their own teaching and how they often show students what they have found.

A farewell to controls? The problems with experiments in education
Mark Huxham, Edinburgh Napier University

Mark flagged up one of the most difficult aspects that bioscientists face when moving over into pedagogical research — the lack of a control. Most bioscientists would identify with Hume “*Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames: for it can contain nothing but sophistry and illusion.*” Yet <1% of educational experiments are controlled (or semi-controlled). Based on his experience Mark encouraged delegates to challenge assumptions, not to always assume controlled experiments are best, but equally not to assume controlled trials are impossible because they cannot be perfect. Mark also warned not to assume that editors (often from a social science background) share the same methodological approaches as we do.



The afternoon consisted of facilitated discussion sessions. Summaries of the discussions are available from

www.bioscience.heacademy.ac.uk/ftp/events/leics240309/discussion.pdf

www.bioscience.heacademy.ac.uk/ftp/events/leics240309/evalpedr.pdf