Potential and Problems of Explicit Research Skill Development in Undergraduate Physics, Chemistry, Biochemistry and Geology.

Eleanor Peirce, Mario Ricci, School of Medical Sciences, The University of Adelaide, Australia, Irene Lee and John Willison, Centre for Learning and Professional Development, The University of Adelaide, Australia
eleanor.peirce@adelaide.edu.au, mario.ricci@adelaide.edu.au, irene.lee@adelaide.edu.au, john.willison@adelaide.edu.au

Abstract: The Research Skill Development (RSD) framework has been used in numerous disciplines in a variety of universities as a conceptual model to aid academics to explicitly and incrementally develop the undergraduate student skills associated with research in a discipline. In the sciences, it has been used successfully in Agricultural Science, Animal and Veterinary Science, Medical Science and other Biological sciences. However, there is no known uptake of its use in Physics, Chemistry, Biochemistry or Geology. This Round Table is an invitation to academics from the latter group of sciences to participate in an open-ended discussion around the potential and problems associated with explicit research skill development of undergraduate students in their disciplines.

The RSD framework will be considered as a point of departure through outlining its use in the Biological sciences. Participants may suggest different approaches to using the RSD or modifications to the framework to make it more suitable, or propose alternative pathways to appropriately developing undergraduate students research skills. Considerations of the similarities and differences between the biological sciences and other sciences at practical and philosophical levels may also illuminate the discussion. Some attendees may choose to become part of the ALTC project that utilises the RSD as its conceptual framework.

How to use “Survey Methods” as a useful survey tool

Aida Yalcin, School of Biological Sciences, The University of Sydney, Australia
ayalcin@bio.usyd.edu.au

Abstract: In helping the Science Faculty staff to design surveys, several survey tools were tested. “Survey Methods” proved to be particularly useful for simple and complex surveys. Three staff in Biology and Physics have successfully trialled the software with both staff and students. As well as providing a platform to create and deliver online surveys, “Survey Methods” can produce data in many formats including Excel spreadsheets, graphs and powerpoint slides. Free trial versions are accessible via the internet.

Why not try it yourself?