

# Fellow Profile



## Adjunct Professor Les Kirkup University of Technology Sydney

Les holds honorary professorships at the University of Technology Sydney, and the University of Sydney. He has published widely in peer-reviewed science and science-education journals throughout his career and has written several textbooks.

**Fellowship title:** Inquiry-oriented learning in science: Transforming practice through forging new partnerships and perspectives

**Year completed:** 2012

**Expertise key words:** inquiry oriented learning, problem based learning

**What did you achieve?:** Through this fellowship, I:

- engaged students, full time and casual academics, science policy makers and high profile national organisations including CSIRO and the Australian Council of the Deans of Science in this fellowship. In doing so, I shaped and broadened the national conversation on learning through inquiry in science;
- facilitated changes in practice at seven universities in five States through supporting the development, trialling and embedding of IOL activities into the curriculum in biology, chemistry and physics;
- captured and examined the student perspective of IOL through focus groups run in five universities in QLD, SA, NSW and TAS;
- presented 13 hands-on inquiry workshops in universities in the UK, New Zealand and Australia, including an invited workshop at the 2012 HERDSA conference in Hobart.

Since my fellowship I have continued to promote learning through inquiry both nationally and internationally in education at all levels. This is evidenced by papers published, for example in the international journal of innovation in science and mathematics education (with M Braun and M Varadharajan) (2016) A Comparison of Student and Demonstrator Perceptions of Laboratory-Based, Inquiry-Oriented Learning Experiences <http://openjournals.library.usyd.edu.au/index.php/CAL>. Invitations to deliver keynotes, 'Inquiry-Oriented Learning in Science: challenges and benefits' at International Conference on Science and Mathematics Education in Bandung, Indonesia, 12th May 2018).

**What does the sector need now?:** The sector is not identifying the next generation of agents, drawn from universities, and working at a national level who can carry on the mission of the OLT/ALTC.

