

ENHANCING LEARNING IN THE LABORATORY: IDENTIFYING AND PROMOTING BEST PRACTICE IN THE PROFESSIONAL DEVELOPMENT OF DEMONSTRATORS

Mauro Mocerino

Presenting author: Mauro Mocerino (m.mocerino@curtin.edu.au)
Department of Chemistry, Curtin University, Perth WA 6845, Australia

KEYWORDS: Demonstrators, professional development, laboratories, OLT Fellowship.

Abstract

A critical component of science and engineering degrees are the laboratory classes. These laboratory classes are also one of the most neglected areas for the professional development of the laboratory demonstrators, who are usually senior students (Honours, Masters or PhD) with little or no teaching experience. In response to concerns about the quality of instruction in laboratories, a Laboratory Demonstrators Professional Development Program (LDPDP) was developed at Curtin to enhance the teaching skills of laboratory demonstrators.¹ A key focus of this LDPDP is to develop demonstrators who are proactive in enhancing the positive learning experiences of their students. An OLT 2015 National Teaching Fellowship aimed to improve the learning experience of students in laboratories through the enhanced professional skills of demonstrators. Following consultation with national and international scholars in institutions that have established PD programs, a refined LDPDP is being developed and disseminated across Australia via local facilitators. To increase the profile and benefits of quality laboratory teaching, a framework for an evidence-based "Certificate of Laboratory Demonstrating" will also be developed. This presentation will report on the progress thus far, which includes the running workshops at eight institutions. Reports from local facilitators will be included.

References

1. Mocerino, M., Zadnik, M., Yeo, S. (2015) "Enhancing students' learning in laboratories through professional development of teaching assistants" EC2E2N NewsLetter 2015 – Special Edition: Chemistry Teaching and Learning. http://www.ec2e2n.info/news/2015/1601_201502

Proceedings of the Australian Conference on Science and Mathematics Education, The University of Queensland, Sept 28th to 30th, 2016, page 94, ISBN Number 978-0-9871834-5-3.