Transforming assessment practice: evidencing and benchmarking student learning outcomes in chemistry

Siegbert Schmid  
*University of Sydney*, siegbert.schmid@sydney.edu.au

Simon Bernard Bedford  
*University of Wollongong*, sbedford@uow.edu.au

Adam Bridgeman  
*University of Sydney*, adam.bridgeman@sydney.edu.au

Glennys A. O’Brien  
*University of Wollongong*, gobrien@uow.edu.au

Ian Jamie  
*Macquarie University*, ian.jamie@mq.edu.au

*See next page for additional authors*

Follow this and additional works at: [https://ro.uow.edu.au/asdpapers](https://ro.uow.edu.au/asdpapers)

Part of the [Arts and Humanities Commons](https://ro.uow.edu.au/ahc), and the [Social and Behavioral Sciences Commons](https://ro.uow.edu.au/ehc)

**Recommended Citation**

Schmid, Siegbert; Bedford, Simon Bernard; Bridgeman, Adam; O’Brien, Glennys A.; Jamie, Ian; Lawrie, Gwen; Lim, Kieran; Priest, Samuel; Pyke, Simon; Schultz, Madeleine; and Southam, Daniel: Transforming assessment practice: evidencing and benchmarking student learning outcomes in chemistry 2015, 65-65.  

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au
Transforming assessment practice: evidencing and benchmarking student learning outcomes in chemistry

Abstract
Higher Education in Australia is in a phase of rapid change due to a number of regulatory changes. Over the past five years the Australian Chemistry community has agreed on a list of Chemistry Threshold Learning Outcomes (CTLOs) that every student graduating from an Australian University will have attained. In addition, the Royal Australian Chemical Institute (RACI) has changed its accreditation process for Chemistry degrees and now uses these CTLOs as the basis for accreditation. Therefore, it is now paramount to ensure that our assessment items allow students to demonstrate attainment of the CTLOs during a degree [1]. The "Assessing the Assessments" project, funded by the Australian Government's Office for Learning and Teaching (OLT ID14-3562) is developing a framework designed to help academics at tertiary institutions to determine the alignment of their assessment items with the CTLOs. The project is also collating a database of standards-based assessment items. The project team has developed an online pro-forma, allowing self-assessment and submission of assessment items. Through workshops, colleagues are guided through the evaluation of assessment items to determine how they meet or fall short of attainment of specific CTLOs. These workshops are designed to support evaluation of assessment items to ensure that they are CTLO compliant. We will reflect on the first year of this large project and seek suggestions and feedback from the audience.

Keywords
chemistry, outcomes, learning, assessment, student, transforming, benchmarking, evidencing, practice

Disciplines
Arts and Humanities | Social and Behavioral Sciences

Publication Details

Authors
Siegbert Schmid, Simon Bernard Bedford, Adam Bridgeman, Glennys A. O'Brien, Ian Jamie, Gwen Lawrie, Kieran Lim, Samuel Priest, Simon Pyke, Madeleine Schultz, and Daniel Southam
TRANSFORMING ASSESSMENT PRACTICE: EVIDENCING AND BENCHMARKING STUDENT LEARNING OUTCOMES IN CHEMISTRY

Siegbert Schmida, Simon Bedfordb, Adam Bridgemanb, Glennys O’Brienb, Ian M. Jamec, Gwen Lawriei, Kieran F. Lim ( ), Samuel Priests, Simon Pykef, Madeleine Schultzh, Daniel Southamh

Presenting Author: Siegbert Schmid (siegbert.schmid@sydney.edu.au)

aSchool of Chemistry, The University of Sydney, Sydney NSW 2006, Australia
bSchool of Chemistry, University of Wollongong, Wollongong NSW 2500, Australia
cDepartment of Chemistry and Biomolecular Sciences, Macquarie University, Sydney NSW 2109, Australia
dSchool of Chemistry and Molecular Biosciences, The University of Queensland, St Lucia Qld 4072, Australia
eSchool of Life and Environmental Sciences, Deakin University, Burwood Vic 3125, Australia
fDepartment of Chemistry, School of Physical Sciences, University of Adelaide, Adelaide SA 5005, Australia
ghSchool of Chemistry, Physics and Mechanical Engineering, Queensland University of Technology, Gardens Point Qld 4001, Australia
iDepartment of Chemistry, Faculty of Science and Engineering, Curtin University, Bentley WA 6102, Australia

KEYWORDS: Chemistry threshold learning outcomes, assessment, accreditation, assessment practice, benchmarking

ABSTRACT

Higher Education in Australia is in a phase of rapid change due to a number of regulatory changes. Over the past five years the Australian Chemistry community has agreed on a list of Chemistry Threshold Learning Outcomes (CTLOs) that every student graduating from an Australian University will have attained. In addition, the Royal Australian Chemical Institute (RACI) has changed its accreditation process for Chemistry degrees and now uses these CTLOs as the basis for accreditation.

Therefore, it is now paramount to ensure that our assessment items allow students to demonstrate attainment of the CTLOs during a degree [1]. The “Assessing the Assessments” project, funded by the Australian Government’s Office for Learning and Teaching (OLT ID14-3562) is developing a framework designed to help academics at tertiary institutions to determine the alignment of their assessment items with the CTLOs. The project is also collating a database of standards-based assessment items.

The project team has developed an online pro-forma, allowing self-assessment and submission of assessment items. Through workshops, colleagues are guided through the evaluation of assessment items to determine how they meet or fall short of attainment of specific CTLOs. These workshops are designed to support evaluation of assessment items to ensure that they are CTLO compliant. We will reflect on the first year of this large project and seek suggestions and feedback from the audience.

REFERENCES
