

Work-integrated learning and STEM skills in the work force

ACDS T&L Conference
Brisbane, July 17th 2015

Professor John Rice
University of Sydney
Australian Council of Deans of Science

Science is funded by teaching

Public investment is based on the promise that a university education provides a good start in life.

A university education helps one to engage in the world and to shape its and our own future.

Employability in particular, and connection with the world beyond university are highly sought after.

NATIONAL STRATEGY ON WORK INTEGRATED LEARNING IN UNIVERSITY EDUCATION



Work Integrated Learning in STEM in Australian Universities

FINAL REPORT

Submitted to the Office of the Chief Scientist

February 2015

Daniel Edwards
Kate Perkins
Jacob Pearce
Jennifer Hong

Australian Council for Educational Research



WIL in STEM in Australia

The indicative data suggest that during their degree

- almost three of every four ICT bachelor students experience an industry based project,
- about one in four agriculture and environmental studies students
- about one in seven science students.

9 Case studies – Examples of WIL in Practice

- 9.1 Overview..... 80
- 9.2 Examples of WIL in Science..... 80
- 9.3 An ICT project case study..... 84
- 9.4 Regional Approaches to Industry
Engagement..... 85
- 9.5 Embedding university-wide WIL
practice..... 87

9.2 Examples of WIL in Science

Biology Laboratory Simulations

The Australian National University (ANU)

University of Technology Sydney and Choice

Physics in the real world

Internships in a research-focussed institution

The University of Melbourne

Undergraduate Research Opportunities Program

Biomedical Research Victoria

10 Conclusion

- 10.1 Overview..... 88
- 10.2 'Good WIL' 88
- 10.3 Important issues that need to be addressed..... 89
- 10.4 Suggestions for the future..... 92
- 10.5 Mapping Objectives to Project Findings..... 94

The logo features a dark blue background with a lighter blue wavy line at the top. The text "SPLnet" is centered in a white, sans-serif font.

SPLnet

Science Professional
&
Integrated Learning Network

What the network will do

- identify and share experience of a spectrum of WIL activities,
- identify and share academic standards and course structures
- examine organizational structures needed to foster WIL,
- advice on relationship building with industry/organisations,
- point of contact for the ACDS with peak organisational bodies.

Project timeline



July 2015	Steering Committee convened
	Criteria for action-learning projects established
September 2015	Call for expressions of interest for action-learning projects
December 2015	National Forum on WIL in Science
January 2016	selection and announcement of action-learning projects
April-October 2016	Regional Workshops
December 2016	2 nd National Forum on WIL in Science