Background information on the Institute for Teaching and Learning, Learning Centre and Mathematics Learning Centre

1. The contribution of staff research to supporting the University’s Teaching and Learning strategy

The research of the academic staff in the teaching and learning units directly supports and informs the work outlined in the units’ strategic plans, and hence the strategic goals of the University. It contributes to the service function of the units while also contributing to the research standing and reputation of the University. The research provides a credible basis to the University’s commitment to research-enhanced teaching and evidence-based educational policy and strategy development.

The research of staff in the units has provided the theoretical basis for key university teaching and learning policies and systems. That same research has had international impact as seen in: the applications of that research and those systems at prestigious universities (e.g. curriculum renewal at Kings College London and the University of Warwick; survey design by the Higher Education Academy), high citations, consultancy requests, keynote speaker invitations and visiting fellow enquiries received. Amongst the staff of the units are individuals with a track record of seven ARC grants, others with in excess of $1.5 million in grant funding, and one of the top eight key researchers in higher education teaching and learning (Kandlbinder, 2013^1). Staff serve as reviewers for prestigious journals and together have served as members of 15 editorial boards for such journals. They also serve as expert assessors of grants for the Office of Learning and Teaching, and the Australian Research Council.

The research of staff includes high quality ERA outputs, competitive research and development grants (OLT & ARC), higher degree research student supervision in seven faculties, and institutional research reports for faculties and SEG committees. Looking at the last five years (2008-2012) there were more than 150 ERA outputs in total, and of these, 66 were refereed journal articles, and 17 books and book chapters. Within this same five year period, the current staff have led or been a member of teams that have secured competitive external grant funding in excess of $2.1 million. These totals do not include the research work of supporting faculty staff in scholarship of teaching activities such as conference papers, faculty initiatives, grants (preparation and participation), collaborative inquiry, and the preparation of institutional reports.

The service and support work of the three teaching and learning units is carried out through several strategies which relate to two key goals, one staff facing and one student facing: 1) Support the enhancement of teaching and curriculum quality, and 2) Enhance learning support for students. What follows is an outline of the research of current staff (indicated in bold) in relation to these two goals and their strategies – illustrated by selected examples of research outputs from the last five years (2008 – 2012) drawing on:

1. ERA outputs (level A1, B1, B2 and C1)
2. Competitive research and development grants
3. Research higher degree student supervision

The following pages do not list all outputs during that period, nor do they list the contributions of honorary associates during that period. This summary also does not include the contribution of teaching and learning unit staff to supporting the higher education research, scholarship, and grants success of colleagues across the University.

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Goal 1: Support the enhancement of teaching and curriculum quality: (Strategy 1) Strategic teaching and curriculum initiatives: Support the enhancement of teaching and curriculum quality by contributing collaborative leadership and support for the University’s strategic teaching and curriculum initiatives and policy development and implementation

Research contributions of current staff on; curriculum, graduate attributes, standards based assessment, academic honesty, research enhanced teaching, blended learning.

Examples of ERA outputs (level A1, B1, B2 and C1) from the past five years

2012


2011


2010


2009

2008

Competitive research and development grants


Higher degree research student supervision

- Education of medical students in Intensive Care Medicine in Australia and New Zealand (PhD: Sarah Whereat). Anthony McLean & Graham Hendry.
• How students’ experiences of the Dental curriculum support their development of ways of thinking and practicing (PhD: Delyse Leadbeatter). Simon Barrie & Chris Peck.
• Nutrition specialist/professional as a resource: A strategy to enhance the quality of nutrition education within undergraduate medical programs (PhD: Katherine Jukic). Keith Trigwell & Linda Klein.
• The effectiveness of the SOLO Taxonomy to support introductory accounting students’ conceptual understanding (PhD: Milica Simic Misic). Rosina Mladenovic, Sue Newberry & Amani Bell.

Goal 1: Support the enhancement of teaching and curriculum quality (Strategy 2) Professional development for university teachers: Support the enhancement of teaching and curriculum quality through the provision of quality professional development and support for university teachers and Research Higher Degree supervisors to provide excellent teaching.

Research contributions of current staff on effective staff development strategies, research on the impact of professional development post graduate courses, mentoring, reflective practice, the scholarship of teaching and learning, online professional learning, professional development of research supervisors.

Examples of ERA outputs (level A1, B1, B2 and C1) from the past five years

2012

2011

2010

2009
Research curriculum, teaching and learning quality institutional data to support the University’s strategic planning and assurance of the quality of

Research and development grants

- Development new models of leadership for learning and teaching at the University of Sydney: A case study of assessment. (2008-2010). Teaching Improvement and Equipment Scheme, the University of Sydney. Goncz, A., Scanlon, L. & Barrie, S.
- Pilot Mentoring Program for Physiotherapy Clinical Educators in the Faculty of Health Sciences. (2010). Teaching Improvement and Equipment Scheme, the University of Sydney. Thomson, K., Leithhead, I., & Nguyen, M.

Higher degree research student supervision

- Investigating the variation in placement supervisors’ experiences of teaching final year Veterinary Science students (MVS: Ingrid van Gelderen). Rosanne Taylor, Susan Matthew & Graham Hendry.
- Study of effectiveness of academic development programs and their role in supporting continuing professional development in Higher Education (PhD: Giedre Kligyte). Simon Barrie & Tai Peseta.
- The nature of informal academic discourse on university teaching and its role in academic development (PhD: Kate Thomson). Keith Trigwell & Simon Barrie.

Goal 1: Support the enhancement of teaching and curriculum quality: (Strategy 3) Teaching and Curriculum Data services: Support the enhancement of teaching and curriculum quality through the provision of high quality institutional data to support the University’s strategic planning and assurance of the quality of curriculum, teaching and learning.

Research contributions of current staff on survey design and validation, survey statistical methodology.
Examples of ERA outputs (level A1, B1, B2 and C1) in last five years


**Research and development grants (OLT & ARC)**


**Goal 2: Enhance learning support for students** (Strategy 5): Academic Learning Support: Support the enhancement of student learning by collaboratively providing support for students in the development of academic language and literacy skills & (Strategy 6) Mathematics Learning Support: Provide collaborative leadership and academic support programs in the field of mathematics and statistics

Research contributions of current staff on language and literacy learning, student learning identities and approaches to learning, intercultural and cross-cultural communication and mathematics and statistics learning support.

Examples of ERA outputs (level A1, B1, B2 and C1) from the past five years


**Research and development grants**


- Feedback in the Sciences: what is wanted, what is given and how can it be improved (2009-2011). Teaching Improvement and Equipment Scheme, the University of Sydney Muir, M., Frommer, M., White, F., Gysbers, V., **Drury, H.**, Ryan, L. & Raju, S.