

The Teaching-Research Nexus in the Faculty of Arts and Education

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INTRODUCTION

This report examines the connections between teaching and research and proposes that this nexus should be fostered in the Faculty. The nexus between teaching and research can be encouraged through a range of different strategies depending on the nature of the higher education institution, as Alan Jenkins and Mick Healey elaborate (2005, p. 23). This report also proposes policy and staff strategies that will develop the TRN in the Faculty in ways that are progressive and beneficial to students and to those communities in which the University's campuses are located.

In the Us context the Boyer Commission's influential report on undergraduate education (1998) advocates that research skills must be progressively upgraded within courses (with an inquiry-based first year and a 'capstone' experience in the final year) and that units should be planned to develop these abilities in a graduated fashion. An overarching approach to course design that facilitates the TRN, rather than implementation at unit-level, would be necessary to approximate the Boyer model, elements of which have been adopted at the University of Melbourne (Melbourne Model, 2009).

1. DEFINING THE TRN SPECTRUM OF TEACHING PRACTICE

Introductory	Medium	Exemplary
Teacher may not meet the criteria to be classified as research-active.	Teacher is research-active.	Teacher is research-active and makes students aware of his or her research.
Research methods integral to units but without reference to wider practice in the discipline.	Actively inducts students into research methods practiced in the discipline (gathering sources, analysis and interpretation).	Mirrors own research activities in class and assessment tasks.
Includes information from recent research in class materials/readings.	Introduces students to current work in the field that is emerging or undergoing debate.	In addition to introducing current research that is emerging or under debate, explains how knowledge is created and applied in the discipline.
Research tasks integrated into units, but without systematic development across year-levels.	Research skills developed with some view to the progressive building of skills throughout the course.	Constructs and teaches units in a way that develops research skills (e.g. building foundational skills and knowledge in first year, consolidating in second year and extending in third year), inducting students into research culture.
Introduces students to the concepts of knowledge discovery, analysis and interpretation.	Includes some opportunities for students to interpret and analyse problems.	Actively creates opportunities for problem or enquiry-based learning.
Allows students to learn independently.	Places emphasis upon students as independent learners and problem solvers.	Places emphasis upon students as independent learners and problem solvers.

2. DRAFT STRATEGIES FOR THE TEACHING RESEARCH NEXUS IN THE FACULTY OF ARTS AND EDUCATION

(From *The Teaching-Research Nexus: A Guide for Academics and Policy-Makers in Higher Education* www.trnexus.edu.au)

Strategy 1: Develop students' understanding of the role of research in their discipline

- Develop the curriculum to bring out current or previous research developments in the discipline.
- Develop students' awareness of the nature of research and knowledge creation in their discipline.
- Develop students' awareness of learning from staff involvement in discipline research.
- Develop students' understanding of how research is organised and funded in the discipline, at Deakin University and in professions related to the discipline.

Strategy 2: Develop students' abilities to carry out research

- Students learn in ways that mirror research processes.
- Assess students in ways that mirror research processes (e.g. requiring students to have their work assessed by peers according to the house-style of a journal before submitting it to you).
- Provide 'training' in relevant research skills and knowledge.
- Ensure students experience courses that require them to do research projects; and that there is a progressive move to projects of greater scale, complexity and uncertainty (see Strategy 3).
- Develop student involvement in research.
- Develop abilities of students to communicate the results of their research - in ways that are appropriate to the disciplinary community in which they are now participating.

Strategy 3: Progressively develop students' understanding

- Ensure that introductory courses induct students into the role of research in their discipline and present knowledge as created, uncertain and contested.
- Ensure that advanced courses develop students' understanding of research, and progressively develop their capacities to do research.
- Ensure that graduating year (capstone courses) require students to carry out a major research study and help them to integrate their understanding of the role of research in their discipline.

Strategy 4: Manage students' experience of research

- Limit the negative consequences for students of staff involvement in research; most important here is managing the student experience of the days (and sabbatical terms) when staff are 'away' doing research.
- Evaluate students' experience of research and feed that back into the curriculum.
- Support students in making clear to them the employability elements of research; this is particularly important for those students whose focus is on using a degree to get employment, and who may not otherwise appreciate the value of a research-based approach.

Strategy 5: Develop staff capacity to connect discipline-based research and teaching

- Develop shared disciplinary and departmental understandings of teaching and research relations through regular staff discussions and professional development seminars on the subject.
- Make a point of collecting and sharing examples of good practice in the TRN within and across departments.
- Regularly gather and reflect on student feedback on their experiences with the TRN. Share findings with colleagues and close the loop by feeding back to students.

Draft Faculty of Arts and Education Teaching Research Nexus Plan 2010

(Informed by suggestions from Jenkins and Healey (2005) and the recommendations of Krause et. al. (2008))

Faculty-centred policy

- Make the goal of effectively drawing together teaching and research central to the vision of the Faculty of Arts and Education.

Awareness

- Plan events and publications to raise awareness of the TRN among staff.
- Explain the Deakin understanding of the TRN to students and involve them in its evolution.

Curriculum

- Review current courses for the extent to which they facilitate the TRN.
- Ensure support is provided for implementation of the TRN at School level, particularly in assisting Unit Chairs to develop curriculum.
- Expect the TRN to be central to the curriculum and that high-level researchers are involved in its creation and revision.
- Create links between Faculty research centres and the curriculum.
- Include student research journals and conference presentations and seminars in assessment.

Disciplinary differences

- Allow for disciplinary variations across the Faculty by enabling Schools to formulate strategies that suit relevant disciplinary contexts.
- Create discipline-specific (or Faculty-specific) indicators within the Faculty in consultation with each School to complement the University-wide Teaching and Learning Plan.

Rewarding staff and recognising the value of teaching

- Awards for excellent practice should link teaching and research.
- Provide grants for research into teaching in higher education.

Broader initiatives

- Develop benchmarking agreements with similar faculties who prioritise the TRN.
- Ensure that the criteria for promotion, rewards and performance development reviews value the TRN.¹
- Promote Deakin University as a facilitator of both leading research and high-quality teaching.
- Ensure that the TRN is incorporated in strategic and operational planning as well as audit processes.

3. DEAKIN UNIVERSITY TEACHING AND LEARNING PLAN 2009 AND THE TRN

1. Implementing an effective teaching-research nexus to enrich the student experience through the direct involvement of researchers in both course development and delivery.

Action	Performance measure	Expected outcome	2009 Outcomes in Arts and Education
3.1 Ensure all course teams include input from relevant leading researchers in the course development process	Documented evidence in new undergraduate and postgraduate by coursework course introduction and course review documents of the input provided by leading researchers.	All new undergraduate and postgraduate by coursework courses submitted for approval from mid 2008. All courses by end of 2012.	To be included in course accreditation documentation from 2009.

¹ At the University of Auckland, academics applying for promotion are required to show how their research and teaching are linked (Gibbs, 2002, p. 11).

<p>3.2 Ensure students are exposed to leading researchers wherever possible at some point in their course.</p>	<p>Number of undergraduate and postgraduate by coursework courses where there is documented evidence that all students are exposed to a leading researcher.</p>	<p>20% of courses by end of 2009. 50% by end of 2012.</p>	<p>Data on this indicator was not collected in 2008. The Faculty proposes to collect evidence on this throughout 2009.</p>
<p>3.3 Provide opportunities for capable students to include active involvement in a Deakin-led research project as part of their undergraduate (pre honours) course.</p>	<p>Number of undergraduate courses (excluding honours) in which this opportunity is available.</p> <p>Number of undergraduate students (pre honours) involved in a leading research project.</p>	<p>Opportunity available in at least 50% of undergraduate courses (excluding honours) by 2012.</p> <p>At least 50 students per year take up this opportunity by 2012.</p>	<p>Unlikely to meet target. The Faculty does not usually find it appropriate to include students in the disciplines represented in our research profile. The Faculty does provide research experiences for senior students in research based internships, work placements, and study abroad experiences.</p> <p>Unlikely to meet target. See comments above.</p>

Fig. 1 Strategy 3, 2009 Teaching and Learning Plan: Assessment of Faculty of Arts and Education performance against University-wide TRN indicators in 2009

4. CASE STUDIES

The following two case studies provide selected examples of how the TRN is already in place in the Faculty.

**Faculty Case Study One:
School of Communication and Creative Arts
Professional Development for Sessional Staff in Children’s Literature**

A significant percentage of face-to-face teaching within the faculty is conducted by sessional staff: 19 per cent of FTE in the School of Communication and Creative Arts, 23 per cent of FTE in the School of Education, with an average of 17 per cent across the Faculty as at 31 December 2008 (Smith and Paddle, 2008, p. 2). These staff members do not receive funding to support the development of research publications and conference attendance, nor do they receive the same degree of professional development in relation to their teaching as continuing staff. Given the amount of undergraduate teaching conducted by sessionals, in order to facilitate the TRN, engagement of sessionals is a useful strategy.

Dr Liz Parsons, a tenured staff member in Children's Literature, obtained Faculty funding to encourage a connection between the research of sessional and their teaching. Five sessional and contract staff from the Burwood, Geelong and Warrnambool campuses were partially funded to travel to the major international conference in their discipline, the International Research Society for Children's Literature Congress in Frankfurt. The curricula of the subjects in which the sessional staff taught were modified to allow staff to model their experience of drafting a conference abstract and developing a research paper from this initial proposal. Assessment in the subject ALL154/254 required students to submit an abstract for one piece of assessment, which was then developed into a final essay in response to tutor comments and peer feedback via the Children's Literature Hub, a unique model of online teaching trialled in Trimester two 2009.

The project goals were as follows:

- to develop sessional/contract staff capacity to connect discipline-based research and teaching by featuring their research in the classroom;
- to engage student learning in ways that mirror research processes by instituting a tutor-led module that draws on the teacher's specific knowledge and expertise;
- to increase student motivation to undertake research practice through tutor-led modelling;
- to appropriately value the contribution of sessional/contract staff by providing professional development opportunities that enhance their career prospects;
- to evaluate the impact of investment in the teaching-research nexus implemented at sessional staff level.

The team of sessional staff has delivered a seminar within the Faculty to report on the project, noting both its personal and pedagogic benefits, and is currently preparing a refereed journal article to convey the results to a broader audience. At this preliminary stage, it is worth observing the benefit of the project for the scholarship and professional development of these sessional staff members, all of whom will continue to teach in the Faculty in 2010.

**Faculty Case Study Two:
School of Education
Professional Experience and the Master of Teaching
A/Professor Simone White**

A number of staff members in the School of Education research in the field of Professional Experience and the scholarship of teaching, and are bringing their shared knowledge of leading research to curriculum development. In 2009, visiting Australian and international scholars were invited to deliver workshops on the latest research in the field culminating in a collection of key papers that have informed practice. These initiatives have assisted staff in using theory to inform decision making on course design.

The new Master of Teaching (commencing in 2010) is a key example of the approaches being used in the School to improve Professional Experience and teacher education based on research and will be a catalyst for future change in other courses. Staff, who have developed this new Master's program, including Associate Professor Simone White as Director of Professional Experience, have drawn on research that argues that the traditional model of placing individual student teachers is flawed. The Master of Teaching adopts a new model of placing student teachers in whole school clusters, in which students are placed in a number of schools, work in a team-based structure and gain experience across year levels. While other universities are moving toward team-based approaches, Deakin's Master of Teaching will be unique because it involves 'teams' of primary and secondary schools in diverse communities which will more adequately prepare student-teachers for working with students from diverse backgrounds through their experiences across the schools and other educational settings. Enabling student teachers to experience a range of year-levels in both primary

and secondary schools adopts a holistic approach to student learning in which student teachers acquire knowledge about the different stages of child development and provides an opportunity to discuss with many different teachers. Their placements also incorporate work beyond the classroom, shifting the learning focus out to the whole school and community it sits within, preparing students to better plan their classroom activities.

The new Master of Teaching makes the nexus between practice, research and theory more seamless, using a partnership model that breaks down the idea that universities only provide the theory and teaching in schools, the practice. It cultivates the link between studying and teaching, including in its three professional experience units time in classrooms, schools and communities.

5. TRN AT COMPARABLE INSTITUTIONS

The research-intensive Group of Eight universities, which attract the lion's share of research funding, are leading the way in developing policy to facilitate the TRN. A number of other universities in Australia and similar institutions internationally who adopt innovative teaching practice also offer examples that could serve as models for initiatives at Deakin.

Griffith University's Institute for Higher Education has produced a detailed 'Good Practice Guide' (APPENDIX A), which puts forward eight broad strategies for drawing together teaching and research, as follows: draw on personal research in designing and teaching courses; place the latest research in the field within its historical context in classroom teaching; design learning activities around contemporary research issues; teach research methods, techniques and skills explicitly within programs; build small-scale research activities into undergraduate assignments; involve students in departmental research projects; encourage students to feel part of the research culture of Departments; and infuse teaching with the values of researchers. These practices are being fostered as part of Griffith's *Academic Plan 3*, in which the University aims to attract students through its 'distinctive 'signature' experience', which emphasises research-based learning opportunities (p. 13). As part of achieving this goal, the

University has adopted a staff development program through the Griffith Institute for Higher Education with a focus on work-integrated learning and research-based learning.

In section 4 of this report, on policy development, we note the University of Wollongong's methodology for developing policy on the TRN. In the following case study from the Faculty of Creative Arts, we can see how UOW's policies are working in practice. Staff member Lotte Latukefu integrated student reflection and peer learning into the music performance program (Latukefu, n.d.). Peer learning, in which students assess each others' performance, is not generally used as a strategy in studio singing teaching, but consultation with colleagues in UOW's Faculty of Education, who introduced Latukefu to the sociocultural theories of Vygotsky, enabled her to find a key piece of research on which to base the curriculum. To support the introduction of reflective practice to the course (in which students kept a journal), the Centre for Educational Development and Interactive Resources assisted in the development of 'scaffolding' for the process of reflective writing. Latukefu describes the process of student development across the years of the course, as they are progressively afforded more freedom in their reflective writing and peer assessment from an initial high-level of staff involvement. This case study demonstrates the need to look at the curriculum across units to develop a graduated approach to student learning in relation to the TRN and the necessity of support from the Institute of Teaching and Learning for curriculum redesign.

Other institutions provide particular examples of excellent practice in Education, such as the University of Otago, New Zealand. Students in pre-service teacher education utilise portfolios as a space for 'authentic enquiry', focusing on the process of learning and reflecting on practice as the curriculum developed (Jenkins et. al., 2007, p. 50). Using practice that would be transferable to Education, second- and third-year students in Sociology at the University of Warwick, UK, evaluated their peers' experience of teaching and learning. The students used methods including focus groups, interviews and participant observation and their results have involved students in Departmental academic debate (Jenkins et. al., 2007, p. 64).

6. POLICY DEVELOPMENT

The majority of Australian institutions that have implemented detailed policy relating to the TRN belong to the Group of Eight, research-intensive universities. For example, Monash University has positioned the development of the TRN as central to its statement of purpose. In its 'Monash Directions 2005', the University states:

To achieve this aim, we will integrate an international dimension into our interpretation of the teaching-research nexus and ensure that this unique fusion applies in all programs taught by the university. We will also identify universities that may be adopting similar approaches and endeavour continuously to improve our performance in relation to them.

This policy statement also gestures toward the way that each University can devise an individualised approach to the TRN to suit its own strengths and strategic direction. The recent approach taken by the University of Wollongong shows how an institution similar to Deakin developed its own university-wide policy.

Policy at a comparable institution: The University of Wollongong

In response to a strategic directive from 2007, the University of Wollongong carried out several projects relating to the TRN in 2008. Three working groups were formed, each of which held discussions and convened seminars attended by university staff: 'Learning–Researching–Teaching Nexus: Focus on research awareness, access and appreciation for undergraduate students', 'Honours: Focus on raising profile of Honours programs as research activities' and 'Curricula: Focus on teaching-research linkages in curricula'. The groups surveyed students using the Student Experience Questionnaire, instigated course reviews and approval processes and made connections between the university's learning and teaching program and the nexus. The outcomes of the three working groups included the production of a 'Learning-Teaching-Research Nexus' website and an Honours website; case studies of good practice and an articulation of the nexus at the University were also published. In its articulation of the TRN (APPENDIX B), the University of Wollongong commits to strengthening the TRN through academic programs that foster 'knowledge of current research', 'theory and practice of current research', 'critical thinking and enquiry', 'engagement in a scholarly community' and 'reflective practice'.

Accounting for Disciplinary Differences in Policy

Alan Jenkins (2004, p. 19) observes that disciplinary variations impact upon the way in which teaching and research interrelate, not only through the way in which knowledge is regarded, but also on the pedagogy and curricula in each discipline. Furthermore, Krause et. al. complicate the idea of distinct disciplinary patterns, arguing that there may be 'as many differences across disciplines as within disciplines' (2008, p. 5). In addition, in Faculties of Education, pedagogic and disciplinary research may overlap: 'the scholarship of teaching and learning may in fact be very much part of their disciplinary focus' (Krause et. al., 2008, p. 23).

As such, Faculty-wide policy needs to allow for the different kinds of pedagogy used in each discipline, and particular scholarly approaches within them. A centralised strategy that does not allow for these variations is unlikely to be successful. The university-wide strategies from the Deakin 2009 Teaching and Learning Plan demonstrate the difficulty of a universal approach, with its inclusion of indicators that do not represent preferred practice in Arts and Education. Gibbs suggests that 'it is essential to allow and encourage departments to work out how this benefit [of research on teaching] might best operate in their own unique context, and to develop and support locally varied strategies accordingly' (2003, p. 11). The draft policy suggestions below attempt to factor in the need for some freedom to apply specific methods to suit varying subject matter both within and across disciplines.

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APPENDIX A

Griffith University Good Practice Guide: Research-Based Learning Strategies for successfully linking teaching and research

1. *Draw on personal research in designing and teaching courses*
 - Incorporate current research directly into the curriculum as the focus of an entire course.
 - Refer to your own experience of tackling 'real world' problems in your research as illustrative examples to help students understand ideas, concepts and theories.
 - Illustrate the values, practices and ethics of your discipline by having faculty members, including postgraduate students, discuss their current research projects.
2. *Place the latest research in the field within its historical context in classroom teaching*
 - Contextualise discussions of current research findings by referring to some of the discredited theories of the past and the passionate debates of the present.
 - Demonstrate the provisional nature of knowledge and its dynamic and evolving nature with an historical perspective showing how current policies and practices have evolved from earlier practices.
3. *Design learning activities around contemporary research issues*
 - Ask students to explore cutting-edge research problems or to suggest solutions to current real world problems based on their knowledge of the fundamentals of the discipline. Variants of this activity include asking students to:
 - Investigate the reporting of the status of a current research question in the discipline by comparing media reporting of a study with the official report.
 - Analyse the methodology and argument presented in a journal article setting out recent research findings.
 - Conduct a small-scale literature review, leading to a conclusion about the current state of knowledge and further questions to be addressed.
4. *Teach research methods, techniques and skills explicitly within programs.*
 - Develop students' understanding of research methodologies during laboratory classes.
 - Design research methodology courses that provide opportunities to apply research skills to authentic research problems.
 - Design assessment tasks within subjects that provide students with opportunities to learn different methods and skills associated with key contemporary research issues.
 4. *Build small-scale research activities into undergraduate assignments.*
 - Students at all levels can benefit from small-scale research activities that can often be carried out in groups. This mirrors the research culture of working in research teams rather than conducting individual research.

- Ask students to analyse research data from existing 'real world' projects.
 - Provide students with a research question which requires them to conduct a small-scale literature review, decide on methodology, gather data, write up results and reach conclusions.
 - Offer capstone courses that focus on a major project utilising the research skills and disciplinary knowledge acquired in previous semesters.
5. *Involve students in departmental research projects.*
- Give students a self-contained project within a larger project.
 - Organise students to act as research assistants to research higher degree students or faculty members.
 - Organise site visits to university research centres.
6. *Encourage students to feel part of the research culture of Departments.*
- Inform undergraduate students about the research interests and strengths of staff in the Departments in which they are studying.
 - Refer to colleagues' areas of interest and achievements and, where possible, invite them to speak to students about their work.
 - Encourage undergraduate and postgraduate students to attend research seminars by visiting scholars, give papers at conferences, and host student conferences.
7. *Infuse teaching with the values of researchers.*
- Encourage students to understand and aspire to researchers' values such as objectivity, respect for evidence, respect for others' views, tolerance of ambiguity, and analytical rigour, by:
 - Modelling researchers' values in classroom interactions
 - Talking about the process that researchers go through before their work is published and the number of revisions typically involved.
 - Providing structured learning experiences that require students to develop these values, such as, providing research articles presenting opposing arguments on the same topic and asking students to analyse their validity and draw a conclusion.

APPENDIX B

Articulation of the Learning-Teaching-Research Nexus at UOW

Through attention to the connections between learning, teaching and research activities at UOW, we: provide students with skills, attitudes and ways of thinking that are valued in both professional and academic careers; stimulate discussion, debate and dissemination of academic ideas, both within the university and beyond; promote understanding of the ways in which researchers work in particular disciplines; encourage students to pursue higher degrees by research.

UOW is committed to strengthening the Learning-Teaching-Research nexus through academic programs and activities that foster:

Knowledge of current research

Academics update course and subject materials to reflect current discipline knowledge. Students engage with research findings and literature. Students discover and discuss new research topics and questions.

Theory and practice of research

Courses and subjects explore the bases of discipline knowledge. Courses and subjects address ethical issues in research, including data collection and acknowledgement practices. Students study the ways in which researchers work and examine the nature and use of specific methods. Students undertake research activities to develop their research skills.

Critical thinking and enquiry

Courses and subjects include activities on problem solving, enquiry, analysis, reflection and critical thinking. Students question knowledge in the disciplines and discuss competing perspectives in the field of study.

Engagement in the scholarly community

Courses and subjects introduce students to the work of faculty researchers. Academics share their interest and enthusiasm for research as part of teaching. Students attend faculty seminars and workshops. Students collaborate with other students and with academics on research projects. Academics encourage students to undertake further research.

Reflective practice

Students reflect on what and how they learn. Academics apply current theories of student learning. Academics undertake and disseminate research about learning and teaching (scholarship of teaching and learning). Academics reflect on their teaching and research practices and interconnections.

APPENDIX C

Questions for academic leaders and curriculum designers on the TRN within faculties and departments

(Source: Jenkins, Healey & Zetter (2007))

Curriculum and research-based learning

- What is your departmental (and disciplinary) understanding or conception of research 'led', 'based' or 'informed' learning?
- What forms of pedagogy and their assessment do you consider appropriate to support these conception
- Can you clearly identify where research-based learning is integrated in the program?
- Where is current research in your field presented in the program? Check your:
 - program design and program outcomes
 - curriculum content and delivery in the modules
 - assessment methods
- Where are research methods/skills/ethics taught and practiced? Is this progressive? Is a variety of appropriate skills/methods delivered?
- Is the research knowledge/skills the student will have acquired made clear in the module learning outcomes?
- Can/do students participate in departmental research projects as eg research assistants?
- Where is the scope for students to conduct independent research in their programs? and in what ways do the programs allow progression?
- How are research skills and the links between teaching and research embedded in monitoring and review of modules and programs?
- How are students supported in making explicit how this research training/knowledge supports their employability?
- How are undergraduate students made aware of postgraduate research opportunities?

Management, organisational structure and staffing at departmental level

- How does the department's learning and teaching strategy articulate research and teaching/learning links?
- How does the department's research strategy articulate teaching and research/learning links?
- How are the teaching and research activities, organised, motivated and resourced? Are they managed for mutual engagement? Are (all) researchers involved in teaching? How are 'non-research active' teaching staff mentored and encouraged to develop a research/scholarly profile, and valued for their particular contributions to the nexus?
- How do research teams and course teaching teams link with each other? How are these links facilitated?
- Are research 'clusters' also 'teaching teams'?

- How are teaching staff 'managed' in developing research and/or scholarly capacity and vice versa?
- How are new staff acculturated into the department values and practices?
- How are incoming students acculturated into the department values and practices?
- How is the staff and student experience of the nexus monitored and the results fed back into policies and practices?

Inclusive culture

Developing the links between teaching and research requires cultural change too:

- What are the mechanisms for disseminating and communicating research outputs and teaching practice development in the Department?
- How is the research culture and activity given visibility to students? How do students come into contact with departmental research?
- What are the strategies to disseminate research-based teaching experience from the module level?
- What profile is given to (discipline based) pedagogic research? How is this research disseminated and applied in programs?