Developing a systematic, cross-faculty approach to teaching and assessing reflection in higher education

Final report 2012

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http://drawproject.net
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Executive summary

The development of reflective skills is widely regarded as a valuable component of student learning in higher education. For example, reflection can play a role in enabling students to engage productively in their first year experience (FYE); to make connections between theory and practice in work-integrated learning (WIL); and once they leave university, to enhance their capacities for lifelong learning in their profession. Yet, despite the acknowledgement that reflection, or reflective thinking, is an important skill to acquire, there is evidence to suggest that the development of reflective skills by higher education cohorts tends to be superficial unless it is approached in a consistent and systematic way.

The overall aim of this project therefore was to enhance staff and student capacities and understandings for teaching and learning reflective practice in higher education. To achieve this aim two models were developed: 1. A model of reflective practice that focuses on pedagogy and offers a shared language that educators across higher education disciplines can apply in their teaching practice and assessment of reflection, and 2. A model for embedding pedagogic change across courses. The models provide a framework for academic staff involved in course/program development including Assistant Deans – Teaching and Learning and course/program coordinators to embed a systematic and developmental whole-course approach to the teaching and assessment of reflection for the purpose of transformative professional practice.

The success of this project lay in involving a large number of staff across five discipline areas in higher education: Business, Creative Industries, Education, Health and Law. Being able to work with staff across the university not only enabled wide dissemination of the resources developed, but was also instrumental in expanding the project’s original focus on reflective writing to the broader notion of reflective learning. That is, the conceptualisation of reflection has been refined during the life of the project to incorporate representations in different modes, using productive and performative (symbolic practice) as well as discursive (language) forms of expression.

Specific outcomes from the project were:

- The development of an explicit model for the teaching and assessing of reflective learning (TARL), including levels of reflection and key elements of the genre, which can be used by a range of staff, from unit coordinators to tutors, sessional staff and library support staff
- The development of a model for a systematic approach to embedding the pedagogy of reflective writing (EPC) across courses in different disciplines in higher education
- The development of a suite of pedagogical patterns and accompanying resources for systematically teaching and assessing reflective practice. These have been derived from existing exemplary teaching and assessing practices, and are underpinned by the TARL and EPC models, and
- A publically available project wiki has been developed as a way of sharing these pattern hubs across the higher education sector.

While the trialing and refinement of pedagogical patterns for the development of reflective practice has been limited by the project’s duration and scope, feedback from (i) staff who have been involved in the trialing process and (ii) participants at the various forums in which the project’s outcomes have been presented, has been very positive. This feedback suggests that the process of pattern development has the potential to be adopted across the higher education sector in a wider variety of disciplines and courses to enhance both the capacities for higher education staff to teach and assess reflective practice, and the capacities for higher education students to become reflective and transformative professionals in the field.
Teaching and assessing reflection in higher education

Reflective skills are widely regarded as a means of improving students’ lifelong learning and professional practice in higher education (Rogers, 2001), particularly in courses that include work-integrated learning. While the value of reflective practice is widely accepted in educational circles, a critical issue is that reflection is a “complex, rigorous, intellectual, and emotional enterprise that takes time to do well” (Rodgers, 2002, p. 845). Current literature also indicates that there is a lack of clarity in the terminology and definition of reflection, its antecedent conditions, its processes, teaching strategies and outcomes (see Moon, 1999; Procee, 2006; Rogers, 2001; Russell, 2005). Portfolios, journals and logs are examples of written tasks that have been used variously to enhance the reflective capacities of students and make explicit the implicit (Schön, 1987). However there is evidence to suggest that reflective writing by higher education cohorts tends to be superficial unless it is approached in a consistent and systematic way (Orland-Barak, 2005). Bain, Ballantyne, Mills & Nestor (2002) argue that deep reflective skills can be taught, but that they require development and practice over time.

Reflection, or reflective practice, has a long tradition and stems from philosophy, particularly the work of Dewey (1933) on reflective thinking for personal and intellectual growth. Dewey’s approach is considered to be psychological, and is concerned with the nature of reflection and how it occurs. A more critical and transformative approach to reflection, which is rooted in critical social theory, is evident in the work of Friere (1972), Habermas (1974) and others who have followed their lead (see for example Hatton & Smith, 1995; Mezirow, 1990). Critical, transformative reflection is underpinned by a commitment to social change by reading the world critically and imagining a better world that is less oppressive (Leonardo, 2004). Such ideals may not always apply to the types and purposes of reflection in higher education and the professions, however such an approach suggests that an alternative reality can be recast in which the student or professional can take an intellectual stance in dealing with critical issues and practices, and is empowered to initiate change (Giroux, 1988).

Schön’s (1983) work on the **reflective practitioner** has also influenced many scholars interested in the work of professionals and how ‘reflection-in-action’ and ‘reflection-on-action’ can influence their professional education. Schön’s approach is steeped in practice, particularly in building theory from practice. His ideas about improving practice through reflectivity and theory-in-use have inspired much debate around the role of espoused theory and theory-in-use. Schön favours theory that is built from everyday practice, however this view has been criticized for not moving beyond the immediate situation and for potentially perpetuating hegemonic or normalising forms of practice rather than enacting change at a broader level (Gur-Ze’ev, Masschelein & Blake, 2001).

Such diverse theoretical underpinnings mean that reflection is multi-faceted and can be interpreted in various ways (Fund, Court & Kramarski, 2002; Moon, 1999). Most researchers and commentators agree though, that there are different types or hierarchical levels of reflection. Grossman (2008) suggests that there are at least four different levels of reflection along a depth continuum. These range from descriptive accounts, to different levels of mental processing, to transformative or intensive reflection. He argues that students can be scaffolded at each level to produce more productive reflections. Similarly, Bain et al. (2002) suggest different levels of reflection with their 5Rs framework of Reporting, Responding, Relating, Reasoning and Reconstructing. Their levels increase in complexity and move from description of, and personal response to, an issue or situation; to the use of theory and experience to explain, interrogate, and ultimately transform practice. They suggest that the content or level of reflection should be determined by the problems and dilemmas of the practitioner. Hatton and Smith (1995) also posit a depth model which moves from description to dialogic (stepping back to evaluate) and finally to critical reflection.
Academic reflection, which generally involves a conscious and stated purpose (Moon, 2006), and needs to show evidence of learning, comprises each level of reflection and must ultimately reach the critical level for deep, active learning to occur. Such transformative reflection is embraced at QUT, with graduate capabilities that value coherent theoretical and practical knowledge; along with critical, creative and analytical thinking; problem-solving skills and self-reliance.

Reflection as an academic genre has particular textual features that students may not have encountered previously in writing tasks. It uses first person tenor with thinking and sensing processes, as does any form of reflection, yet it also requires the use of nominalisation and technical nouns to allow dense and abstract concepts to be efficiently stated. It demands the use of evidentiary adjectival and causal adverbial groups to show reasoning and explanation (Coffin, 2006). These more complex purposes, high rhetorical demands (Goodfellow & Lea, 2005), and linguistically demanding features of the genre, require explicit teaching and scaffolded development over time for students to achieve success.

Developing and refining pedagogy across whole courses, such as the teaching of reflective writing in higher education, involves a complex set of relations between teaching practitioners, support and leadership groups acting within a dynamic organisational setting. For successful pedagogical change to become embedded within both formal and practitioner domains in a sustainable way, these relationships can be identified and explicitly supported in the form of a model. Components for such a model might include internal practitioner inquiry based on action and reflection (Schön, 1983); identification of critical overlapping knowledges within technological, pedagogical and content domains (Mishra & Koehler, 2006); and the representation of successful pedagogical activity as design patterns (Goodyear, 2005).

**Approach and methodology**

This project was underpinned by a transformative approach to learning that acknowledged the pedagogical process as one of knowledge transformation rather than knowledge transmission (Kalantzis & Cope, 2008; Leonardo, 2004). The learner (whether staff or student) is an active participant in improving learning and professional practice. Critical social theory underpins this transformative approach to reflection. When students are provided with opportunities to examine and reflect upon their beliefs, philosophies and practices, they are more likely to see themselves as active change agents and lifelong learners within their professions (Mezirow, 2006).

The project used a spiral methodology where students were scaffolded to reflect in critical and transformative ways, while at the same time, staff were supported by the research team to reflect in critical and transformative ways as they implemented the reflective strategies. In this way, teachers and students were active learning participants alongside one another as part of a ‘community of reflective practice’ (Lave & Wegner, 1991; Lawless & McQue, 2008). This approach increased the potential sustainability of reflective practice as well as the capacity of those involved.

The project asked the following questions:

1. Can explicit and systematic teaching and assessment of reflective writing improve student developmental assessment outcomes across a course, particularly in first year experience (FYE) and work-integrated learning (WIL) units?
2. What are staff and student experiences of embedding a model for effective teaching and assessment of reflective practice into units across a course?
3. What level of support and scaffolding do teaching and support staff need in implementing strategies for effective reflection?
4. What are the needs of different disciplines for embedding a model for effective teaching and assessment of reflective practice across courses?
A detailed review of literature was undertaken early in the project to inform the subsequent empirical work. Initially, the focus for the review was two-fold: i) teaching and assessing reflection in academic contexts, particularly through the written mode; and ii) embedding broad-scale pedagogic change in higher education. A more broadly conceptualised view of academic reflection to encompass multimodal performance as well as writing was taken up in later stages of the review.

Following the identification of staff in the five QUT faculties (Business, Creative Industries, Education, Health and Law) who could contribute to the project, the following research tasks were undertaken:

- initial interviews with selected staff to determine detailed current teaching and assessment practices around reflection, purposes and quality of reflection and perceived outcomes of reflective practices
- analysis of student work from participating staff’s classes to identify elements that constitute superficial and/or transformative reflection, and
- interviews with students in participating staff’s classes on their perceptions of the reflective process and quality of reflection using open-ended questioning methods and multiple platforms to gather the data, including email and face-to-face interviews.

The initial interviews with staff indicated a broad agreement that reflective writing/practice was an important skill to be developed by higher education students. It was seen as facilitating self-directed and lifelong learning, as well as problem solving capabilities in novel situations, and improved professional prospects for students upon graduation. There was also agreement that that reflective writing/practice should be explicitly taught at university, although differing opinions on where this best sits. Most suggested it should be scaffolded throughout a learning program. Some interviewees reported difficulty in discriminating student achievement on tasks with a reflective writing component; though academics who had been teaching through reflection for some time found it easier to make these discriminations. The findings from these surveys helped to inform the project in two ways:

1. They identified a range of teaching and assessment strategies around reflection already being practiced by staff. These strategies became a starting point for the teaching patterns developed in the project.
2. They also identified where there were particular needs which would be worthwhile addressing in the project, e.g. in explicating criteria and standards for reflective writing tasks.

Interviews were conducted with a small sample of the students who had agreed to provide the project with examples of their written reflections (14 students from four faculties). Students all agreed that the explicit teaching of reflection had assisted them in completing their reflective assessment task. However, some felt that more support could have been provided. In particular, a number suggested that exemplars/models would have helped them to know they were “on the right track” in a writing task which differed from their usual pieces of assessment. While most students had made a connection between developing reflective practice at university and the need to be a reflective practitioner in their future profession, there were a few who strongly believed that the reflective components of the unit were simply a university task disconnected from the real world. These data will be reported fully in the proposed edited book.

All staff who initiated and/or trialed the reflective patterns were also asked to complete an online survey during the second year of the project. This survey was then compared to previous surveys to indicate impact on reflective practice and up-take of the TARL
model and 4Rs resource. Although only a small number of staff responded to the survey (ten staff across five faculties), their responses were overwhelmingly positive. All had introduced the 4R model to their students. Nine of the ten respondents thought that their students' literacy skills in reflective writing/practice had improved as a result of their participation in the project. In particular, higher levels of reflective thinking had been enhanced. For most staff, the development of reflective skills within their single unit was not envisaged as a stand-alone. Rather, it was seen as something that would be further developed in subsequent university studies and in professional practice. All respondents indicated that they would continue to use the model as a basis for further refinement of their approaches to teaching and assessing reflective practice in future offerings of the unit. (See Appendix D for the protocols for staff and student surveys.)

Outcomes

Specific outcomes from the project were:
- The development of an explicit model for the teaching and assessing of reflective learning (TARL), including levels of reflection and key elements of the genre, which can be used by a range of staff, from unit coordinators to tutors, sessional staff and library support staff
- The development of a model for a systematic approach to embedding the pedagogy of reflective writing (EPC) across courses in different disciplines in higher education, and
- The development of a suite of pedagogical patterns and accompanying resources for systematically teaching and assessing reflective practice. These have been derived from existing exemplary teaching and assessing practices, and are underpinned by the TARL and EPC models. A publically available project wiki has been developed as a way of sharing these “pattern hubs” across the higher education sector. The approach proposed by the project to creating such teaching designs and to sustainably embed them into higher education programs and courses is outlined below.
The Teaching and Assessment for Reflective Learning Model (TARL)

A starting point for the TARL model (represented diagrammatically in Figure 1) is that good pedagogic design needs to account for many factors. To simplify the selection of possible designs around the teaching of reflection, we introduce the pedagogic field. It can be imagined as a two dimensional space where categories (or levels) of reflection are set against the development stages students experience across a course.

![Pedagogic Field Diagram](image)

**Figure 1: The TARL model**

We have chosen to represent the levels of reflection as a simple scale, based on the work of Bain et al. (1999) and Carrington & Selva (2010). Just four levels are used: a combined one of Reporting & Responding; Relating; Reasoning; and Reconstructing. The 4Rs provides the vertical axis for our pedagogic field which represents levels of higher-order thinking. The two “replaceable scales” adjacent to the reflective scale on the vertical axis indicate that other learning theories and professional standards can be mapped alongside the 4Rs.

The horizontal axis of the pedagogic field represent the phases of a course: foundation, theory and professional practice. The focus of reflection can change over a course. Early in a course, students can readily reflect on their own understandings as well as surrounding social influences that they experience. Later in the course, students can reflect on other actors and events in their professional domain such as professional peers and clients. In concert with this more complex range, experiences typically change from ones that are simulated in the lecture- or tutorial-room to ones that are situated in real professional practice (such as an internship). These developmental factors are aligned with the course phase on the horizontal axis.

The dots represent specific teaching episodes (or, as we refer to them, teaching patterns) that are relevant for students at a particular stage in their course and that
target a specific level (and sometimes a range) of reflection. The position of dots illustrates the expectation that increasingly higher levels of reflection are targeted as students progress through their course. Though this is just an anticipated trend and some teaching approaches will lie outside this expectation. (See page 8 for further discussion on the creation of the teaching patterns.)

Appendix A: The 4Rs model of reflective thinking is a student-orientated resource that identifies the different levels of reflective thinking and provides general prompting questions that scaffold students into the type of thinking and expression at each level. The 4Rs is a general and accessible scale for students with an easily remembered mnemonic. It can be readily adapted with different prompting questions for specific disciplines or activity types.

Embedding Reflection in University Courses: The Embedding Pedagogical Change Model (EPC)

Although the term competency is problematic, particularly in characterising skills and dispositions that are cultivated in university courses, the label is sometimes applied to the processes associated with reflective writing. As a competency, it joins others, including collaboration, creativity, employability and digital literacy as important adjuncts to any undergraduate course. Such competencies are generally considered wicked because the problem of embedding them into courses with a professional discipline focus is particularly difficult. Wicked competencies are hard to embed because so much of a course, including elements of curriculum, pedagogy, staffing and resources have to be simultaneously treated. Piecemeal approaches to curriculum reform are rarely sustained unless course planning is coordinated across these elements.

Figure 2: A course-wide view of embedding pedagogical change

Fig 2 illustrates one view of the Embedding Pedagogical Change (EPC) model developed by the project around this issue. It shows that planning at the intersection of these elements is vital if pedagogical change is to be sustained. In particular the overlap between Curriculum and Pedagogy defines a space related to Bernstein’s (2000) zone of recontextualisation where teachers construct pedagogic discourses from imperatives of the curriculum and the opportunities available from their knowledge.
of appropriate pedagogies. In a similar fashion, the overlapping space between Resources (and particularly technological resources) and Pedagogy is related to Feenberg’s (1998) notion of technological reappropriation. In this (ideal) case, teachers adapt and modify technologies in order to design pedagogy suitable for their students.

Courses are made up of individual subjects (or units) spread over years coordinated by different coordinators. Teaching staff involved in courses do not necessarily have a big picture of how the different subjects and programs work and in how various competencies (including reflective writing) are developed. Another aspect of the EPC model, the course-long view looks at fundamental processes that ideally should take place to retain such a development sequence (see Fig 3).

**Figure 3: A course-long view of embedding pedagogical change**

These processes are a mixture of top-down (managerialist) and bottom-up (collegiate) approaches. For example, we introduce the notion of requisite trust that a subject coordinator should have towards those colleagues who prepare reflective writing skills and subsequently build on the development work done in a subject. Because requisite trust is vital to maintaining a development thread around reflection, conditions which challenge this trust need to be confronted. For example, if a subject coordinator is replaced, a course leader might take steps to ensure the reestablishment of requisite trust (perhaps over a range of wicked competencies) with the new staff member.

**Teaching Patterns**

Teaching patterns are abstract, formal descriptions of the steps involved in planning and executing a teaching episode. In the academic literature they are called pedagogical patterns and their development in recent years can be traced from architectural design patterns pioneered by Alexander et al. (1977). In short, they are recipe-like structured documents with descriptions based around the problem to be solved, contextual elements, planning steps, links to other patterns, etc. Teaching patterns can be written for any effective educational methods, but in this project we have focused on patterns associated with reflective teaching and assessment in undergraduate courses. Teaching patterns are not prescriptive; they can be constantly modified and refined in the light of different circumstances, feedback received from students, and the rich professional dialogues that surround them.

By itself, a teaching pattern is an abstract description of the design. In most cases, other artefacts are useful to understand how the design works in practice. We have used the term pattern hub to describe a teaching pattern and its associated resources,
which can include such things as: student handouts, assessment criteria, student exemplars, etc.
The project has established a working pattern language, arranged on a pedagogic field in order to assist selection. A sample language with over 25 patterns collected over five faculties during 2010 and 2011 is available on our website. A list of synopses of these reflective patterns can be found in Appendix B.

**The Ongoing Project**

The project has broken new ground in conceptualising the pedagogic field around reflective writing and assessment through the production of models, resources and a proof-of-concept pattern language. There are numerous pathways from this starting point. In particular, the validity of the models needs to be established over a range of conditions (different disciplines, course size and/or duration for example). The pattern language framework needs to be tested with a real course improvement project, so that the utility of this technique in sustainably supporting a community of practice amongst course teachers is recognised. It would be beneficial to extend the application of the models and methods to post-graduate and early career contexts. Finally, it would be appropriate to use similar approaches in related wicked competencies, including collaboration, creativity, employability and digital technology use.

**Dissemination**

**Strategies for profile building and dissemination**

Dissemination occurred across all phases of the project through fortnightly Working Team Meetings; monthly meetings with the Working Group (as well as regular updates); and teleconferences with and newsletters to the Project’s Reference Group (PRG). A project wiki has been developed to enable easy sharing of information. The network of Assistant Deans – Teaching and Learning, of which four of our team members or PRG members are a part, also served as an avenue for dissemination, feedback and updates. QUT’s ePortfolio and WIL teams, TALSS and Library support staff, and International Student Services, all of which are represented on the PRG, provided additional avenues for contextual dissemination as the revised models were up-scaled through systematic implementation across courses at QUT.

Broader dissemination was achieved through university forums, workshops, sharing resources and effective strategies through ALTC Exchange, presentations at higher education conferences and symposia, and paper submissions to peer-reviewed journals. Progress reports were written at appropriate times during the project. The dissemination process was flexible to ensure that dissemination activities were reviewed and revised during the project to ensure most effective opportunities were realised.

A major dissemination forum was also held in September 2011 where the project’s models, findings and work across faculties was presented to a large audience. A website featuring all resources including reflective pedagogic patterns was launched at this event.
## Presentations

### 1. Presentations, seminars and workshops within QUT

<table>
<thead>
<tr>
<th>Month</th>
<th>Audience</th>
<th>Focus</th>
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<tbody>
<tr>
<td>May 2009</td>
<td>Work Integrated Learning (large project group reps from all faculties)</td>
<td>Assessment of WIL in the Primary Education Course</td>
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<tr>
<td>September 2009</td>
<td>Work Integrated Learning (large project group reps from all faculties)</td>
<td>Teaching and assessing reflection: Education as a case study</td>
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<tr>
<td>January 2010</td>
<td>School of Social Work – unit and course coordinators</td>
<td>ePortfolio as a tool for reflective assessment across a whole course</td>
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<td>June 2010</td>
<td>University Course Coordinators’ forum (Organised by Office of Teaching Quality)</td>
<td>Course-wide reflection: Assessment and Pedagogy</td>
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<td>June 2010</td>
<td>University workshop</td>
<td>Introducing the models; strategies &amp; resources</td>
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<td>August 2010</td>
<td>Transitions Out project group – reps from each faculty (Organised by Office of Teaching Quality)</td>
<td>Assessment strategies for capstone units</td>
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<td>August 2010</td>
<td>University workshop</td>
<td>Modifying unit outlines &amp; assessment</td>
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<tr>
<td>August 2010</td>
<td>Health workshop</td>
<td>Writing CRAs &amp; assessment descriptors</td>
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<tr>
<td>September 2010</td>
<td>Education workshop</td>
<td>Modifying CRAs &amp; assessment descriptors</td>
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<tr>
<td>October 2010</td>
<td>Law workshop</td>
<td>Writing CRAs &amp; assessment descriptors</td>
</tr>
<tr>
<td>November 2010</td>
<td>Business workshop</td>
<td>Writing CRAs &amp; assessment descriptors</td>
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<td>May 2011</td>
<td>Faculty of Business Teaching and Learning seminar</td>
<td>Teaching and Assessing Reflective learning in Higher Education</td>
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<td>October 2011</td>
<td>QUT – School of Early Childhood Education</td>
<td>Embedding reflection in teaching and assessing</td>
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<tr>
<td>October 2011</td>
<td>QUT – School of Cultural and Language Studies Education</td>
<td>Embedding reflection in teaching and assessing</td>
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<td>October 2011</td>
<td>QUT</td>
<td>ALTC Project forum: Showcasing teaching and Learning projects across QUT</td>
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<td>November 2011</td>
<td>QUT – School of Accountancy</td>
<td>Planning to teach reflection across a whole course</td>
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<tr>
<td>November 2011</td>
<td>QUT – School of Maths, Science and Technology Education</td>
<td>Embedding reflection in teaching and assessing</td>
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### 2. External presentations (for other Queensland HE institutions and for UK Research Centre)

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<tr>
<th>Month</th>
<th>Audience</th>
<th>Focus</th>
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<tbody>
<tr>
<td>July 2011</td>
<td>Australian Catholic University workshop – Streamed across six campuses – Brisbane, Ballarat, North Sydney, Melbourne, Strathfield, Canberra</td>
<td>Strategies for Enhancing Reflective Teaching and Assessment in your Units</td>
</tr>
<tr>
<td>September 2011</td>
<td>The Australian Collaborative Education Network Qld Chapter (ACENQ) presentation – hosted by QUT</td>
<td>Teaching and assessing reflective writing in higher education</td>
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<tr>
<td>September 2011</td>
<td>QUT, Griffith University, The University of Queensland, Volunteer Queensland</td>
<td>Research Forum: Teaching and Assessing Reflection across Higher Education Courses – present theorised models, resources for staff and students, launch project website, poster session of teaching trials</td>
</tr>
<tr>
<td>October 2011</td>
<td>Webinar participants organised by the Centre for Recording Achievement, Wigan, Lancashire</td>
<td>Teaching and assessing reflection in higher education</td>
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<td>October 2011</td>
<td>Education Research Group of Adelaide (ERGA)</td>
<td>Teaching and assessing reflective learning in higher education</td>
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<tr>
<td>November 2011</td>
<td>University of Queensland - TEDI</td>
<td>Strategies for Enhancing Reflective Teaching and Assessment in your Units</td>
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<tr>
<td>November 2011</td>
<td>University of Queensland – Dept. of Social Work</td>
<td>Teaching and assessing reflection in higher education</td>
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### 3. National and international conference presentations

<table>
<thead>
<tr>
<th>Month</th>
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<tr>
<td>November 2010</td>
<td>Ryan, Mary (2010). Improving reflective writing in higher education: A social semiotic perspective. Australian Association for Research in Education National Conference, Nov 28- Dec 2, Melbourne Australia</td>
</tr>
</tbody>
</table>
4. Conference proposal (accepted)

Chair and Discussant: Nan Bahr
Paper 1: Ryan, Mary & Ryan, Michael. Theorising a Model for Teaching and Assessing Reflective Learning in Higher Education
Paper 3: Barton, G. & Dillon, S. Multi-modal approaches to reflection in Higher Education
Paper 4: Ryan, Michael & Ryan, Mary. Embedding Pedagogical Change as a Key Responsibility in Higher Education Course Improvement

5. Proposed international conference presentations in 2012


Ryan, Mary. (2012). The teacher as reflexive professional: Making visible the excluded discourse in teacher standards. Approaches to Discourse Analysis across Disciplines (CADAAD) conference, Portugal, Spain, 4-6th July.

Publications

1. Journal Articles published or in press:


Ryan, Mary (in press). Conceptualising and teaching discursive and performative reflection in higher education. Studies in Continuing Education.


2. Publications in progress
Journal Articles


Success of the Project – Supportive and Impeding Factors

Factors Critical to the Success of the Project

A major factor critical to the success of this project is that it has fulfilled its design-brief as being a systematic, cross-faculty approach to teaching and assessing reflection. The fact that this project was always intended to be one that was developed across a number of faculties at QUT has been a very positive aspect of the project. Working with staff from Business, Creative Industries, Education, Health and Law has been extremely rewarding. Relevant team members have shown ongoing support and enthusiasm for the project and its significance in higher education.

We would like to acknowledge the involvement of all staff who initiated reflective patterns in their teaching as a result of this project including:

- Lenore Adie - Education
- Dean Brough – Creative Industries (Fashion)
- Jimi Bursaw – Education (UQ)
- Suzanne Carrington - Education
- Tina Cockburn – Law
- Sarah Davey-Chesters - Education
- Steve Dillon – Creative Industries (Music)
- Jennie Duke - Education
- Rachael Field – Law
- Jillian Hamilton – Creative Industries
- Evan Jones – Creative Industries (Dance)
- Jenny Kaighin – Health (Social Work and Human Services)
- Ingrid Larkin – Business
- Kelli McGraw – Education
- Judith McNamara - Law
- Louise Mercer – Education
- Patricia Obst – Health (IBHI)
- Erin O’Connor – Health (Psychology and Counselling)
- Rebekah Russell-Bennett - Business
- Donna Tangen – Education
- Karen Woodman - Education

Critical to the success of the project generally was:

- The positive outlook of the research team
- The flexibility in the design of the reflective pattern language in that it allowed staff from a number of faculties to develop patterns using a common language
- The project was built on individual strengths in the initiation and trialing of patterns but also allowed for a collaborative approach.

We would also like to acknowledge and thank all staff who have trialed reflective tasks in their teaching resulting from the pedagogic patterns and 4Rs model, and those who have participated in interviews and/or surveys assisting in the development of both models and curriculum advancement. We also acknowledge all student participation. Without your involvement this project would not have been a success.
Limitations

Despite one of the major successes of the project being that staff from a number of faculties was involved, this also impacted on the ease of both collection and analysis of data. It was evident that individual staff implemented reflection in their teaching and assessment in wide and varied ways so collecting data using similar approaches proved to be difficult. It was also difficult to get student involvement from an extensive number of courses for a number of reasons including:

- The difficulty in finding a suitable time to visit classes to explain the project and their possible involvement
- Getting students interested in participating in a project that isn’t necessarily assessable - especially when they are approached by other researchers frequently

We learnt to:

- Offer incentive to students
- Contact students a few weeks into semester rather than at the very beginning, and
- Involve staff more in informing students about the project as well as motivating them to participate.

Another limitation identified throughout the course of the project was that we initially limited reflective tasks to written modes. Once we gained involvement of staff in faculties such as Creative Industries we realised that multi-modes of reflection are evident in much teaching across the university (not just in Creative Industries). This led us to value multi-modal approaches to reflection and has since become a strength of this project.

Links with priority goals and other ALTC projects

This project aligned with a key objective of the Priority Projects Program: to identify, develop, disseminate and embed good individual and institutional practice in learning and teaching in higher education. It specifically addressed Priority 1, related to developmental assessment practices. The project work highlighted the essential links between pedagogy, curriculum and assessment, and has produced outcomes that connect these important areas. First, we have contributed to QUT’s curriculum development process, so reflection is now officially included as a top-level essential element of course/program design in QUT policy. Secondly, we have developed a major resource bank of teaching strategies, mapped onto our theoretical model of teaching reflection in higher education, so that pedagogic choices can be more systematic, discerning and appropriate for students, staff and unit or course contexts. Thirdly, we have developed assessment strategies and criterion referenced assessment techniques to ensure appropriate scaffolding for students and rigour in assessing deep learning through reflection.

The project has also built on the previously ALTC-funded Work Integrated Learning (WIL) project (see Patrick et al, 2008 for final report) in which one of the project leaders (Deborah Peach) was based at QUT. Our work has also informed the ALTC-funded projects: Articulating a transition pedagogy to scaffold and to enhance the first year student learning experience in Australian higher education (Kift, 2009) and Stimulating strategic change in legal education to address high levels of psychological distress in law students (Field, 2011) both of which utilised reflection to improve student learning.
outcomes. Our project has developed a number of resources to scaffold students in reflection across their program/course, so that deep, critical reflection is enhanced in foundation, capstone and WIL units. The project has also built upon the Australian e-Portfolio Project (2007; 2008) led by QUT. Orland-Barak (2005) reminds us, however, that the construction of a portfolio per se, does not automatically yield critical reflection. Our project resources provide explicit and developmental teaching and assessment strategies, which enhance and complement ePortfolio capacities.

Evaluation of project outcomes

An independent evaluation of the project was carried out by Dr Wendy Morgan. The independent project evaluation report has been provided separately to the ALTC.

In summary, the independent project evaluation found that the following outcomes had been achieved:

- Completion of a review of the literature on teaching and assessing reflective writing in higher education
- Completion of initial survey of identified teachers at QUT and other Australian universities undertaking reflective pedagogies
- Development of an online model of Teaching and Assessing Reflective Learning (TARL) across the pedagogic field, with dimensions of reflection level and course phase
- Development of an assessment continuum for reflective writing, mappable onto theoretical schemas of reflective thinking, discipline standards and professional competencies
- Development of an online resource to scaffold students’ reflective writing focusing on contexts, purposes, textual features of the genre and levels of reflection, including transformation of professional practice
- Development of an integrated theoretical and practical set of online reflective teaching and assessment strategies and exemplars for reflection in higher education, derived from good practice
- Presentation of professional development workshops and forums at QUT and other universities within Australia and the UK to support staff in teaching and assessing reflective practice
- Development of a schematic model for embedding pedagogical change systematically across courses and faculties
- Resources embedded in online library skills repository for library staff to utilise in academic skills support for students
- 4Rs model made available via ePortfolio website for students’ use
- Refereed journal publications, inter/national conference/symposium and workshops presentations
- Development of participating teachers’ capacities for teaching and assessing reflective language
- Some evidence of enhancement of students’ capacities for reflective thinking as a result of implementation of reflective pedagogies.
References


# Appendices

**Appendix A – The 4Rs model of reflective thinking**

<table>
<thead>
<tr>
<th>Level</th>
<th>Stage</th>
<th>Questions to get you started</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reporting and Responding</td>
<td>Report what happened or what the issue or incident involved. Why is it relevant? Respond to the incident or issue by making observations, expressing your opinion, or asking questions.</td>
</tr>
<tr>
<td>2</td>
<td>Relating</td>
<td>Relate or make a connection between the incident or issue and your own skills, professional experience, or discipline knowledge. Have I seen this before? Were the conditions the same or different? Do I have the skills and knowledge to deal with this? Explain.</td>
</tr>
<tr>
<td>3</td>
<td>Reasoning</td>
<td>Highlight in detail significant factors underlying the incident or issue. Explain and show why they are important to an understanding of the incident or issue. Refer to relevant theory and literature to support your reasoning. Consider different perspectives. How would a knowledgeable person perceive/handle this? What are the ethics involved?</td>
</tr>
<tr>
<td>4</td>
<td>Reconstructing</td>
<td>Reframe or reconstruct future practice or professional understanding. How would I deal with this next time? What might work and why? Are there different options? What might happen if...? Are my ideas supported by theory? Can I make changes to benefit others?</td>
</tr>
</tbody>
</table>

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**References**


Appendix B – Synopses of reflective patterns

**Ad Hoc Web (AHW)** This pattern uses the ready availability of the web to set up a different sort of engagement in tutorial-style classes. Reflection is enriched by testing ideas, seeking examples and answering questions. Access to the web within a lab setting or with student-owned devices is required. It is suitable for foundation and intermediate phases of a course and is implemented over a semester.

**Analysing Reflective Texts (ART)** This pattern works by highlighting different levels, textual features and structures of reflective writing through the analysis of exemplar texts. It is particularly useful in foundation stages of a course as students learn the skills of academic reflection. This is an activity that can be completed within a single tutorial class.

**Analysing a Scenario Response - Foundation (ASRF)** This pattern works by resolving the personal nature of reflection and objective knowledge. A scenario where a discipline-specific problem is played-out with student actors brings the two perspectives together. This activity could be completed in a tutorial class and is well suited to the foundation phase of a course.

**Analysing a Scenario Response - Intermediate (ASRI)** This pattern works by asking groups of students to resolve personal profession-like experiences and objective knowledge. Scenarios are acted-out which bring the two perspectives together for high-level reflection (reasoning and reconstructing). This activity could be completed in a tutorial class and is suited to intermediate or capstone stages of a course.

**Double Sided Projects (DSP)** This pattern helps with the design of assignments. It works by partitioning the assignment into two parts: a (traditional) discipline-specific task and reflective writing around the completion of that task. Assignment specifications need to be re-written to describe and provide assessment criteria for the "reflective" side. Students need to possess or acquire reflective writing skills. This pattern has semester-wide implications.

**Fishbowl Reflection (FBR)** This pattern is an activity suitable for students at any stage of their course. Reflection is encouraged by separating 'reflecting' observers from participants who engage in a staged discussion or debate. It is simple to prepare and can be completed within one class. No special resources are needed.

**Future Career Reflections (FCR)** This pattern investigates why students choose the course that they do. Often students come into their courses with pre-conceptions about their chosen careers without considering the broad nature, scope and application of their chosen profession.

**Formulating Questions for Reflection (FQR)** This pattern describes an approach to scaffolding students’ ability to formulate their own questions. The “expert” models effective questioning techniques for students, gradually fading the model and allowing students to take over asking questions of each other. The pattern can be implemented in a single lesson. It can be useful in
the intermediate and capstone stages of a course where students are required to reflect on field or service learning experiences.

**Group Microcasts for Reflection (GMR)** This pattern reifies group-negotiated reflection of an experience into an artefact, in this case a very short podcast (microcast). In turn the microcast itself can be used as the basis for further reflection. Convenient access to technology for podcast creation and a place to host the microcasts (e.g. Blackboard) is required. The pattern is suitable anywhere within a course, but it does need some skills and equipment.

**Making Annotated Exemplars (MAE)** This pattern is about making student resources to demonstrate features of good reflective writing in the form of annotated exemplars. The exemplars reveal the thinking behind the construction of good reflective texts and make strong connections to how students will be assessed. Preparation involves collecting samples from past students or composing suitable texts. The pattern is very general in its applicability, so can be used at any stage of a course and can target any level of reflection.

**Mapping Critical Incidents - Capstone (MCIC)** This pattern follows on from Mapping Critical Incidents - Foundation (MCIF) and is therefore suited to intermediate and capstone stages of courses where the students have had/will have professional experience. This activity can be completed in one class.

**Mapping Critical Incidents - Foundation (MCIF)** This pattern is an activity suitable for students learning the basic reflection processes of the 4Rs (reporting and responding). By focusing on a simple observable skill, the complexities of reflection in real contexts is reduced. Some preparation is necessary (an exemplar skill needs to be chosen and modelled). This activity can be completed in one class.

**Making Reflection Visible (MRV)** This pattern works by making reflection into a performance and recording it so that it becomes an object for a wider audience. This pattern has technical and video-preparation skill requirements and needs to be carefully scaffolded. It is suitable for the foundation phase of a course. The pattern is completed over a semester.

**Performer as Reflective Practitioner (PRP)** This pattern highlights the reflective processes used in performance based disciplines (Dance, Drama, Teaching, Sports). It focuses on the cumulative nature of reflection over time where the performer constantly researches, evaluates and improves their performance practice.

**Prompting Reflection with the help of Technology (PRT)** This pattern can be used where students are expected to reflect on their own performance (e.g. a role-play) or activity (e.g. problem-solving). During this performance or activity, students are not distracted by also attempting to gather data for reflection. Rather, recording technologies allow them to engage in the primary experience and reflect later. The technical aspects of recording and distributing the recordings promptly to students need to be in place before the pattern is implemented. The pattern is suitable for any stage of a course.
Reflections Around Artefacts (RAA) This pattern works by focusing on a tangible student-made product that serves as the basis for reflection and further refinement. Ideally, the product is associated with professional activity, so this pattern is suited for intermediate phases of a course. It requires scaffolding and integration with assessment, so is completed over a semester.

Reflection Assessment Criteria (RAC) This pattern works by building a common and consistent vocabulary around reflection, especially in assignment descriptions and assessment criteria. It is suitable for any phase of the course, but should take into account earlier language use. The pattern requires semester-wide planning and adjustment to documentation.

Reflections About Performance (RAP) This pattern works by scaffolding students to reflect on a performance from a number of perspectives and to write these reflections in a blog. Because it focuses on skill development, this pattern is suited to the foundation phase of a course. The design spans a semester unit of work.

Reflective Blogs during Internship (RBI) This pattern works at the time when students are busy undergoing professional practice by structuring their reflection using an online blog. It is particularly suited to the capstone phase of a course when students are involved with field experience. The pattern requires semester-wide planning and integration with assessment.

Reflection as a Professional Activity during Service Learning (RPA) This pattern works by asking students to keep a portfolio of reflections as they engage in service learning experience. It is suitable for students in the capstone phase of their course and is scoped before, over, and after their field placement.

Second Order Reflections (SOR) This pattern works by adopting a two-stage approach to reflection: a first stage where basic levels of reflection are targeted and a second stage that focuses on critical/reconstructive reflection. It is suited to later stages (intermediate and capstone) of a course. The pattern requires semester-wide planning and some integration with assessment (where the second stage is directly assessed).

Socratic Questions for Reflection (SQR) This pattern describes an approach to helping students formulate their own questions. Students are introduced to the Socratic questioning framework which they then use, initially in small groups and then as a class activity, to interrogate a problem. The pattern can be implemented in a single lesson. It can be useful in the intermediate and capstone stages of a course where students are required to reflect on problematic aspects of field and service learning experiences.

Start Talking Reflection (STR) This pattern works by starting with personal, oral forms of reflection and scaffolding students so that their reflections are made available to wider audiences (starting with peers) and textual expression. It is particularly suited for a course's foundation phase. The pattern can be completed as part of a semester as a sequence of classes.
**Task-orientated Teamwork Reflection (TTR)** This pattern works in collaborative learning contexts to make teamwork processes explicit. It is suitable for intermediate and capstone phases of a course. It works by providing plenty of scaffolding to a collaborative task that is set for assessment. Much of the reflective writing is tested with peers. This pattern requires semester-wide planning.

**Using Assessment Scenarios (UAS)** This pattern works by providing students with an introduction to a reflective thinking scale (the 4Rs model) used for self- and peer-assessment. It is suitable for the foundation phase of a course. This activity can be completed in a single class.

**Writing Reflective Journals (WRJ)** This pattern outlines some of the decisions to be made by coordinators who wish to incorporate ongoing reflective writing into their unit. It gives suggestions on how some of these expectations can be articulated to students and teaching staff who are also new to such writing. The pattern is a precursor to other patterns which are dependent on students journaling their experiences over an extended period of time.
Appendix C – Student and staff surveys

1. Student protocol

Developing a systematic, cross-faculty approach to teaching and assessing reflective learning in higher education
Protocol for student interviews/focus groups

This interview is part of a project that has been funded by the Australian Learning and Teaching Council (ALTC). The research aims to assist university staff to systematically develop students’ reflective practice as they proceed through their undergraduate courses. As one component of the study, we are seeking current students’ perceptions of their experience of the teaching and assessment of reflective practice. All the data gathered will be treated confidentially and presented anonymously.

Section 1: Some background information
*Please print your answers in the spaces provided or tick the boxes.*

1. Age: □ Under 25 □ 25 – 35 □ Over 35

2. Gender □ Male □ Female

3. Current course: ______________________

4. How many years have you been studying this course? ______

5. Have you studied any other university courses prior to this one?
   □ No
   □ Yes, please specify ______________________________
   How long did you study this course? _________________

6. Here is a list of the units whose students are participating in the study.
   Circle the unit/s which you have studied in Semester 1, 2011:
   AMB310  AMB379  EDB004  EDB033  EDP415  KDB103  KMB003  LWB240  LWB498  PYB000

7. Describe the assessment item in this unit which included reflection. (What form did it take? What were you asked to reflect about?)

_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________
Section 2: Guiding questions for focus group /individual interviews

Developing reflective practice at university
1. In earlier university studies, have you completed assignments which explicitly required some form of reflection?
   What can you recall about these assignments? (What were you asked to do? How were you prepared, if at all, to complete the tasks?)
2. Thinking about the assessment involving reflection which you completed this semester, what sort of preparation and support did you get leading up to the assessment?
   Was this similar to or different from the assessment in earlier units?
   What do you think was the purpose of the task?
   Did you get the mark that you expected?
   In what ways do you think this reflection task was useful? Why?
3. Can you think of any other guidelines/support that might have been helpful in completing the task?

Being a reflective practitioner
4. How important do you think it will be to reflect on your professional practice when you start working?
   How easy / how difficult do you think it will be?
   What will be the likely benefits?
2. Initial staff interview protocol (March 2010)

Demographic Questions:
1. Within the context of reflective writing, which of these best matches your most significant role? lecturer, course/program designer, policy formulation, learning support, researcher, other: please describe ...
2. What level(s) of student study are you most involved with? (undergraduate, post-graduate, research, learning support, other: please describe ...)
3. Within a course, what phase are you most involved with? (foundation, intermediate, finishing, all, other: please describe ...)

Topical Questions:
1. For how many years have you had a particular interest in reflective writing?
2. Have you written an academic paper/presentation with some focus on student reflection? (yes, no, thinking of it). If yes, please provide the reference and a copy of the paper/presentation.
3. In a few sentences, when assessing students, what qualities do you value most highly in student reflective writing?
4. Do you intend designing/implementing/writing-about an activity or innovation regarding reflection (writing or assessment) in the near future?
5. In general, how important is it for university students to write reflectively? (1→4, least to most important).
   a) If important, can you suggest reasons why?
6. In general, on entry to university undergraduate programs, at what level can students write reflectively? (1→4, rudimentary to mastery).
   a) How do beginning students typically respond to requests to write reflectively?
7. Should skills associated with reflective writing be explicitly taught in university courses? (1:no, 2:yes).
   b) If yes, who should do this teaching (1: foundation subjects, 2: intermediate subjects, 3: finishing subjects, 4: all subjects, 5: in subjects that assess it, 6: independently by students (e.g. online skill building modules), 7: some combination.
   c) In your experience, what other skills are closely related to reflective writing?
   d) Can you briefly name some productive approaches to the teaching of reflective writing? (for example, journal writing)
   e) What are the best ways that university teachers can adopt teaching and assessment strategies around reflective writing? (1: PD workshops, 2: following exemplars, 3: mentoring, 4: online modules, 5: some combination, 6: resources, 7: other ... NB – don’t prompt here, unless the question is unclear)
f) Within a course, what can be done so that the teaching and assessment of reflective writing is embedded and sustained over time?

8. How difficult is it to assess student reflective writing that discriminates student achievement? (1→4, easy to difficult). Why?
   a) What scale or descriptions do you use to discriminate between students when assessing reflective writing?

9. What course, faculty, or university-wide initiatives around the teaching and assessment of reflective writing are you aware of at your institution? This is a question that you might like to add to in response to the follow-up email.
   a) Do you consider them successful? Why/why not? If yes, to what features do you attribute this success?
   b) Are you aware of any initiatives at other institutions?

10. Are non-textual modes of expressing reflective thinking used?

11. Are there any colleagues of yours who we should talk to?

12. As a student, did you complete assessment tasks, or were you involved with, reflective writing? Do you think this has influenced your interest in reflective writing as a teaching and assessment tool? Why/why not?
3. Online survey for staff (September 2011)

Demographics:
1. Name:
2. Unit Code: Unit Name:
3. Where does this unit fit within the degree program?
   Choose an item.

Background Information:
4. Which pattern did you trial in your unit?
5. Did you use it for the purposes of:
   - Teaching Intervention
   - Assessment
   - Both
6. Did you use a model of reflection? Examples include the 4Rs or STAR-L.

Topical Questions:
7. Describe your approach to integrating and trialling the pattern you identified in Question 4. What did you do? How was this different from your usual approach to teaching in this unit?

8. Describe how it went.
   a. What were you hoping for in the span of the 4R scale?
   b. What did you end up getting?
   c. Why do you think that happened?

9. Do you know what exposure to, or experience with reflective writing/practice your cohort typically comes in with?
   Yes
   No
   a. If yes, please provide details, and describe where the exposure/experience occurs.

10. Do you know specifically whether your students will have an opportunity to apply and/or build on the reflective writing/practice skills they have learnt in your unit?
    Yes, in subsequent units
    Yes, in professional practice
    I am not sure
    They will not have the opportunity to build on these skills
a. If relevant, please describe how students will be able to apply their reflective writing/practice skills in the future.

11. Do you think your approach to teaching and learning in general has been impacted as a result of this project?
   Yes
   No
   a. If yes, please describe how your teaching practices have been impacted.

12. Having familiarised yourself with teaching practices associated with reflection, how has that influenced the choices that you make as a unit coordinator, program coordinator, or academic?

13. Has this project clarified the way in which you might assess examples of reflective writing/practice within your discipline in the future?
   Choose an item.
   a. Please describe how your assessment practices have been impacted.

14. What additional resources, if any, would have better facilitated the inclusion of reflective writing/practice in your unit?

15. Do you have any additional feedback or comments for the project team?