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**Author**

Fletcher, Margaret, Macuga, Patricia

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# The Theory Practice Nexus in Teacher Education: Preparing Students for Work

Margaret Fletcher & Patricia Macuga

*School of Cognition, Language and Special Education &  
Centre for Applied Language, Literacy and Communication Studies, Griffith University*

A frequent criticism levelled at university education is the emphasis on theory rather than practice. The challenge for academics remains complex where competing demands require creative solutions to course design and implementation that will accommodate diverse learning needs of students. A recent addition to these demands is preparing students with a set of generic skills that will be the "building blocks of personal and professional success" (Griffith University Graduate Profile). This skill development is aimed at enhancing professional expertise and personal effectiveness in ways that equip a university graduate for life-long learning. These skills should be embedded within and across courses in university programs. In this paper, our efforts to achieve this are reported. Over the past four years, a teaching team has worked with schools in designing a course that addresses the theory / practice nexus and those issues related to student diversity and generic skills. It is consistently rated by students as highly effective in preparing them as teachers of English and recognised by schools as a way forward in preparing students for work.

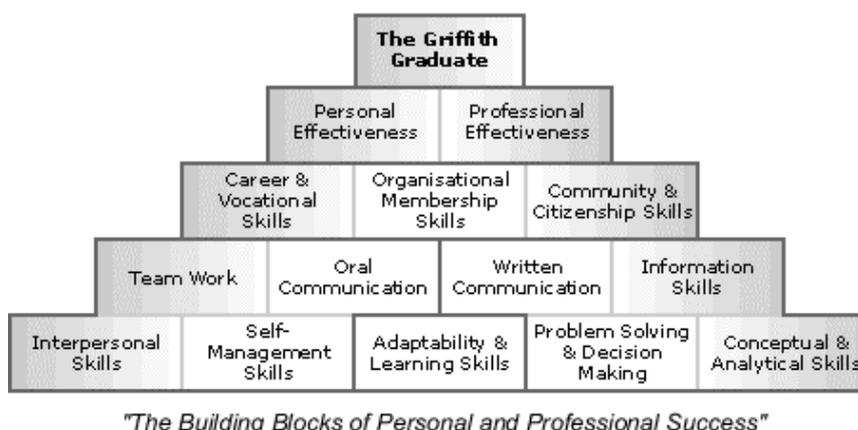
## Introduction

Historically, the English curriculum courses offered in the Bachelor of Education (primary) degree program at Griffith University attracted unsatisfactory evaluations from students enrolled in the Program. They viewed the courses as too theoretical with minimal practical content and reported they were under prepared in the practical skills needed to teach English. In 1999, a third English course was added to a revised Bachelor of Education (primary) degree. Over the past three years there has been a systematic effort to develop a suite of courses that offers students a coherent learning experience in their preparation as teachers of English.

To do this, the English teaching team reflected on evaluation data from students and examined published research on best practices in tertiary teaching. The existing courses were modified in significant ways with major changes to assessment that was designed to develop a theorised understanding of best practice in English teaching and learning. The third English course was developed collaboratively in partnership with schools, incorporating key learning outcomes identified by school leaders as essential attributes of effective teachers. These attributes were an ability to work collaboratively as a member of a learning team, use data-driven planning to design curriculum and to share their successes and expertise within and across the educational learning community.

During this period of review, Griffith University initiated a range of policies designed to enhance the learning experiences of students. An outcome of the Griffith Project (2002) is the Strategic Plan 2003–2007, which highlights the qualities of a Griffith Graduate as someone who "will be known for their expertise and ability to apply their multi-disciplinary knowledge and skills in innovative ways to novel problems". [See Teaching and Learning at Griffith, available [www.griffith.edu.au](http://www.griffith.edu.au)] These qualities were illustrated in the following figure that is to be incorporated in course outlines across the university.

## *The Griffith Graduate* *Resource Directory for Generic Skills Development*



*"The Building Blocks of Personal and Professional Success"*

**Figure 1.**

Generic skills development for the Griffith Graduate.

In the teacher education context, ways to integrate learning experiences that would develop generic skills were reviewed in the literature.

### **Teacher Knowledge**

Post-compulsory education should go beyond a knowledge-telling curriculum to provide knowledge-transforming learning contexts where students determine their own learning pathways as they research assumptions and test solutions (Bryer & Fletcher, 2000; Wilson, & Berne, 1999). Literature in the field identifies a range of factors that contribute to the development of teacher knowledge (Ethell & McMeniman, 2000; Schon, 1987). These include:

- Self-actualization of teacher as researcher; teachers taking control of their learning needs (Hemsley-Brown & Humphreys, 1998; Sachs, 1997);

- Critical reflection in practice (Ethell, 1997; Freese, 1999; Kullman, 1998) ;
- Multiple opportunities to engage with theory and practices of reflection in one's work environment (Billett, 1996; Eraut, 1985; Greeno, 1997; Hammond, 1998);
- Social and community dimensions of learning (Cochran-Smith & Lyttle, 1999; Collis, 1998) and the role of mentoring (Orland, 2001); and,
- Problem-based learning as a form of inquiry (Oliver & Deane, 1995).

Views of knowledge and learning and what contributes to effective learning outcomes have undergone considerable change over the past decade. There is an increasing emphasis on process-based rather than product-based learning where students are equipped to be independent learners. Knowledge building is a product of inquiry where understanding is enhanced through a constructivist view of learning (Farnham-Diggory, 1994; Schwandt, 1994). Teacher knowledge is informed by theory and grounded in the practical experiences of work and this has implications for education students.

"All student teachers need to be provided with opportunities in their preservice teacher education course to foster the development of appropriate schemata for interpreting new knowledge and experiences from the perspective of teachers rather than students" (Ethell, 1997, p. 283). Fletcher (2001, 2004) reported that some teacher education students appear to defer vocational thinking until they are ready to graduate. She found that students in their final semester who are still thinking as "students" rather than as beginning teachers exhibit less agentic approaches towards their learning, locating outcomes with lecturers and tutors rather than proactively pursuing their own learning needs.

### **Lifelong learning**

Teacher knowledge is an evolving process that has adopted the term 'life long learning' as an informing principle. Lifelong learning has been adopted as a key component in education and training programs of the OECD (1996), the European Union (1995), and UNESCO (1996). Lifelong learning is a core belief incorporated in Griffith University's Mission and Values statement where employability status expect an adaptive and on-going approach to learning that is transforming and transferable. Lifelong learning is clearly an idea with a futures orientation. It projects teacher knowledge as adaptive and transforming practice in ways that are theorised and tested in the context of work (Candy, Crebert, & O'Leary, 1994). What is not so clear, though, is what lifelong learning actually means in an educational context, and what policy actions and pedagogical practices may be necessary to bring it about.

### **Authentic assessment and life-long learning**

A way forward in enhancing students as lifelong learners is to use authentic assessment opportunities that will equip students to monitor, reflect and act on their own learning needs in ways that develop understandings in changing work environments (Fletcher, Bartlett, Bryer, & Bowie, 2001). However, post-compulsory education traditionally has relied on assignment and examination formats to assess student content knowledge of courses (Darling-Hammond & Snyder, 2000). Efforts to move beyond a knowledge telling paradigm are evident where assessment tasks are designed to challenge students to

construct their own understandings in ways that are integrative and solution oriented (Cormack, Johnson, Peters, & Williams, 1998; Fletcher & Bryer, 2000). Authentic assessment has been variously described as practical and realistic (Torrance, 1995), performance based, (Wiggins, 1989) and, reflects the conditions where the performance would naturally occur (Meyer, 1992).

Authentic assessment should provide opportunities for students to demonstrate their learning in situations that reflect vocational contexts of their future careers. It should be a learning opportunity for students to demonstrate their analytic thinking skills and understanding of core content, to apply that understanding to practice and to reflect on their performance. Therefore, our definition of an authentic assessment task is one that is:

- grounded in real or simulated contexts;
- experienced-based;
- problem-oriented; and,
- integrated in the curriculum as an instructional tool.

The issue for the teaching team was to establish a course that would facilitate the development of vocational knowledge through providing preservice teachers with opportunities to articulate, explicate, and explore their own beliefs and preconceptions of teaching in theorised and practical way (Ethell, 1997).

In designing the course, a "constructive alignment model" (Biggs, 1996, 1999) framed the integration of learning objectives, teaching objectives and assessment tasks. Biggs (1999) argued that coherence across these three areas would result in assisting students to understand concepts in a transformative way. This translated to a central goal in the course outline that stated, "You will confidently apply your researched understandings of principles of effective teaching and learning to your own classroom practice". To do this the following learning outcomes were identified for students. These outcomes supported the development of stated Griffith graduate generic skills where there were applied in an English teaching and learning context.

**Table 1**  
Alignment of course outcomes and Griffith Graduate generic skills

<b>Course Outcomes:</b> <i>After successfully completing this course, students should be able to:</i>	<b>Generic skills:</b> <i>The Griffith graduate will be known for their expertise and ability to apply their multi-disciplinary knowledge and skills in innovative ways to novel problems.</i>
Identify their own learning needs as a teacher of English;	Self management skills
Strategically pursue their own learning as researchers of literacies;	Adaptability and learning skills
Work collaboratively with peers and members of the teaching profession to develop and test effective teaching approaches to teaching literacy;	Team work Oral communication Problem solving and decision making
Plan for student diversity by researching learning needs of specified groups of students;	Written communication Conceptual and analytical skills
Design a set of resources that will support students' mastery of a range of communication media (oral, print and multimedia).	Career and vocational skills

It is through authentic assessment tasks that the theory / practice nexus is addressed (Smith, Scholten, Russell, & McCormack, 1997). Deliberate course design that incorporates tasks where students draw on theory to research their practice enables learning to be applied within a theorised framework. In this course, students were challenged to pursue their own learning needs by selecting a topic that they felt was personally and professionally relevant to them as future teachers of English. The first assessment task was a Literature Review where students investigated published research on their selected topic. This provided a theorised understanding of the issue. The second task was applying theory to practice. Students developed a practical resource that would address the issues they had identified in the Literature Review. This resource was presented in a poster format in a public venue using a conference format. The final assessment task has been modified over the three years of the course in response to formative and summative data results. In 2001 students were asked to submit a *Thinking Log* that:

will be a systematic reflection on your development as a teacher of English. Your response to each week's topic should demonstrate your integration of knowledge and understandings gained throughout this degree program. [2002 Course outline, p. 7]

As reported in the results section below, quantitative and qualitative data indicated this assessment item had limited influence on student learning. Consequently in 2003 this was modified as a summary statement recording their learning across the three English courses. This task required students to synthesise understandings about the teaching and learning of English, and demonstrate how they would apply those understandings in a classroom setting.

### **Description of the study**

This study has been undertaken over a period of three years. The aims of the project are to:

- investigate effects of using innovative, authentic assessment tasks on preservice students' learning and performance;
- document and describe if and how student perspectives as 'learner' are transformed to that of 'researcher', and
- modify course design over time in response to research data and evaluative feedback.

### **Method**

Action research methods were used to evaluate and monitor the effectiveness of assessment as an intervention in enhancing student learning (Zuber-Skerrit, 2002). Formative and summative evaluation guided iterative processes as participants engaged in a plan, act, observe, and reflect cycle (Kemmis & McTaggart, 1988). Questionnaires, assessment tasks, student results, focus group interviews, evaluation feedback and forum discussion provided data sources for quantitative and qualitative analyses. A mixed methods paradigm (Gay, 2000) underpinned the analysis of data collected. Quantitative and qualitative methods were used. All data provided progressive and comparative evaluative information about students' development as learners.

Three areas of the course design were targeted. They were course content, course delivery and course assessment. Results are reported following a three-year cycle of reflective action.

## Results

Data collected over three years measured student perceptions about the usefulness of course delivery, assessment items and website.

### Course delivery

The course was delivered using lecture and tutorial format with practitioners from outside the university invited to present lectures on best practice. For example, this year a first year Griffith graduate contributed to the lecture program sharing her experiences as a beginning teacher of English, presenting the planning and assessment procedures she had used in her classroom. This was an authentic demonstration of the Griffith graduate attributes in action.

**Table 2**

Evaluation feedback: Course delivery

HOW EFFECTIVE WERE THE FOLLOWING IN DEVELOPING YOUR LEARNING IN THIS COURSE?			
Course delivery	2002	2003	2004
Lectures	84.0	93	95
Invited guest lectures	86.5	77	97
Tutorials	63.5	76	91

These results report percentage of students' responses on a 7-point Likert scale that has been collapsed to show positive agreement to stated items. The level of positive agreement has generally increased over the three period reflecting the effectiveness of the action research approach in meeting the needs of students. Lectures were refined and became more focused as a result of student feedback. This year in response to students' request to link theory with practice, each lecture was introduced with a 'Teaching Idea' that applied a theoretical concept to a classroom activity. The one exception was related to invited guest speakers in 2003 where some students viewed their contribution as "not related to the course", "boring" or "irrelevant". Comments supporting 2004 guest lectures focussed on the practical content they offered:

"It was really useful to have practicing teachers come in and show the sorts of activities and assessment they use in their classrooms".

### Reflection

Evolving understanding of student interests and needs has focused the course delivery in ways that connect theory with practice explicitly. Cumulative experience for teaching staff has enabled members to refine their own practice in an attempt 'to practice what we preach' (Fletcher & Bryer, 2000).

**Technology as a tool for learning**

To support the delivery of content in face to face mode, a website was designed to facilitate virtual learning through additional content organised in Modules and supplemented with a Resource folder that enabled staff to add material as needs arose. A Noticeboard allowed communication by staff to students. It provided an important role in responding to student queries or problems they encountered during the course. The Discussion Forum was organised around specified topics where students would share information with each other or seek clarification on readings or tasks.

**Table 3**

Evaluation feedback: Course website

<b>WEBSITE: HOW EFFECTIVE WERE THE FOLLOWING IN DEVELOPING YOUR LEARNING IN THIS COURSE?</b>			
Design	93.5	95	95
Content	94	97	95
Noticeboard	90	97	95
Forum	78	88	78
Resource folder	88	100	100

There is considerable consistency in student responses related to the website across the three years. While the majority of students consistently rated the website as effective in developing their learning, qualitative data details these views.

Supplying lecture notes on the net is ideal.✓✓✓

Use of interactive noticeboard and forum is excellent for easy communication.

Everything was a great learning tool. Very organised.

Interestingly, the variability reported on the effectiveness of the forum suggests further need for investigation. A few students stating not enough students used the forum and that as it wasn't assessed "there was no incentive to do it". Another issue for some students was the need for 'forum etiquette' as they objected to the tone of some students' contributions. An analysis of forum postings across the three years reveals a qualitative difference in the type of contributions students made and the level of response by tutors. In 2002 and 2004 students generally focussed on inquiry type questions seeking clarification of tutorial topics or procedural information related to the assessment tasks. In 2003 much of the talk exhibited higher-level thinking where students engaged with issues that were personally relevant. For example:

I was wondering, if all those people who have trouble with spelling – did you also struggle with learning to read? Is there a link between spelling ability (applying successful spelling strategies) and the ability to 'attack' unknown words when reading (applying graphophonic knowledge, suffix, letter/sound relationships)? Does the attitude a student has towards reading affect the student's ability to spell (the more a student reads, the better the student will be able to spell)? And, is there a sequence in which the skills of talking, reading, spelling and writing are learnt? Is one a pre-requisite for another? Specifically – is it required to know conventions of spelling in order to decode when reading?

There appears to be a correlation between the quality of student contribution and the level of tutor response. Tutor input in the forum appears to stimulate and facilitate their intellectual engagement in ways that does not happen when they are left to their own discussions.

Furthermore, monitoring student discussions in the forum has given us insights to the problems encountered as the semester progressed and enabled us to provide additional resource material immediately. For example, in 2002 it became clear students were having difficulty with the genre of a literature review. Within two days, we developed and posted a proforma in the Resource folder, with a set of guiding questions to focus their writing. In the following years this enabled us to pre-empt such problems by alerting the students to the guidelines. Their 100% positive rating suggests they recognised the 'timeliness' and value of this tool in addressing their needs as learners.

#### *Reflection*

Technology has become an essential component in meeting the needs of students. The website provides access for all participants to inform, question and challenge. In a course with over 260 students across two campuses, it enables a community of learners to share understandings and negotiate tasks. While it was used to varying degrees by students it facilitated the delivery of consistent messages related to assessment tasks and provided a visible and permanent record of students' evolving understandings.

#### **Authentic assessment: Preparing students for work**

Planning for assessment that reflected the philosophy underpinning the course required rethinking purposes of assessment. Assessment has two important but different goals in higher education. First, the goal of measurement underpins a system where certification is an expected outcome of study at university. Second, the goal of instruction is integrated where assessment tasks are viewed as learning opportunities for students to further their understanding in the field (Cole, 1988; Eisner, 2000). There are competing views in the literature as to what constitutes effective tasks that will achieve these goals, and where learning outcomes remain the domain of the teacher (Wyatt-Smith (2000)). In recognition of this, we looked for innovative ways assessment could be designed to accommodate individual learning styles and learning needs. As third year students completing their final English course, we believed students to have a sound knowledge base on which to identify their own learning needs and demonstrate that capability in the assessment tasks. Thus, the tasks became a vehicle for students to pursue their own learning and demonstrate their level of achievement in meeting course outcomes. Options were built into the tasks where students could test their thinking in the field. All students presented their work publicly where their poster presentation was available for viewing by lecturers and peers on campus.

Assessment items were designed using inquiry methods of learning, where students adopted researcher roles as they investigated best English teaching practice and applied this to designing a practical resource. This cumulated in a synthesising, reflective task. This was initially a progressive thinking log but was changed to a Summary statement in 2002 as the teaching team reflected on the value of tasks and ways to improve learning outcomes for students.

**Table 4**

Evaluation feedback: Course assessment

COURSE ASSESSMENT: HOW EFFECTIVE WERE THE FOLLOWING IN DEVELOPING YOUR LEARNING IN THIS COURSE?			
Literature review	82	76	91
Conference presentation	81.5	77	82
Thinking Log (2002) Summary Statement (2003/4)	56.5	94	91

The assessment in this course is challenging, confronting and effective in achieving the aims of the course. Students recognised the role assessment played in furthering their understanding of literacy teaching and learning. They saw them selves as researchers where comments over the three years characteristically illustrate their understanding of the role the tasks played in contributing to their learning:

It began our researching careers.

By researching literacy issues, I have gained understanding in how to address them in my teaching.

Evaluative comments on the poster included:

It was a good way of pulling together three subjects.

This was such a fun night. I was so impressed with everyone's posters!

Criticisms generally related to the timing of the assessment tasks, where the university calendar meant students returned for a final week of tutorials and lecture, after attending four weeks of professional practice. In the first two years, some students were disappointed at the rushed 30-minute poster presentation. This year we responded by extending the poster presentations to two hours and students found this provided them with greater opportunities to see what other students had done. However, timetabling issues limit the options we have in setting assessment dates, which remains an ongoing negotiation every year.

## Conclusions

Out attempts to design a course that will accommodate diverse learning needs of students, contribute to their developing skills that will be the "building blocks of personal and professional success", and will prepare them to be effective teachers of English continues to evolve through the action research process. By embedding skill development within the context of course learning and assessment, students respond to the authentic experiences they encounter as they theorise ways to improve their practice in practical and classroom-oriented tasks. Further, our action-oriented approach to evaluating the effectiveness of the course design has resulted in changes that have improved the learning experience of students. This is evident in the view represented by students in the following table as they evaluated their preparation to be researchers of their own practice as teachers of English.

**Table 4**

Evaluation feedback: Preparing students for work

	2002	2003	2004
How effective was this course in contributing to your preparation as a teacher of English?	81%	97%	95%
How effective was this course in developing your understanding of teaching English	85%	86%	90%

This paper has been a learning opportunity for the authors as we reviewed data collected over three years and had the opportunity to reflect in a systematic way on what has worked. We will now consider what future opportunities are available for us to ensure that the theory practice nexus remains grounded in authentic learning experiences and assessment tasks that explicitly prepare students for the work of English teaching.

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