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Embedding graduate skills into a first year management course: Theory, practice and reflection

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Abstract: This paper explores both the theory and practice of embedding graduate skills within Griffith Business School Curricula. We reflect on our experience in running a pilot in Management Concepts: a first year course designated as a site for embedding particular skills. We use our experience in this context to illustrate and support our argument that teaching practice and evaluation are as important as research in developing a scholarly approach to graduate skills development.

Keywords: Graduate skills, reflective teaching practice, critical thinking

Introduction

During the past decade, Australian universities have embraced the concept of graduate skills. What appears to be consensus at a policy level however masks significant differences in understandings about what these terms might mean in practice (Barrie, 2004). Some point to the theoretically and conceptually flimsy nature of graduate skills development (Barrie, 2005; Moore, 2004; but see also Clanchy & Ballard, 1995), while others note the increasing pressure on universities to demonstrate their accountability in terms of graduate outcomes (Chanock, Clerehan, Moore & Prince, 2004). As Barrie (2005) points out in his survey of Australian universities, many fall short in two areas: firstly, they have yet to develop teaching and learning strategies, which are appropriate for developing skills within specific disciplinary contexts; secondly, they need to provide evidence of their outcomes through the development of assessment appropriate criteria and standards.

In this paper we address these issues by describing the development of a discipline-specific, embedded, and developmental approach to graduate skills development within the Griffith Business School (GBS). Following an overview of our learning development program and its theoretical underpinnings, we reflect on the process of piloting skills development in a first year management course: Management Concepts. Our discussion focuses on one of the skills developed for this course, namely, critical thinking. Firstly, we trace the development of our conception of critical thinking in this context. Secondly, we discuss our experience of embedding critical thinking in the course through appropriate teaching and assessment practices. Finally we show how reflective teaching practice has informed further revision of

learning development in the course. We use this example of reflective practice to argue that teaching practice and evaluation are as important as higher education research in developing a scholarly approach to graduate skills development.

Graduate skills in Australia

During the past decade, all Australian universities have published policy statements that identify desirable graduate skills. For example, the Australian Technology Network's aim is for its graduates to possess,

The qualities, skills and understandings a university community agrees its students should develop during their time with the institution. These attributes include, but go beyond, the disciplinary expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that prepare graduates as agents for social good in an unknown future (Bowden et al. as cited in Chanock et al., 2004, p.23).

The apparently enthusiastic adoption of such statements can be seen as a response to significant changes in the nature and purpose of tertiary education in Australia during the past decade. There is little doubt that students have changed: most come to university seeking a vocational education geared towards the professional formation of graduates (Marginson & Considine, 2000). With universities now relying heavily on full-fee paying national and international students (Bostock, 2002; Lowe, 2004; Coaldrake, 2000), we find students also want value for the money they pay. With such a diverse, pragmatically motivated student cohort, we can no longer assume that students come to university with the type of disposition and skills that enable them to succeed.

The realisation that incoming students may not succeed at university without some corresponding change in teaching processes (Bryant, Scoufis & Cheers, 1995) has prompted many to focus explicitly on the development of skills that will enable students to learn – both at university and when they leave. Essentially, this means adopting a 'student-centred' pedagogy (Prosser & Trigwell, 1999), which begins from the premise that university teaching must adapt itself to student ability, rather than the other way around. Such a premise points to the need for process-driven rather than content-based curricula (Biggs, 2003). It also calls for the recognition that many students who attend university today do so for reasons of employability, rather than to obtain higher knowledge (Biggs, 2003).

Many view the explicit development of graduate skills as a way of working towards enhancing student employability (Barrie, 2005; Chanock et al., 2004; Christensen & Cuffe, 2002). However, the current focus on skill development also has other potential benefits; it can be seen as a way of making university learning culture and expectations explicit to a diverse range of students, and can equip students with the skills and disposition necessary to be life-long learners. In short, the 'contemporary focus on generic skills [is] part of a bigger, as yet unresolved, debate about the purpose of university education and how to develop educated persons who are both employable and capable of contributing to civil society' (B-HERT in James *et al.*, 2004, p.175).

The Learning Development Unit, Griffith Business School

In response to these challenges, the GBS has established a Learning Development Unit (LDU). With 3000 plus students enrolled in Business Programs, from a diverse range of

Australian and international backgrounds, it was obvious from the outset that the LDU would need to take a pro-active, systemic and developmental approach to skill development.

As part of the process of developing a theoretical framework for our program, we first reviewed existing Australian research on graduate skills. What we found was that the interpretation of graduate skills varies widely. Understandings of graduate skills vary from the most basic view, that skills are a separate precursor to learning, to the most complex, that skills are capabilities, 'that sit at the very heart of discipline knowledge and learning' (Barrie, 2004). Scholarly opinion on the best way to develop graduate skills falls into two distinct camps: the generalists and the specifists. Generalists argue that graduate skills can be taught separately from content, then applied to any discipline, whereas specifists argue that skills such as critical thinking cannot be separated from their disciplinary context (Moore, 2004). Put another way, learning graduate skills as part of one's chosen discipline is a form of literacy, which is 'about being able to participate in appropriate ways in the discourse of one's chosen discipline, to enquire, interpret, hypothesise and challenge – in short, to negotiate meaning' (Kirkpatrick & Mulligan, 2002).

This latter theoretical position resonated with our prior teaching experience across disciplines ranging from management and applied ethics to humanities. Our experience affirmed the premise that graduate skills such as written communication and critical thinking meant different things to different disciplines. Recent work from initiatives at other Australian universities also appeared to embrace the embedded skills development model (Bath *et al.*, 2004; Ballantyne *et al.*, 2004; Christensen & Cuffe, 2002). Embedding skills development into existing GBS curricula would also achieve the other related objectives of promoting a student-centred teaching and culture that acknowledges the diversity of both student background and ability within the School. Ultimately, we hope that graduate skills development will change the way disciplines within the School are taught.

In terms of the implementation process itself, we have been particularly attracted to Gordon and Lee's (1988) model of 'co-production', because it provides a useful conceptual basis for explaining and theorising our relationship with discipline-based staff. Essentially, this model calls for a reconsideration of the relationship between learning specialists and disciplinary specialists. Rather than maintaining the boundaries between these two areas of expertise, we needed to think of our project as one in which learning and discipline specialist are 'jointly involved in the work of knowledge construction' (Gordon et al as cited in Gordon & Lee, 1998, p.6). Such collaboration is intended to produce a 'third knowledge' in the form of a modified curriculum based on an holistic, contextual approach to skills development (Gordon et al. as cited in Gordon & Lee, 1998, p.6).

The GBS learning development program

Our work in the LDU began with a review of the literature on embedding the development of graduate skills. This research prompted us to design a program, which aimed to embed identified graduate skills in one primary, discipline-based course per semester. This process would begin in first year and ultimately extend up to the end of third year. Because previous research has shown that students need repeated opportunities to practise these skills if they are to graduate from university with the disposition for life-long learning (see, for example Wilson *et al.*, 2004), we have also designated at least one other course per semester as a 'skills transfer course'. This course will offer comparable assessment tasks, thus providing the opportunity for students to practise the skills taught in the primary course. To test, and fine-

tune, our skills development model for 2006, we piloted the process of graduate skills development during semester two of 2005 in designated primary course, Management Concepts.

Assessment, course objectives and skills-based lectures were developed by the LDU in partnership with the Management Concepts convenor, and other teaching team members. The skills development process was embedded in a two-step assessment task, supported by specifically targeted lectures and tutorials. This design encouraged students to develop skills, such as written communication and critical evaluation of sources as a way of enhancing and deepening their disciplinary learning from both a scholarly and professional perspective. All targeted skills were assessed at levels the teaching team believed were appropriate for first semester, first year Business students, on the basis of research conducted by the LDU, our prior teaching experience in other disciplines, and the experience of the Management Concepts' teaching team.

Critical thinking in a first year management course

In this paper, we explore what our practise in Management Concepts revealed from the perspective of teaching 'critical thinking': one of skills we targeted. While we recognise that the skills identified in our program are interdependent and are, therefore, not developed in isolation, we have chosen to focus on the development of this one skill (set) to illustrate our approach. It is not only students who are confused by 'the unbearable vagueness of critical thinking' in western universities (Vandermensbrugge, 2004); many academics also hold 'fuzzy' conceptions of what the term means in their discipline. A 1997 study using interviews with teaching staff in 66 Californian universities found that 89% of respondents claimed that critical thinking was a primary objective in their courses, yet only 19% could articulate an understanding of what critical thinking is, and only 9% taught it in their courses (Paul *et al.*, 1997). An Australian study (Kirkpatrick & Mulligan, 2002), which investigated course requirements and students' perceptions of the meaning and value of critical reading practices in several disciplines suggests that Australian university teachers are no different from their US colleagues in this regard. Kirkpatrick and Mulligan confirm what our teaching practice had suggested: there is no consensus and little support for critical thinking in business as an academic discipline.

Thus, our first challenge in designing an embedded, contextualised and developmental approach to teaching and learning critical skills was to understand what critical thinking *could* mean in the context of a first year commencing semester management course. Braun's (2004, p. 233) review of literature on critical thinking in the business curriculum suggests that it is generally taught as part of a problem solving process. Within this context, students demonstrate their capacity for critical thinking when they identify management problems, evaluate information from a range of perspectives about the cause of the problem, and assess the strengths and weaknesses of options for solving the problem. The existing written assessment piece in Management Concepts mirrored these requirements, yet students struggled to meet them.

Our first step in embedding the skill of critical thinking required for this assessment was to locate particular areas of difficulty students had previously experienced in completing it. The course convenor indicated that problem identification and use of references posed the greatest challenge to students. In response, we designed a two stage report writing process that particularly targeted these two components. This offered students the opportunity to make

mistakes and receive feedback, before tackling the second, more heavily weighted (in terms of marks) item. In the first stage students were asked to identify a management problem from a case study, then find and review some of the current management literature in relation to the problem, by identifying and critically evaluating two common themes. The second stage built on the first in that students were required to develop an argument regarding the nature of the problem and propose an appropriate solution.

Each component of the assessment was supported by learning activities that contextualised and modelled requirements for students; we also held teaching team meetings which fostered a common understanding of the assessment requirements and the marking criteria. Given the course convenors' feedback on student difficulties with the assessment, we modelled the process of identifying a management problem from different case studies, identified key words from the identified problem and modelled database searches for appropriate texts. Students were given opportunities to practice these skills in our lectures and again, in tutorials. We contextualised each skill by discussing its professional relevance, its importance in mastering the theory and practice of the discipline, and the need to identify as future researchers in practice.

The results for the first piece of assessment confirmed what both our review of the literature (Biggs, 2003; Prosser & Trigwell, 1999), and our experience had led us to expect: the spread of marks occupied almost the entire range available, showing us unequivocally that 375 students of different ages, with different educational, ethnic and cultural backgrounds and experiences of work and life, had made their own disparate meanings of our carefully designed teaching activities. While we were not particularly surprised by these variations in responses and outcomes, we were taken aback by the kind of strengths and weaknesses the students' work revealed.

The papers submitted for the first stage of the assessment clearly (and reassuringly) demonstrated that the majority of students had developed the ability to identify a management problem in a case study and find five appropriate academic articles. Where many students had difficulty was in the second aspect of the task: reviewing the literature. They had trouble identifying themes in the literature because their reading skills did not stretch to constructing meaning from academic articles. Realising this prompted further investigation, which in turn led to adjustments in our thinking about critical thinking in first year. Importantly, research from the perspective of student perceptions has pointed to the need to challenge students' assumptions about the nature of knowledge. Phillips and Bond's (2004) categorisation of first year management students suggests we can realistically aim for a shift from a unitary perspective to one that accounts for multiple positions within this cohort - if we target learning support for the literature review more appropriately. Guided by research on the development of critical reading skills (for example, see Wilson *et al.*, 2004), we will now work with tutors to develop meta-cognitive reading strategies in tutorials, link critical reading practices to professional development, and embed reading strategies more explicitly into the first stage of the assessment.

Overall, engaging in the process of embedding graduate skills in Management Concepts has given us crucial information that we were unable to gain from related literature. Analysing the outcomes of the first stage of the assessment revealed to us how the students *actually* understood the requirements for critical thinking at this stage of their course, as opposed to how we thought they should conceive of it. It also showed us what they could *actually* do. An analysis of the second stage outcomes also provided useful evidence regarding skill

development. In the second stage students were asked to use the extensive feedback they received from stage one to improve their problem identification and generate solutions to the problem. This stage was also supported by learning activities. After accounting for students who withdrew or did not submit items of assessment, almost all students work showed improvement. Another factor that arose as a significant issue for the process was the apparent link between the quality of improvement in students' work and the skill level of tutors who gave them feedback and led learning activities in tutorials. Students from tutorials of more experienced staff tended to perform better, overall, in the written assessment. This discovery has prompted us to develop a series of teaching development workshops as part of our program.

Conclusion

In terms of designing our program, we have benefited greatly from our initial research in graduate skills development. We believe that the generally positive outcomes in relation to the improvement of student performance reflect our efforts in this regard. Equally, we would argue that using the co-production model as a way of framing our work with disciplinary staff allowed us to design a model of graduate skills development that was thoroughly integrated with disciplinary norms and practices.

However, what we also found was that our teaching practice in the Pilot was a crucial step in fine-tuning the assessment since it offered us the opportunity to properly gauge the learning levels of the GBS cohort. This provided us with new insights into student learning in relation to graduate skills, such as critical thinking, not initially thought of as problematic by the Convenor. Equally as important for our project, was the discovery of the true level of teaching ability amongst our teaching staff, and the importance of staff training to skills development within our discipline.

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