

Research Paper

Title: Learning through reflection: the interface of theory and practice in public health

Abstract

This paper demonstrates that challenging students through assessment to reflect critically on their own learning fosters the transition from theory to practice. The research explored the worth of setting a reflective practice assessment as a means of enhancing student learning at postgraduate level; and to determine if the task was beneficial in developing critical reflection skills in readiness for the world of work.

The research investigated student responses to a purposefully designed Critical Reflection Model as a basis of learning by evaluating their perceptions on the merits of completing a reflective practice exercise to assess their academic learning and professional development. Conducted in 2010 and 2011, findings are presented from two student groups undertaking the same subject in successive years. Narrative analysis of assessment papers and student interviews enabled student experiences to be explored in greater depth and to establish what facilitated the shift from acquiring knowledge to developing practice skills. Critical to the analysis process was a focus on the students' realization of the interface between theory and practice.

The Critical Reflection Model acted as a conduit to deeper learning. In doing so, the assessment assisted student to position reflective practice as a process, and build depth in their ability to critique, question, analyse and promote actions pertinent to public health. The findings demonstrated that purposeful integration of learning and professional competencies in the curricula equip students to use reflective practice as a learning tool and in doing so strengthen knowledge and competencies for public health practice.

Introduction

This paper discusses research undertaken in 2010 and 2011 which explored postgraduate student perceptions of structured reflective practice as a means of enhancing deeper learning and developing professional skills for practice in public health.

Background

Postgraduate studies at Deakin University, Australia, in public health and health promotion are course work programs designed to prepare graduates to be theoretically sound and confident in the practice of assessing public health situations and promoting population health. The courses offer a sound theory base and integrate both public health (Australian Network of Academic Public Health Institutions [ANAPHI], 2009) and health promotion competencies (Australian Health promotion Association [AHPA], 2009) set down by peak bodies in the field. The postgraduate program attracts a large cohort of international students who have obtained undergraduate qualifications such as medicine and dentistry. At a domestic level, students come into the program with some background of social or medical health practice, for example, general practitioners, community nurses and social work, however, most have little formal qualification in public health (Moore, Miller & Heerde, 2009). Personal development and employability are critical to contemporary teaching and learning in higher education (Yorke, 2006; Smith et al., 2009). The literature highlights self-assessment of learning as key to personal development (Biggs & Tang, 2007), and that employers are continuing to place emphasis on attributes, skills, knowledge and attitudes when seeking tertiary qualified graduates (Smith et al., 2009). The principles of Personal Development Planning (PDP) encourage students to develop a stronger sense of professional development and personal career direction as they engage in critical reflection and review learning in a developmental context (Edwards, 2005). A further progression of PDP is Career Development Learning which supports students' learning about themselves and the world of work. Thus contemporary student learning expands beyond academic knowledge per se, to a broader context that involves learning as a process "... that represents the development of skills necessary to navigate a successful and satisfying life/career" (McMahon,

Patton & Tatham, 2003 p.6). Kuisma (2007) suggests that health professionals need to be able to identify their own values, feelings and abilities so that they can react appropriately to experiences when dealing with others. Common to the literature regarding academic and professional development is the importance of reflective practice, where students' reflection-in-action is pertinent in the transition of knowledge to practice (Smith et al., 2009; Biggs & Tang, 2007; Edwards, 2005). According to Moon (2006), students draw on external and internal experiences to inform learning. This relationship with the internal and external environment is important to recognize as a learner, in particular (Moon 2006, p.21) states that "... the prior experience (i.e. the state of the cognitive structure) guides how we respond to a present experience", and therefore, important to the learning process as reflection gives meaning to the information. In particular, reflective journaling encourages students to be in charge of their own learning, to reconstruct new knowledge in light of existing knowledge and experiences, and for students to assess their own development (Moon, 2006).

In preparing students to be life-long learners, critical thinkers and analytical in their work; reflective practice provides a conduit for the development of such essential skills required for the promotion of population health (AHAP, 2009; ANAPHI, 2009).

Integrating work with learning

In the 2008 scoping study of WIL practices in Australian higher education, the report defined work integrated learning as "An umbrella term for a range of approaches and strategies that integrate theory with the practice of work within a purposefully designed curriculum" (Patrick et al., 2008, p.iv). Placed in this paradigm the integration of work in higher education becomes more complex than students merely undertaking a number of hours of fieldwork experience. Integration of theory and practice in a contemporary sense is structured around providing student learning opportunities that focus on increasing an individual's level of employability (Yorke, 2006). With dynamic changes in the contemporary workplace, the skills employers are seeking from higher education graduates are also changing leaving the university sector under greater pressure to integrate work-based practices in student courses as a means of enhancing graduate employability (Bates, 2008). Deakin

University's Functional Area Plan Teaching and Learning 2008 outlines strategies and actions for teaching programs which develop graduates to connect with the workplace (Deakin University 2008). However, such plans require commitment and resources from academics and faculties to adopt teaching approaches that provide work-oriented student learning opportunities by way of assessment, classroom activities as well as field experience. Therefore, it is critical that course structures are assessed to ascertain how well individual units provide WIL opportunities in the classroom. Given, the literature supports the notion of teaching and learning practice designed to link academic development with the world of work (Biggs & Tang, 2007), this research demonstrates the integration of health promoting competencies in the postgraduate curriculum. The focus and application of critical reflection is a stepping stone toward developing an enhanced appreciation by students of self-initiated learning to promote knowledge, skills, attributes and the interface between theory and public health practice.

A social view of health

The paper identifies the intersection of theory and practice in public health, and therefore acknowledges that the delivery of postgraduate education in public health involves the promotion of health at a population level. Thus, this paper is underpinned by the notion that health encompasses the social, economic and environmental factors that contribute to health outcomes for the better or worse (Reidpath, 2004). Reference to public health therefore, considers health from a public lens and encompasses health promotion practice.

Research aims

The aim of this research was to investigate the worth of setting a reflective practice assessment as a means of enhancing student learning at postgraduate level, and to determine if the task was beneficial in develop critical reflection skills in readiness for the world of work. A key objective of the research was to explore the interface of theory with practice, and develop an understanding of when and how reflective practice assisted students to come to link real life examples to the theoretical underpinning of public health. This connecting of theory and practice was colloquially termed in the unit, and throughout the research, as an 'Ah-Ha' moment.

Methodology

Study design

The research considered the application of a Critical Reflection Model for student assessment, and an evaluation of student perceptions about the merits of reflective practice to assist academic learning and professional skills.

Research context

This research was undertaken in 2010, and repeated with a successive student cohort in 2011. The reflective practice assessment formed twenty percent of the overall assessment for the Contemporary Health Issues and Policies subject, a core unit in the postgraduate courses of public health, health promotion and health and human services management. The Critical Reflection Model was created to assist students to make a link between academic learning and professional practice. Employed as a learning resource to prompt reflection, the model was designed to develop critical reflection skills so that students would interrogate how what they learned in the class environment developed professional skills. Hence, the intent of the model was to develop deeper levels of learning and professional acknowledgment.

The following Critical Reflection Model developed by the researcher asked students to reflect and comment on five reference points:

- 1: Why they had enrolled in the particular postgraduate course they were undertaking?
- 2: What their learning goals were specifically for the unit of study?
- 3: What knowledge of contemporary health and/or policy did they bring to the unit?
- 4: How do they learn? What learning styles assisted them to gain knowledge and skills?
- 5: What skills do they have at this point of their professional and academic career?

The assessment task asked students to respond to the model in weeks two and ten of the unit. They were required to undertake reflective practice (as journal notes) across the trimester, drawing on facets of the unit including materials provided by the unit chair. A summary paper of their journal notes of contemporary health and policy formed the main component of the assessment. Additional to the summary paper, the students had to identify

three ‘Ah-Ha’ moments that provided clear examples of how and when they contextualized the interface of theory and practice.

Students were supported in the assessment through additional resources and activities that gave guidance on developing reflective practice skills. For example, weekly reflective prompts (called independent learning activities); reading materials that explained how to practice critical reflection, and an assessment task briefing paper that provided a rationale of why they were undertaking the exercise were used. Students were also provided with a rubric marking guide on the associated levels of reflection required for postgraduate study and for this assessment.

Data gathering and process

The study focused on a narrative inquiry and analysis to explore students’ perceptions. Narrative analysis is considered an effective method with which to make sense of the story told (Daly, 2007). For the purpose of this study, narrative analysis was appropriate as it enabled experiences of the assessment task to be explored in greater depth. An important characteristic of narrative inquiry is how the story is constructed to illustrate “... different points of time and to move between the past, present and future ...” (Daly, 2007, p.112). This notion of time was critical to the reflective practice exercise as it provided insight on how students assessed their own transition in learning and professional development across the study period.

The students’ completed assessment tasks formed the primary data set, with a number of interview transcripts providing in-depth assessment of the worth of a reflective practice assessment for students in public health. Recruitment for the study was independently undertaken by the project’s research fellow. Forty-five students provided completed assessment tasks with twenty-four students participating in semi-structured interviews. Thematic analysis of the narratives was conducted by the researcher.

Ethics

Ethics approval to conduct the research was granted by Deakin University Human Research Ethics Committee in 2010 and 2011.

Limitations

The Critical Reflection Model was developed in response to student feedback suggesting that the unit lacked links to the real world of work. Newly appointed to the unit, the researcher designed the assessment to include a diagrammatic way in which students could construct, develop and assess their own academic and professional development. Thus, the experimental nature of the model and assessment was developed in readiness for the 2010 academic year without little thought of how to evaluate the impact of such a different assessment task and learning process. The positive response to the task by students' mid-way through the study period highlighted the need for a study to capture student perceptions and developmental outcomes. The combination of developing a research action project, the newness of the idea to the researcher and limitations in accessing students may have limited the study. However, given that the study was repeated in 2011 with similar outcomes, the findings have identified that such assessment is important in developing students academically and professionally.

Results and discussion

The points listed below illustrate how students at an individual and shared level perceived that they benefited from undertaking the assessment task:

- An increased interest and appreciation of what they were learning, and why
- A greater level of learning when skills were identified and developed incrementally
- More confidence to question and debate, particularly by international students
- A greater appreciation of their own learning and the responsibility that came with this
- Recognition of the need for reflective practice and the assessment task to be well supported by resources that equip students to think more critically
- Recognition of the value of 'Ah-Ha' moments to enhance deeper learning
- Acknowledgement of the personal lessons that came from goal setting, reflective practice and in particular asking questions of themselves

In the discussion which follows, the findings have been grouped under three broad headings representing the critical lessons to emerge from this study. They are discussed within the context of the existing literature:

1. The worth of embedding a critical reflection assessment task to enhance student learning
2. The facilitators that assisted the shift from information to application
3. The interface of understanding, the 'Ah-Ha' moments that demonstrate learning

The worth of embedding critical reflection in postgraduate study

Undertaking this study has demonstrated the benefits of developing teaching approaches that provoke and develop critical thinking, in this case in a systematic approach that empowers and develops students' skills.

Importantly, the investment in reflection time and associated supporting resources enhanced student learning and applicability to practice. The following examples illustrate the importance of such an exercise in enhancing personal and professional development. In particular, the student comments highlight the changes that transpired as they were empowered to recognize their own responsibility in learning and in doing so; shift the purpose and focus of study from a degree as the end product to a greater appreciation of the learning taking place.

In my case, I can say that through journal writing after each week's lecture my learning was enhanced and I gained a greater understanding of concepts that were explored...It also helped me to relate the course theory to events or topics encountered in my everyday life which also enhanced my learning (# 1).

Through reflective journaling I was able to identify characteristics and factors that have acted as barriers to my learning and development. [Being] outcome oriented in my approach to work and studies, [I was] losing sight of the steps required in the interim to achieve this ... I tended to tick off my 'to do list' rather than giving attention to the quality in which I had completed tasks ... This, I now understand is a significant barrier for my learning and for developing my skills. For this reason the very act of reflective learning has awoken me to a way to develop personally and professionally (# 4).

Importantly, the worth of the exercise extended to students already working in the public health field. For those students, being able to develop a process of reflection, to journal and to question helped construct ways forward for practitioners.

It has been a complimentary process – academic and in practice. I reflected on the re-structuring of my organization ... Reflective practice has reinforced a need to rethink how to better approach leadership and mentor roles. I have taken a lot from this process. The reflective practice assessment has increased my identification of process as it draws on the why questions rather than what questions (#24).

The facilitators that assisted the shift from information to application

The Critical Reflection Model acted as a conduit to assist students increase their curiosity and begin to question aspects of their own learning that they had not considered previously.

Undertaking the model made me sit back and think about my skill sets and develop ways to improve these (#25).

The reflective practice required me to stop and really evaluate not only my unit goals but more broadly my course and career goals. By embracing the unit as an opportunity to clarify my course goals, rather than another requirement to be 'ticked-off', I have begun thinking about the next steps of transition into my aspired career path. ... I have not only gained knowledge, but I have been encouraged [to] initiate working relationships which will hopefully progress in the future (#4).

The assessment task was embraced by the students, as it tended to help establish awareness of their own role in learning and the responsibility that independent, critical, reflective learning brings. The task provided space and time to think about what they had discovered and reinforced professional directions, confidence and personal ambitions. Students stated that it made them more active learners, more reflective practitioners; they increased their understanding of the principles of critical reflection and the need for such reflection at postgraduate level. Similarly, reflective learning drew the unit content together and connected theory to practice more easily for those students working in the health sector. Hence the model, supported by learning resources encouraged students to be curious, to question, and to critique, and to be active rather than passive learners.

I now have a strong sense of the importance of reflection in professional practice and the need to commit to the process of lifelong learning (# 6).

The process of reflective practice has given me an opportunity to engage with the content of the unit in a very different, yet valuable way. It has prompted a deeper level of thought and encouraged me to further develop my critical analysis skills. I look forward to applying reflective practice principles to my future study and professional work (#1).

What has changed - I have had a veil lifted on how to look at what I do in a different light. I can see large improvements already in my clinical teaching. This exercise via the course has been invaluable. ... Ego and arrogance has taken a fall and enthusiasm to improve my teaching ability has risen in its place (#4).

Reflective practice can be used to develop new perspectives on issues and assist in the application of theory to practice (Hatlevik, 2011). Documenting reflections in a journal (as required by students in this task) is known to encourage students to take charge of their own learning, to construct new knowledge in light of their existing knowledge and experience and to assess their own development (Moon, 2006). The assessment task assisted students to be reflective learners, as well as equip them in a critical competency area of public health practice. *The encouragement of being mindful about reflective practice in this unit has been an enlightening experience that has contributed to many intended and unintended learning outcomes (#11).*

Reflection in this subject has allowed me to understand the key learnings involved in contemporary health issues and policies. In particular, I am now able to see the relevance of social determinants and policy in my life (# 22).

A purposeful undertaking of the unit was to support students to develop the art of critical reflection and in doing so, facilitate learning to application. Equipping students to reflect through a number of supporting resources was stated by students as pertinent to their overall building of knowledge and skills across the unit.

The reflective exercises [independent learning activities] helped to put the information gained into perspective. To learn about policy is one thing, but to use every day examples like gambling to explain the different types of policy enabled me to gain a deeper understanding (# 17).

Similarly, the interviews highlighted the importance of implementing strategies to support student learning. Resources to assist students on how to reflect, and build on existing experiences were considered important to the learning process. Teaching practices that use materials and activities aligned to assessment and intended learning outcomes are more likely to enhance learning (Biggs & Tang, 2007). Providing dedicated study blocks to assist students align theory with practical application was considered important to their learning. As the student experience below suggests, not all units provide space and opportunity to build knowledge and develop a clear understanding of what is important and relevant to learn.

The study blocks with the independent week for reflection gave me space; it gave me time to learn. In this unit I was standing on stones very clearly seeing goals, not drowning on concrete steps (# 28).

Such actions to include differing teaching approaches such as reflective, independent study periods are supported by Mezirow (1997), who suggests that adult learners need to be more autonomous thinkers, and thus, interventions that facilitate deeper learning are necessary for the learner to develop meaningful knowledge.

'Ah-Ha' moments - The interface of theory with practice

The lived experience of translating theory to practice was keenly embraced by the students as critical to their learning. The Ah-Ha moments, initially considered light-hearted in the overall assessment task, were subsequently recognized by students as critically important. Once students had experienced circumstances where they understood concepts and theory at a practical level and could identify how that changed happened, such 'Ah-Ha' moments were seen as an extremely powerful component of the assessment task. For example, the student below who had grappled with how to apply social health in a medical context was struck by the messages he took away from an audio-link provided to students as a reflective practice activity.

The interview with Sir Michael Marmot on the Health Report was a significant experience for me during this unit ... His belief that the general practitioner can achieve a great deal during 1:1 consultations with their patients was encouraging for me and an endorsement of a process I questioned as a course goal. He endorses the GP role in relation to universal healthcare access, health promotion and prevention oriented consultations. My role as a patient advocate as well as working in partnership with other health workers is one way to influence the social determinants of health (#3).

Similarly, a community health practitioner suggested an early reading increased their awareness of the many social factors impacting on health, an area in which they not given broader attention to before.

Whilst my understanding of SDOH was solid, I really only considered the Marmot and Wilkinson (2003) list of the ten SDOH as the Holy Grail. It was therefore inspiring and my first ah-ha moment of the subject when I read Keleher and MacDougal (2009), when the authors considered other SDOH that had not even crossed my mind., including climate change and human rights (#12).

'Ah-Ha' moments also highlighted how theory can get lost in practice and the importance of reflection to reinforce the principles and practice of public health.

Although the social determinants were a familiar concept, so often within a health promotion management role I am engrossed in the day-to-day administration of projects and programs ... that it is easy to become lax about health promotion theory. I found it extremely helpful to get back to basics, and have the opportunity for reflection on the presence or lack thereof health promotion theory in my current role (# 9).

Important to the exercise was the discovery of learning. The following two examples provide insight to student learning in action.

I've always used journals in my personal life- but never for study or work. Since my HSH702 journal has been so useful I've started using a journal for work. Articulating my thoughts, structuring them, and objectively assessing them have really helped me to create lasting learning's and positive action. Journaling itself has created my 'ah-ha' moment (# 20). The first ah-ha moment was when I completed assignment one on the SDOH, I felt it was wrong of me to assume initially that I possessed excellent knowledge on the subject. The amount I learned from the unit made me realize there was something more to learn (#21).

Not only did the 'Ah-Ha' moments bring theory to life, but also the opportunity to debrief and share experiences initiating further learning opportunities. Students gained much from these informal debriefing sessions.

The debrief was really helpful ... you heard a variety of experiences, backgrounds and great learnings... I found this session very interesting and new to my previous learning environment. It was informative and opened my eyes on what other people take away from a learning experience (#37).

Conclusions

This research explored the merits of a reflective practice assessment as a means of enhancing student learning at postgraduate level. The critical reflection exercise assisted both international and domestic students to better understand the values of lifelong learning and to develop academic skills that promote greater critique, deconstruction and assessment of evidence to develop knowledge. Consequently, undertaking reflective practice provided an opportunity for students to link knowledge and employability features expected of postgraduate students to professional practice and personal career ambitions. The two studies over 2010 and 2011 demonstrate a need for consideration to be given to the merits of including professional skill development in curriculum assessment, particularly at postgraduate level.

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