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"Friday is my research day": chance, time and desire in the search for the teaching-research nexus in the life of a university teacher

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Abstract

This paper builds on some ideas recently presented by Boyd et al. (2010). In that paper, the focus was on the ways in which experienced academic staff articulate the teaching-research nexus. By presenting six short case accounts, this paper describes how a reflective narrative activity enabled some 'new to academe' teachers to identify the teaching research nexus in their own work. For each of them, there was some particular reason or stimulus that led to them articulating the teaching-learning nexus in their work. Given the effectiveness of this method for enabling staff to consider the teaching-research nexus, this paper speculates on ways of drawing all academic staff to encounter the 'concept' of the teaching-research nexus.

Keywords

teaching-research nexus reflective narrative university scholarship threshold concept professional development

Cover Page Footnote

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Introduction

If the individual finds satisfaction and meaning in work, the organization profits ... [but] if not, individuals withdraw (Bolman & Deal 2003, p159).

The question is how to ensure the individual finds satisfaction and meaning in work. Notions of the learning organisation (Senge 1990) and emotional intelligence (Goleman 1998) inform us that, to improve organisational effectiveness, the organisation must consciously engage its work through theory and method, which need to be studied and mastered to be effectively applied (Senge 1990). This study examines paths towards that conscious engagement in a specific workplace environment: the university. It uses a case study of a core cultural academic process, the body theory and technique known as the "teaching-research nexus".

University education often claims distinction from other higher education through teaching and learning that is directly related to scholarship such as research. While the value of this teaching-research nexus (TRN) seems clear, its actual definition and practice is often less so, especially among academics coming from teaching, professional or vocational rather than research backgrounds, or those whose primary role is teaching. The need to establish institution-wide uptake of TRN at universities is now generally accepted. At our university, for example, a program to enhance staff TRN awareness and provide a framework for staff development informed by the nexus parallels a growing interest in the scholarship of teaching and learning. Published models of TRN have been evaluated against experience of established TRN practitioners (Boyd et al. 2010); these evaluations have highlighted the diversity of approach, the importance of an overarching ethos that TRN brings to a scholar's work, and the individual stimuli a scholar requires to adopt TRN. We became confident that a TRN implementation program at our university could have validity against both the global experience and our own institutional culture.

Scholars who are experienced in engaging the nexus (termed here "TRN scholars") empower their scholarship through TRN. They explicitly understand what drives or influences their individual engagement with the nexus. For novice TRN scholars, however, it becomes clear that many do not understand their stimuli, and struggle with adopting TRN. For successful institutional implementation of TRN, it becomes important to understand how novice TRN scholars position their scholarship. To examine this, we draw on the experience – through reflective narrative – of novice TRN scholars, to understand the practical application of the TRN concept to professional and institutional development. Specifically, we focus on reflective narratives of six scholars, as they work through a process of engaging TRN into their daily university lives.

The teaching-research nexus

The teaching-research nexus (TRN) is claimed to be fundamental to academic work (Boyer 1990); research and teaching are mutual activities, and thus it is considered essential to foster synergies between them (Anon 2003; Ling et al. 2007, Prince et al. 2007; Willison & O'Regan 2007; Brew 2010; Healey et al. 2010). Globally, universities are implementing strategies to encourage the nexus (e.g. Hattie & Marsh 1996; Angelo & Asmar 2005; Jenkins & Healey 2005; Lyall 2006; Zubrick et al. 2001). However, the international literature demonstrates that TRN is often poorly defined, especially in contexts where research and teaching are considered separate and competing activities. While the literature clearly demonstrates the need for universities to develop policies

that encourage and support the nexus, for individual academics the focus is on professional development. More recently, emphasis on TRN has shifted from discussions of teaching-research relationships towards engaging students in inquiry and the benefits of research skills (Seymour et al. 2004; Prince et al. 2007; Turner et al. 2008; Healey et al. 2010; Boyd et al. 2010; Koppi et al. 2010; Partridge & Sandover 2010; Santhanam 2010). TRN is viewed as opening up new pedagogical approaches to linking teaching and research (Healey 2005; Prince et al. 2007; Bennett et al. 2010; Boyd et al. 2010; Guerin & Ranasinghe 2010; Guatelli et al. 2010; Rennie 2010).

At our university, O'Reilly and colleagues established a TRN development program (O'Reilly et al. 2007). Reporting the results of a global literature review and a staff survey, they affirmed the national and global acceptance of an intrinsic association between teaching and research, placing the university's TRN practice at into this global environment. Importantly, they demonstrated that our TRN was diverse, often implicit rather than explicit and constrained by institutional demands. They especially noted that the extent to which teaching and research truly interacted was unclear. Since that report, there has been renewed interest in Boyer's (1990) seminal work on the nature of scholarship. This interest has drawn attention to his framework of four interacting types of scholarship as a heuristic to value and integrate teaching and research within an academic's work. At the same time, the Australian Government's Carrick Institute forum on the teaching-research nexus (Krause et al. 2007, 2008) focused on four themes:

- The impact of the nexus on student learning.
- The variety of circumstances within disciplinary contexts.
- The imperatives for institutional policy change.
- The national initiatives then in play.

Importantly, the forum identified five dimensions of the nexus that our university adopted in its approach to implementing TRN:

- Learning through research.
- Research-led teaching.
- Researching teaching.
- Teaching informed research.
- Learning how to do research.

Finally, around this time, one of us (Boyd) reflected on his own teaching and learning performance by benchmarking against TRN criteria at other universities: specifically, the University of Tasmania's focus on academic and student outcomes and the University of Melbourne's structural approach. The Tasmania approach evaluates a program in terms of the presence of defined teaching and learning elements and their engagement by both students and academics, while the Melbourne approach focuses on institutional elements required to ensure that the nexus operates. While he was satisfied with the outcomes in terms of how own academic performance, it is more important to note his growing realisation that the nexus deeply influenced his teaching and learning, despite his experience and assumed understanding of the relationship between his extensive research and teaching careers. The lesson was one of the need for explicit engagement with TRN as an active professional development tool. The benchmarking was an articulation of Boyd's own narrative, an experiential learning that allowed him to "honor the little stories of the individual and the big stories of the disciplines" (Palmer, 1998:76).

¹ http://www.utas.edu.au; http://www.cshe.unimelb.edu.au/pdfs/TR_Nexus.pdf

A program of TRN staff development

O'Reilly's and Boyd's experiences, described above, have encouraged them to directly engage other academics in reflective narratives of their own scholarly practices. The aim was to highlight the benefits of active TRN engagement, mentor scholars in reflective practice and support the scholars' self-assessment. The engagement sought answers to three questions:

- 1. How do academics articulate the nexus in their practice?
- 2. How do students experience the nexus within their undergraduate curriculum?
- 3. What are the nexus possibilities in the university's teaching and learning program?

The program comprises action research involving individual TRN self-reflection; recording and dissemination of TRN case studies individual and small group mentoring; workshops; production of scholarly outputs and curriculum materials; and facilitated writing and publishing (cf. Greenwood & Levin 1998; Campbell & Norton 2007; Yin 2009).

While the project aimed to lead by example, it has become clear that further research on the TRN and its implementation was required to allow the project team to apply the lessons found in the global literature. The project therefore convened a panel discussion, in which experienced TRN scholars narrated their own experiences, as examples of Krause et al.'s (2007) five TRN dimensions, described above. Analysis of that event reached several conclusions (Boyd et al. 2010).

- 1. Each experienced scholar continues to learn within the nexus. All demonstrated the importance of bi-directionality between research and teaching. All understood the nexus to be important in successful teaching and learning.
- 2. The experiences affirmed Krause et al.'s (2007) conceptions and definitions of TRN. This important finding affirmed the practical validit within our university, of broader views of the TRN.
- 3. Despite disciplinary differences, we found definitions and boundaries to be less important than commonalities: "Nexus engaged academics ... [to] bring unique and specialist experience, ethos, attitude and perspectives of knowledge and scholarship to their teaching and learning: their fundamental philosophy as researchers and scholars shapes their approach to teaching and learning [Thus] research provides conceptual foundations for critical engagement in learning ... [and] becomes a core learning tool ..." (Boyd et al. 2010, p16).

But why is it so hard for novice scholars to engage with TRN?

Boyd et al. (2010, p16) concluded positively: "... the nexus becomes the catalyst to encourage the merging of boundaries between teachers and learners, lecturers and researchers, and for the nexus to become a truly two-way relationship. The teacher-researcher grows through the process ... and students develop as critical thinkers and engaged practitioners".

However, there remains an issue. An important aim of our project was to engage new TRN scholars. In practice, this is difficult. While there may be institutional limitations (e.g. workloads), in analysing our established TRN scholar experiences we noted one particularly important element. Each experienced TRN scholar described their own stimulus to adopting TRN as a

central focus of their scholarship. These were quite diverse, and included: demands on teaching outside their discipline; the need to define a new research area; the need for teaching structures or devices; the challenges of a paradigm shift in a curriculum; the practical demands of professional training; and the demand for evidence-based performance data. The key conclusion is that these scholars needed to become fully conscious of their relevant stimulus, and that their subsequent adoption and adaptation of the nexus was explicitly framed in terms of that stimulus. In subsequent discussions – some 40, largely TRN-inexperienced scholars attended the panel discussion – an important contrast emerged. While the experienced TRN scholars had found their individual stimulus (the thing that drove or influenced their active engagement with the nexus) and valued its importance, other academics had not. It has become clear that the fact that some academics have yet to identify the driver or influence that will help them engage with the nexusis a significant impediment to further uptake of the nexus amongst scholars.

Method: reflective narrative and participant observation

We now sought to understand this impediment more fully. The nexus team continued its reflective narrative approach by engaging novice TRN scholars in interviews, conversations and shared reflective writing, encouraging them to articulate their sense of the nexus. In doing so, we intended to refine the nexus model affirmed in our previous work, with a specific intention of making TRN and its adoption relevant to the conditions of inexperienced academics in an institution such as ours

We embedded the goal of understanding this impediment, therefore, within a critical reflective mode, adopting a peer- and self-review approach that married the practical application of experiential learning and reflective observation (Fry et al. 2003) with the strengths of reflection-in-action and reflection-on-action (Schon 1983), and harnessed reflective practice based on participant observation (Lincoln, 1994; Maykut & Morehouse, 1994; Dunn, 1997; Kearns, 2000; Wengraf, 2001; Robson, 2002; Neuman, 2007, 2009). Reflective practice can be defined as:

The critical thinking required to examine the interaction occurring between the researcher and the data during analysis ... [to] be reflective so that she can uncover and provide a full account of her deep-seated views, thinking, and conduct. (Jackson 2003, p223)

Practically, we harnessed this critical thinking through narrative writing, via both semi-structured interview and individual writing. This form of writing-as-discovery echoes the adoption of biographical narrative in the social sciences as a form of critical engagement with academic processes (Weintraub 1978; Bulmer 1984; Lincoln 1990; Weiland 1995; Richardson 1997; Chamberlayne et al. 2000; Clandinin & Connelly 2000; Geertz 2000).

Results

Introduction to the reflective narratives

The following reflective narratives emerged from discussions between the core team members – those already experienced or engaged in TRN – and academics who self-identify as novice TRN scholars: Steve Rowe, Erica Wilson, Kay Dimmock, Wendy Boyd, Elaine Nuske and Johan

Edelheim. They recognise the nexus as a potential component of their teaching and learning scholarship and practice; they now seek to engage more deeply with the nexus. Discussions were followed by semi-structured interviews, transcribed verbatim to provide transcripts that stimulated the next stage, the writing. Each participant then drafted a short (500- to 1000-word) piece reflecting on their engagement with the nexus: why, how, what, strengths, weaknesses, benefits, supports, impediments? Style was left open, ideally in the writer's voice, but designed to provide a descriptive narrative case study for this paper. All authors, including the novice TRN scholars, then examined the case studies from the perspective of the issues identified above: Why is it hard for novices to engage with TRN? What is the role of the original stimulus to engage with TRN? How can the organisation respond? The following discussion is the group's review of our communal experiences.

Steve: from Luddite to innovator

My teaching research nexus lies in the field of interactive online teaching and learning. The trigger for my engagement with the nexus can be traced directly, and paradoxically perhaps, to a lack of time. I say "paradoxically perhaps" because it is more usual to hear academics lament the lack of time to engage with something else. My initial engagement with the nexus was participation in an action research group for a PhD (O'Reilly 2003).

My time in that group provided transformational space (Savin-Baden 2008) to explore and develop a strategy to address an emerging issue: the lack of time to comply with ever-tightening preparation deadlines for external print-based study materials. I needed more time to update my materials, because of an unanticipated update of the textbook and the need to include up-to-date current-events content. Group members were multi-disciplinary, thus less constrained by existing views of what could not be done because that is "not how we do it in our discipline". This broader outlook was very stimulating, and reinforced similar experiences in other disciplines described at Teaching & Learning Centre seminars. I decided to remove all feedback from the printed study guide, and place it in our learning management system (LMS). Access to page proofs allowed update of study-guide content within a reasonable time, streamlining the study-guide preparation timetable.

The successful use of the LMS encouraged me to explore other features, which I soon took advantage of for other assessment tasks. This move was significant: I had been an avowed Luddite following a forgettable experience in the early 1990s with the then-new online world. The action-research cycles encouraged the practicality of LMS features to invite guest lecturers to share their experiences with students. I had done this regularly during my initial four lecturing years in the late 1980s, but it was impractical and uneconomic on multiple campuses with the growing cohort of distance students. The asynchronous LMS discussion board allowed anywhere-anytime access to all students and lecturers, leading to the successful re-introduction of guest lectures. Significantly, graduates were invited as guests, a strategy to allow students to see graduate attributes "in action", and to see direct connections between study materials and the real world. The asynchronous discussion boards have been subsequently been superseded by synchronous audiographic tools, allowing direct audio and text contact.

So, how did this pragmatic response to a lack of time (re)engage me with the nexus? As an innovator, I became a regular presenter at Teaching & Learning Centre seminars. This encouraged me to talk outside the university, and I began to write conference papers. Significant impetus came from engaging the literature for these seminar and conference papers. My two most significant influences were, and remain, Palmer (1993) and Shulman (2002), specifically their advocacy of

the value of sharing our ordinary stories about teaching. Only slightly less significant was their message that sharing these stories is neglected as an integral part of our normal academic activities. This reflects my own experience, no doubt why I identified with their work, and heeded their call.

Erica: growing a critically reflective pedagogy

The idea of the teaching-research nexus is not new to me; it is something that I had been doing for years, without clearly putting a name to it. As a post-doc early-career academic, I was already incorporating elements of my research into teaching, via lectures and study topics on women and travel, and guest research lectures. However, I did not fully think about the nexus more broadly until exposed to the TRN project. Only then did I realise that TRN was more than just giving a lecture on my research, or including a paper in a book of readings.

My stimulus was a desire to think more strategically and theoretically about my pedagogical approaches: why I teach the way I do. Further, after 10 years of teaching, I wanted to reinvigorate my teaching. I felt I had reached stagnation: while I enjoyed teaching and engaging students, I knew my methods needed closer examination and reinvigoration. Thus began a process of self-reflection (helped by a sabbatical) on my role as a university teacher of sustainable tourism. I had recently engaged in a critical turn in tourism studies, caught up in an academic movement, challenging mainstream, positivist approaches to research. Yet I hadn't turned this critical eye to the teaching of tourism. A colleague made me aware of her own work on critically reflective (or reflexive) practice in her undergraduate management courses, which, coupled with my own critical leanings and values, highlighted its potential in strengthening my teaching and the students' learning.

The first step in enacting a critically reflective pedagogy was to reflect upon my own teaching goals, values and aspirations. This I did through writing my own teaching philosophy, articulating the ontologies and epistemologies underscoring my teaching practice. How could I translate this philosophy, grounded in the critical realm, into the actual teaching of sustainable tourism? This is done in small, effective, ways. In my first lecture on sustainable tourism, for example, I am upfront about my critical perspective, my reasons for this approach, and my own values, beliefs and assumptions (the core of critically reflective practice). I also discuss my struggles with being personally sustainable, trying to position myself alongside the students as a co-learner trying to grasp what sustainability means! I say that my goal is for students to go into the world, be able to think critically, and be a well-rounded person able to debate and question. These were always the values underscoring my teaching, but I didn't know how to translate them into the curriculum. Incorporating critically reflective pedagogy into this class is my first attempt at putting TRN into practice! I now also include critical thinking and reflection as clearly outlined skills as part of the [?] syllabus in my unit guide, and dedicate one assessment item to developing critical-thinking and reflection skills. This is despite some mixed reactions, but I try to be honest about why I am doing it, and where it fits in the students' studies and everyday lives.

There are challenges to this TRN, particularly to the critical teaching approach. I must consider the power differentials: I hear academics say, "Students just can't think critically"; perhaps it is because they don't know what "critical" means? But do we, as teachers? I also have to avoid disadvantaging international students: critical thinking is a Western, individualistic paradigm. So, the aim is to start simple, with simple exercises for students to elucidate – in plain English rather than theoretical language – their values, beliefs and assumptions regarding tourism and the environment. I need to avoid advantaging those who speak out or know how to debate. Quieter

and some international students need suitable assessment allowing everybody a voice. That is what critical theory is about: letting people have a voice and feeling they have power, avoiding a "talking down to", hierarchical structure.

I have started to publish on this approach – another example of the nexus. This process of reflection has grounded me, clarified my teaching intents and values and helped in my own professional development. I have a stronger interest in the scholarship of teaching, and the scope for publishing on our teaching practices, and recently commenced as my School's Director of Teaching and Learning to further this interest and develop my leadership skills in this area.

Kay: an accidental academic

Being in the position where I can discuss my TRN might be described as a pleasant accident, being in the right place at the right time. Joining the academy was not a deliberate choice — I was simply curious to know what academics in universities did!

An honours year in 1995-6 allowed me "the luxury of spending time in the library and thinking about research", as one supervisor said. As a mature-aged student with a media and publishing administration background, and many years as a backpacker, I enjoyed the novelty in studying tourism. What was it really about? I was a little lost for some time during this luxury in the library – worrying and wondering. However, I was introduced to a conceptual model for studying managers and management as one way I could examine my research topic – management style and competitive strategy in small tourism businesses. The support of a well-tested conceptual tool was terrific: it allowed me confidence to probe the ability of the tool, and dig into the meaning of its application. There was a discovery happening to me, and I liked what I was doing.

After Honours, I joined the teaching team as a tutor in an introductory management unit whose foundation was the conceptual model I had been studying. That was in 1997, and now I am the unit assessor, teaching across seven locations (including SE Asia) with more than 500 students. The model is in its fifth edition. I work on it with many students in Australia and internationally: how I refer to it, discuss it, introduce it and deconstruct it have all changed dramatically over those years. Students have shown me how elements of the model have value for them, and why it is, or isn't, important to them.

Colleagues and I then applied the model in research considering student skill and competency development. Working with Bangkok-based students, I've seen the influence of cultural norms on their interpretation and assessment, as they lean towards positive human resource commentary at the expense of a critique of organisation structure and management hierarchy, to save face. The model was also useful in research with managers of scuba-diving enterprises, who commented readily on industry challenges and difficulties that confront their management.

I also want to understand the importance of the degree program to overseas students. With two colleagues (one offshore), we ran student focus groups, presenting the findings to the offshore partner and getting them published. This research helped me see why students took on a financial burden along with a significant language hurdle, as they sought to acquire what they identified as the credibility of an international master's degree.

By now in my career, the idea of a nexus between teaching and research was becoming clearer, although I wasn't aware that it was universal. I had the good fortune of forming a close association between them using this model to conduct research – some five research papers – to and develop

as a teacher. The model provided security in the form of support and structure in research and teaching, both of which were removed when I undertook PhD studies. Yet, perhaps, that security also gave me the discipline to discover more, and to complete my PhD.

For me, teaching and research are two quite different tasks, yet they both demand ongoing application and an ability to manage detail. Not naturally being a scholar, I see these in a practical light more than anything else. Yet, as university teachers, the ethos of research is critical to our work in the classroom, in lectures and in discussions with students and others: if we are not active in research, then we have not had the experience of discovering, whether deliberately or by accident, and therefore are unable to know and be informed by the nuances of engagement with research.

Wendy: finding her practitioner pedagogy

Being in my third year as an academic, I have questioned, reflected upon and critiqued my teaching approach, so that students are actively engaged in worthwhile learning. I want to be a successful teacher. I seek to establish an environment that supports student engagement; how best to do this has continuously challenged me. Most recently, I applied an approach that I had successfully used as a practitioner working with young children. It is a documented pedagogical approach that engages learners, and supports their thinking and learning. I am unsure if this is the teaching-research nexus at work, but suspect it is the beginning.

Having a background as an early-childhood professional, and knowing the value of establishing a pedagogy of relationships for young children to learn, I decided to apply a similar pedagogy in my tutorials for a core early-childhood unit. My understanding of a pedagogy of relationships was based on respectfully communicating, using listening, attentiveness and two-way interaction to establish a caring relationship between the students and the pedagogue. How did I apply this pedagogy of relationships? In the early-childhood tutorials, I learnt the students' names, and a little about their background as quickly as I could, to make a personal connection with each student. During tutorials, whilst students were engaging in group work around key discussion topics, I took the opportunity to interact with every student during the two hours. This, I believe, helped to cultivate a culture of two-way respect: I developed an understanding of each student's background, interests and issues; they got to know me a little better as I shared anecdotal experiences from my early-childhood teaching.

I also wanted to adopt this approach to model appropriate teaching in early-childhood education. According to the early-childhood national curriculum, the Early Years Learning Framework, good early-childhood pedagogy is based on the teacher's professional knowledge and skills; knowledge of children, families and communities; and awareness of how beliefs and values affect (children's) learning and personal styles and past experiences (DEEWR, 2009). Within the Framework, the principles of teaching children are based on secure respectful and reciprocal relationships; high expectations and equity; respect for diversity; and ongoing learning and reflective practice. Thus, the students could subliminally be exposed to these early-childhood principles by my approach.

I did not know whether applying these principles to a higher-education class was an effective teaching strategy, but I understood how important it was to be recognised and respected as an individual in your own right. Students responded well to my teaching, and I found myself looking forward to the weekly tutorials as I engaged deeply with them.

I was amply rewarded when the Student Unit Reports came out: average student rankings were 4.7/5! Students' written comments told me that they had captured what I had been trying to achieve. These unit reports were affirmation for my adopted pedagogical style. While the satisfactory completion of assessment reflected the students' learning, the student comments told me that this pedagogical approach suited the delivery of early childhood principles and practice content. I continue to reflect on my practice, and sense I need to ensure that I contextualise my teaching approach to each unit content and each class context.

Elaine: Friday is (still) my "research day"

I came to academia relatively late in my career, having practised as a social worker for 18 years. Brought up on a diet of evidence-based practice, a modernist conception of "what works", my practice was influenced strongly by research and theory. Praxis was the buzzword – the practical application of learning. Entering the world of university teaching, it was no surprise to discover the discourse of the "teaching/research nexus". My early teaching years saw me pursing research though my PhD. It was clear I was to embark on this massive task based on my previous passions and practice, so I focused on foster-family care. My practitioner experience had always left me bereft of passion for hard evidence, my worldview seeking meaning and narratives rather than hard answers to assist my understanding of the vulnerable with whom I worked. It always seemed to me, for example, that if evidence-based practice worked, why were children still being abused; why was the system not working? With relief, therefore, I discovered I was able to concentrate on a more postmodern philosophy that allowed for difference and placed value on experience and meanings.

However, I was bemused by my research not connecting with my teaching. Was that acceptable? "Totally," said my supervisor, "so long as the research is valid." I guessed there would be connections, in that I used my social work skills in interviews, researched direct lived experience, and could relate that to my teaching within the counselling units. I was not convinced. Friday became my "research day", a day when I concentrated on research, not teaching or student issues. My job became rather disjointed.

Once I received the hallowed piece of paper and could call myself Dr, I began to look at where to move my research career. Only then did I began to ask, "How does my research inform or relate to my teaching?". I returned to the conceptualisation of praxis, and began to process how my research interests could be connected to my students. An invitation to join the TRN project appeared in an email. Yes, I thought, maybe this will help me focus and integrate the different aspects of my job as an academic. To some extent, it has, but

Thinking about the nexus has helped me to see connections, to integrate my learning with the learning of my students. My focus has been on reflective practice, as a counsellor, as a teacher, and as a researcher. This seemed to be the way I could integrate my experiences and move forward with my research agenda. Over the last year or so, I have been integrating knowledge and research into the role of the reflective practitioner in my teaching within counselling units. I have spent time with students discussing both their own self-reflections and the nature of research into this area within the counselling literature. The graduate attributes of my teaching units stress the role of reflection both in, and on, action for the counsellor. This sits well with me now. I definitely feel more comfortable with this connection. In addition, I have moved into the area of direct research with problem gambling. Teaching within the counselling major has seen me able to directly incorporate this research knowledge into subject areas of teaching. It also allows me to share my

experiences as a researcher with students, who seem to now value the nature of research in its many forms.

However, Friday still remains my "research day" – but today is Monday, so is the writing of this paper considered research or not, I wonder?

Johan: teaching practices as the base for research

As a lecturer in tourism and hospitality management, I had previously worked in the hotel industry overseas, re-educating myself as a primary school teacher, before starting my academic career. Starting as an academic, I realised, to my surprise, that basic pedagogic methods were seldom practiced. While my years working as a primary school teacher still shine through, regardless of the age difference and maturity of my current students, I still find that such practices work well. Similarly, interactive teaching methods that I previously used to keep classes engaged and interested are as important for undergraduates as for children.

Working at a small university with a limited number of specialist subjects, I find myself mainly teaching foundational subjects related to my work background, rather than my research areas. My research focuses on power structures in tourism and hospitality, and, therefore, seldom fits directly into my undergraduate subjects. When considering the TRN, therefore, I work rather from the perspective that good teaching practice should be recorded and disseminated as research to a broader audience. Teaching practices are integral to learning; learning about what students find effective is important. I see myself as a good teacher, and I take pride in teaching well. I try new teaching methods in my classrooms, while presenting the standard syllabus for my subjects, something I would like to do more extensively. I have found that teaching hospitality and tourism in higher education is seldom based on innovative teaching methods. Surprisingly little research has been done on how to teach in the field, rather than what to teach (Stergiou, Airey & Riley 2008). An ongoing debate still rages about how much tourism and hospitality studies at university level should be aimed at either academic skills transferable within a larger business, humanities or scientific environment or, as the industry is often arguing, training employees for practical tasks in the workforce (Tribe 2002). Whilst understanding this debate from both viewpoints, I find that it seems to overlook the important question of how to transfer information bridging the theorypractice gap. Building on my diverse background and the fact that my students generally evaluate my teaching highly, I started documenting the way I teach (Edelheim & Ueda 2007; Edelheim 2009, 2010).

My long-term aim is to publish a small research book on alternative methods in hospitality and tourism teaching. I want to bring different ways of learning, rather than new content, into the classroom. This approach started when colleagues asked me how I went about activities that created lots of excitement and activity amongst my students. Writing up my class activities or assessable items, I also self-reflexively created a literature review to see how others had used similar methods. I know that several colleagues have really good assessment items and different methods of teaching; if I could create a proforma in how to document best practice, I could work with colleagues to help them document their methods and, through that, create research broadening the body of knowledge. It is amongst the most satisfying types of research I have done, simultaneously feeding in new ideas on how to conduct future classes.

Discussion

These reflective narratives have helped the research team better understand the adoption of the teaching-research nexus in higher education. Like Palmer's (1998, p76) "little stories of the individual", the narratives have helped us better understand the "big stories of the discipline". Most importantly, they help explain why it is hard for novice scholars to engage with TRN. To explain this understanding, we continued our reflective narrative, with the established TRN scholars seeking follow-up comment from the novices, and themselves reflecting on the novice narratives in the context of their own experience.

Elements of all of Krause et al.'s (2007, 2008) five nexus dimensions are evident in the narratives. However, there is a stronger common theme: these are scholars trying to make meaning of their teaching. The nexus, at times loosely defined or implicit, is articulated best through discussion of pedagogy, the bridging of practice and teaching or the practical relevance to teaching. In short, these scholars are trying to "walk the walk" in their university teaching. In seeking to do this, they find the broader application of scholarship and research, either drawn from prior academic or professional experience and practice or emerging from pedagogical needs, to be useful; the nexus validates their search for meaning.

It is also useful to consider Krause et al.'s (2007) five key qualities (they call them conceptions) of the nexus. The first is that the TRN epitomises teaching and learning in higher education: unlike the experienced TRN scholars, all of whom started from this standpoint, our novices did not make this starting assumption. While some express surprise at the lack of linkages, most appear to be so immersed in the task of teaching that such a conception of higher education only emerges in response to a teaching and learning need. All agree that the second conception – that the TRN engages and motivate students – is valid. The final three – that the TRN develops important graduate attributes, that it prepares students for future employment and that it offers professional benefits for academic staff – are not explicit in the narratives, although are probably implicitly accepted. They better reflect the underlying drivers behind most of the development described in the narratives. It is likely that, given the early-stage nexus adoption represented by these narratives, these conceptions will mature with time.

The narratives indicate the novice TRN scholars' intention and willingness to engage with nexus. It is questionable, however, whether all the nexus scholarship, with its papers, definitions of dimensions and conceptions, experienced scholar case studies etc., is really what helps the novice engage this seemingly central academic trope. The narratives reflect the influences of pragmatic need, serendipitous opportunity and desire to engage teaching and learning in professional and exciting ways. There are common themes:

- 1. Engaging the practice of teaching in lieu of conventional research.
- 2. Merging professional and pedagogical practices.
- 3. Creating professional credibility.
- 4. Engaging in a contextual puzzling over the epistemology and ontology of "research", and its relationships with "scholarship" and "teaching".

These scholars do not seek to bring research results *per se* into the classroom, but to bring in the methods, concepts and ethos of their discipline. To do this, they recognise the nexus as a valuable heuristic.

While academics with scholarly apprenticeships (e.g., people such as the experienced TRN scholars in the team, whose primary professional background is in academe) may intuitively understand "research" and "university teaching and learning", for academics with professional backgrounds or later-in-life academic career starts (i.e. whose apprenticeship and culture is professional rather than academic), such intuitive understanding may be less tangible. Their professional cultural background is different. While such academics want to be good university teachers, they question what is required as an academic researcher. While there may be other organisational impediments to a university promoting the nexus, the professional cultural apprenticeship may be the crucial personal epistemological and ontological impediment to engaging the nexus.

Therefore, while we can accumulate case studies from experienced scholars (e.g. Boyd et al. 2010) and use them in mentoring novice TRN scholars, there are fundamental cultural limitations. What is missing is a means to adopt the teaching-research nexus threshold concept (cf. Meyer & Land 2003, 2005): what is the threshold concept that assists a novice TRN scholar in moving from intention to action? This question must be asked in the context of the novice's understanding of scholarship being conditioned by a professional, rather than academic, cultural background. It has been assumed that a definition of the nexus, expressed in conventional academic terms, is what is required (see the extensive literature cited in the introduction). However, as Shulman (2002, pp41-2) points out, "we in the academy would love to believe that one can't practice or perform without first understanding. Alas, we all know that's not true", cautioning against allowing the sequence or hierarchy of the definition to dictate "the only legitimate way to learn something is in this particular order". Definitions only capture certain things, and, in providing a simplified view of complexity, reflect their preconditions. In the nexus, the preconditions exclude the cultural apprenticeships of non-experienced TRN scholars; they assume the scholar recognises, or has crossed, the threshold.

The threshold is a "conceptual gateway" by which a person understands a new way of thinking (Meyer & Land 2003, 2005). Interestingly, Meyer and Land describe the threshold as "transformative (occasioning a significant shift in the perception of a subject), irreversible (unlikely to be forgotten, or unlearned only through considerable effort), and integrative (exposing the previously hidden interrelatedness of something)" (p386); the latter is apposite in this discussion. Thresholds may be "troublesome", in that they may challenge the status quo. Importantly, Meyer and Land consider that both ontological and epistemological conditions may cause blockages to achieving a new transformative state – that is, crossing the threshold – and that it is necessary to explicitly design and manage a process to facilitate transformation: in their words, "to assist teachers in identifying appropriate ways of modifying or redesigning curricula to enable their students to negotiate such epistemological transitions, and ontological transformations, in a more satisfying fashion for all concerned" (Meyer & Land 2005, p386). Here, we have adopted as our "modified or redesigned curriculum" the narrative form to encourage colleagues (read "students" above) to "internalize key concepts, reflect on experiences or create applications of theoretical ideas" (Summerby-Murray 2010, p232). Adopting reflection to transform lived experience and knowledge into effective action requires specific encouragement or prompting, and thus a structured approach (Hutchings & Wutzdorff 1988; Summerby-Murray 2010; Heller et al. 2011). In doing so, we have identified triggers to approaching and, in some cases, crossing the TRN threshold: Rowe's changing demands on curriculum development, Wilson's teaching stagnation, Dimmock's "being the right place at the right time", Boyd's realisation that methods used to engage young children could be used with university students, Nuske's fear of being professionally disjointed and Edelheim's surprise at the lack of previous research. The changes that have emanated from these triggers have been to some extent transformative, none are irreversible and all result in heightened awareness of the integrative nature of scholarship, the very core of the nexus.

To reinforce the importance of this threshold concept, our novice TRN scholars respond in various ways. Boyd, for example, commented that she "identified with the notion for myself in researching my teaching, but it has implied layers of meaning for my teaching of students who I am also trying to bring to the threshold concept level ... the notion of threshold concepts holds well for my ongoing critical learning and reflection in my teaching." Dimmock commented that "the suggestion of threshold concepts sits very comfortably with me and the TRN experiences that I've shared in this paper are central to the experiences of working with first year undergraduate and first year postgraduate students"; she has subsequently explored her nexus using Meyer and Land's (2005) terms. However, there is a clear recognition of the importance of understanding and seeing clearly the different paths that have lead each individual to the threshold. Rowe commented on the importance of the different perspectives from which each scholar begins, even within the respective research and practitioner umbrella labels.

Conclusion

The teaching-research nexus may be viewed as a core trope of university education: there is a fundamental relationship between the scholarships of teaching and of research, and that this differentiates universities from other forms of higher education. The modern university, however, is evolving from its conventional scholarly origins: its curriculum is becoming increasingly practical and applied, its scope increasingly professional and its staff and students increasingly pragmatic. A greater proportion of both staff and students are being drawn from non-scholarly backgrounds. The assumptions underlying the teaching-research nexus – borne of scholarly apprenticeships – are increasingly found to be implicit rather than explicit, even amongst experienced TRN scholars (Boyd et al. 2010).

Drawing on reflective narratives of academic staff who have a desire or intention to engage the nexus, but find it difficult, we are able to test these assumptions. We find that engaging the nexus requires that academics who may be late-career starters or recruits from the professions - those without a conventional scholarly apprenticeship and therefore without the epistemological or ontological understanding of conventional scholarly research - master key threshold concepts (Meyer & Land 2003, 2005). The triggers for such mastery are diverse, but to a large extent reflect pragmatic needs and serendipitous opportunity. In particular, with a contemporary focus on teaching and learning in the universities (e.g. Buchanan 2010), engagement emerges out of a desire to engage teaching and learning in professional and exciting ways. These changing circumstances imply that conventional academic development needs to be adapted to harness the opportunities offered by this focus on teaching and learning, the pragmatic day-to-day demands of teaching academics and the serendipity so influential in any career (cf. Cloke 1994). Mentoring for the nexus needs to rely less on formal expressions of the nexus and more on adaptive strategies based on the daily experience of academics. The institutional response - the method to lead the novice to the threshold - needs to realistically reflect the diverse, troublesome and contingent contexts of academics' desires to engage the teaching-research nexus.

References

- Angelo, T. & Asmar, C. (2005). *Towards a New Definition of Research-Led Teaching and Learning at VUW*. Victoria University of Wellington, Wellington. http://www.utdc.vuw.ac.nz/research/rlt/rlt.pdf
- Anon (2003). The Teaching-Research Nexus: A Discussion Paper. Monash University, Melbourne.
- Bennett, D., Wright, D. & Blom, D. M. (2010). The Artistic practice-Research-Teaching (ART) Nexus: Translating the information flow, *Journal of University Teaching & Learning Practice*, vol 7, no. 2. http://ro.uow.edu.au/jutlp/vol7/iss2/
- Bolman, L. G. & Deal, T. E. (2003). *Reframing Organisations: Artistry, Choice, and Leadership*, 3rd ed. Jossey-Bass, San Francisco.
- Boyd, W. E., O'Reilly, M., Bucher, D., Fisher, K., Morton, A., Harrison, P. L., Nuske, E., Coyle, R. & Rendall, K. (2010). Activating the Teaching-Research Nexus in smaller universities: Case studies highlighting diversity of practice, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Boyer, E. (1990). *Scholarship Reconsidered*. Carnegie Foundation for the Advancement of Teaching, New York.
- Brew, A. (2010). Imperatives and challenges in integrating teaching and research, *Higher Education Research & Development*, 29, 139-150.
- Buchanan, J. (2010). Quality teaching: means for its enhancement?, *Australian Universities' Review*, 53(1), 66-72.
- Bulmer, M. (1984). The Chicago School of Sociology. Chicago University Press, Chicago.
- Campbell, A. & Norton, L. (2007). *Learning, teaching and assessing in higher education: developing reflective practice*. Learning Matters, Exeter.
- Chamberlayne, P., Bornat, J. & Wengraf, T. (eds) (2000). *The Turn to Biographical Method in Social Science*. Routledge, London.
- Clandinin, D. J. & Connelly, F. M. (2000). *Narrative Inquiry: Experience and story in qualitative research*. Jossey-Bass, San Francisco.
- Cloke, P. (1994). (En)culturing Political Geography: A Life in the day of a 'Rural Geographer'. InCloke, P., Doel, M., Matless, D., Phillips, M. & Thrift, N., *Writing the Rural: Five Cultural Geographies*. Chapman, London, 149-190.
- DEEWR (2009). The Early Years Learning Framework. Commonwealth of Australia, Barton.
- Dunn, K. M. (1997). Cultural Geography and Cultural Policy, *Australian Geographical Studies*, 35(1), 1-11.
- Edelheim, J. (2009). With *The Simpsons* as Tour Guides: How popular culture sources can enhance the student experience in a university tourism unit, *Journal of Hospitality and Tourism Management*, 16(1), 113-119.
- Edelheim, J. (2010). Challenging undergraduate hospitality students The use of debates as interactive teaching and assessment tools, *Challenge the limits CAUTHE 2010*, 8-11 February, Hobart, Tasmania.
- Edelheim, J. & Ueda, D., (2007). Effective use of simulations in hospitality-management education a case study *Journal of Hospitality*, *Leisure Sport and Tourism Education*, 6, 10-25.
- Fry, H., Ketteridge, S. & Marshall, S. (2003). A handbook for teaching and learning in higher education: Enhancing academic practice. Routledge Falmer, London.
- Geertz, C. (2000). Available Light: Anthropological reflections on philosophical topics. Princeton University Press, Princeton.
- Goleman, D. (1998). Working with emotional intelligence. Bloomsbury, London.

- Greenwood, D. J. & Levin, M. (1998). *Introduction to Action Research: Social Research for Social Change*. Sage, Thousand Oaks.
- Guatelli, S., Layton, C., Cutajar, D. & Rosenfeld, A. B. (2010). The Teaching/Research Nexus and internationalisation: An action research project in radiation physics, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Guerin, C. & Ranasinghe, D. (2010). Why I wanted more: Inspirational experiences of teaching-research nexus in engineering undergraduates, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Hattie, J. & Marsh, H. (1996). The relationship between research and teaching a meta analysis, *Review of Educational Research*, 66, 507-542.
- Healey, M. (2005). Linking research and teaching to benefit student learning, *Journal of Geography in Higher Education*, 29, 183-201.
- Healey, M., Jordan, F., Pell, B. & Short, C. (2010). The research–teaching nexus: a case study of students' awareness, experiences and perceptions of research, *Innovations in Education and Teaching International*, 47, 235-246.
- Heller, E., Christensen, J., Long, L., Mackenzie, C. A., Osano, P. M., Ricker, B., Kagan, E. & Turner, S. (2011). Dear Diary: Early career geographers collectively reflect on their qualitative field research experiences, *Journal of Geography in Higher Education*, 35(1), 67-83.
- Hutchings, P. & Wutzdorff, A. (1988). Experiential learning across the curriculum: Assumptions and principles, In Hutchings, P. & Wutzdorff, A. (eds), *Knowing and Doing: Learning through experience*. Jossey-Bass, San Francisco, 5-19.
- Jackson, W. (2003). *Methods: Doing social research*, 3rd ed. Prentice Hall, Toronto.
- Jenkins, A. & Healey, M. (2005). *Institutional strategies to link teaching and research*. The Higher Education Academy, Heslington.
- Jenkins, A. & Healey, M. & Zetter, R. (2007). *Linking teaching and research in disciplines and departments*. The Higher Education Academy, Heslington.
- Kearns, R. A. (2000). Being there: Research through observation and participating. In Hay, I. (ed), *Qualitative research methods in human* geography. Oxford, South Melbourne, 103-121.
- Koppi, T., Nolan, E. & Field, D. (2010). Developing transferable research skills in first year agricultural economics students, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Krause, K-L., Arkoudis, S. & Green, A. (2007). *Teaching-Research Linkages: Opportunities and Challenges for Practice and Policy. Stimulus Paper: Carrick TRN Forum.* Carrick Institute, Canberra http://trnexus.edu.au/uploads/presentations/KrauseTRN.pdf
- Krause, K-L., Arkoudis, S., James, R., McCulloch, R., Jennings, C. & Green, A., (2008). *The Academic's and Policy-Maker's Guides to the Teaching-Research nexus: A suite of resources for enhancing reflective practice*. Australian Learning & Teaching Council, Canberra http://www.olt.gov.au/resource-teaching-research-nexus-report-griffith-2008
- Lincoln, Y. S. (1990). The making of a constructivist: A remembrance of transformations past, in Guba, E. (ed), *The Paradigm Dialog*. Sage, New York, pp 67-87.
- Lincoln, D. (ed) (1994). Handbook of Qualitative Research. Sage, Thousand Oaks.
- Ling, P., Flood, A. & Green, P. (2007). *The Teaching-Research Nexus and the Australian Research Quality Framework*. Paper presented at the Enhancing Higher Education: Theory and Scholarship, Proceedings of the 30th HERDSA Annual Conference, Adelaide.
- Lyall, K. (2006). Sensible Change in a Confusing Policy Environment. http://www.carnegiefoundation.org/scholarship-teaching-learning/resources
- Maykut, P. & Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide*. Falmer, London.

- Meyer, J. H. F. & Land, R. (2003). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practicing within the disciplines. In Rust, C. (ed), *Improving student learning: Improving student learning theory and practice Ten years on*. Oxford Centre for Staff and learning Development, Oxford.
- Meyer, J. H. F. & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning, *Higher Education*, vol 49, pp 373-388.
- Neuman, W. L. (2007). *Basics of social research: Qualitative and quantitative approaches*, 2nd ed. Allyn & Bacon, Boston.
- Neuman, W. L. (2009). Understanding research. Pearson, Boston.
- O'Reilly, M. (2003). *Using Cross-Disciplinary Action Learning Sets when Designing Online Assessment*. Paper presented at the Interact, Integrate, Impact Proceedings of Australasian Society for Computers in Learning in Tertiary Education, Adelaide.
- O'Reilly, M., Rendall, K., Jackson, J. & Bronks, R. (2008). *Dimensions of the Teaching-Research Nexus at Southern Cross University*. Unpublished report, Southern Cross University, Lismore.
- Palmer, P. (1993). Good talk about good teaching: Improving your teaching through conversation and community, *Change Magazine*, vol 25, no 6, pp 8-13, cited in Anon (2003), Faculty Development Update, *Accounting Education News*, vol 31, no 3.
- Palmer, P. (1998). The courage to teach: Exploring the inner landscape of a teacher's lif.. Jossey-Bass, San Francisco.
- Partridge, L. & Sandover, S. (2010). Beyond 'listening' to the student voice: The undergraduate researcher's contribution to the enhancement of teaching and learning, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Prince, M. J., Felder, R. M. & Brent, R. (2007). Does Faculty research improve undergraduate teaching? An analysis of existing and potential synergies, *Journal of Engineering Education*, 96, 283-294.
- Rennie, H. G. (2010). Multi-level linking of teaching and extra-curricular activity with professional planning research: The case of the Lincoln Planning Review, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Richardson, L. (1997). Fields of Play (Constructing an Academic Life). Rutgers University Press, New Brunswick.
- Robson, C. (2002). *Real world research*, 2nd ed. Blackwell, Malden.
- Santhanam, E. (2010). Trends in achieving teaching-research connections From global perspectives to an institutional strategy, *Journal of University Teaching & Learning Practice*, 7(2). http://ro.uow.edu.au/jutlp/vol7/iss2/
- Savin-Baden, M. (2008). Learning Spaces: Creating Opportunities for Knowledge Creation in Academic Life. Open University Press, Buckingham.
- Schon, D. (1983). The reflective practitioner: How professionals think in action. Basic Books, New York
- Senge, P. M. (1990). "Give me a lever long enough ... and single-handed I can move the world", in Senge, P. M., *The fifth discipline: the art and practice of the learning organization*. Century Business, London, 3-16.
- Seymour, E., Hunter, A., Laursen, S. & Deantoni, T. (2004). Establishing the benefits of research experiences for undergraduates in the sciences: first findings from a three-year study, *Science Education*, 88(4), 493-534.
- Shulman, L. S. (2002). Making Differences: A Table of Learning, Change, 34(6), 37-44.
- Stergiou, D., Airey, D. & Riley, M. (2008). Making sense of tourism teaching, *Annals of Tourism Research*, 35(3), 631-649.

- Summerby-Murray, R. (2010). Writing for immediacy: Narrative writing as a teaching technique in undergraduate cultural geography, *Journal of Geography in higher Education*, 34(2), 231-245.
- Tribe, J. (2002). The Philosophic Practitioner: A Curriculum for Tourism Stewardship, *Annals of Tourism Research*, 29(2), 338–357.
- Turner, N., Wuetherick, B. & Healey, M. (2008). International perspectives on student awareness, experiences and perceptions of research: implications for academic developers in implementing research-based teaching and learning, *International Journal for Academic Development*, 13, 199-211.
- Weiland, S. (1995). Life history and academic work: The career of Professor G. In Josselson, R. & Lieblich, A. (eds), *The Narrative Study of Lives vol. 3*. Sage, Thousand Oaks, 59-99.
- Weintraub, K. (1978). *The Value of the Individual: Self and circumstance in autobiography*. Chicago University Press, Chicago.
- Wengraf, T. (2001). Qualitative Research Interviewing. Sage, London.
- Willison, J. & O'Regan, K. (2007). Commonly known, commonly not known, totally unknown: a framework for students becoming researchers, *Higher Education Research and Development*, 26, 393-409.
- Yin, R. K. (2009). Case Study Research: Design and Methods. Sage, USA.
- Zubrick, A., Reid, A. & Rossiter, P. (2001). Strengthening the Nexus between Teaching and Research. http://www.dest.gov.au/archive/highered/eippubs/eip01_2/default.htm