

Teaching Meets Research Meets the Real World

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Introduction

The place where teaching meets research meets the real world is not an intersection frequently travelled. Over the last decade, I have seen lots of conversations where teaching encounters the real world (rather more talk than action, if the truth be known) and others where research encounters the real world- sometimes in very productive ways. On fewer occasions I've seen research and teaching intersecting in interesting ways. But this is almost the first occasion I can recall where all three have entered the same conversation.

Interestingly, the layers of meaning around each of these constructs also include highly visible status differentials. Research is always the high ground in university culture, therefore the teaching-research nexus also is high ground- though perhaps not *quite* as elevated as research alone. On the other hand, for some academics at least, 'real world' can carry connotations of grubby commercialism and narrow skills-based vocational education. It is very definitely 'low ground'.

At QUT, our 'university for the real world' tag is both a brand and an identity, and in both capacities, it continues to serve us very well. For us, the status meanings associated with 'real world' are not a matter of distant esoteric interest. They are part of our lived experience within our learning community- our way of thinking about ourselves- and inevitably, understanding ourselves in relation to others.

Real World meets Teaching and Learning: Engagement at QUT

In this university for the real world, we've spent considerable time discussing (and arguing about) Engagement- in a nutshell, the interface between the university and the communities it serves. We've recently published a book, *Challenging boundaries: Perspectives on community-university engagement* (Hatherall, W., 2007) that explores the ideas and practices of engagement at QUT. As all here would appreciate, traditionally this dimension of academic work has been seen as a distinct category of work called 'Service'- neither teaching nor research, often community-based projects with a philanthropic orientation that provide access to the university's intellectual capital for the common good.

Slowly but surely, we are moving towards a very different conceptual position where engagement is not seen as a separate category of academic work, distinct from teaching or research, but as a desirable characteristic of both teaching and research. In a 'university for the real world' one would assume that engaged teaching and learning, and engaged research, would be ubiquitous, but the wheels of change grind exceedingly slowly when they encounter immovable objects such as promotion policies.

'Engagement' is a very interesting and somewhat ambiguous word when used with learning and teaching. I've used the word 'engagement' here as the nomenclature for our interface with external communities. In this sense, engaged learning and teaching is very much about the ways in which we as teachers and our learners stay connected with the world of professional work and the communities within which graduates will be working in the future. 'Engagement' becomes a form of shorthand for staying in touch with the emerging ideas, new technologies, current interests and

needs of the professions, and of employer priorities. At QUT, 'engagement' and 'real world learning' are used almost as synonyms. We have a lot happening in work integrated learning, cooperative education projects and various forms of internship and placement.

But 'Engagement' also can mean the way in which the individual student encounters the ideas in the curriculum- the extent to which the student finds these ideas challenging and interesting, and personally engages with them in powerful ways. This meaning of engagement doesn't necessarily require any connection with the world beyond the university walls. It is possible the student will find the ideas themselves riveting.

But for many of our students, we will increase the likelihood of their personal engagement with the ideas, when we help them make meaningful connections with their own career destinations. They need to understand why this particular chunk of content is relevant and useful for the graduate outcome they are seeking.

So this is 'real world' learning, as we are coming to understand it at QUT.

Research meets Teaching in University Classroom

Interesting insights emerge, in the space where teaching, research and 'real world' intersect. For example, conventional wisdom of university education suggests the most important connection between research and teaching occurs in the research that underlies the foundational knowledge base of the discipline. Viewed through this lens, good university teaching involves making sure newcomers to the discipline understand the tenets of the knowledge base *and* the research findings that have created and supported them.

In practice, this usually means beginning undergraduates spend a lot of their learning time sitting in lecture theatres, listening to (or failing to listen) as experts expound about particular fragments of the knowledge base, often in quite abstract terms. For these first year students, their experience of research is anything but lived experience. For them, research findings are little more than a topic that is 'covered' in the lecture or textbook.

If the 'real world' enters the world of the undergraduate student at all, it probably comes only after they have 'mastered' the underpinning knowledge- most likely towards the end of their undergraduate career, when they are let loose on an unsuspecting world, to "apply what they have learned".

The fallacies in this Mode 1 (Gibbons 1994) epistemological perspective are many. It fails to acknowledge that undergraduates didn't just pop out from under a cabbage leaf the Sunday before O week. They come to their undergraduate studies with their own theories about why things are the way they are- even if they aren't able to articulate these very clearly. They bring, at a minimum, 17 years of lived experience, and a current life that is continuing to impact their own knowledge base and their own theorizing, quite apart from anything to which we might expose them in our lecture theatres.

Many of them barely slow down long enough to taste life in the university before moving on. These students are not very tolerant of our peculiar ways of living and learning in universities. Many of them are not at all sure they made the right choice of degree in the first place, and unless they find the ideas gripping, they simply don't stay in the classroom, or often, in the university. As Erica McWilliam (2005) puts it, it is either "Wow!" or "Yuk!" in remarkably short order. If it is the latter, they are gone- either physically, or at least, mentally disengaged.

Another fallacy is that the research base underpins the entire knowledge base of our professions. In actuality, it stops well short of telling the whole story. Professional knowledge also includes craft know-how, philosophical positioning, historical taken-for-granted, cultural and contextual dimensions, and personal practical knowledge (Clandinin, 1985), to name just a few dimensions. So whilst the research base is undoubtedly a very important component of the knowledge we try to impart in our students, in itself, it is not sufficient.

And lastly, when those students do finally escape our classrooms, and get into the 'real world' of professional practice, "applying what they have learned" is a woefully inadequate description of the cognitive, cultural and behavioural challenges they face.

But this conventional wisdom of university teaching and learning is not easily challenged or impacted. As a scholar of teacher education, I spent years questioning the conventional wisdom of 'first learn the theory, then apply it in practice', in the articles I wrote, and in six years as an Executive Dean of a large Faculty of Education, was largely unable to shift the fundamental epistemological underpinnings of our very large undergraduate program. Now, in a university-wide role, I am conscious of the same conventional wisdom, as strong as ever, visible across many disciplines.

Real World meets Research

In a university like QUT, we are relatively comfortable with the intersection between 'real world' and research. We are known for the high quality of our outcomes-based research, with industry partners such as Brisbane Airport Corporation, Port of Brisbane Authority, Microsoft, and Boeing. (The BAC-QUT research partnership won the national B-HERT award in 2007 for the best university-industry collaborative project in Australia.) The CRCs in which we participate have well developed strategies for industry-university collaborative research. These connections between industry and university are deep and productive. They embody Gibbons' (1994) Mode 2 knowledge – a form of discovery that is interdisciplinary, and focused on immediate problem-solving in a particular social context.

But our expertise in the area of collaborative research has thus far not impacted greatly on our ways of understanding learning or practicing pedagogy. By and large, we see 'real world' and 'research' connected within one box, and 'real world' intersecting with learning and teaching in an entirely separate box. As yet we do not have a well-developed model that integrates our collaborative research expertise with our 'real world' teaching and learning experience.

At a practical level, collaborative research projects offer rich opportunities for learning at all levels- not only for doctoral students, with related research projects, but even for first year undergraduates. Through involvement in such projects, even at a basic level, undergraduates could

develop deeper understandings of how disciplinary knowledge is used in practice, why it is useful for professionals to know the things they do, as well as coming to know about the more tacit dimensions of practical knowledge that can never be lectured about in the abstract, but that can be investigated through personal encounters with complex professional environments.

The professional networks we have developed for research purposes also could be a rich source of support for our 'real world' teaching and learning activities, *if* we could find a practical means to harness them.

But always, the challenge is one of scale. Involving three or four doctoral students in a large collaborative research project is something we already know how to do. Involving 15 or 20 students in an elective unit, where the lecturer already has an active collaborative research agenda may take a greater level of attention to logistics and policy compliance (or avoidance), but it *does* happen, and provides a very powerful learning opportunity for these students. (We heard about an excellent example of this recently, where Shannon Satherly, an early career academic from BEE has built into her U/G unit requirements in urban planning, the opportunity for undergraduate students to get involved in a meaningful way in her own land planning action research with several communities in the Wide Bay area of Queensland. This is a fantastic learning environment- rich with opportunities for students to be deeply engaged in learning the disciplinary knowledge of this profession and gaining first hand experience of research at the same time.)

But when the undergraduate unit has a thousand students enrolled, the logistical challenges of utilizing research experiences and real world connections to enrich student learning become almost insurmountable.

I say 'almost' because there are some worthy initiatives and some new opportunities emerging through technological capabilities are promising in this regard. Pedagogical use of research-generated case studies and professional narratives has been in this learning space for several decades. Now, it is possible to create virtual workplaces through software such as Second Life, or by other technology-supported simulation approaches. Undoubtedly, these virtual world approaches have a lot to offer in pedagogical terms, but as yet, they are not able to replicate the rich complexity of real life. They may well supplement real world learning experience, but they cannot substitute for it.

Dreaming the future into existence

As those who must balance university budgets understand so well, lectures are an inexpensive way to teach a large group of students. This reality becomes just a little more palatable if you believe that the most important thing first year students need is to learn the underpinning theory of the discipline. And after all, listening to the learned professor or lecturer talk about that knowledge is the time-honoured way that novice university students have learned that theory for generations.

But one wonders whether the penchant for large scale lectures in first year is in any way, a reflection of the epistemological position that students must learn the theory first, or whether large scale lectures are simply all that is possible, given the sheer logistical nightmare of doing anything more interesting with a thousand students at a time! (My colleague Dr. Margaret Lloyd- a wonderful

coordinator of a First Year core unit in Education- with over 1000 students enrolled, always likens the task to ‘organizing the Roman legions to invade Scotland’!) In itself, a mammoth task, without trying to implement radical innovations along the way.

But if we were to take seriously, the reconceptualization of Mode 2 knowledge discovery as Gibbons (1994) and others have suggested, our university learning environments might look quite different. We might set our students free early in their university life, to leave the campus and plunge into the complexities of professional workplaces. We wouldn’t ask them to undertake any brain surgery, or design any space vehicles right away, but we would believe in their capacity to ask worthwhile questions, and we would give them the tools they would need to investigate those questions, including the theoretical knowledge that would provide new lenses through which to view the same question.

The temporal tyranny that keeps students in our lecture theatres (or absent from our lecture theatres) until late in their degrees- when we decree (often without any hard evidence at all, that) they are now ‘ready to practice what they have learned’- would go away, and they might find new certainty about the decisions they have already made about their choice of degree, and new confidence in their own ability to question, to investigate and to learn.

But we have a lot to learn ourselves, about how to make this work- especially on a grand scale.

This particular intersection of research, teaching and ‘real world’ is not the simplistic or conventional view that that research generates the knowledge that we then transmit to our students. Neither is it the view that when teachers talk about their own research in lectures, this is somehow good for students. Rather, this perspective is suggesting that the research *process*- the approach we take as researchers in pursuit of new knowledge- could provide new insights and lead to new practices as we support our students’ own pursuit of knowledge. So I would argue that the most relevant dimension of the research-teaching nexus is not research as the provider of right answers to be taught by technicist lecturers or consumed by anonymous and passive learners, but the understanding of research as a strategy- an approach to living in the world – that is useful. Research is a way to better understand the complex problems that exist in the real worlds of professional practice, and this is an orientation that would serve our graduates well.

Conclusion

In a former life, I taught undergraduate students in an Education program how to teach Social Studies to children. And through this work, I came to understand the profound difference between teaching the curriculum and living the curriculum. Whether it was my own practice as a teacher educator, or as a teacher working directly with children, it was possible to teach Social Studies concepts as abstracted topics- to teach *about* Social Studies, in a way that engaged neither learner nor teacher as human beings. It also was possible to create learning environments in which learners- whether they were five or fifty- had an opportunity to live these ideas, and engage with them in deeply personal ways.

As we think about the three-way intersection between teaching and learning, research and ‘real world’, I suspect the same principles might apply. When our learners are able to *live* research, either

first hand through their own investigations in a protected corner of the real world, or perhaps vicariously, through explorations in a virtual world, or through their encounters with teacher-researchers who are visibly, even blatantly engaged with their own teaching as a form of research, then we will come close to a model for how research-teaching and real world meet, to the benefit of all.

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