Chapter 5

Developing Research Culture – Overcoming Regional and Historical Obstacles

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Abstract

This chapter commences with an overview of the role of research in universities and then hones in on the specific details of the current research quality context in Australia. One question the chapter addresses is how research culture develops in universities, or their sub-units, where there is no tradition of research. Obstacles to developing a research culture come in many forms and are reviewed. More important, solutions are identified and ideas given on how culture develops. Southern Cross University (SCU) is discussed as an example of a successful regional research institution, with reference to the Doctor of Business Administration (DBA). The burgeoning interest in evidence-based-practice in the professions is introduced as an example of how research culture is needed in universities to further support graduates in their subsequent professional life.

Key words
Australia, organisation culture, research quality frameworks, evidence-based-practice

Introduction

What is research? Debating this question could fill the whole chapter. As soon as one starts to pin it down with a brief definition, voices can be raised in protest. Given that this book is about professional doctorates at SCU the definition adopted in this chapter loosely relates to that which research higher degree students are taught in business and management, which is to generate knew knowledge by systematically and rigorously collecting and analysing information about a topic of interest and documenting the outcomes for others to read.

Should all universities do research? Many would argue that research, when defined as generating new knowledge is part of what distinguishes a university from a lesser teaching institution. For example, Shamai and Kifir (2002, p. 398) state that any higher education institution worthy of its name must promulgate research and a research culture which preserves its ‘formal and substantive right to be the gatekeeper’. On the other hand, some contributors to recent debate in Australia argue that we have too many universities, some of whose research output is very low and that the country can not sustain research across them all (Lloyd 2009). Others argue that so long as a university does some research, concentrating in areas of strength, then that is an acceptable situation (Universities Australia 2008). As we shall see there are some flaws in this argument since it looks at the university as a whole and it leaves some academic staff ‘out in the cold’ when it comes to gaining support for their research activities if they are not part of the select few on whom the university decides to concentrate. Practical ideas generated by the current debate in Australia are underpinned by various models of how research is

organised within universities. Later in the chapter, SCU is examined as an illustration of how these models of research work and what the implications are.

Current state of play – research quality measurement by government

A wave of reform in the 1980s and 1990s saw several institutions in Australia upgraded from teachers colleges, institutes of technology, or colleges of advanced education to university status. SCU's development in this regard has been chronicled in an earlier chapter. With this upgrade came the need to establish research in some institutions for the first time. The 1990s saw a concerted effort to upgrade staff qualifications and introduce research activity for new universities, with many success stories. Research cultures may be embedded in some institutions, and established or emerging in others, with the latter requiring a ten year evolutionary period (Ebbutt 2002).

In more recent times, as in the UK, Australian universities' research performance has been subject to increasing scrutiny and measurement. In May 2004 the then Howard government introduced the Research Quality Framework (RQF) to measure the value of taxpayer funded research, assess its impact in academe and the wider community, evaluate postgraduate research training quality and examine access issues. With the subsequent change of federal government, a new system was announced in February 2008, labelled Excellence in Research for Australia (ERA). Differences exist between the RQF and ERA but for the purpose of this chapter the main point is that measuring research quality and quantity is firmly on the agenda. The last five years have seen a burgeoning of centralised research administration positions to ensure compliance with government frameworks. Further, university research performance is now a matter for global comparison (Sebalj & Holbrook 2009).

Although the underlying intent may be that research is still understood as the process of creating new knowledge, research is defined differently by governments when they attempt to measure quality. By default, research comes to be known as a process whereby individuals compete for selective grant funding, preferably in collaboration with others inside and outside the institution, and where the results of the work funded by the grants are published in journals ranked and deemed acceptable by government. This leaves many academics who are indeed research active outside of the new, formal, recognised research agenda. Similar processes have been documented in the UK as a result of that country's REA (Deem & Lucas 2007). There are a range of models for how research is organised and structured in universities, some of which are more inclusive than others. We will turn to these models next.

Structure of research

The 'ideal' structure and culture for research is that it permeates academic work. As Pratt, Margaritis and Coy (1999, p. 44) describe it:

> Academics who are researching at the leading edge of their disciplines and are able to draw on this knowledge in their teaching. Graduate teaching programmes

> become a driving force for the development of the departments and the graduate students themselves help in developing new knowledge and exploring the frontiers of the discipline alongside their supervisors. Graduate students, a thriving research programme, and publications in the recognised academic and professional journals and conferences are hallmarks of successful university faculties.

Note however this description only relates to postgraduate students and does not address undergraduate education and the role of research there. Further, universities, faculties or schools do not always conform to this ideal type. In practice, at least five different models can be observed:

Independent researchers – there is no central research core in the unit and research is carried out by a few individuals, usually operating alone with little or no budgetary support.

Stars – Most or all research is carried out by a very small number of 'star' performers. In this model research is limited to the scope and range of the stars' interests.

Independent centralised model – a core group of academics carry out most of the research with other staff on the periphery and still others acting independently, but still no majority of research active staff.

Collaborative centralised **–** a core group of skilled academics promote research activity and gather others into the process, creating a critical mass at the central core.

Multi-core – several collaborative centralised groups can be found across the university (Shamai & Kfir 2002).

It can be seen that of the five models only the last two approach the ideal type outlined by Pratt et al. (1999). Why then is it that despite tacit acceptance that university staff should do research and that the mission of a university includes research, some academic staff, schools or faculties are not research active or less research active than others? This question is addressed in the next section.

Obstacles to research

The literature reports a range of studies into obstacles to universities' research performance and these have been summarised in Table 1.

Table 1 Classification of obstacles to staff research

General	Details	Sources
Strategic issues	• a university mission that emphasises applied scholarship • university as a whole is struggling to remain viable	Hermanson 2008 Shamai and Kfir 2002

Culture and values	• a teaching focussed culture • curricular development and delivery seem as more critical • disciplines with a vocational orientation • resentment of staff who were not there for their students because they were researching	Shamai and Kfir 2002 Brotherton 1998 Thomas and Harris 2000 Jooton and McGhee 2003
Limited institutional resources	• lack of staff whose research is of sufficient standard to succeed in top ranked journals	Hermanson 2008
Lack of general research skills	• legacy staff from earlier teaching institutions who were not required or developed to do research	Deem and Lucas 2007
Lack of specific individual skills and expertise in 'playing the research game'	• lack of skills in interdisciplinary research including holistic thinking, creativity, intercultural competence and communication • no grant writing skills or confidence • no skills to manage projects, staff and budgets once funding is obtained • lack of skills and confidence in writing for ranked journals • lack of commitment to persist with drafting, redrafting, receiving rejections and revising papers for journals	Deem and Lucas 2007 Hermanson 2008 Manathunga 2006 Kamler 2008
No specific research budget or funding		Shamai and Kfir 2002
Workloads	• high and exhausting teaching loads • high administrative demands • lack of time	Deem and Lucas 2007 Tynan and Garbett 2007
Industrial arrangements	• staff on casual, temporary, short term contracts for teaching-only duties	Tynan and Garbett 2007

Overall, Table 1 suggests a common theme of a lack of resources at individual, group and organisation level, combined with a culture of intensive teaching that runs counter to productive research. In theory, the solutions to improving research activity and culture include addressing the obstacles outlined in Table 1, although removing obstacles is not necessarily the same as encouraging research and increasing output. Table 2 shows ideas for improving research performance (not necessarily drawn from the same literature or research studies) and suggests a broader range of interventions. It can be seen that most of the recommendations fall under the ambit of standard management practices required to bring about change in an organisation.

Table 2: Developing research and a research culture

High level focus	• governments that recognise the regional mission of local universities • distinctive culture that embraces research as part of the academic's role • the research culture is an item on important committee agendas • strategic alignment at all levels of the university • clear goals • participative governance
Specialised research leadership and administration unit	• support from the Vice Chancellor, and a head of research with high status and power • a proactive and supportive research division or office that does more than ensure compliance • a centralised research office, promoting research clusters on which resources are expended • designated research positions • streamlined administrative procedures that make it easier to comply with government measurement and accounting frameworks
Local or sub-unit factors	• strong leadership, with research and management skills • decentralised organisations which enable the school or faculty to direct resources to research

Human resource management policy, procedure and processes	• a raft of human resource management and development including retraining or replacing original teaching staff with research focussed academics through recruitment • individual and organisation performance indicators focussed on research • rewards and value given to research • developing students to become research staff • specific assistance with grant applications and publications (including workshops) • providing internal, unattached or open research funding • reducing teaching and administrative workloads • collegiality, networks and informal seminars and research method sessions • mentoring • team research projects • frequent communication • positive group atmosphere

Sources: adapted from Balint et al. 1994; Bazeley 1994; Bland and Ruffin 1992 in Pratt et al. 1999; Deem and Lucas 2007; Dodgson 2009; Hazelkorn 2004; Jooton and McGhee 2003; Pratt et al. 1999; Shamai and Kfir 2002; Sibley 1995; Tynan and Garbett 2007

Culture change

What Table 2 doesn't capture is the more subtle culture change that is required. Culture reflects the personality of each university and distinguishes one from another. Crucially, it is a system of *widely shared* and *strongly held* values (Robbins et al. 2008). Consequently, for a university, faculty or school to claim a strong research culture, research must be valued by a majority of its members. Culture serves many purposes including socialising new staff and guiding day-to-day activities. It influences universities' ability to implement strategy and deliver outcomes. Culture has received considerably more attention in recent years, as organisations gradually realise that changing culture is more significant (and more difficult) than changing structure. It is easy to restructure the organisation chart but hard to reconfigure the hearts, minds and values of individuals in the chart's boxes (Robbins et al. 2008).

Culture originates from the university's founders and thus institutions with a long history of research already have an advantage. Newer universities that developed from teaching colleges or the like need to change an earlier culture (such as a teaching focus) to a new research-orientated culture. At the same time, since culture is about shared values they

can not be imposed by top-down decree and will be resisted if they challenge historical, widely-held assumptions (such as academic freedom or student service). Existing culture is maintained and transmitted by organisation practices that keep it alive such as human resource policy, particularly recruitment, socialisation and performance management, along with leadership (Robbins et al. 2008).

Borrowing from the transformational theory of leadership (Burns in Dubrin, Dalglish & Miller 2006), creating or reinforcing a research culture requires leaders who can influence academics towards the goal of creating and disseminating new knowledge. Transformational leaders demonstrate four specific behaviours: *idealised influence* by being role models of successful research. They develop, collegially in the case of universities, a shared vision about what a successful research school, faculty or university looks like and make sure they and others can articulate this vision to create *inspirational motivation*. Transformational research leaders also provide *intellectual stimulation* which allows and encourages questioning of the status quo. Finally they provide *individualised consideration* which meets each academic 'where they are at' vis-à-vis research and provide tailored understanding, support or autonomy depending on that individual's particular needs and attitudes.

The individual's perspective

Academics may feel pressured to do research in the new quality measurement environment and some find it hard to meet the new standards. For example:

> I expect research standards to rise gradually, but I can't believe how abruptly the standards have changed here. It's a totally different set of expectations than when I was hired a few years ago, which doesn't seem fair. Now they are demanding publications in the top X journals for tenure and promotion, but few faculty members here have ever published at that level. I don't even think we have the resources to be competitive at the top X journal level (Hermanson 2008, p. 54).

However, many academics offer reasons for wanting to engage in research going well beyond pressure to enhance their resumes with entries that show compliance with the latest government quality framework. For example, Thomas and Harris (2000) found that staff gave the following reasons:

- their own personal development
- the intrinsic rewards of research including intellectual stimulation and job satisfaction
- making sure their knowledge was up-to-date for teaching
- credibility in front of students
- commercial potential of research.

Trends – the role of research and evidence-based practice in the professions

Evidence-based practice for professionals in industry is another reason to encourage research in academe. Evidence-based practice is an emerging approach that promotes

collecting, interpreting and integrating valid, user-reported, professional-observed and research-derived evidence, moderated by user needs and preferences in order to improve the quality of professional decisions and judgements (Brice et al. 2005 in Greenwood & Cleave 2008). Research within the professions produces applied knowledge which is fundamental to evidence-based practice (Ebbutt 2002).

For example there is a great deal of energy going into encouraging UK school teachers to carry out research. (Worrall 2004, p. 137), along with librarians (Greenwood & Cleave 2008; Todd 2008), nurses (Hill, Lomas & MacGregor 2003), physicians (Zemlo et al. 2000), dietitians (Vaughn 2003) and other health professionals. In management, Jeffrey Pfeffer of Harvard and Robert Sutton of Stanford are strong proponents of evidence-based practice (Pfeffer & Sutton 2006). The relevance of this emerging approach is that it adds pressure to academics to know, understand and carry out research as well as passing this on to their students, in a way that may not typically characterise vocational or applied disciplines such as management and business.

Application at Southern Cross University

For size, SCU is the number one university in Australia for research income from Cooperative Research Centres (CRCs) which are applied, industry focussed organisations, actively participating in nine CRCs (SCU 2008). Despite the fact that smaller organisations are at a definite disadvantage (Shamai & Kfir 2002), SCU has been successful by focussing on core strengths across a range of science and social science designated areas of research interest around sustainability and innovation, in partnership with many organisations. These interests fit with the university's location in a part of the country that embraces 'alternative' values whilst at the same time ensuring that its work has global significance. The university is well placed in that interest in sustainability may have been a confined to the 'alternative' individuals who flocked to the Northern Rivers of New South Wales over the preceding years, but it is now an issue of international significance.

The university has a straightforward, practical and realistic research and research training management plan. Reviewing the SCU 2007 Research Report it becomes obvious that the more successful research areas of the university work in teams, collaborate with other organisations and institutions and channel their energies (and those of their students) into key designated areas of research strength (DAORS).

Regarding the DBA, the Graduate College of Management has a DAORS in change innovation and organisational development, and as demonstrated in an earlier chapter, the largest percentage of candidates' research falls into this category. The university has a policy of requiring that Higher Degree Research students enrol in an existing DOARS and present their research to an annual off-campus DAORS meeting, which in the case of the DBA takes the form of twice yearly doctoral symposia.

These requirements can be seen as essential first steps in inculcating DBA candidates with some of the norms and processes of the 'scientific community' (Neuman 2000, p. 9),

which should stand them in good stead in later academic or professional life where they are required to conduct and present research. This is just part of the process and the DBA program also has a staff member designated to work with students and supervisors to achieve publications in ERA ranked journals, with some success. There is further scope for DBA projects to be linked to a larger collective effort on the part of academics to increase critical mass and capitalise on the synergies such collaboration generates.

Although the university's strategy of focussing on research strengths has been successful, SCU does suffer from some of the side effects of such an approach. Though it adopts the recommended multi-core model of research structure (Shamai & Kfir 2002) discussed above, one problem is that not all schools or faculties have a core (for example a CRC) and thus research opportunities are limited for some staff.

In a survey of SCU, staff O'Reilly and Rendall (2007) found that most (around seventy percent) wanted to be research active, but some found teaching workloads, administrative duties and lack of time were major obstacles. O'Reilly and Rendall also found there was limited evidence of undergraduate students being taught to develop research skills, which reinforces a point made earlier that the ideal type of successful university faculties (Pratt et al. 1999) may be more applicable to postgraduate students and even then is far from universal. Based on the literature reviewed in Table 1 it would seem that SCU is fairly typical in the obstacles faced.

Possible future directions

Research focus is likely to increase as the new Australian government ERA takes force. Some academics will be better placed than others to capitalise on it. Whether voluntarily or otherwise, some academics will continue to work in teaching only positions, whether these positions are designated as such or not. Eventually, as the current cohort retires they are likely to be replaced with research-qualified staff. However, unless work intensification and casualisation of the Australian academic workforce is significantly reduced, there will still be a cohort of academics in certain institutions who do not have the time or opportunity to be research active. Research activity in universities is likely to further coalesce around the core or multi-core model. The demand for management and business graduates who can use and 'do' research will increase and thus the DBA and other professional doctorates will retain their relevance and significance.

Conclusion

Research in the form of creating new knowledge is central to the mission of universities. The Australian government, by introducing quality assessment processes, has created a strong focus on research, arguably transforming it into a bureaucratic compliance process as much as a quest for new knowledge. Research is structured in different ways within institutions, with an inclusive, multi-core model seen as preferable. One advantage of this model is that it creates the critical mass necessary to compete on the national and international stage and is therefore most suitable for the government's agenda. Universities that have traditionally been more teaching-focussed face a range of obstacles

including lack of resources, and of embedded research culture. Effective leaders can transform universities and sub-units by valuing and rewarding research and utilising a range of human resource management strategies to develop and encourage academics' research. SCU is a relatively small, regional and new university but it has done well to capitalise on the region's strengths and interests to conduct applied research of regional and international relevance, with industry partners. Evidence-based practice is an emerging approach in the professions that makes the SCU DBA and other research focussed postgraduate programs of particular relevance.

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