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Supporting creativity in architectural education: examining the impact of leadership, management and staff development

Abstract:

Universities in Australasia, as they drive curriculum innovation, face a range of challenges that inhibit their momentum. A number of these challenges have arisen in response to the federal government's compliance monitoring entities, which are focussed on academic standards and quality assurance. In addition to this, there is an increased emphasis on research performance, innovation and postgraduate education. Against this backdrop, the present paper examines academic leadership, management and staff development and considers the implications of these overarching processes for supporting creativity (and associated curriculum innovation) in architectural education. Through surveys, interviews and focus groups, with leaders in architecture and design schools across Australasia, this paper provides a critical review of their attitudes and concerns. As part of this study, eleven recurring themes are identified as being relevant to leadership and management issues. These include workload, skills, management, support, health and succession planning. In combination these themes effectively articulate the pressures and concerns of academic leaders. In light of these findings, this paper considers the impact of these leadership and management issues on curriculum initiatives that have the potential to advance and build creativity in contemporary architectural education. The paper concludes that the situation, as revealed through the study, does not auger well for the future even though, through enhanced staff development, some potential exists for producing innovative curriculum structures and learning environments.

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Keywords:

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Introduction

A 2008 survey of 181 architecture academics drawn from across the Australasian region found that by far the most important purpose of their curriculum was to support students to become creative design practitioners (Ostwald & Williams 2008a). Academics rated the design studio the most critical component of the educational environment and expressed their frustration at the way design teaching was devalued and under-resourced (Ostwald & Williams 2008b). In another part of the survey, the same academics overwhelmingly rejected the prospect of ever becoming a leader or manager of a School or Faculty (Ostwald & Williams 2010). These two, seemingly disparate, results are potentially more closely linked than they first appear, with leadership and management being linked by several respondents in the survey to the likelihood of curriculum innovation supporting graduate creativity (Ostwald & Williams 2008a). It is the gap between these conflicting desires – the call for increased innovation and the concomitant rejection of responsibility for achieving it – that signals the need for one other, under recognised dimension of tertiary management; staff development. This paper is, therefore, about the often forgotten relationship between these factors: creativity, leadership, management and development.

In the first instance, design is a complex activity that, at its most productive, engages the student in the application of significant levels of creativity. The role of design educators is to produce environments that encourage and foster such attributes. However, there are many situations in universities where design academics are unable to create a learning environment that is supportive of creativity. This leads to the second factor; it is precisely in this context, where new curricula and teaching strategies need to be implemented, that effective leadership is called for. Furthermore, this leadership is needed at an overarching level, rather than just in isolated classes or subjects. But these same leaders, who are pivotal to fostering a constructive learning environment, must be supported, developed and empowered. This is the last of the three factors, and while a great deal has been written about the first, creativity, relatively little is known about leadership, management and staff development in architectural academia.

The present paper responds to this situation by bringing together the results of two studies that have been undertaken by the authors. The first examined the attitudes, practices and beliefs of the leaders and managers of architecture schools in Australia, New Zealand and Papua New Guinea. This study was undertaken in 2010 and 2011 as an extension and expansion of an earlier research project (Ostwald & Williams 2008a) and only isolated outcomes concerned with professional recognition and the student experience have since been published along with some limited reporting of strategic issues which are developed in the present paper (Ostwald, Williams & Fuller 2009, Fuller, Ostwald & Williams 2009, Williams & Ostwald 2010). The second study was concerned with the way in which creativity is fostered and assessed in the curriculum design and teaching practices of schools of architecture and design across Australia (Asklund, Ostwald & Williams 2012). These two studies used surveys, focus groups and interviews, collectively involving over 400 participants from university Architecture and Design Schools, to construct a detailed

picture of the educational environment that has developed in architecture and design schools over the last decade. Focusing on academic attitudes to leadership, and contextualised through research into supporting creativity in students, this paper ultimately considers the vexed issue of whether academics have the wherewithal to enable the very changes they desire.

This paper is structured in four parts. The first provides a background to the problems of supporting students to develop creative skills. This is a particularly contentious issue in architecture schools at present because there is a growing belief that the pressures of quality assurance and compliance are reducing academics' capacity to support student innovation. The second begins by describing the methods used to gather and assess the primary data that informs the paper, before the results of the interviews about leadership and management are tabled and then discussed through an analysis of the participants' own words. In the third section, the paper examines these findings, expanding the discussion to consider academics' views about staff development. Finally, the paper concludes by bringing together these two strands of results – the first about leadership and management and the second staff development – and considering whether the combination are able to support the innovative curriculum structures and teaching and learning practices that are needed to foster creativity. The paper concludes that leadership roles in architecture and design schools have become so unattractive to academics that there is currently a diminished capacity in schools to encourage innovative approaches in teaching and learning for supporting creativity.

Supporting creativity

One of the primary stated objectives of the architectural curriculum is to support students to develop design skills and abilities (Schön 1985, Boyer & Mitgang 1996, Cook & Hawley 2004). Yet, the delivery of programs of study that have this explicit purpose requires a different approach to that of many other university programs or courses. This is because, embedded within most design activity is some measure of originality, innovation or inspiration which is often described as 'creative capacity' (Williams, Ostwald & Askland 2010: 152). However, creativity is an ambiguous term, which encapsulates the legacy of a range of historical and theoretical debates (Csikszentmihalyi 1998). It refers to interrelated dimensions associated with people, processes, products and milieus (Rhodes 1961) and is often connected to concepts of originality, value, novelty, appropriateness and surprise (Amabile et al. 1996, Elton 2006, Maher 2010, Mayer 1999, Paulus & Nijstad 2003, Sternberg & Lubart 1999). The lack of clarity associated with the term poses a particular challenge to all creative arts disciplines and design education, as one of these, when creativity has to be assessed. Traditionally, assessment in design has relied, at least in part, on assessors' subjective judgment and their tacit understanding of creativity within the disciplinary context. As a result of this, the subjective nature of assessment and the subsequent lack of transparency have been cause of ongoing student frustration, ambiguity and stress (Bachman & Bachman 2006). Furthermore, for many

students, the assessment of creativity remains a mystery; something beyond their reach (Davies, Swinburne & Williams 2006). In addition, the often-subjective assessment practices of architecture and design academics can potentially be deemed inappropriate from a contemporary quality assurance perspective that demands both objective and transparent assessment procedures (Ostwald & Williams 2008b). This situation is exacerbated through the Australian government's imposition of teaching and learning accountability provisions through bodies like the Australian University Quality Agency (AUQA) and, in more recent times, Tertiary Education Quality and Standards Agency (TEQSA) which, while well intentioned, tend to limit the range of acceptable teaching and assessment processes and indirectly discourage innovation.

Ultimately, one of the problems with supporting students to develop creativity is the divergence between the embodied, lived, practical experience of creativity and the theoretical and abstract definitions and models that exist. A challenge for the design disciplines is to find a way to bridge between the theoretical and the pragmatic notions of the concept. Creativity is a complex and contingent concept that cannot be reduced to a singular rational or isolated problem-solving process and it cannot be assumed to be implicit in a particular product or project. Although the simplicity of such definitions and assumptions may assist academics and students by providing a 'check list' of requirements and expectations, such reductionism is problematic within heuristic disciplines. Invariably the development of curricula which fosters creativity, and the capacity building in human capital required to deliver the programs of study in a supportive way, are significant issues facing academic leaders in architecture and design (Boyer & Mitgang 1996, Fuller, Ostwald & Williams 2009).

Research method

In 2007, the authors of the present paper compiled a list of 319 full-time academic staff in architecture schools across three countries (Australia, New Zealand and PNG); a number which was verified with the assistance of the AASA (Association of Architecture Schools of Australasia) and the RAIA (Royal Australian Institute of Architects). This number excluded honorary, adjunct or conjoint staff, fractional staff (with a fraction below 0.6), short-term contract staff and casual or sessional staff. Following the university's human ethics clearance, these 319 academics were invited to participate in an online survey comprising between 36 and 40 questions (some specific answers lead to additional subquestions for clarification). The content of the initial survey was formulated in response to a combination of the issues raised in a literature review on architectural education between 1997 and 2007 and those raised in discussions at AASA annual meetings from a similar time span. This list was supplemented with a set of topics identified by the project reference group. At the end of the survey period, 181 valid responses were received, representing an overall response rate of 56.7% (Ostwald & Williams 2008a).

Several of the survey questions were related to the leadership and management of architecture schools or to the career aspirations of academics (which, in turn, elicited

comments about senior management positions). Such questions identified a clear national trend which suggests that few academics aspire to lead or manage architecture schools. In response to this result a series of focus groups were conducted in all of Australia's and New Zealand's schools of architecture to gain a more detailed understanding of the issue. In total, 39 academic managers were interviewed as part of this process along with 73 academic staff.

In general, the 'trigger' questions in the interviews and focus groups were both openended and positively framed. For example, the most common questions were: 'Tell us about the role or value of academic leadership and management in your school' and 'Tell us about your experiences as a manager or leader of an architecture and design school.' The interviews and focus groups were recorded and transcribed, and the responses classified into dominant themes, which were then used to identify the frequency of the response. The frequency was determined relative to the complete set of transcribed responses for each question, using the following six descriptors and approximate numerical ranges: 'widespread' (31 or greater responses), 'very common' (between 21 and 30 responses), 'common' (between 11 and 20 responses), 'rare' (between 6 and 10 responses), 'very rare' (between 3 and 5 responses) and 'isolated' (1 or 2 responses only). While this is not a strict numerical classification, these ranges give some indication of the dominance of each theme across the region. Furthermore, while a theme may recur a number of times, there may be a level of disagreement about it. Thus, for each theme the level of 'support' was recorded, providing a broad indicator of the extent of agreement about it. Thus, 100% support suggests that every respondent to this issue had a similar opinion, while the result of 80% support for a 'common' theme may suggest that four or more responses (approximately 20%) directly disagreed with the general thrust of the theme as it is phrased. The themes, their frequency and level of support were all tabulated. Thereafter, they were interpreted with the assistance of quotes gleaned from the recordings. To ensure anonymity, while still providing some level of acknowledgement of the type of person the answer was coming from, quotations were referenced in the following ways. If there is more than one school of architecture in a given state in Australia, then the state is used as a notation to describe the source of the quote (Qld, NSW, Vic, SA, WA). Where there is only one school in a state (NT, Tas and ACT) it might be possible to determine the source of the quote and so it is identified as 'Aus'. For New Zealand responses the coding 'NZ' is used.

Research results

Eleven dominant themes relating to leadership and management were identified in the interviews and their frequency and level of support recorded (Table 1). However, for the purposes of the present paper not all will be considered in detail as we suggest that it is the role of the leader, coupled with their capacity to lead, which is significant for ensuring that the appropriate curricula, teaching method and assessment modes are implemented.

For this reason, only seven themes (as shaded in the table) will be considered in detail in the following sections.

#	Theme	Frequency	Support
1	Leadership and Management roles in Schools of Architecture involve excessive workload much of which is bureaucratic in nature.	Widespread	100%
2	Taking on a Leadership and Management position in a School of Architecture has a detrimental impact on an academic's career path and promotion aspirations.	Very Common	90%
3	Taking on a Leadership and Management position in a School of Architecture can have a serious and detrimental impact on the health of the individual.	Common	100%
4	Leaders and Managers of Schools of Architecture are not appropriately supported (by administrative staff) or offered adequate development opportunities.	Common	80%
5	Leaders and Managers of Schools of Architecture lack the power necessary to truly shape an academic unit.	Common	80%
6	Finding people willing to take on Leadership and Management positions in Schools of Architecture is difficult and this is hampered by lack of succession planning and/or available staff.	Common	90%
7	The most important role of Leaders and Managers of Schools of Architecture is to be an advocate for the school and its staff.	Rare	80%
8	Sometimes the wrong people will seek to be appointed to Leadership and Management positions in Schools of Architecture.	Very Rare	80%
9	It is almost impossible to find a Leader or Manager of a School of Architecture who fulfills the university expectations of such a position.	Isolated	100%
10	The innate skills and qualities of architects tend to make them less ideal in purely managerial positions.	Isolated	100%
11	The most important role of Leaders and Managers of Schools of Architecture is to engage with the architectural profession.	Isolated	100%

Table 1. Themes identified in the interviews and focus groups; shaded themes are specific to this paper.

Workload concerns

Theme 1 suggests that: 'Leadership and Management roles in Schools of Architecture involve excessive workload much of which is bureaucratic in nature.' Academics argue that the volume of administrative workload is the greatest factor preventing them from considering becoming a leader or manager. Moreover, they maintain that this situation worsens with seniority, with management typically being only bearable at program or degree level, becoming more difficult at the level of Head of Discipline or Department and almost impossible at the level of Head of School or Dean. Staff, typically, believe that in order to undertake these roles a person must give up their teaching or research careers, their chances of promotion and their quality of life. For example, one senior

academic notes that, 'the problem is that the more you go up the line the greater your administrative load' (NSW). Another academic states that a person typically 'gets into leadership for the opportunity to bring a few changes to a school but the consequences – more paper work, diminished research work – are not worth it' (NSW).

The range of terms that are used to describe the workload problem are surprisingly consistent. In South Australia, one academic stated that 'the amount of administration is overwhelming', in Western Australia another used exactly the same words and then added that workload doesn't 'allow the level of strategic direction and planning that is needed'. A Victorian senior academic argues that the 'amount of work is debilitating' and that 'only an idiot would become a head of school; how do you continue to research [or] continue to teach, it's basically a suicide path'. Another senior academic notes that the 'Head of School job is an impossible one; you are caught between a rock and a hard place' (Aus). A South Australian senior academic similarly voices the opinion that, the 'Head of School position is one of the hardest positions in a university to have. I'm sure everyone thinks that they've got the hardest position but these are other people who aren't Heads of Schools telling me this' (SA). An experienced New Zealand academic argues that:

I have been here a long time and I have watched a series of good academics be snowed under and swamped by increasing and overwhelming levels of bureaucratic compliance. [...] I think it is inhuman and cruel [...]. You see people who have intentions to provide academic leadership [...] and none of those things are seen as being valuable in a leadership role. What is seen as being valuable is processing paper. (NZ)

Overall, a high degree of consistency is found in the multiple responses that make up this theme. As identified previously, the demands made on educational leaders are increasing with not only the general administrative 'busywork' of a school but also with the added pressures of the Quality Agenda in both teaching and research, that is, with regard to TEQSA and ERA. The workload capacity left for leaders to be concerned with innovation and curriculum renewal is therefore diminished.

Career concerns

Theme 2 comprises academic responses that argue that leadership and management positions are detrimental to an academic's career path. These academics believe that a person's career suffers if they take on such a role because their focus is directed away from research and teaching; areas which are the primary indicators of a successful career. For example, one academic notes that 'leadership positions are seen as a distinct inhibitor to promotion' (WA), another agrees arguing that 'no one wants to be an academic leader because it's seen as an impediment to the personal development of your career' (Qld). A NSW academic supports this view stating that if you become a manager in a school of architecture 'you will never get promoted; there is a lot of responsibility, longer hours and you are isolated and not thanked for anything that you do'. This response is echoed

across Australia with others arguing that 'there's no promotional glory in leadership and you don't get far in management by being a good or nice person' (Aus) and that 'it interrupts your career path and unless you are interested in a career as a university leader it is a bad choice' (WA).

Two key reasons are given for leadership and management roles being perceived as detrimental to advancement; the first is that fulfilling these roles distract a person's focus from research and teaching, the second that these roles are not perceived as a valuable. In the first instance, several academics note that in a career path, 'all of the emphasis is on research' (Old) and that, if you become an academic leader, you 'compromise the time you can commit to research and this in turn also compromises your advance within the institution' (NSW). This is echoed in the statement that: '[n]o one wants to be an academic leader, because it's seen as an impediment to the personal development of your career, when all of the emphasis is on research' (Qld). In the second context, academics across Australia and New Zealand repeatedly affirm that there is 'not a lot of prestige attached to the role' (SA), or that 'the way that architecture programs are now treated within the university, the role of leading a program or school, has less status' (Qld). A Western Australian academic maintains that 'staff believe that there is a distinct lack of preparation for the role of leadership in the institution, it is basically shared between people in more senior academic positions and thus it is not valued as an activity with a great deal of potential'.

Health concerns

Theme 3 was that senior leadership and management positions had a negative impact on a person's health. This theme developed spontaneously in discussions and was not specifically raised. In particular, the demands for accountability that come with senior positions were seen as taking a personal toll on many leaders, with several speaking of suffering from stress and/or taking anti-depression medication in order to cope with the position. For example, an experienced academic argues that the problem starts because the 'demands of the university are effectively unmanageable' (NSW) and 'before long, it just takes over your life [...] and then you're here late and you're working all weekend and you want to do other things but you don't end up doing them, simply because there isn't time' (NSW). A Victorian Head of School observes that, 'it is awfully stressful being a punching bag for both sides of my job; staff on one side, senior managers on the other'. Another academic proposes that 'the university changes the rules and expectations too often and the leaders bear the brunt of this and have to implement the changes, including staff reductions' (WA) resulting in levels of stress that are unsupportable. As a result of this pressure, two Heads of School separately describe themselves as 'a dying breed' (NSW, NSW), while in Queensland, one school has had four heads of school in six years because 'they keep burning out' (Qld). An experienced senior manager notes that the Head's role is 'absolutely debilitating' and because of this 'I have trouble sleeping, [and] I take anti-depressants' (Aus). In New Zealand, a former senior level manager notes that 'I have seen people in my past role get rashes, get sick, get migraines and have to leave the institution for those reasons. I have seen it take extreme personal toll for many people at this level' (NZ).

Support and power

Themes 4 and 5 have several parallels, they are both 'common' in their number of responses, with similar levels of agreement between respondents, and each suggest different reasons why leadership and management positions in schools of architecture are unattractive. The first of these relates to the lack of administrative support given to Heads and Deans and the second is associated with the relative lack of power that people in these positions, actually have. In the first instance, Heads of School are typically described as being 'under-resourced, under-supported and under-attack' (WA) and as having 'no administrative support whatsoever' (NSW). Many academics also argue that there is little or no training to support Leaders and Managers in schools of architecture. For example, one states that 'it is unrealistic for a person to be dropped into this position, they need more than peer mentoring, special skills are required' (SA).

Theme 5 proposes that the key problem with being a Dean, Head of School, or Head of Discipline is that 'in the current climate academic leaders do not have the power to really make a difference' (WA). 'There is no power in this job, there's no power over funding and there's no disciplinary authority in terms of being able to counsel staff or deal with errant behaviour. It's just a frustration and a huge emotional burden' (NSW). Contemporary academic management structures typically invest power at the highest level, the Vice Chancellor, and devolve very little power of control below that level. The average Head of School is therefore three levels removed from real power only having control over the margins, leaving the role to be viewed as 'a thankless middle-management position' (Vic) or 'a position that has no power attached' (Vic) to it and 'no autonomy' (Qld). The end result is that 'the Head has been effectively stripped of most of their powers' (Qld) but none of their responsibilities.

The problems of willingness and succession

Themes 6 and 8 suggest that – as a result of the workload, the impact on a person's career and the lack of resources and power to support the positions – it is difficult, if not impossible, to find someone to take on the role. Most schools admit to having little or no succession planning in place, in large part because no one will take on these roles. One Head of School argues that s/he is effectively locked into the position because 'nobody wants this job and there isn't an obvious successor to take it over either' (NSW). Another states that 'I've pleaded to give the Headship up and there's just no one who will take it on and who has the ability to withstand the inevitable knives that you get in your back' (NSW). In Queensland, 'no-one wants the Dean's job because its so terrible' (Qld) and another academic observes that 'Universities [...] have trouble getting people to do

Head's roles now, so that means that the queue of people to be a Head of School is pretty short' (Qld). Attracting an external Dean or Head, Theme 8, is similarly fraught with difficulty because 'the appointment of a Dean is such a political thing; there's so many players and the university wants an international [design] practitioner who is also a brilliant researcher and a brilliant administrator; they are really asking for a unicorn you know; a mythical beast' (NSW).

Discussion and development

One of the challenges with social sciences research of the type presented in this paper is that peoples' opinions, however strong their pattern of reporting, are not necessarily true. For example, every promotion criteria for every architecture school in Oceania includes a component of leadership, management or administration; this does not stop people from sharing the 'common' view that it has little positive impact on a career path or promotion. While there are no past studies available of leadership and management in architecture and design schools to triangulate the present data against, there are some past studies into academic leadership and management that are relevant in the present context. Indeed, almost the complete range of opinions reported here have strong parallels to those recorded in past research into academic leadership and management (Sarros et. al. 1999. Rowley & Sherman 2003). Past studies into academic leadership and management positions have also suggested that high levels of personal stress are common (Gmelch & Seedorf 1989, Gmelch & Burns 1993, Gmelch, 2000). All of which lends credibility to the majority of the results of the interviews and focus groups. Nevertheless, the purpose here is not to construct an argument against taking up a leadership or management position in a school of architecture or design; it is abundantly clear that people are needed in these roles. However, if we can begin to accept even a small proportion of the hundreds of responses recorded here, then it is clear that the roles of Dean, Head of School and Head of Discipline are especially difficult in the specific context of architecture and design schools.

We believe that one of the primary reasons for this difficulty is because, in the past, universities valued and promoted the autonomy of the individual, the derivation of authority from academic standing and the sovereignty of the individual's research. Inevitably, these values, along with a distinct ambivalence to administrative tasks on the part of academics has come into conflict with the government's agenda for universities (Marginson 2002, Ostwald & Williams 2008a). As Coaldrake and Stedman (1999) identify, the renewed emphasis on performance and accountability has led to increased workload pressure and lower morale. The egalitarian and collegial structures of the past are being replaced with autocratic and managerial systems (Marginson & Considine 2000). Even within 'core' teaching and research tasks, academic work has become more specialised. The expectation that teaching and learning environments are centred on a series of increasingly reified learning outcomes demands a more professional and nuanced approach to university teaching. Similarly, research demands are growing: to

improve postgraduate supervision and its outcomes, to produce high quality/high impact publications, to establish links with industry and to prepare, submit and/or review external grant applications (Reuben 1996). All of these changes, which are manifest so clearly in the demands on academic leaders and managers, are brought into focus when considering the question of staff development.

Under normal circumstances, the solution to several of the problems raised by academics to the challenges of leadership is staff development, and appropriate strategies and processes to facilitate this (Bolman & Gallos 2011). Staff development is one of the primary ways to empower individuals to take a leadership role in teaching and to support the realisation of innovative curriculum. During the interviews conducted by the authors a range of issues associated with staff development were identified by participants. In these responses it was clear that academics have a heightened awareness of the need to engage in professional development and, moreover, that this is becoming a standard expectation in the discipline. As one academic notes,

within universities there has been a huge emphasis on two areas: teaching and research and I think both of those areas within our discipline have not been well looked after in the past. So universities generally are demanding up-skilling of architecture academics across the board in teaching and research. (Vic)

While the need for professional development presents itself in a number of forms, the most prevalent was the pressure to undertake research higher degrees study. Whether real or imagined, staff felt a pressure to enrol in, and complete, a research higher degree as articulated in the statement,

[w]e are under pressure because [...], if you looked [at the situation] five years ago the number of academic staff with PhDs would have been very low, well below university norms. So the pressure has been placed on us to increase our postgraduate qualifications. (Vic)

The motivation for this change lies partially in the expectation that demonstrable research capacity is a base level of performance of every academic in a contemporary university (Coaldrake & Stedman 1999, Marginson 2002). As such, academics feel that it is necessary for them to complete a PhD or other higher degree if they have not already done so. While this might be viewed as a staff development activity and, therefore, a path to a leadership role, many academics saw it as purely a necessity in order to remain employed and to be competitive in promotion and other advancement paths.

People are now realising that a PhD is absolutely necessary if you are going to get to any level of seniority. Anecdotally, when I started in my first academic position in 1977 with a brand new masters degree under my wing, I was only the second person in the entire faculty with a masters degree. It was unusual and then, within a decade, half my colleagues had masters degrees. The same now has happened with PhDs. (NZ)

A related view is expressed by an academic who note that, '[h]istorically our staff were practitioners but now the pressure of the funding model means most staff need PhDs'

(WA). This view was repeatedly articulated as the requirement that 'promotion is very much going to be based on post-grad qualifications; everyone has to have a PhD, so every staff member in their performance management has been asked to provide details of how they're going to achieve that' (SA).

In addition to the expectation that academics complete a PhD, the emphasis on provable levels of quality teaching has lead to a parallel demand for staff who have qualifications. often at graduate certificate or diploma level, in teaching and learning. As a Western Australian academic observes, the 'introduction of good teaching measures encourages participation in the development of good teaching practices and the implementation of new modes of instruction and assessment'. However, while it was evident that academics see the value in enhancing their teaching qualifications, for the good of their students and their profession, there was a concern that the need for 'up-skilling' was being driven more by artificial quality assurance mechanisms than the delivery of an inspirational student experience. Thus, in the interviews, staff ultimately stated that they believed that bureaucracy, legislation and the pressure of annual performance reviews had bred a compliance regime that did not reward innovation. Coupled with the even greater pressure to complete research higher degrees, there was a perception that teaching qualifications were becoming expedient, rather than being genuinely useful. Thus, despite what appears to be a positive focus on staff development, the context in which it is occurring has tended to undermine the capacity of these processes to empower the individual and make them capable of taking a more senior role attuned to supporting the production of high quality teaching and learning.

Conclusion

Morgan, O'Reilly and Parry (2004) claim that teachers often seem to have difficulties defining what they mean by creativity. Whereas the act of teaching design implies that there is an understanding of what creativity is, there is often limited engagement with the term. As part of the authors' recent research (Williams, Ostwald & Askland 2010), we interviewed academics about the issue of supporting students to develop creativity, with one participant explaining that creativity

is not something that you can simply describe to someone, and therefore they understand it. It is much like the customs of a country [...]. You can't explain the customs of a country and then someone understands the customs of that country; you can't just explain what creativity is and then expect a student to understand it.

This quote draws attention to the issue of embodiment and the role of subjective, often tacit, understandings of creativity. Creativity is innately complex – it is simultaneously a characteristic of particular acts, ideas and products; it is the process leading to such outcomes; it is a reflection of particular personality traits that enable such processes; and, it is the result of socialisation within particular fields promoting certain identities and practices, as well as external, environmental, factors guiding and evaluating creative

processes and products (Amabile et al. 1996, Csikszentmihalyi 1998, Elton 2006, Maher 2010, Sternberg & Lubart 1999, Asklund, Ostwald & Williams 2012). In order to support students to develop these complex multi-dimensional skills, and in order to assess their work effectively in the context of current compliance regimes, there is an urgent need for academic vision, leadership and innovation. However, the academic landscape painted in this paper in the field of architecture and design is not one that elicits confidence in the prospect of major, positive reforms occurring in curricula design, teaching practices or modes of assessment in these fields.

It is clear, from the research reported in this paper, that for innovation to occur, and to occur in a sustained way which supports the production of creative graduates, there is a need for strong leadership and effective management. Nevertheless, academic leaders in architecture and design clearly feel they are overloaded with work, mired in bureaucracy and burdened with the expectation that they will keep their teaching and research active while being a manager. What is evident in this situation is that the demands of leadership leave little scope for development of innovation and may even deter some staff with an interest or skills in teaching from aspiring to leadership and management positions. This, coupled with the fact that the architecture and design disciplines tend to appoint staff from industry, means that many new, energetic staff have their attentions swiftly diverted from seeking staff development in teaching and learning by the task of completing a PhD. This situation also contributes to staff not perceiving teaching as a viable path to career progression and promotion. Certainly, in the interviews it was identified that changes in promotion criteria to recognise teaching are gaining momentum, but this was countered with the belief that research remains the primary means of career advancement.

In this context, we feel the question must be asked whether the current academic system has the capacity to ensure the delivery of the types of education programs that will provide the diversity of learning experiences that are needed to foster creativity. The harsh reality garnered from this research is that it seems unlikely that this delivery will be driven by academic leaders alone as administrative and quality assurance tasks detract from the ability of leaders to focus on curriculum issues. Moreover, coupled with academic managers' lack of capacity to commit to teaching/curriculum innovation is a parallel lack of willingness of many staff to take on this responsibility. This has led to a situation where there is not the capacity support sustained curriculum renewal which in turn will provide a learning environment that will foster creativity.

What the future holds – when there is little prospect of change in resourcing for universities and no willingness amongst academics to take on a leadership role – is simply the maintenance of the status quo; a situation that will not enhance student learning in the desired way. The only aspect of this larger conundrum that offers some hope is that, as more staff complete research higher degrees, there may be some new capacity to devote to teaching innovation and even a larger pool of potential applicants for leadership and management roles.

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