PRRES Conference 2010

Forces for change in property education and research in Australia

Professor Mike Hefferan PhD, University of the Sunshine Coast and Mr. Stuart Ross, University of the Sunshine Coast

ABSTRACT

The property sector represents some 40% of national wealth and by its nature and function, impact on nearly all forms of economic, community and individual activity are profound. Compared with other sectors, however the critical role of education and research appears to lack the overall strategy and vision that one might expect.

This is not to suggest that the education agenda has not progressed considerably over the last decade or so. Quality tertiary courses are now offered in most Australian states at undergraduate and, increasingly at post graduate levels with a robust accreditation process in place. Nevertheless, given the compounding changes occurring across the sectors, it might be debated whether in fact, these courses are now to fully prepare future property professionals.

The current situation with property research in Australia is even more problematic. On the national agenda, particularly through the Australian Research Council, research into property and related areas is demonstrably under represented. This is a perennial issue that shows no signs of improvement. Quality research is produced – but it tends to be eclectic and relatively small scale with most university staff being committed to teaching and learning activities. Relatively few have wide research experience.

This may simply reflect the nature of the property sector and the relative newness of teaching and learning and research initiatives in it. As the sector matures however, a more strategic and coordinated approach may be necessary.

This paper attempts to identify changes occurring within the property professions and the tertiary sector that will influence the both education and research in these areas into the future.

KEY WORDS: Australian property sector; Property teaching and learning; Property research; Changed environment; Roles of universities; Professional bodies.

Contact details: Mike Hefferan <u>mhefferan@usc.edu.au</u> Stuart Ross <u>sross@usc.edu.au</u>

1. INTRODUCTION

The contemporary property sector required a range of professional professionals – from analysts and valuers through to asset managers, financiers, and property and facilities staff. The diversity and complexity of these tasks has increased remarkably, reflecting a now much more sophisticated sector, linked to finance, assets and wider community.

For all of that, tertiary education of property professionals is relatively new across Australian universities.

Over only four decades, it has largely transferred from technically based education to tertiary. For many students, whilst statutory registration as a valuer remains important, acceptance by the professional organisation, as entry into a range of specialist areas, is often now a key priority.

At the same time, the amount of property research has increased within university and consultancy practices, with a range of industry and research journals publishing locally and internationally.

Professional and academic organisations such as the Australian Property Institute (API), the Royal Institution of Chartered Surveyors (RICS), the Pacific Rim Real Estate Society (PRRES), and particularly the academic and research leaders from the twelve Australian universities now directly involved in these areas, need to be recognised for their role in advancing this level of positive change.

For all of the good work however, property education and research in Australia remain an immature discipline (Boydell 2007). It is small-scale, remarkably underrepresented in public funding and, except for those closely involved with the relevant profession, lacking in recognition. It remains difficult to undertake quantifiable research into the subject, statistically reported across disciplines as diverse as architecture and building, management and commerce, engineering and related technologies and natural and physical sciences (Birrell et al. 2008).

The immediate and longer-term environment now presents particular challenges at a number of levels. Technological, market and workforce changes create quite different scenarios from those of the past. At the same time, but largely unrelated, government policy for the tertiary and Technical and Further Education (TAFE) sectors in Australia together with university structure and objectives are likewise moving quickly and irreversibly into major restructuring. Property education and research are at the nexus both of these property sector and educational sector changes and the impact of these is likely to be significant even in the short to medium term.

Truly forward-looking, tertiary education programs and better focused research agendas can help address these challenges and, in fact, can assist in seizing new opportunities. This paper confirms observations made in other research citied above that urgency now exists in this. The tertiary education sector now needs to realign its offer, emphasising integrated experiential learning and prioritised, industry relevant research.

This paper attempts to takes a wide view of these complex and inter-related issues. It holds that setting a long term, value adding strategy for property education and research requires not only an appreciation of the future of the property sector but also a sound understanding of the new framework now under construction which for the management of the university sector.

2. BACKGROUND

The fundamental principles and methodologies of valuation, assessment and analysis have changed a little over decades - nor should they - based as they are on market analysis and professional assessment of return and risk. It is the diversity and level of sophistication in application of those fundamentals that have radically changed. The property professionals have built on that valuation platform and applied it to

a greatly expanded range of portfolio and asset management, development and regulatory and statutory matters.

In parallel and over the same period of time, the professional education of property professionals has, except in the matter of real estate marketing, moved almost entirely into the university sector. As noted by Bradley et al. (2008), Birrell et al. (2008) and

Access Economics (2008), the TAFE/Vocational Education Training (VET) system has now taken a largely divergent path from the universities, having quite a different socio-economic profile and often with limited interest by VET students in progressing to university programs, at least as a natural, short term progression.

Small and Karantonis (2001) make similar observations regarding the property sector where TAFE courses now typically focus on capacity building and technical skills as opposed to deep background knowledge that would need to be applied to solve novel problems. Numerous pathways exist for students translating between the VET and tertiary levels across Australian universities and these now represented over 10% of all university admissions (Bradley et al. 2008). Nevertheless, the transition to university property courses does not appear strong. Difficulties arise in confirming the quality of key courses for acceptance as prior learning. Differences in assessment regimes and the sensitivities of universities in maintaining professional accreditation can also be present issues.

It is interesting to note that even though the API has, for several years allowed for a lower technical level of membership, there has been only two TAFE Institutes that have sought and obtained that new accreditation. Both of these are in New South Wales and already had a strong history in and relations with the property sector. No others in Australia have made formal application, again reflecting the quite different direction that the TAFE system and its institutes now follow.

Even though largely separated from its earlier technical links, the development of property teaching and learning and research agendas in such a new area creates its own difficulties. Like a range of other professions, notably law and architecture, few practitioners or academic staff have doctorate qualifications or strong research credentials, at least in the university sense. In a sense, this was ironic, given that the entire basis of the work of most property professionals is analytical research.

The other professions noted above, however, were well established, large scale and high profile and little challenge was made by university authorities to the lack of doctorate qualifications in these disciplines. Unfortunately for property schools, particularly those located in business and engineering faculties, the pre-requisites placed upon them to employ only those with higher-level tertiary qualifications continues to frustrate the securing of new, industry relevant staff.

This may be one of a number of factors that have resulted, as observed by Boyd (2004), in a significant aging of the property academic workforce with little succession planning for the professorial and other senior staffs who have retired in recent years or who will retire over the near future. Small and Karatonis (2009) also observe that the comparatively poor salary of academic and casual teaching staff makes it difficult to encourage involvement by practitioners.

The employment choices of any professional are complex and are the product of a range of income, qualification, work quality and security reasons (or combination). For whatever reason, there is a fundamental and growing problem attracting staff that are both qualified and industry experienced into property education. This matter requires further investigation and action and is an important part of ensuring professional advancement within the sector.

The establishment of standards, uniformity in practice and the ability to encourage education programs to meet changing demands over time has been vital to the support and advancement of the property profession (Boyd 1995, 2002). In recent years, RICS and particularly the API have played an essential role in this. All but one of the property-oriented, undergraduate university courses in Australia now have been accredited by the API. The API uses detailed criteria under ten headings to ensure satisfactory pedagogy, staff quality, practicality and industry linkages. The ten criteria for assessment are:

(i) Higher Education degree;

- (ii) Coverage of key knowledge fields (particularly related to valuation methodology, economics, planning, building and law);
- (iii) Graduate capability of gaining employment in the property sector;
- (iv) Suitable component of specific property related courses;
- (v) Inclusion of generic attributes such as ethics, communication, decision making and interpersonal skills;
- (vi) Direct links to industry and research;
- (vii) Industry qualifications of key academic staff;
- (viii) Effective evaluation;
- (ix) Inclusion of practical elements in the course that expose students to industry practice; and
- (x) Institutions resourcing of necessary support material and resources (library, software, laboratories, etc).

(API Accreditation Guidelines 2007)

The accredited programs are reviewed on a regular basis as, indeed, are the guidelines themselves.

Arrangements here as for any profession required educational standards to be established and enforced. Universities generally recognise the value of such accreditation in attracting students to their particular courses. On a practical basis too, it is anecdotally reported that heads of property disciplines have, in fact, used the conditions that often attach to program accreditation to ensure that a good balance is established between the obvious and legitimate needs to ensure high-quality academic staff, whilst also appreciating the industry importance placed on practical knowledge and industry qualification, such as Certified Practising Valuer (CPV).

The research agenda is certainly not as clear. Even internationally, it is acknowledged that property generally is a difficult area to closely define as a distinct body of knowledge, and there is a lack of consensus as to its boundaries (Black and Rabianski

2003). They note that, by its very nature, property interests diffuse across many areas, with particular emphasis on investment and finance in the US but perhaps more on built environment issues in the UK, Australia and New Zealand.

Overall, they note that risk and return analysis appeared to rank quite highly but, even in that, there seemed to be significant differences of opinion by both academics and professionals as to which general areas of research should be emphasised. Harrison and Manning (2008) also investigated these matters and suggested that, in the US at least, there were some 'research hubs' or aggregation of research efforts in several key areas, notably market analysis, real estate contract and business issues, and government policy and planning, particularly in the housing sector. Property education itself also had a significant level of research interest.

They noted too that, internationally, the interest in real estate research appeared to concentrate in a relatively small number of universities. Roulac and others (2004) noted that research internationally appeared to be shifting away from investigations into appraisal methodology and more towards the financial sector, behavioural influences, standards and environmental concerns.

The history of property research in Australia, however, would not seem to be as positive. Boydell (2007) noted the small scale and somewhat eclectic nature of research here and observed that its lack of profile and upcoming changes to research funding provides little comfort into the future.

Property research in Australia emanates from several sources. The first is the universities but, as noted above, the number of full-time property academics in

Australia is small, and there are only five property-related professors. The activities of most of the staff are firmly based on teaching and learning activities with very limited time, industry exposure or experience to undertake significant research projects.

It is a telling statistic that only three property academics in Australia are known to be active with the Australian Research Council (ARC), the primary source of government funding to the research community. Whilst this may say something about the experience and lack of doctorate qualifications of many property academic staff, it must also reflect on the lack of interest and prioritisation of property

research in the minds of the government and research funding authorities. Where property research is involved in ARC projects, it is often in an ancillary or supporting role and not as a mainstream component of those investigations.

Whilst an anecdotal observation, property academic staff are genuinely interested in undertaking research projects. However, their teaching workload and limited industry networks and, often, their own efforts to secure higher qualification limits their ability to pursue additional research.

The development and asset/property sectors indeed undertake copious amounts of research of a specific and general nature and a number of high profile property research/analysis consultancies have emerged nationally and internationally in recent years. The issue here, however, is that such information represents vital corporate advantage to those firms and their clients and, consequently, as commercial-in-confidence, will never be released into the public domain except perhaps bilaterally and in general terms. Boyd (2005) and Boydell (2007) both recognise that greater cooperation and, perhaps, greater sharing and integration of much of this available knowledge will be vital to professional development into the future.

3. THE EMERGING TEACHING AND RESEARCH ENVIRONMENT

As well as those long-standing issues and challenges in property education and research in Australia, there are now a number of additional factors that will be increasingly important into the future.

In the first instance, two major reports that have been released and are very likely to be implemented by the Federal Government progressively over the next few years. The first is the 2008 Review of Higher Education Final Report led by Emeritus Professor Denise Bradley AC (known as the 'Bradley Report'). The second major report, effectively into Australian research agenda, was instigated by the Federal Minister for Innovation, Industry, Science and Research in 2008. It was titled The Review of Australia's National Innovation System, (known as the 'Cutler Report').

These reports will set the education and research environment in Australia and, from that, the strategic direction of a range of programs including property. Whilst small program areas such as property education and research are not specifically mentioned in either of the reports, the effect may well be significant.

The Cutler Report continues a long-standing and understandable trend to aggregate research into larger, world-class facilities and centres, concentrating on areas of high science. The impact of that will almost certainly be the continued stratification of universities, with the major ten or twelve moving rapidly to provide those centres of aggregation.

On the face of it, this may seem to have little to do with property but indeed it may well be beneficial. Those smaller or 'technical' universities such as many of those with property programs may well seek out new niche areas in which to pursue more developed agendas.

It may be observed that, until this time at least, many universities enjoyed the commercial benefits of relatively low cost educational programs in areas such as property, but had little interest in it or a willingness to invest, past those undergraduate, and some postgraduate, offerings. This landscape may well rapidly change and those universities not involved in the high-profile, science-based activities may well look to establishing centres of excellence in currently lesser recognised areas. Suddenly, non traditional areas such as property have increased interest. Such areas have potential for high-profile, cross discipline, regionally relevant characteristics and with well resourced public and private sector partners.

The Bradley Report also indirectly presents some opportunities, but also challenges, for property education. Two of the critical outcomes of Bradley are: firstly, that there are quite arguably too many universities in Australia and some aggregation or even amalgamations would be worthy of further investigations; and secondly, universities need to work actively, through the TAFE system etc, to provide increased accessibility to tertiary education, particularly for socio-economic groupings currently under-represented in university populations.

As noted earlier in this paper, there are difficulties in attempting to translate TAFE property qualifications to those in universities as these two types of organisations have followed quite diverse paths in recent years. The API has introduced a technical membership into its organisation which recognises certain accredited TAFE courses.

Whilst this responds to the new government agendas to some extent, it is doubted that there will ever be large volume pathways re-established between TAFE and the university sector. Rather, in this regard, universities and, specifically here, university property undergraduate courses should consider their own forms of outreach to target non-traditional demographics into these courses.

There are several other important factors inside universities that will also significantly influence the direction of property education and research into the future. The first of these is the fact that property discipline areas are quite small in Australia, normally with between four and eight full time staff supplemented by sessional academics and other related discipline professionals and by administrative staff at each university.

Consequently, they are rarely identified as free standing schools and are variously located in business faculties, engineering/build environment faculties or in some cases faculties aligned with architecture or natural sciences. Whilst all of these discipline areas have relevance to property there is a general trend, mirroring the approach in the United States, for property to be located in business schools. This is based on the reasonable premise that it is the economics, finance, governance and law that are intrinsic to property decision-making, management and dealings.

That continuing trend comes with its own issues. Business faculties have there own peer group and their own accrediting organisations such as the Association to Advanced Collegiate Schools of Business (AACSB). These accreditations demand certain levels of qualifications, in particular reinforcing the need for academics, including the property academics, to have doctoral levels.

Another emerging issue within the university community in Australia is that rapid stratification is occurring. Led by the University of Melbourne and the University of Sydney, the larger universities are radically changing their undergraduate structures, often involving much more holistic and generic offerings of up to five years in duration. There may well be sound strategic and pedagogical reasons for such change, but it means that the ability for professional accrediting bodies to require certain essential components in undergraduate courses is becoming quite tenuous.

New approaches to assessment accreditation may need to be considered to accommodate the legitimate expectations of both universities and of the profession.

4. EXTERNAL DRIVERS FOR CHANGE

The provision of professional education and of research should be seen as a service – in this case, a service to the property sector and on to the wider community. On that basis, it needs to be demand-led, responding and evolving over time to meet the changing requirements of that sector. For the practice of valuation, those changes are quite profound. Existing mainstream work involving mortgage finance for residential properties is subject to quite extraordinary changes in the types of tenure, development control, topographical and, particularly, the amount of sales information available. It would be naïve to think that, as that trend, facilitated by new information and communication technologies, advances, the future of valuation practice lies in a continuation of the large volume, low margin residential mortgage market.

Nevertheless, as Magdziarz and Crowell (2007) note, the basic skills of being able to analyse and assess the market remain of fundamental value and now can be evolved and applied in a wide range of contemporary, more complex and, professionally, probably much more interesting areas. Boyd (2002) particularly notes that the future of property professions depends on the adaptation to changing industry demands, globalisation and communication. Further, graduates now have demonstrably greater opportunities to develop different aspects and knowledge within the property sector (Page 2007). As well as an extension of the more complex areas of commercial, development, finance and statutory valuations,

new opportunities are clearly emerging in such areas as impact assessments, detailed consultancy and advice, asset management, mediation and alternative dispute resolution and rapidly expanding demands to better assess environmental trade-offs, banking and sustainability investments.

Clearly, even though the fundamentals of assessment will remain critical to that, their application into these new areas will require significant changes to existing undergraduate and postgraduate courses. Additionally, and as an increasing matter of urgency, these changes may encourage concentrated re-training and professional development courses for those practitioners moving from those more traditional mortgage finance areas into the new areas of professional demand.

A further area that is now significantly changing the nature of property education is the shifts in the demands of students, both at undergraduate and postgraduate level. Again, Boyd (2004) notes that, in almost all other aspects of contemporary life, the fundamental differences in approach and philosophy between baby boomers, generation X and generation Y are quite fundamental and will affect property practice and educational delivery styles. He suggests, as does Epley (2004), that behavioural analysis must be closely considered if educators are to properly meet the needs and expectations of these client groups.

Numerous studies (Callanan and McCarthy 2008; Robson 2007, 2008) emphasise the educational value and also the personal requirements by contemporary students to integrate tertiary education and learning with work experience in the development of a whole professional – not simply someone with technical competence. Given the likely future diversity of roles of property professionals, this observation would appear to be particularly relevant in property education. Across undergraduate property courses in Australia, only about 50% are recent school graduates. The rest are more mature and the vast majority are already employed in part-time and in many cases close to full-time employment, many already within the property sector.

Given this scenario, many programs are effectively run as part-time programs, with individual courses scheduled at times that can best fit in with the students' other work commitments. This concentrated, often after-hours face-to-face contact, supplemented by specific online lecture support material, will increasingly represent mainstream teaching activities. Into the future, as the re-training of existing professionals to undertake new roles becomes more prevalent, short courses and intensive training modules, either by distant learning or as day or weekend ('block') courses, will almost certainly become more important. Greater flexibility in work times for academic staff will be a pre-requisite to these changes.

5. A SCENARIO FOR THE FUTURE

A fundamental challenge to tertiary education or research is that activities, by their nature, require considerable prediction of the future. Current undergraduate students will not be fully applying their studies for some years and into a commercial and professional environment far different from the present. Similarly, research of value will typically seek discoveries and answers to problems that will be sustainable into future, unknown environments.

Professions and large institutions like universities generally do not deal with change well. In some ways that is surprising, given the intellectual capacities, knowledge and the ability for innovation that they possess (Greenwood and Ors 2002). In practice, however, these attributes are, more than outweighed by their conservative histories, traditions, processes and systems (Marginson and Considine 2000). Typically both of these types of organisations see a primary role in defending established value only diverting and advancing with proven cause and clean, long term direction.

This paper has identified a range of very significant changes now well under way, both within the property professions and within the tertiary education sector. It also particularly notes that the research agenda for property disciplines in Australia, which must be particularly important in providing more certainty and direction into the future, is currently not well defined.

Clearly, change is required but, for professions and for universities alike, radical change is normally unwise and unlikely in any case. Being aware of upcoming challenges and opportunities and then moving in a defined but evolutionary way is much more likely to achieve desirable and sustainable results.

Given the diverse nature of the property sector and its understandable need to hold intellectual property as a core element of business, it is unlikely that significant industry change will emanate from private practices or firms. Likewise, as described above, property schools across the universities are relatively small and do not have great influence to change within their large and traditional organisations.

Consequently, the best leadership in moving into this changed environment can indeed come from the two leading industry associations – RICS and the API. RICS already has a well-established research agenda, importantly with very strong international links and resources. They are making significant advances in research and practice into such areas as sustainability and financial analysis.

The API, on the other hand, is only now developing a research agenda but has historically taken an important role in working with its universities and, through its National Education Board (NEB), it has a mature, well-recognised and detailed program of course accreditation applied in practically all tertiary property courses across Australia.

The API/NEB keep these accreditation (and particularly program content) criteria under regular review and, to this end, are about to embark on a survey from key informants from the property sector and from its client groups, to assess the likely future demands and roles for property professionals, including valuers. It notes correctly that today's university students will emerge into quite a different market and environment, particularly by the time they reach full professional productivity in five to eight years. Consequently, programs and their constituent courses must be able, as much as possible, to provide the skills now that will be used then.

The API/NEB project seeks to gain the observations of those key informants as to the future component of valuers' work, say in five or ten years time. As well as valuers' involvement in assessments for financial institutions, it invites comments regarding the likely future role for valuers/property professionals in such areas as property consultancy and more detailed advice, roles within the development sector and in asset and land management (broadly defined), the potential for wider roles in mediation activities, in the assessment of environmental criteria, impact studies etc.

The project, which is scheduled for completion in March 2010, will, remarkably, be the first study of its type undertaken in Australia.

The API/NEB hopes that, from this information, it can continue to evolve courses within the universities and to better establish a research agenda for the future. Again, it is stressed that the economic and financial components of property and valuation work will not change and are certainly not being challenged. It does, however, reflect future scenarios where those basic elements may be applied into quite different areas. Without pre-empting the outcomes of that study, it would appear likely that, as has been occurring in kindred professions such as surveying over recent years, changes in demand will require skills not possessed by many current valuers and other property professionals. If this is indeed the case, it will be important that professional bodies also reconsider the accreditation, not just of full tertiary offerings, but also of retraining and professional upgrading programs.

6. CONCLUSIONS

For all of this unprecedented change, both in the property and the tertiary education sectors, there are considerable grounds for optimism in all of this. Property continues to emerge as an area of importance in its own right and one where the expansion of professional skills training and research now demanded. This may not simply be in traditional valuation and analysis but also in consultancy; environmental management and sustainability; alternative dispute resolution; financial structures and planning; and potentially a range of other areas. A demand survey to commence shortly by the API will now, for the first time, allow the analytical definition of those likely changes and opportunities.

However, all of this must be kept in context and there remain significant issues within the changing tertiary sector for the property discipline. Overall, property schools within universities remains small, largely unrecognised and without strategic influence. Their research efforts are not coordinated, the leadership group is rapidly aging and a large majority of staff are so engaged in teaching the ever-growing cohorts of undergraduates, that they are not research active. Additionally, securing staff is increasingly problematic, given institutional demands for doctorate qualifications.

This paper holds that all of this represents a scenario for significant change. It is predicted that, with imminent changes in both the teaching and research environment in Australian universities, undergraduate property education maybe left to a smaller number of technically-based universities. More positively however, changes in the property sector will provide much more expansive roles in professional up-skilling and development and in much larger, new areas of research.

It would be hoped that the professional bodies both API and RICS can play an increased role in assisting universities to better identify up coming change and to encourage the further development of undergraduate, post graduate and professional development courses that truly supports the property professionals into the future.

7. **REFERENCES**

Access Economics Pty Ltd 2008, *Future Demand for a Higher Education*, Department of Education, Employment and Workplace Relations.

Australian Property Institute 2007, Accreditation Documents, Canberra, Australia.

Birrell, B, Healy, E, Edwards, D & Dobson, I 2008, *Higher Education in Australia Demand and Supply Issues, A Report for the Review of Australian Higher Education,* Centre for Population and Urban Research, Monash University.

Black, RT & Rabianski JS 2003, 'Defining the real estate body of knowledge: a survey approach', *Journal of Real Estate Practice and Education*, vol .6, no. 1, pp. 33-54.

Boyd, T 2007, 'Bridging the gap: a graduate training program for the property industry in Australia', in *Proceedings of the 13th Pacific Rim Real Estate Society Conference*, Fremantle, Western Australia.

Boyd, T 2006, 'Re-engineering the property profession-generational change', *Australian Property Journal*, vol. 39, no. 3, pp. 207-211.

Boyd, T 2004, 'When the baby boomers go, real change in the property industry will begin', *Australian Property Journal*, vol. 38, no. 4, pp. 290-293.

Boyd, T 2002, 'Thirty years later – Is there a 'new school' of appraisal thought', in *Proceedings of the 8th Pacific Rim Real Estate Society Conference*, Christchurch, New Zealand.

Boyd, T 1995, 'Current valuation practice in Australia, A Survey of Valuers', *Journal of Property Valuation & Investment*, vol. 13, no. 3, pp. 59-69.

Boydell, S 2007, 'Property research - the university challenge', *Australian and New Zealand Property Journal*, vol. 1, no. 2, pp. 130-135.

Bradley, D, Noonan, P, Nugent, H & Scales, B, 2008, *Review of Australian Higher Education: Final Report*, Commonwealth of Australia

Callanan, J & McCarthy, I 2003, 'Property education in New Zealand: Industry requirements and student perceptions', *Journal of Real Estate Practice and Education*, Grand Forks, vol 6, no. 1, pp. 23-33.

Dorchester, JD, Jr. 2007, 'Voices in the evolution of appraising: hindsights and insights'. *The Appraisal Journal*, vol 75/3, pp. 211-226.

Epley, DR 2004, 'New ranking of decision making subject areas for corporate real estate executives', *Journal of Real Estate Research*, vol 26:1, pp 43-69.

Greenwood R, Suddaby, R, & Hinings, CR 2002, 'Theorizing change: the role of professional associations in the transformation of institutionalized fields', *The Academy of Management Journal*, vol. 45, no 1 (Feb., 2002), pp. 58-80.

Harrison, M & Manning, C 2008, 'Characteristics of recent real estate research 2001 – 2006', *Journal of Real Estate Practice and Education*, Vol. 11, No. 2, pp 109-126.

Marginson, S & Considine M 2000, 'The Enterprise University: Power, Governance and Reinvention in Australia', Cambridge University Press.

Page, GM 2007, 'Review of professional socialisation as a mechanism to improve graduate outcomes', in *Proceedings in the13th Pacific Rim Real Estate Society Conference*, Fremantle, Western Australia.

Robson, K 2008, 'Juggling the need of students and employers in the workplace arena', in *Proceedings in the14th Pacific Rim Real Estate Society Conference*, Sydney, New South Wales.

Robson, K 2007, 'Do study tours / field trips contribute to the university experience', in *Proceedings in the13th Pacific Rim Real Estate Society Conference*, Fremantle, Western Australia.

Roulac, S, Adair, A, Crosby, N, Lim, LC, Watkins, C & Davis, P 2004, 'The emerging global real estate appraisal research agenda: evidence from ARES, ERES, PRRES, and RICS conferences', *Journal of Real Estate Literature*, Vol. 12, No. 2, pp 135 – 155.

Small, G, & Karantonis, A 2001, 'Property education, training and phenomenalism', in *Proceedings in the 7th Pacific Rim Real Estate Society Conference*, Adelaide, South Australia.

Small, G, & Karantonis, A 2007, 'A profile of property economists and the maturation of the academic discipline', in *Proceedings in the13th Pacific Rim Real Estate Society Conference*, Fremantle, Western Australia.