

BUILDING AN UNDERSTANDING OF LAW: ENGAGING PROPERTY ECONOMICS STUDENTS BY USING TECHNOLOGY

Dr Lucy Craddock¹

Queensland University of Technology (QUT)

Faculty of Law

ABSTRACT

Problem/Purpose

It is assumed university students engage with technology as easily for their university studies as they do socially. However, prior research reflects the difficulties that non-law students face in engaging with legal materials. The purpose of this research was to determine how technology use impacts upon non-law students' engagement with legal materials.

Design/methodology/approach

The project explored *inter alia* the extent to which first year non-law students engaged with technology for their studies and in particular with legal materials and databases. The project was undertaken during semester 2, 2014 in a legal service unit delivered to a mixed cohort, which included construction management, property economics, planning and quantity surveying students. Actual technology use and familiarity was tested by means of an in class survey delivered in the Week 2 lecture. Use and familiarity was then retested at the end of semester in the Week 13 lecture, with adjustments made in lecture delivery and materials in-between.

Findings

Students initially identified a limited use of technology and an extremely limited knowledge of legal databases. On retesting, all students reported a better level of engagement with technology for their studies. All participants also reported they now knew how to use the required legal databases, and most reported the lecturer's use of technology had assisted them.

Research limitations

The findings reported are of the property economics cohort only. Participation was limited, in part due to the fact lectures were recorded and physical attendance not required. It is proposed to expand the research to capture future cohorts.

Takeaway for practice

N/A

Originality/value

The research challenges the assumption that all students engage with technology for their university studies. It reinforced the need to ensure that if students are to be required to engage with particular databases they are provided with either specific direction and or training to enable their use.

Social implications

N/A

Keywords: technology, law, access

¹ Senior Lecturer and Solicitor

INTRODUCTION

An ability to engage with the law is an often dry yet inevitable requirement for both professional life and university studies. Law, as understood in the Australian legal system, includes legislation and court judgements. Law content within non-law degree programs is delivered as a core, but limited, aspect of those programs. In an accredited property economics degree program, law content delivered within legal service units will include the basics of contract law and negligence, as well as more specific information regarding property laws and land laws (Blake et al., 2010).

A core requirement of any legal studies is the ability to engage with legal research. That is the ability to be able to locate and consider relevant laws and their impact in any given scenario. First year students, particularly non-law students, typically have limited prior exposure to law or legal databases. For those who have undertaken legal studies at high school, this most often involved only engaging with a prescribed textbook and did not involve the requirement to undertake legal research, particularly research by the use of the specific legal databases required at university or in the legal profession.

Despite this limited prior exposure to specific databases, it remains that it is often incorrectly assumed by many that university students engage with technology as easily for their university studies as they do socially (Kennedy et al., 2006). Relevantly, while many students may be able to engage with the majority of the content and materials required for their degree program; prior research reflects the difficulties that students face in engaging with legal materials (Craddock, 2014).

The purpose of this research was to determine how technology use impacts upon property economic students' engagement with the technology, in particular the databases, necessary to access legal materials. The paper begins with providing a context for the research, before considering relevant literature. The research methodology is then presented and findings discussed. The paper concludes by identifying considerations to adopt for future delivery of legal materials within property economics degree programs.

CONTEXT

Irrespective of jurisdiction, an understanding of the law requires students to engage with legislation as well as tribunal decisions and or court judgements. Common law (as opposed to civil law) includes both the written law of a jurisdiction (legislation and regulations) and case law, which may develop over time or as a consequence of judicial consideration and determination of written law. In common law jurisdictions, such as Australia, New Zealand, the United Kingdom and Canada, judges as well as the legislatures, 'make' law, so that court decisions (judgements) are more than a mere indication of the result in a particular case.

While legislation and legal reports of cases still are produced in hardcopy volumes, either bound or loose-leaf, this material is now more readily available through authorised legal (subscription and open access) databases. As well, in some instances, case commentary, particularly for more notable or notorious cases, is freely accessible on the web. These latter sources, however, are unauthorized and potentially inaccurate, which can be a trap for the unwary student. Prior to commencing their university studies, most students typically have limited exposure to either legislation or case law. This is particularly so for non-law students.

Property education delivery within Australia continues to face a number of external challenges (Hefferan and Ross, 2010), and these as well as internal challenges, result in changes to program delivery. In the author's university in 2013, and as relevant for this paper, changes were made to several non-law degree programs with respect to the content and method of delivery of compulsory legal units (referred to in other universities as a *subject* or *course*) to be implemented in their 2014 delivery. There were four programs to be affected by these changes. The affected degree programs were those for construction management, quantity surveying, property economics and planning. At that time the then compulsory legal units were specifically targeted to the relevant student cohort as relates to the unit content and assessment; and were delivered either by full-time or sessional staff with legal as well as cohort specific qualifications and or experience.

In addition to other changes, the change of perhaps most impact, and as relevant for this paper, was that as from 2014 onwards the identified degree programs each would have the *same* compulsory law unit, which would be delivered as a service legal unit by the Law School. Students in the new unit ('LWS012') would be expected to undertake assessment and complete assignments within the Law School framework. Students would undertake LWS012 in the first year of their degree program, either in first semester or second for those commencing mid-year. While not part of the decision making process leading to the development of LWS012, subsequently the author was selected to be the first unit coordinator for this new legal service unit.

Prior to allocation of the author as initial unit coordinator of LWS012, agreement was reached between the Law School and the other programs' programmer leaders as to the weekly lecture structure for LWS012 and the textbook to be prescribed. However, the author was given a level of flexibility as to how lectures would be delivered; the actual lecture content and the nature and structuring of tutorials and assessment tasks. After further consultation it was agreed that the assignment would be a research task, which in particular would require the student cohort to engage with legal databases in order to undertake the necessary research. This would involve consideration of materials beyond what was available in the prescribed textbook or that presented in lectures and or tutorials.

LITERATURE REVIEW

The literature reviewed here includes that from other disciplines, most relevantly law, due to the limited nature of property education specific research (Yam and Rossini, 2012). It is also appropriate to do this due to the unique nature of law units delivered within property economics degree programs (Blake et al., 2010). Most available research, however, has considered the issue of technology engagement primarily from the perspective of the instructor. Where research data was collected from students themselves, this tended to be focussed at a higher level for the purpose of better designing and managing online spaces to support students (Nelson, Kift & Harper, 2005).

As the first year of university is a time of transition, it is recognised that extra support may be necessary in order to enable student learning (Yam, 2012; Kift and Field, 2009). In addition to issues facing students generally, a variety of matters, as well as a need to have a base level understanding of other discrete knowledge areas, can impact upon the success of property economics students in their studies. This includes the need to have an understanding of knowledge areas such as mathematics (Newell and Mallik, 2011), economics (Poon, 2013) and law (Blake et al, 2010).

In any law unit, including legal service units, students will need to be able to access a variety of primary and secondary materials (legislation, and reported and non-reported cases). This will primarily be through use of legal databases. Most first year students, however, have had limited exposure (if any) to the research and other databases, in particular the legal databases, they will be required to use at university. At a base level, enabling student engagement with technology, for the purpose of enabling their learning is essential (Poon, 2012). While (most) property economics students will have acquired the necessary technical and soft skills for their future profession by the time of their graduation (Blake and Susilawati, 2009), at the start of their universities studies they too have limited experience with or exposure to any type of database. Where students are expected to utilise specific databases, it will be essential to ensure that academic teaching staff are selected who are appropriately skilled in order to enable student engagement (Cradduck, 2014).

Students' individual characteristics will have significant impact on their academic achievements (Lee and Mallik, 2015; Poon, 2013). However, while reading authors such as Prensky (2001) could make the reader believe that, as most current students are 'digital natives', these students will *only* be able to learn *if* they use technology, this use is not in fact a significant detriment of their ability to appropriately engage with the technology and databases required for their degrees. A 'digital immigrant's' perception of the needs of 'digital natives', is reflected in the moves by universities to a more blended approach to content delivery (Poon, 2012). Although, as Yam and Rossini (2012) observe, student demand for what they perceive to be the most effective method of delivery does impact both upon their course selection *and* university delivery in order to 'cater' for these demands (p.129). The 'digital natives' reality, however, is much different. As McNeill, Diao and Gosper's (2011) research reveals, students' use of technology for learning is far more moderate than many academics believe, with preference given by students to technology that is easy to use and access.

Survey data from the United States highlights the importance that educators place on the integration of technology as a facilitator of learning as well as their desire for increased levels of integration (MMS Education, 2012). While beneficial as a tool for determining current and desired levels of technology integration this, and similar surveys, undertaken as they are of educators and/or administrators, arguably do not reflect accurately students' attitudes to, and adoption by students of, technology for their learning (Allen *et al*, 2012). Research has examined property economic student satisfaction with regards to the incorporation of technology in content delivery; however, this was in respect of the replacement of face-to-face lectures with online delivery (Cornish, Reed & Wilkinson, 2009) rather than in respect of their engagement with either general or law-specific technology and or databases.

Assessment of student satisfaction with their learning experience has become a core element of performance measurement within universities' property economic degree programs. However, in most cases this data is collected too late for appropriate changes to be incorporated into unit delivery during the semester under assessment (Newell, 2013; Poon, 2013). Where in-class, in-time assessment has been made, this has been in the context of engaging students in tutorials in the context of their completion of problem-based exercises and in the context of core property related content (Yam, 2012). Determining property economics students' *actual* use of technology related to *legal research* by asking students themselves, and doing so in such a manner in order to benefit the cohort of students surveyed, as well as (rather than merely) future cohorts, therefore is timely.

LEGAL DATABASES

There are a number of databases available for legal research. The ones selected as most appropriate for use in LWS012 were the *Comlaw* and *Austlii* websites. These databases, are arguably among the easiest to use and most authoritative, however, from the perspective of first year non-law students with limited (if any) exposure to legislation and case law, can appear very strange. They also are free to use databases and do not require registration or password for access.

The *Comlaw* website² is maintained by the Office of Legislative Drafting and Public, Attorney General's Department (Cth). It is the source for authorized Australian (federal) legislation and related documents. It also provides links to other sources of Australian law (i.e. for the States and Territories). *Comlaw* as the authorized legislative website is the site that students are encouraged to use for the purpose of research. Commonwealth legislation is located by means of either using the alphabetical index or by means of use of the search function. Interestingly, while the links it provides for State/Territory legislation are to the State/Territory legislative sites; the links it provides for State/Territory case law are to the relevant pages of the *Austlii* site, not to the relevant court/s sites.

The Australasian Legal Information Institute (AustLII) is a joint initiative of the Faculties of Law of the University of Technology Sydney and the University of New South Wales. Through its free open-access website³ AustLII provides access to Australian primary and second legal materials, as well as to a number of law journals. Unlike *Comlaw*, legislation on the *Austlii* website appears as an indexed document with hyperlinks embedded throughout to other relevant sections of the particular legislation, or other pieces of legislation. It also enables relevant cases, i.e. for our purposes, those that have considered a particular section to be easily accessed by use of 'noteup' function within the section page. The risk with using this database is that it is not the official database and as such the legislation itself, as well as the materials accessed by use of the 'noteup' function may not be up to date.

Prior anecdotal feedback from law students indicates that initially neither database is easy to use. By the end of their first semester of use, however, as familiarity with the databases grows so too (usually) does the comfort level of students (Craddock, 2014). There was no data available, however, empirical or anecdotal, against which to test assumptions of property economics students' perceptions or use of these databases.

PURPOSE

The purpose of this research was to determine how technology use impacts upon property economics students' engagement with legal materials. This research project was undertaken during semester 2, 2014 in a legal service unit delivered to a mixed cohort, which included construction management, property economics, planning and quantity surveying students. This paper is a preliminary study that examines only the responses of the property economics students. The related property economics degree program⁴ has accreditation from both RICS and the API. LWS012 was designed to meet core university requirements, as well as to satisfy the accreditation requirements of these professional bodies.

² <http://www.comlaw.gov.au/>

³ <http://www.austlii.edu.au/>

⁴ It is noted that the quantity surveying degree program is also accredited by RICS, which conducts reassessment each semester. Feedback from the 2014, semester accreditation was that LWS012 satisfied all accreditation requirements.

METHODOLOGY

The project explored *inter alia* the extent to which first year property economics students engaged with technology for their studies and in particular with legal materials and databases. Following the Muir (2007) model, assumptions of student use of technology in their learning were tested. The initial phase consisted of the author reflecting upon their prior experiences with delivering a law unit to property economics at a different university, and in planning the new law unit's delivery.

An issue previously identified was that some non-law students have difficulty in engaging with legislation and case law. The assumption made from these observations was that students were not sufficiently familiar with the necessary legal databases in order to be comfortable in their use for either general legal studies or as specifically relevant for undertaking a law research assignment.

Students' initial technology use and familiarity with databases was tested by means of an in class survey delivered in the Week 2 lecture. Use and familiarity was retested at the end of semester in Week 13. The two surveys were created by the author and consisted of a mix of multiple choice and open-ended style questions. Participation in the research was voluntary, and restricted to those students who were physically present at the time in the lecture theatre.

Drawing upon previous experience in delivering legal units to non-law students, the author was conscious of the differences with non-law student understanding and desire for engagement with legal materials. This formed the basis for the questions for the Week 2 Survey.

The data gathered from Week 2 Survey was analysed separately, and also as against the author's proposed delivery methods for subsequent lectures and adjustments made to lecture delivery method is necessary to assist with engaging and enabling students. In the second phase the success of these adjustments in enabling better student engagement with the legal databases was tested by means of a follow-up survey during the Week 13 lecture. After the Week 13 Survey data was analysed areas of further adjustment were identified for future cohorts. These adjustments are currently the subject of reflection in respect of the 2015 LWS012 delivery.

The University's Human Research Ethics Committee assessed this research as meeting the conditions for exemption from HREC review and approval in accordance with section 5.1.22 of the *National Statement on Ethical Conduct in Human Research* (2007). It is proposed to expand the research to capture future cohorts and in early 2015 further approval was to be obtained to redeliver the surveys to the 2015 cohort.

Limitations

Participation by students in the research was limited. This was in part due to the fact that in accordance with Law School processes, all lectures were recorded and as such physical lecture attendance (as opposed to tutorial attendance and participation) was not required. The recording of lectures had been advised to students in the Week 1 lecture resulting in a discernible decrease in attendees in the lecture theatre at the same time the author noted an increase in the number of students accessing the lecture recordings. There was a further reduction in students attending the Week 13 lecture in comparison with the Week 2 lecture.

The findings also are restricted in that this paper reports only the responses of the property economics students of the LWS012 2014 cohort, as well not every student answered every question. This restricts the pool of available responses. Further only one cycle of delivery of the surveys was available for analysis. Delivery of the surveys to the 2015 LWS cohort⁵ and future cohorts hopefully will overcome these limitations.

⁵ Ethics approval was obtained to conduct the research for the current (semester 2, 2015) LWS012 cohort and to use the data gathered for comparison purposes with the 2014 data.

RESEARCH QUESTIONS

The Week 2 Survey and the Week 13 Survey each contained 17 questions. Those of relevance are:

Week 2

1. What is your major?
2. Are you: female or male or prefer not to identify?
16. Do you know how to search for laws online?
17. Do you know how to search for case law online?

Week 13

1. What is your major?
2. Are you: female or male or prefer not to identify?
8. Did you access the online Library recording for Task 2 before attempting the task?
9. Did you find the online Library recording helpful?
15. Do you know how to search for laws online?
16. Do you know how to search for case law online?
17. Has the lecturer's use of technology in the lectures been beneficial?

RESULTS AND DISCUSSION

At the start of this research project, based upon prior observations as referred to above, the author's assumptions of first year non-law student engagement with legal databases and technology generally was:

- many students have one or more smart devices, which they bring to class but most students only use their smart devices in class for personal use;
- most students use computers for preparing (typing) their assignments;
- a very small number of students only rely on hard copies of documents (i.e. legislation); and
- most students have no experience as to how to effectively use online legislation databases to enable their learning.

The Week 2 survey sought to test these assumptions. Lecture delivery had been designed on the assumption that the author would need to use the room computer for more than just power point delivery. Specifically, that it would be necessary to refer to relevant legislation and case law. All students present in the Week 2 lecture agreed to participate in the Survey. This was 165 students out of a unit cohort of 312, of which 28 identified as being property economic students. The students completed the Survey questionnaires in a mid-lecture break during which the scheduled recording was paused.

Analysis of the data gathered from the property economics students' responses revealed that of those present:

- The majority of were male (18 = 64%)
- Most did not know how to search for laws online (20 = 72%)
 - This was mainly the male students (14 answered 'no' to this question, with only two answering 'yes')
- Most did not know how to search for cases online (20 = 72%)
 - This was mainly male students (14 answered 'no', with only two answering 'yes')
 - Six female students had indicated they did not know how to search for cases online in comparison with five who did not know how to search for laws

The Week 2 and Week 13 quantitative results are compared in Table 1 on the following page by reference to the number of responders.

Table 1: Comparison of results for Week 2 and Week 3

	Week 2		Week 13	
	Yes	No	Yes	No
Search for law	8	20	12	-
Search for cases	7	20	11	1
Accessed recording	n/a		10	2
Recording helpful	n/a		8	4

The quantitative responses served to reinforce the author's perceptions of students' lack of knowledge of how to find relevant laws or cases. The responses from the property economics students were consistent with response from the other three cohorts.

Students also were able to provided qualitative comment in response to Questions 16 and 17. Limited qualitative comments were provided. In respect of both, such comment as was made was repeated, and included:

I feel that as though I can figure it out.

A little bit.

Need to refresh.

But not confident.

These responses while valid did not add to or alter the author's prior perception of student knowledge or that gained from consideration of the quantitative responses.

Following analysis of the Week 2 survey data a number of interventions were undertaken. These included adjustment to the proposed lecture delivery as well as provision of additional resources:

- Time was allocated during each future lecture to step through the process for accessing that weeks' legislation and/or case law
 - This was undertaken by means of accessing alternatively the Comlaw and Austlii websites
- A variety of resources from the Law Library was made available on the unit's Blackboard site; and
- A brief (15 minute approximate) podcast on researching for the assignment also was provided by a Law Librarian. This was developed with input from the author as to their expectations of assignment submissions, and was specifically directed to assisting students with how to locate, and consider, relevant legislation, specific legislative provisions, and cases.

The Week 13 Survey sought to identify whether student understanding and ease of use of legal databases had increased during semester; and whether they considered the restructuring of lectures had benefitted their learning. Students were also specifically asked whether they had listened to the Law Library recording and whether this benefitted them. As noted in the Limitations above, there was a reduction in the number of student who attended the Week 13 lecture. In total only 87 students were in attendance of which only 12 identified as being property economics students, of these four were female and eight were male.

Analysis of the Week 13 Survey data from these property economics students revealed:

- Except for two female students, all property economics students present had accessed the Library recording before attempting the assignment
 - Of these only one male student identified that it had not been helpful;
- All identified as now knowing how to search for legislation and case law; and
- 11 identified (with one not responding) that the author's in class use of technology had enabled them.

Students also were able to provide qualitative comment in response to Questions 9 and 17. Qualitative comments, however, from the property economics cohort was extremely limited. In respect of Question 9 notably this included that the law library recording "*it helped clarify the process for the assignment*". The responses from the property economics students were consistent with responses from the other three cohorts. The qualitative responses while valid did not add to the data available from consideration of the quantitative responses.

As Race (2007) notes, the starting point for enabling students' use of technology is to ensure their instructor has an appropriate level of familiarity with that technology and that due consideration has been given to its appropriateness for the desired purpose. For this unit, this was achieved by the selection of the author who was very familiar with various legal databases and their use. Selection of appropriate technology for students' use is a crucial element of the success of any system (Hassanzadeh, Kanaani & Elahi, 2012). This aspect was addressed by selecting the most straightforward of the available databases for student use. Finally, and most importantly, student attitudes and the quality of the information provided are integral aspects of their successful engagement (Ozkan and Koseler, 2009). It is therefore crucial to ensure students are engaged with the process of using any required technology and that context is provided for their use. This aspect was addressed by means of assignment specific additional support provided by the Law Library.

CONCLUSION

The research challenges the assumption that all students engage with technology for their university studies. It reinforced the need to ensure that if students are to be required to engage with particular databases they must be provided either with specific direction and or training to enable their use. In 2014 the author's university merged the delivery of the law service unit to the distinct cohorts of construction management, property economics, planning and quantity surveying students into one law unit. This paper examined the results of in lecture specific surveys undertaken by the author of the property economics cohort. There were four important findings from this research, which will inform future deliveries of LWS012 and be of instruction to other academics.

The first two findings are consistent with other research findings (McNeill, Diao & Gosper, 2011). That is that first, the students themselves identified that they need support in using new technologies. The second is that, where the database or technology is unfamiliar to the academic, then that academic also will need support in becoming familiar with these. Students initially identified a limited use of technology and an extremely limited knowledge of legal databases. On retesting, all students reported a better level of engagement with technology for their studies. All participants also reported they now knew how to use the required legal databases, and most reported the lecturer's use of technology had assisted them.

The third finding is that students took some time to become used to the different method of delivery of LWS012 particularly as regards the recording of lectures. Once they became used to this method of delivery, the number attending face-to-face lectures reduced significantly, while the online system reflected an increase in the number of students accessing the recorded lectures.

The fourth finding is that assistance (provided in the context of the Law Library podcast) must be clear, directed and brief with the benefits of engaging with those materials clearly evident to the student.

REFERENCE LIST

- Allen, I., Seaman, J., Lederman, D. and Jaschik, S. 2012. *Conflicted: Faculty and Online Education*, 2012.
- Blake, A., Craddock, L., Richardson, K., and Eves, C. 2010. Real property law: Its place in Australian undergraduate real estate programs. *Journal of Real Estate Practice and Education*, 13(2), pp. 141-158.
- Blake, A. and Susilawati, C. 2009. An Evaluation of How Well Undergraduate Property Students are Prepared for Commencing their Careers, *Pacific Rim Property Research Journal*, 5(2), pp. 204-224.
- Cornish, S., Reed, R., and Wilkinson, S. 2009. Incorporating New Technology into the Delivery of Property Education, *Pacific Rim Property Research Journal*, 15(3), pp. 303-3320.
- Craddock, L. 2014. Law students' perspectives of the affect of academics' use of technology. *International Journal of Information and Communication Technology*. (In Press)
- Hefferan, M. and Ross, S. 2010. Forces for change in property education and research in Australia, *Property Management*, 28(5), pp. 370-381.
- Kennedy, G., Krause, K., Judd, T., Churchward, A., and Gray, K. 2006. First Year Students' Experiences with Technology: Are they Really Digital Natives? *Australasian Journal of Educational Technology*, 24(1), pp.108-122.
- Kift, S. and Field, R. (2009) Intentional first year curriculum design as a means of facilitating student engagement: some exemplars. In *Proceedings of the 12th Pacific Rim First Year in Higher Education Conference*, Queensland University of Technology, Townsville, Queensland, pp. 1-10.
- Lee, C. and Mallik, G. 2015. The impact of student characteristics on academic achievement: Findings from an online undergraduate property program, *Pacific Rim Property Research Journal*, 21(1), pp. 3-14.
- McNeill, M., Diao, M. and Gosper, M. 2011. Student uses of technology in learning: two lenses. *Interactive Technology and Smart Education*. 8(1), pp. 5-17.
- MMS Education. 2012. 2012 Results from the SIIA Vision K-20 Survey. Report for *Software & Information Industry Association*, July 2012. <http://www.sii.net/visionk20/> (accessed 04/10/2012)
- Muir, P. 2007. Action Research in the Scholarship of Learning and Teaching. *The RMIT Teaching and Learning Journal*. 2(3). <http://emedia.rmit.edu.au/edjournal/?q=book/export/html/279> (accessed 02/01/2013)
- Nelson, K., Kift, S. and Harper, W. 2005. First portal in a storm: A virtual space for transition students. In *Proceedings ASCILITE 2005*. QUT, Brisbane, Queensland, pp. 509-517.
- Newell, G. 2013. Assessing Property Students Satisfaction with their Property Education Experience in an Australian University, *Pacific Rim Property Research Journal*, 19(2), pp. 133-149.
- Newell, G. and G. Mallik. 2011. The Importance of Mathematics Background and Student Performance in a Property Degree, *Pacific Rim Property Research Journal*, 71(2), pp. 313-328.
- Poon, J. 2013. An examination of a blended learning approach in the teaching of economics to property and construction students, *Property Management*, 31(1), pp. 39-54.
- Poon, J. 2012. Use of blended learning to enhance the student learning experience and engagement in property education, *Property Management*, 30(2), pp. 129-156.
- Prensky, M. 2001. Digital Natives, Digital Immigrants Part 1.9 *On the Horizon*, 9(5). <http://www.proquest.com/> (accessed 14/09/2009)
- Race, P. 2007. *The Lecturer's Toolkit*. Routledge: New York.
- Yam, S. 2012. Tutoring – What do our First-Year Real Estate Undergraduates Expect? *Pacific Rim Property Research Journal*, 18(4), pp. 319-333.
- Yam, S. and Rossini, P. 2012. Online Learning and Blended Learning: Experience from a First-Year Undergraduate Property Valuation Course, *Pacific Rim Property Research Journal*, 18(2), pp. 129-148.

Email contact: l.craddock@qut.edu.au