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A cross-country comparison on the use of blended learning in property education

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Abstract

Purpose – The purpose of this paper is to compare the use of blended learning in property education courses in different countries. The rationale for this study is to fill the research gap in this area. The focus of previous research on blended learning has been on individual countries only, and there is yet to appear any research on a cross-country comparison. The purpose of this study is to identify the differences as well as the good practices using blended learning as a delivery approach in different countries. As a result, individual countries can learn experience from another country. It is expected academics interested in using blended learning as a delivery approach will benefit from the research findings of this paper, through gaining an understanding of the advantages and challenges of using blended learning in different countries.

Design/methodology/approach – This paper presents the research findings of questionnaire surveys and interviews with academics teaching property courses in Australia and the UK. The questionnaire aimed to gather academics’ views on blended learning, their reasons for using blended learning as a teaching method, their design of blended learning courses and the support they provide to students on dealing with web technology. The aim of the interviews was to gain deeper insight into the successful factors and challenges in the use of blended learning. In total, 16 interviews were conducted. The interviews were recorded, transcribed and coded to identify similar themes. Content analysis was used as a method to analyse the interview data. The frequency of the answer in the questionnaire and comments from interviewees is presented.
Findings– The Australian and UK property academics have similar views on many aspects of blended learning. Their definitions of blended learning are similar as their reasons to use it as a teaching method. The commonly used teaching and learning activities in their blended learning courses in both countries are, again, similar, such as the use of lectures, case studies and guest lecturers. On the other hand, the academics in the two countries face different challenges. A challenge faced by the Australian property academics is to deliver online courses to students who have limited internet downloading capacity and broadband width. Australia is a very large country and has more regional and remote areas. Another challenge faced by the Australian academics is keeping up with the constant introduction of new teaching and learning technology by their universities. On the other hand, the UK academics faced a different challenge, which was to sufficiently engage and encourage students to contribute in online Discussion Boards. The finding is possibly because the UK study was conducted two years prior to the Australian study and the idea of online discussions was relatively new to students at the time. The conclusion drawn from this research is that “time” and the size of the country influence the use of blended learning.

Originality/value– This project is the first to conduct a cross-country comparison on the use of blended learning in professionally accredited property courses.

Introduction

Blended learning has become increasingly commonly used in higher education as it has the advantages of both online and traditional delivery approaches (Garrison and Kanuka, 2004; Horton, 2000; Owston et al., 2008; Smyth et al., 2012). Previous research found that the use of a blended learning approach enhances students’ learning experience and engagement as it creates a positive impact on students’ perceptions of the learning environment and their study approach (Lizzio et al., 2002; Poon, 2012). Blended learning shifts the focus from “teaching” to “learning, which enables the students to become more involved in the learning process and more motivated and, as a result, it enhances their commitment and perseverance (Donnelly, 2010; Sharpe et al., 2006; Wang et al., 2009; Woltering et al., 2009; Yen and Lee, 2011). Yen and Lee (2011) concluded that “blended learning, thoughtfully combining the best elements of online and face-to-face education, is likely to emerge as the predominant teaching model of the future” (p. 138). Please also see Section 3 for the literature review of blended learning. According to the American Society for Training and Development, blended learning is identified as one of the top ten trends to emerge in the knowledge delivery field in 2003 (cited by Rooney, 2003). Rosenberg (2001) shared the same view and stated “the question is not whether we should use blended learning; rather the question is what are the ingredients that should be included”.

Blended learning has been a widely used teaching and learning approach in property-related courses internationally. It has been used as a teaching method for the MSc in Real Estate Investment and Management and the MSc in Real Estate Construction and Development taught in various Central and Eastern European countries. These courses are offered jointly by two UK universities, Nottingham Trent University and Sheffield Hallam University. Blended learning is also used in property courses in Australia, such as the course delivered by the University of South Australia and Deakin University. Blended learning has also been used in a wide range of subject areas including liberal arts education, management education and undergraduate education, in countries such as Japan, the UK and South Africa (Jung and Suzuki, 2006; Salmon and Lawless, 2006; Harding et al., 2006). In addition, previous
publications have discussed the application of blended learning in various countries, including Korea, China, Malaysia, Canada and Israel (Lee and Im, 2006; Huang and Zhou, 2006; Kaur and Ahmed, 2006; Owston et al., 2006; Nachmias et al., 2006). However, the case studies discussed the use of blended learning in their own countries only. There has not been any research comparing the use of blended learning in different countries.

The aim of this paper is to discuss a cross-country comparison on the use of blended learning in property education courses in the UK and Australia. The rationale for this study is to fill the research gap in this area. As stated earlier, the focus of previous research on blended learning has been on individual countries only, and there is yet to appear any research focusing on cross-country comparisons. The purpose of this study is to identify the differences and also the good practices in blended learning delivery in various countries, with the expectation that individual countries will learn from other countries’ experience. In addition, academics who are interested in using blended learning as a delivery approach will also benefit from the research findings of this paper, through gaining an understanding of the advantages and challenges of using blended learning in different countries.

The UK and Australia were chosen as the targeted countries for this research as they are both providers of property education internationally and have largely similar structures in their university degree programmes. In addition, the property education sectors in both countries have recently experienced considerable changes, such as increases in the number of mature students and part-time students. As a result, more diverse and flexible teaching and learning strategies are required to engage the groups of non-traditional university students and provide them with learning experiences which suit their individual learning styles and personal circumstances (Biggs and Tang, 2007; Department of Education, Employment and Workplace Relations, 2008; Honey and Mumford, 1986). This paper is structured as follows. The second and third sections are reviews of factors affecting the quality of learning and blended learning. Sections 4-6 describe the research methods, research findings and discussion. The seventh section is the conclusion, and the final section is a discussion of the limitations of this study and suggestions for future research.

Factors affecting quality of learning

Previous literature has discussed differences in learning styles and their influence on people’s learning preference (Biggs and Tang, 2007; Honey and Mumford, 1986). Honey and Mumford (1986) identified learning styles which include activists, reflectors, theorists and pragmatists, all of which have an impact on how people learn. In addition, there has been systematic and extensive research into the quality of students’ learning in higher education since the 1970s (Biggs and Tang, 2007; Entwistle and Ramsden, 1983; Laurillard, 2002; Marton and Säljö, 1976a, b; Prosser and Trigwell, 1999; Ramsden, 2002). Outcomes from these researchers have helped to identify the key concepts related to quality learning in higher education.

As shown in Figure 1, students’ perceptions of teaching-learning environments, the presentation of course materials and the types of teaching and learning environments affect the quality of learning achieved. The key to the above-mentioned elements is the university lecturers’ pedagogical knowledge as it dictates the design of the course materials and the learning environment. Lizzioet al.’s (2002) research shared similar findings. They investigated the relationship between university students’ perceptions of their academic environment, their approaches to study, and their academic outcomes, and stressed the practical significance of these relationships for educators wishing to understand the effect on
course design. They concluded that elements of the learning environment, which can be influenced and controlled by instructors, affect not only how students approach studying, but also the subsequent learning outcomes they attain. In other words, the pedagogical design of courses and the learning environment influence students’ learning experience and ultimately their achievement.

**Blended learning**

Williams *et al.* (2008) defined blended learning as a combination of traditional face-to-face learning and distributive learning. Distributive learning is an instructional model which allows lecturers, students and content to be in different locations. The main feature of distributive learning is that the learning environment is designed to accommodate the fact that students have different learning styles. This pedagogical model encourages students to learn in an interactive and collaborative environment, and at their own pace and in their own time (Graham, 2006; Saltzberg and Polyson, 1995). There are many other definitions of blended learning but there is no agreed single definition (Bluij *et al.*, 2007; Green *et al.*, 2006; Jonas and Burns, 2010; Marsh *et al.*, 2008; Sharpe *et al.*, 2006; Stacey and Gerbric, 2008). There is, however, a common theme among all popular definitions in that there is recognition of the combination of virtual and physical environments. In other words, blended learning is usually considered to have a combination of face-to-face learning experiences, such as on-campus classroom contact, and online learning experiences. Please see Table I for a summary of definitions of blended learning.

Blended learning involves a paradigm change in which the emphasis shifts from teaching to learning (Nunan *et al.*, 2000). Therefore, blended learning is a fundamental redesign of the instructional model with a shift from lecture-centred to student-centred instruction where students become active and interactive learners. Several research studies have demonstrated that courses using blended learning as a delivery method contribute to improved learning outcomes for students (Boyle *et al.*, 2003; Dziuban *et al.*, 2006; Garnham and Kaleta, 2002; Lim and Morris, 2009; O’Toole and Absalom, 2003; Twigg, 2003). Studies conducted in the USA and Spain found the use of blended learning can also enhance students’ examination marks and reduce drop-failure-withdrawal rates (López-Pérez *et al.*, 2011; Twigg, 2003). Graham (2006) concluded that the common reasons for educators to choose blended learning as a delivery method are because it improved pedagogy, increased access and flexibility and increased cost-effectiveness.

The use of blended learning can pose challenges for students and universities. Vaughan (2007) identified that the challenges to students included their expectation that fewer classes meant less work, they had inadequate time management skills, and they had problems with accepting responsibility for personal learning. Students also commented that blended learning could make them feel isolated as the opportunities to interact socially were limited because they did not meet their classmates in traditional classroom environments (Smyth *et al.*, 2012). However, there are also advantages with blended learning. Students’ ability to manage their own learning is a key to the success of blended learning for some students.

The success of blended learning is defined by Stacey and Gerbric (2008) as “practice which promotes achievement of high-quality learning outcomes and positive student learning experiences, with high teacher satisfaction and a reasonable workload that allows staff time for research and scholarship” (p. 965). “Student” and “institutional” are the key factors affecting the successful implementation of blended learning. An important factor related to students’ success is skills training. Learners must be trained and equipped to navigate the
information and communication technology used in blended learning and facilitators must be taught to use the technology from the user-end for them to facilitate delivery (Beadle and Santy, 2008; Harris et al., 2009). In addition, institutions are required to provide dedicated services to support and assist learners and facilitators throughout the development and use of modules in order to ensure the successful implementation of blended learning. This includes spending resources on communication to encourage instructors and prospective end-users to become actively involved and fully aware of the blended learning initiatives (Garrison and Kanuka, 2004; Harris et al., 2009). The emphasis in this communication should focus on the learning and the associated outcomes rather than only on the use of technology.

**Research method**

The data for the Australian and the UK blended learning studies were collected at different times. The mixed-method approach adopted for this study has involved data collection by questionnaire surveys and interviews in both countries. The use of a triangulation research approach aims to ensure that reliability and validity exist throughout the research.

To facilitate the comparison of the findings, the Australian and the UK studies have the same questions in the questionnaire survey and the interviews. The questionnaire was constructed using SurveyMonkey, an online survey tool that enables easy online survey distribution. The questionnaire started with asking for the background information of respondents. The main body of the questionnaire asked about their definitions of blended learning, the reasons for using blended learning as a teaching method, the resources required for the successful implementation of blended learning and the types of help students usually need to deal with web technology. The answer options for these sections are on a five-point Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree). The other two sections in the questionnaire ask about the types of virtual learning environment (VLE) used to support blended learning, and the types of teaching and learning activities included in the blended learning courses/modules. The lists of commonly used VLEs and teaching and learning activities are provided, and the respondents are asked to indicate whether they use them by answering “Yes” or “No”. In addition, comment boxes were also included in all sessions. Descriptive statistics analysis was used to analyse the questionnaire findings. The mean values of the questions were presented and discussed. The mean value was calculated by multiplying the number of respondents by each of the Likert scale points then dividing by the total number of respondents to the same question. For the questions answered “Yes” or “No”, the percentage of “Yes” answers will be reported in the paper.

Interviews were semi-structured in nature. Interviews lasted from 30 minutes to 90 minutes. Interviews began with the collection of professional background information and continued with a series of key questions. The interview questions were divided into four sections: knowledge and experience of blended learning, design and use of blended learning, resources needed for blended learning and evaluation of the use of blended learning. Finally, interviewees were given the opportunity to add further comments. The interviews were recorded, transcribed and coded and similar themes identified. In other words, content analysis was used as an analysis method for the interview data.

**4.1 UK study**

The UK data were collected from April to October 2010 for a previous project, the findings of which were reported in Poon (2012). The questionnaire was sent to all course leaders of the Royal Institution of Chartered Surveyors (RICS) and Chartered Institute of Building (CIOB) accredited undergraduate and taught postgraduate property courses. The e-mail
addresses of all academics teaching these courses were identified through web searches of relevant university websites; 184 questionnaires were sent out and 37 completed questionnaires were returned, giving a response rate of 20 per cent. Out of the 37 academic respondents, 54 per cent of them teach both RICS and CIOB accredited property-related courses, 73 per cent teach both undergraduate and postgraduate programmes, 62 per cent have more than five years’ teaching experience and 95 per cent of respondents have at least one year’s experience of using blended learning.

In addition, eight interviews with property course leaders from four universities were conducted. These interviewees were selected because of their reputation for using blended learning as a delivery method. Five of them were recommended by the author’s colleagues and the other three were identified by the author through their work on using blended learning as a delivery method which has been widely reported in the UK property education community. All interviewees have had substantial experience teaching in higher education. Their years of experience range from 15 to 32 years, with an average of 24 years. All were practitioners prior to joining the higher education sector, and at the time of interviewing all were teaching both undergraduate and postgraduate courses. Some interviewees were also teaching distance learning programmes. Interviewees’ backgrounds were diverse, as were the subjects they were teaching, which ranged from property investment, property valuation, property management, environmental management and construction project management. The interviewees will be identified as UK Academic 1-8 and universities will be quoted as UK-A, UK-B, UK-C and UK-D University[1] in this paper.

4.2 Australian study

The data for the Australian study were collected from November 2012 to February 2013. The questionnaire was sent to all academics who teach RICS, CIOB, Australian Institute of Building (AIB) and Australian Property Institute (API) accredited undergraduate and taught postgraduate property courses. The lists of RICS, CIOB, AIB and API accredited courses are available from their organisation websites (Australian Institute of Building, 2012; Australian Property Institute, 2012a, b; Chartered Institute of Building, 2012; Royal Institution of Chartered Surveyors, 2012). Fewer property courses are taught in Australia than in the UK, therefore, the total number of property course directors in Australia was only 50. As a result, it became necessary to extend the survey population to all academics who teach property courses in order to increase the sample size; 207 questionnaires were sent out and 54 completed questionnaires were returned, giving a response rate of 26 per cent. Out of the 54 respondents, 22 per cent of Australian respondents teach more than one type of accredited property course, 63 per cent teach both undergraduate and postgraduate programmes, 52 per cent have more than five years’ teaching experience and 919 per cent have at least one year’s experience of using blended learning. Please see Tables II-IV for a comparison of the UK and Australian academics’ profiles.

In addition, eight academics from four Australian universities were interviewed to gather further insight into the use of blended learning in Australian property education. These interviewees had expressed interest in being interviewed in their responses to the questionnaire survey, which reflected their interest in blended learning and their willingness to share their experience. Their experience of teaching in higher education ranged from four years to 25 years. As with the UK interviewees, all Australian interviewees were practitioners prior to joining the higher education sector, and at the time they taught both undergraduate and postgraduate courses. Six respondents teach courses which are delivered to both on-campus and off-campus students. As a result, they use online delivery mechanisms widely, for
example, all their lectures are recorded and made available online and they also reported
greater use of Discussion Boards. Interviewees’ backgrounds ranged from property
investment, property valuation, property management, property law, property taxation,
construction project management, quantity surveying and construction ecology. These
interviewees will be identified as AUS Academics 1-8 and universities will be named as
AUS-A, AUS-B, AUS-C and AUS-D University in this paper.

Research findings

5.1 Definition of blended learning

The Australian and UK property academics agreed that blended learning is about using a
range of teaching methods, with average mean values of 4.59 and 4.27, respectively, in
their questionnaire survey responses (see Figure 2). These results show that in both countries
property academics share the definition of blended learning with the literature, such as
in Driscoll (2002) and Singh (2003), which is, “the use of multiple strategies to teach and
encourage and stimulate students’ learning”. UK Academic 3, who is the joint programme
leader for a RICS-accredited property course delivered in Central and Eastern European,
reinforced this view by summarising blended learning as “a mixture of teaching approaches
used to assist students in their learning ability”. However, the Australian academics have
expressed slightly conflicting views on defining the “range of activities”. In their further
comments in the questionnaire, they stated that blended learning is “not just a range of
teaching methods but a range of learning activities from a number of different modes”. In
other words, it shifts the focus from teaching to learning, which echoes Nunan et al.’s
(2000) view that the focus of blended learning is on “learning”. The Australian academics
mentioned the term “flipped learning” but it has not been mentioned by the UK academics.
Flipped learning is a pedagogical model in which the typical lecture and homework elements
of a course are reversed. In flipped learning, students are required to do self-directed study,
such as watching lecturers’ pre-recorded videos or online repository videos and read articles
or reports or any other written materials, prior to the scheduled classroom contact time, while
the in-class time is devoted to exercises, projects or discussions. The idea of flipped learning
is that it adopts an active learning approach, and has a hybrid course design to enhance
students’ learning experience. With its design of learning activities, it places higher focus on
students’ self-directed study than lecturers’ teaching. To a large extent, the principle of
flipped learning is similar to blended learning which places more responsibility on students’
management and ownership of their learning.

5.2 Reasons to use blended learning as a teaching method

The key reason indicated by the Australian and the UK property academics to use blended
learning as a teaching approach is to enhance students’ learning experience and engagement.
This aim is reflected in the high average mean values of 4.26 and 4.27, respectively, for this
question (see Figure 3). The academics in both countries use multiple learning activities, such
as podcast video lectures and case studies, etc. (see Figure 5) to engage students. Blended
learning is also used out of necessity because it is the most suitable method for the nature of
the course, or to fit in to the university's business model. The property courses in Australia
are often delivered to both on-campus and off-campus students concurrently, therefore,
blended learning is, again a suitable delivery method. AUS-B University delivers property
courses on-campus and off-campus, and AUS Academic 3 commented on the various aspects
of the suitability of blended learning methods (see Section 5.3). On the other hand, the UK
academics usually used blended learning to deliver part-time courses in which students are
taught in block weeks. This point is illustrated in UK Academic 3's experience. The primary
reason for UK Academic 3 to use blended learning as a delivery method is because his course was offered to students in Central and Eastern Europe; nearly all of whom were currently in full-time employment and based in geographically diverse locations. Therefore, “block classes” were chosen as the delivery mechanism, which means the only classroom contact time occurred on five weekends spread over two years. Therefore, the teaching materials needed to be available online, and the most convenient method for communication between the lecturer and students was on the internet. In this context, the nature of the course and the students’ profiles made blended learning the most suitable delivery method.

The Australian property academics mentioned pedagogical reasons for their use of blended learning. They stated in the further comments in the questionnaire that the use of blended learning provides students with learning options and aligns with their individual learning styles, which echoes Honey and Mumford (1986) and Lizzio et al.’s (2002) view on this issue (see Section 2). AUS Academic 1 further stated that the use of blended learning allows him to break down the teaching materials for traditional three-hour lectures into small sessions. As stated in Biggs and Tang (2007), students’ concentration usually lasts for 20 minutes, and the conventional lecture is not the best way to retain students’ attention, therefore, it is essential to identify different ways to engage students in order to keep them interested and focused on their learning.

5.3 Design and use of blended learning

Blackboard is the most popular VLE, as reflected by its use by 84 per cent of Australian property academics and 72 per cent of the UK academics in our survey. UK Academic 5 used Blackboard to create working groups for students, divided the module into six themes and allocated one theme to a group of students. Each group was responsible for identifying resources for the allocated theme and to prepare for a poster presentation. In this way, students had already developed their learning on a certain theme prior to their first classroom meeting. At the first class meeting, the individual groups of students presented their poster to the whole class. In other words, the students participated in flipped learning (see Section 5.1). The students had been given the ownership of their learning and were able to develop a deep knowledge of the theme they were responsible for, and also gain general knowledge of the other five themes. This exemplifies the use of student-led learning to enhance student engagement and interaction. This echoes Garrison and Vaughan's (2008) comments that enhancing students’ learning experience and engagement is one of the fundamental benefits of blended learning. In addition, several Australian and UK academics stated that they use their own web site to post teaching and self-study materials and post blogs on specific topics as well as podcasting lectures (see Figure 4). The Australian academics also used a range of additional virtual environments to support their teaching and learning activities, such as Eluminate Live, Skype, EchoSystem and YouTube. The virtual environments are particularly useful to communicate and deliver teaching to off-campus students.

Of the wide range of teaching and learning activities used by the Australian and UK property academics in blended learning courses, the most popular ones were case studies, conventional lectures and visiting lecturers. Nearly 90 per cent of questionnaire respondents in both countries used these methods. Case studies and visiting lecturers are particularly suitable for property courses because of their practical and vocational nature. Conventional lectures are still the most popular but the Australian academics also like to deliver podcast video lectures. With a higher level of off-campus students studying Australian property courses, the use of podcast videos is a more interactive simulated delivery method for the off-campus students (see Figure 5).
Another popular teaching and learning activity for Australian respondents is online discussions; it has been mentioned numerous times by the questionnaire respondents and interviewees. The Australian academics had more pedagogical underpinning in their choice of teaching and learning activities. AUS Academic 3 delivers courses which have alternate weeks of on-campus and online delivery. He delivers the materials with a more conceptual and philosophical focus, such as what are the drivers for people to choose particular types of investment, in face-to-face delivery mode. This type of knowledge usually generates a lot of discussion; as a result, the debate and the dialogue will enhance students’ understanding of the principles. On the other hand, he records the skill-based knowledge, such as how to use a financial calculator, as videos. The advantage of recording the skill-based videos is that students can refer to them in the future. AUS Academic 5 also teaches on-campus and online students. He admitted that it is a challenge to give the off-campus students the same tutorial experience as the face-to-face students. Therefore, he uses different activities to encourage them to engage in discussions on the Discussion Boards. He discovered that one of the most effective ways to encourage the off-campus students to participate in discussions is to make the audio-recorded face-to-face tutorials available to them, which usually triggers a lot of discussions or questions from the off-campus learners.

5.4 Successful factors for development of blended learning

The availability of resources is one of the most crucial factors for the development of blended learning (Mitchell and Honore, 2007). Many of the UK academic interviewees commented that blended learning requires a lot of resources upfront for initial development, including financial resources, time and effort, which continues throughout the duration of the module/modules in order to maintain a high standard of delivery. The Australian and the UK property academics were in agreement on all identified resources in the questionnaire, except for online support from relevant software companies, as being very important; the average mean values for all identified resources are more than 4.00 (see Figure 6). The most important resource is staff time; the average mean values are 4.52 and 4.70 for the Australian and UK academics, respectively. This comment is reinforced by AUS Academic 8 who commented that “it would be really helpful if he could have sessional staff to assist with the technological aspects of his teaching, such as editing videos”. He explained that the module leaders have numerous roles, and with the constant introduction of new technology, he has found it difficult to deliver high-quality interactive teaching without any assistance. The second most important resource is university-based support; their mean scores are 4.50 and 4.51 for the Australian and UK academics, respectively. The other type of resource mentioned by the Australian academics is digital equipment. AUS Academic 3 clearly stated the requirement for equipment to produce impressive online teaching, based on his recent experience of studying on a massive open online course (MOOC). The equipment AUS Academic 3 suggested included a large plasma television, a good quality camera and recording facilities. The large television can show the presenter's whole body, their body language and movements, which makes the online learner feel their learning is more like “real-time” study. He suggested that universities should be more professional in their production of lecture videos in order to make them more exciting and engaging.

The second most important factor for successful blended learning is skills development, for both academics and students (Beadle and Santy, 2008; Harris et al., 2009). The UK academic interviewees commented that training is essential for colleagues who are new to blended learning. They consider IT training to be of great importance, although UK Academic 4 commented that perhaps the best way to gain IT knowledge is through hands-on experience. Workshops on the use of relevant software and VLE platforms were also considered useful.
On the other hand, the Australian academics commented that attending the university's teaching and learning professional development events is a good way to enhance knowledge in this area. It is also important to learn from the peers, which is summarised in AUS Academic 2's quote, “it is important to talk to colleagues who have more experience on blended learning, see what they do, what works for them, then emulate from there, rather than re-invent the wheel”.

The UK academic interviewees thought it is important that technological training be offered to students on the use of web technology. They think it is essential that students have a sufficient level of IT literacy to ensure they can fully appreciate the use of the technology. The Australian interviewees commented that a lot of assumptions were made about students’ IT literacy. They commented that students may be advanced in certain IT applications, such as the use of social networks, but not all of them are “all-round” IT-literate. Therefore, academics should be aware and provide further support and assistance to students, if necessary. As stated by AUS Academic 3, the production of skill-based videos is a good way to enhance students’ technical know-how. In addition, the speed of internet connection is also considered an important technological issue; this concern, in particular, has been raised loudly by the Australian academics. A general problem, especially for the Australian students, is the download speed from the internet and the available bandwidth capacity. There are two reasons for these issues. The first reason is that Australia is a considerably larger country geographically than the UK and the broadband services in some regional or remote areas may not be that well-developed. Further, there are more off-campus students studying Australian property courses. As a result, better internet infrastructure is required to cope. One piece of advice from the Australian academics to solve this problem is to seriously consider the production of videos and the platform on which to deliver the podcast videos. The use of streaming videos rather than downloadable videos can minimise the problem of limited bandwidth. In addition, the videos should be produced in smaller sizes and compact formats so they take less time to download. Overall, the academics in both Australia and the UK generally agree that the commonly used types of help, such as central IT support and students’ peer support, can assist students dealing with web technology; all of which has been indicated in their average mean scores which are above 4.00 (see Figure 7).

5.5 Challenges for using blended learning

There is no lack of challenges for using blended learning as a teaching method, but the challenges faced by the Australian and the UK property academics are different. The major challenge for the Australian academics is fast-changing technology. It can be summarised by AUS Academic 3’s comment, “technology moved too fast; we just learnt one technology and then we were told by the university that we needed to use another new technology, so we do not really master the technology that we are required to use”. This point is also linked to other comments made by the Australian academics about understanding the power of the options. Several of the Australian academics used commercial software called “Camtasia”, which can do screen capturing and sound recording at the same time. The academics believe there are a lot of functions in this software, but they do not have sufficient knowledge about them, therefore, the academics felt they could not fully utilise the software. As they do not know exactly what the functions are, they cannot seek advice from colleagues who have had more experience using them. On the other hand, the UK academics commented that the challenges they face come from the nature of blended learning. One of the characteristics of blended learning is that it involves a lot of e-learning technology and online discussion. The UK academics found it was difficult to encourage students to use the course's Discussion Board, and thought the barriers could be caused by the media and the platform. Students are required
to log-in to the relevant Discussion Board web page in order to make a contribution which they considered inconvenient. In addition, students may feel uncomfortable about making comments and expressing opinions on Discussion Boards, which can be viewed by all participants of the course. On the other hand, the Australian academics also use Discussion Boards widely but do not encounter similar problems. A possible explanation could be the difference in culture between the two countries, or that Australian students had become more used to Discussion Boards by the time the Australian study was conducted, which was two years after the UK study.

**Discussion of findings**

The UK and Australian property academics have similar views on many aspects of blended learning. They both define blended learning as the use of a range of teaching methods. However, the Australian academics have further determined that the focus of blended learning should be on learning, rather than teaching. The common reasons for the property academics in both countries to use blended learning are to enhance the students’ learning experience and to align with the university's business model. The Australian property courses are commonly delivered to both on-campus and online students at the same time, while there is a high level of part-time property courses in the UK, therefore, in both countries blended learning is considered a suitable delivery approach in those circumstances. Apart from the business reasons for using blended learning, the Australian academics also stressed a pedagogical reason, which is to provide different learning options to suit individuals’ learning needs and preferences.

The term “flipped learning” has been mentioned by Australian property academics but has not been mentioned by the UK academics. However, the UK property academics have already adopted this principle, which requires students to do self-directed study prior to attending classroom contact activities (see Section 5.3). The possible explanation for this is the “time difference” between the Australian and the UK studies. The Australian study was carried out two years after the UK study, and there has been more development of the pedagogical research and the use of new terms. It can also be a reflection on the Australian academics’ ability to identify additional successful factors with blended learning. The Australian property academics had experienced studying on MOOC courses and stated the necessity for clearer technological requirements for the development of podcast videos. Again, the “timing” is a reason as MOOC has only recently become a common concept.

Resources and skills development are important success factors for the development of blended learning. Effective blended learning incurs huge initial set-up costs, as well as substantial on-going running costs. Apart from physical resources such as equipment, a lot of vital human resources such as staff time are also required. In addition, academics and students need to be IT-literate in order to take full advantage of blended learning. As a result, it is important to have skills development events for students as they are not always as “all-round” IT-literate as they appear to be. The successful factors for the implementation of blended learning in the UK and Australia are different. For the real estate academics in Australia, the requirements for better equipment and more IT support are vital because they have a very high proportion of off-campus delivery and have adopted technology-enhanced learning to a greater extent. On the other hand, more skills development is essential in the UK because blended learning is not as prevalent compared to Australia, and there is a relatively lower level of the use of technology to support learning. After considering the differences of the success factors in the UK and Australia, the ultimate key success factor which is proved to vital for the successful implementation of blended learning is “resources”, both in the form
of financial resources, which can be used to enhance infrastructure and human resources, which is related to the implementation of blended learning.

The challenges faced by the UK and the Australian property academics with the use of blended learning are quite different. For the Australian academics, the major challenges are coping with the fast, frequent changes in technology and the availability of internet broadband width for all of their students. There are more off-campus students in Australia; therefore, Australian universities are generally more willing to invest in technology. However, a side effect is that the academics sometimes struggle to keep pace with the introduction of new technology. On the other hand, Australia's size and its huge regional and remote areas contribute to the issues with “broadband width”. In contrast to the Australian students, the UK academics commented that their students are less willing to engage in online Discussion Boards; however, this result may have been because the use of technology was a relatively new concept for the UK students when the study was being conducted there.

The findings indicate that UK and Australian real estate academics have different views on blended learning. In the UK, blended learning is largely considered to be the use of a mixture of teaching approaches to assist students with learning. In other words, it has more of a teaching focus. On the other hand, the Australian academics have a stronger focus on learning as they consider blended learning “is not just a range of teaching methods but a range of learning activities from a number of different modes” (see Section 5.1). One of the further reasons for Australian academics’ use of blended learning is pedagogical, that is, to provide students with learning options that align with their learning styles. The difference in views on blended learning between these two countries provides a possible explanation for their different approaches to blended learning. The UK academics simply consider the use of a variety of delivery methods, e.g. conventional lectures, guest lectures and case studies, etc. as blended learning. On the other hand, the Australian academics have given more consideration to the design of the delivery method. For example, they break down the traditional three-hour lectures into smaller sessions with the aim of maintaining students’ interest. Furthermore, the Australian academics have thought more about how to engage students in activities outside the classroom through the greater use of technology-enhanced delivery and how to cope with the larger numbers of off-campus students studying in Australia. The difference in the views between the UK and Australian academics on blended learning has also resulted in the different role in its facilitation of teaching. In the UK, blended learning is usually viewed as a mechanism to enhance face-to-face delivery and with the focus on providing students authentic learning experience. On the other hand, the use of blended learning is more about the use of technology to deliver courses online so it makes study more flexible.

**Conclusion**

This paper discusses a cross-country comparison of the use of blended learning in property education courses in the UK and Australia. It reviews the UK and Australian definitions of blended learning, the reasons why they use blended learning as a teaching method, the different designs and uses for blended learning, and the successful factors and challenges in implementing it.

The size of the country plays an important part in the use of blended learning as it has impacts on the commonly used delivery modes and the infrastructure necessary to support blended learning delivery. In addition, the larger number of off-campus students and limited availability of broadband width are major challenges in Australia. On the other hand, time has played a part in the changes and development of blended learning. The Australian and the UK
studies were conducted two years apart, and some of the divergent comments are attributed to the studies being conducted at different times. This view is reinforced by the Australian and the UK property academics who have both commented that the concept of blended learning will disappear in the future, it will just become “learning”. The various techniques and technologies which are new now, will be standard in the future.

Based on the research findings from this study, it can be concluded that the key factor for the successful introduction of blended learning is resources. The “resources” required not only refers to the financial resources necessary for the purchase of equipment, but also staff time for developing the relevant learning resources. The on-going skills development of staff and students is also important for the development of blended learning to enable full utilisation of the potential of blended learning as a delivery method.

Different practices on blended learning in the UK and Australia have certain aspects from which each country can learn. Australia can learn from the UK finding that students do not always have the necessary IT skills, and could, therefore, offer more technology training for students. This result is especially important for Australia where more focus is placed on online learning and technology is widely used to support delivery of programmes.

The UK could also learn from Australia regarding the use of blended learning. UK academics are advised to make better use of blended learning so courses can be delivered to on-campus and off-campus students concurrently, which would address the requirements of the business model. Furthermore, the UK academics could also learn from Australian academics about the use of technology to enhance learning by using podcast videos, skills set videos and Discussion Boards to support delivery. It is also important to consider using a wide range of virtual environments to support their teaching and learning activities. The use of these methods also has the effect of enhancing the engagement of students outside the classroom. Moreover, the UK academics are advised to consider the pedagogical aspects of using blended learning, for example, how to use blended learning to assist students’ learning and keep them engaged.

Blended learning is an increasingly useful approach because it changes the focus of learning design by shifting the emphasis from simply considering the face-to-face and online environments to the design of issues, such as the process and synergy of blending both environments (Littlejohn and Pegler, 2007). This research has identified the essential successful factors in the use of blended learning as a delivery method. It has also highlighted the value of using blended learning to enhance student learning and as a tool to address the needs of different learning styles. In addition, it has also discussed aspects of blended learning as a delivery method which one country can learn from the other.

Limitations of the research and suggestions for future research
The first limitation of this research is that the two sets of data, Australian and the UK, were collected two years apart. Although the data indicated that “time” has an impact on property academics’ views on blended learning, it can also be argued that the time difference also imposes limitations on the direct comparison of the practices in both countries. Also, the roles of the respondents differ slightly. The UK respondents are all course directors, whereas the Australian respondents are all academics teaching property courses. While their different roles may not have a direct impact on their experience of teaching or their use of blended learning, they may have a different strategic understanding of the higher education sector.
A further limitation is the sample size for the questionnaire survey. Although the response rates for the questionnaire surveys are considered to be quite high for online questionnaires, that is, 26 and 20 per cent for the Australian and the UK studies, respectively, the sample sizes are relatively small at 54 and 37, respectively.

One of the suggestions for future research is to increase the sample size in order to enhance the generalisability. It is advised to disseminate the questionnaire survey to all academics who teach real estate courses in the UK, unlike the current research in which the questionnaire was sent to course directors only. It is expected the sample for the UK academics could be increased, however, the number of Australian real estate academics is relatively small because of the smaller number of real estate courses offered. Therefore, the second suggestion is to conduct more interviews to gain a larger amount of qualitative data to supplement the quantitative data.
**Figure 1** Concepts related to the quality of learning at university

**Figure 2** Definitions of blended learning

Source: Entwistle *et al.* (2002)
Figure 3 Reasons to use blended learning as a teaching method

![Bar chart showing reasons for using blended learning](chart_reasons.png)

Figure 4 Types of virtual learning environment to support teaching and learning activities

![Bar chart showing types of virtual learning environments](chart_vle.png)
Figure 5 Types of teaching and learning activities used in blended learning courses

Figure 6 Resources required for the development of blended learning teaching methods
**Figure 7** Types of help that students usually need in dealing with web technology

![Figure 7](image)

**Table I** Definitions of blended learning

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driscoll (2002)</td>
<td>Driscoll states four different ways in which blended learning can be defined, which are:</td>
</tr>
<tr>
<td></td>
<td>- Combining or mixing various web-based technologies to accomplish the educational goal</td>
</tr>
<tr>
<td></td>
<td>- Combining or mixing pedagogical approaches (e.g. constructivism, behaviourism) to produce learning outcomes</td>
</tr>
<tr>
<td></td>
<td>- Combining instructional technology with face-to-face teaching</td>
</tr>
<tr>
<td></td>
<td>- Combining instructional technology with on-the-job tasks</td>
</tr>
<tr>
<td>Singh (2003)</td>
<td>Blended learning is a combination of delivery methods which complement each other and work to support students’ learning</td>
</tr>
<tr>
<td>Dziuban et al. (2006)</td>
<td>Blended learning is viewed as a mix of pedagogical approaches that combines the effectiveness and the socialisation opportunities of the classroom with the technological enhancements of online learning</td>
</tr>
<tr>
<td>Graham (2006)</td>
<td>Blended learning is the convergence of face-to-face settings, which are characterised by synchronous and human interaction, and Information and Communication Technology (ICT) based settings, which are asynchronous and text-based and involve humans operating independently</td>
</tr>
<tr>
<td>Collins and Blake (2007)</td>
<td>Collins and Blake discuss how blended learning may mean different things to different people. They state that, by definition, “blended” learning includes many different learning approaches, though perhaps it would appear to be more concerned with individual differences and incorporating both formal and informal learning, than with the face-to-face/online learning dichotomy that is often focused on.</td>
</tr>
<tr>
<td>Garrison and Vaughan (2008)</td>
<td>Blended learning is “the thoughtful fusion of face-to-face and online learning experiences” (p. 5). They emphasise the need for reflection on traditional approaches and for redesigning learning and teaching in this new terrain</td>
</tr>
</tbody>
</table>
### Table II Courses taught

<table>
<thead>
<tr>
<th>Course Type</th>
<th>UK respondents (%)</th>
<th>AUS respondents (%)</th>
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</thead>
<tbody>
<tr>
<td>RICS accredited course only</td>
<td>43</td>
<td>72</td>
</tr>
<tr>
<td>CIOB accredited courses only</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>API accredited courses only</td>
<td>n/a</td>
<td>38</td>
</tr>
<tr>
<td>AIB accredited courses</td>
<td>n/a</td>
<td>44</td>
</tr>
<tr>
<td>More than one type of accredited course</td>
<td>54</td>
<td>22</td>
</tr>
</tbody>
</table>

### Table III Levels taught

<table>
<thead>
<tr>
<th>Level Type</th>
<th>UK respondents (%)</th>
<th>AUS respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG programmes only</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>PG programmes only</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Both UG and PG programmes</td>
<td>72</td>
<td>63</td>
</tr>
</tbody>
</table>

### Table IV Experience using blended learning as a teaching method

<table>
<thead>
<tr>
<th>Experience Duration</th>
<th>UK respondents (%)</th>
<th>AUS respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>1-5 years</td>
<td>59</td>
<td>54</td>
</tr>
<tr>
<td>6-10 years</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>14</td>
<td>20</td>
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</table>
Reference


