

## PRACTICE ARTICLE

# BLENDING LEARNING IN INTELLECTUAL PROPERTY: THE BEST OF BOTH WORLDS

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### I INTRODUCTION

Although the expression ‘blended learning’ has appeared only fairly recently in learning and teaching circles, the concept it denotes has been evolving over a much longer period. Allison Littlejohn and Chris Pegler describe ‘[b]lending [a]s an art that has been practised by inspirational teachers for centuries’.<sup>1</sup> In contemporary times, blended learning usually refers to models that involve elements of online learning blended with traditional classroom teaching. Since late 2005, with the advent of relatively simple and accessible podcasting technologies, the potential to replace some face-to-face teaching with podcast ‘lectures’ has presented some really interesting alternatives for academics interested in technology and in using audio content as part of their blend. As the uptake of blended learning continues to gather pace in all disciplines, it is timely to examine the operation of this model in the context of legal education.

This practice article reflects on a trial of blended learning conducted in an elective law subject, Intellectual Property, at the University of Western Sydney (UWS) in the Summer Session of 2008. The aims were to establish whether a ‘replacement’ model of blended learning was suitable for law students and to assess the benefits and challenges such a model presents. The results demonstrate that, with sufficient time invested in the redesign of

the subject and in the production of quality learning materials, blended learning can deliver significant benefits in legal education. In particular, the blended mode of delivery offers opportunities to make learning in law subjects more active without sacrificing the detailed explanations of black-letter content, typical of traditional lectures, upon which law students often place great value. By combining the best aspects of face-to-face and online teaching, this model can offer students the best of both worlds.

## II BLENDED LEARNING

### A *What is Blended Learning?*

It is generally acknowledged that the term ‘blended learning’<sup>2</sup> can have a range of different meanings in different contexts.<sup>3</sup> ‘Definitional complexities’ of this kind can lead to misunderstandings arising from a belief that ‘everyone shares the same understanding or definition of this term’.<sup>4</sup> It is therefore important at the outset to clarify how the expression ‘blended learning’ is used in this article. Broadly speaking, blended learning can be used to refer to any teaching method that blends online and offline elements. Charles Graham proposes the following definition: ‘*Blended learning systems* combine face-to-face instruction with computer mediated instruction’.<sup>5</sup>

Blended learning arguably has its origins in distance education and is often seen as a ‘combination of two historically separate models of teaching and learning: traditional face-to-face learning systems and distributed learning systems’.<sup>6</sup> Although early experiments with fully online courses have not been as universally successful as was originally expected,<sup>7</sup> blended learning offers new directions, largely as a result of recent technological developments.<sup>8</sup> These developments have made it possible to create blended models that replace some face-to-face teaching time with another mode of delivery, even for campus-based students. Since the advent of podcasting in late 2005, its use as a component of blended learning has become increasingly popular. The blended learning model used in the Intellectual Property trial involved blending classroom seminars with podcasts. These podcasts replaced approximately half of the face-to-face class time in the offering. The method evaluated in this paper is therefore what is sometimes referred to as a ‘replacement’ model of blended learning

and references to ‘blended learning’ in the reflections that follow carry a corresponding meaning.

## B *Choosing the Right Blend for Law*

Charles Graham identifies the challenge of blended learning as ‘seeking best practices for how to combine instructional strategies in face-to-face and CM [computer mediated] environments that take advantage of the strengths of each environment and avoid their weaknesses’.<sup>9</sup> The trial discussed in this paper blended face-to-face seminars with podcasts consisting primarily of black-letter content. The aim of the trial was to evaluate whether these are suitable modes to blend for a law subject, and to establish how they might best be integrated to achieve an appropriate balance between podcast coverage of primary authority and the more interactive learning environment in the seminars.

Face-to-face teaching is an important component of blended learning for a range of reasons. The benefits of this mode include opportunities for synchronous advice and responses to students’ questions, providing a forum for presentations and discussion, building community between students and even improving retention rates.<sup>10</sup> The classroom setting also provides important opportunities for placing the content in context.<sup>11</sup> Several of these factors operate regardless of whether the face-to-face classes are lectures, seminars or tutorials and regardless of the discipline involved. Seminars, rather than lectures, were chosen for the face-to-face component of this blend as, in addition to the generic benefits described above, they have particular benefits for law students. These benefits include the opportunity to practise oral and aural skills and to engage in class exercises involving the application of principles and authorities to problem questions. Seminars also allow much greater emphasis to be placed on the interactive features of face-to-face teaching identified above, particularly class discussions of difficult aspects of the content.

The acquisition of ‘basic disciplinary knowledge is essential to higher order learning’<sup>12</sup> in all disciplines, and this is particularly so in law, in view of the ‘Priestley Eleven’ requirements<sup>13</sup> and the broader professional emphasis of the degree. Although learning content through the traditional lecture format is a passive and usually ‘rigidly teacher-centred’<sup>14</sup> form of learning, it appears that

law students can, and do, benefit from detailed explanation of the content as an aid to acquiring this ‘basic disciplinary knowledge’.<sup>15</sup> Lectures have, in the past, been the primary means of explaining content in law subjects. They can reinforce concepts already learned through the students’ own reading, explain areas that are unclear and provide a point of comparison for students to check their own understanding of the material against the explanations provided in the lecture.<sup>16</sup> Although lectures do not feature strongly in law schools in America, where the Socratic dialogue and case method approaches are much more prominent, it has nevertheless been acknowledged even there that ‘lectures are an indispensable and unavoidable part of any academic enterprise. Lectures are where we *explain* things to students’.<sup>17</sup>

Earlier iterations of Intellectual Property had adopted an essentially ‘lecture-style’ mode of delivery. Feedback on the earlier iterations indicated that students placed a great deal of value on those ‘lecture-style’ classes as an aid to their learning. However, it was also clear that what the students valued was not the lecture format per se, but the *explanations* of black-letter content contained within those lectures. It was also clear that presenting those explanations by different means, other than in a traditional lecture-room setting, would still deliver their central value to students. Roy Stuckey acknowledges that ‘[p]erhaps technology’s greatest unused role in achieving learning outcomes is in helping students acquire core legal knowledge and understanding’.<sup>18</sup> Whereas, in the past, lectures were probably the only practical way to deliver this type of instruction to a group, podcasting technology has provided important new options for this delivery, as the trial undertaken in this subject demonstrates.

As a design issue, short podcast explanations of content serve a valuable purpose in supporting seminars or tutorials. Seminars or tutorials are undoubtedly much more interactive and therefore usually also more engaging for students than traditional lectures. However, really good seminars do rely for their effectiveness on all, or at least most, of the students being thoroughly prepared before classes and having understood the material correctly. Providing podcasts of content to students *before* the seminars can, in combination with their own readings of the cases, legislation and set texts, help them learn the material in preparation for the seminars.<sup>19</sup> Combining the podcasts with a detailed, step-by-step

learning guide, including questions, problems and other activities, has additional advantages in that it allows students to learn the content in a more active manner than delivery of the same content in a traditional lecture setting would allow.

The acquisition of what John Biggs and Catherine Tang refer to as ‘declarative [or propositional] knowledge’<sup>20</sup> must take place before that knowledge can be applied to problems and provide the basis for the type of ‘intellectual inquiry’ seminars are intended to encourage.<sup>21</sup> Where preparatory work, supported by podcasts and online learning guides, allows students to acquire sound declarative knowledge of the central content, class time is freed up for more productive uses than simply covering content, and much more discussion and work on problems is possible. As Anthony Chan, Mark Lee and Catherine McLoughlin put it, ‘modern teaching methods ... have a significantly higher probability of success if students come to class already inspired to learn and willing to participate’.<sup>22</sup> For law students, a thorough understanding of the content acquired *prior* to attending classes should engender this type of approach to face-to-face seminars. Division of the content into small podcast segments interspersed with online questions and other activities can also help students acquire that prior knowledge in a significantly more active, learner-centred manner than the traditional lecture format.

A combination of podcasts containing ‘lecture-style’ content with face-to-face seminars is therefore a good blend for law. Podcasts of content provide a good source of support for students in learning the core principles and authorities prior to seminars, while better preparation leads to better, more interactive seminars in which the content already learned can be built on and applied. In this way, the two modes complement each other well and, to return to the point made by Graham at the start of this section, the central benefits that accrue to law students from traditional lectures and also from seminars *are* each preserved and combined in this particular blend.

### III THE SUBJECT AND THE OBJECTIVES OF THE TRIAL

#### A *The Subject*

Intellectual Property is a popular undergraduate law elective that the author has taught for several years. As taught at UWS, the subject focuses on the three central regimes of intellectual property law, namely copyright, patents and passing off/trade marks.<sup>23</sup> Intellectual Property's broad appeal derives from the diverse and familiar areas it covers, including the music, literary and visual arts industries, computer programming, aspects of internet regulation, pharmaceutical, scientific and engineering patents, character merchandising and protection for celebrity images and famous brand names. However, despite the popularity of the underlying subject matter with students, the law involved is conceptually at the more difficult end of the spectrum for an undergraduate subject. The legislation is complex, particularly in copyright and trade marks, and is subject to frequent amendment. Cases present difficulties not only in terms of the principles involved and the legal reasoning employed, but also due to the complexity and diversity of the underlying factual situations they adjudicate upon. Fact situations involving increasingly complicated technical, computer, scientific and business or marketing concepts characterise this area of the law.

As a result, and despite the many excellent texts and other resources available on the topic, the content of this subject requires careful explanation to students in order to get the central concepts correctly bedded down before moving into the more advanced, current or controversial aspects. As a direct result, most face-to-face teaching time in this subject has, in the past, been absorbed by explanations of the legislation and cases in a traditional lecture style of delivery.

#### B *Objectives for the Trial*

Intellectual Property has always been very well received by students at UWS, with feedback and evaluations singling out the careful explanations of content given in lectures as particular features that had helped them to learn the content. However, given the wonderful diversity of topics the subject touches upon, and the

relevance of so many of those subjects to students' day-to-day lives, the subject always seemed to harbour an unrealised potential for a much more interactive, true seminar style of delivery. To borrow from Arthur Chickering and Zelda Gamson's classic statement on good practice in undergraduate learning and teaching, as it relates to active learning:

Learning is not a spectator sport. Students do not learn much just sitting around in classes listening to teachers ... They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves.<sup>24</sup>

The content of this subject quite clearly contained opportunities to make the learning experience a much more active one in the sense described above. Issues such as music piracy; the new time, space and format-shifting provisions in the *Copyright Act 1968* (Cth);<sup>25</sup> the new protection for parody and satire involving copyright material; protection for reality program formats; whether celebrity images should be protected per se in Australia; patent evergreening; the impact of pharmaceutical patents on developing nations or the impact on agriculture of patents over genetically modified plants could all provide great discussion triggers for much more interactive classes that would really engage students with the content of this subject.

Unfortunately, in the traditional lecture mode of delivery, there was little, if any, time to explore these issues in detail. However, abandoning lectures altogether in favour of a program consisting only of interactive seminars was also not a viable option, particularly in the face of consistently positive feedback from students over several years about the value they attached to the explanations of content contained in the lectures. Accordingly, while students were encouraged to pursue the developing and sometimes controversial aspects of the topic in their own research papers, their lecturer continued to look for a way to give more class time to these 'leading edge' aspects of intellectual property, but without sacrificing detailed explanation of the content.

### *C Institutional Developments*

The UWS School of Law conducted an extensive curriculum review during 2007. One of the key outcomes was the decision taken by the school, corresponding with broader UWS initiatives,

to embark upon a staged introduction of blended and e-learning into some of the school's subjects. Several recommendations were made in the final report in amplification of that decision, although Recommendation 18 led most directly to the trial discussed here. It reads as follows: 'That the School of Law move progressively to extend and implement blended learning across the whole law curriculum'.<sup>26</sup>

The blended learning trial also linked two internally funded Learning and Teaching Action Plan (LTAP) projects which the author was involved in: one on blended and e-learning in Law and the other on learning guides and resources for students, particularly in online environments. As part of those LTAP projects, the author had already undertaken trials of podcasting in selected topics within the core Bachelor of Laws (LLB) subject Constitutional Law during Autumn 2007. A more extensive trial was then conducted in Property Law in Spring 2007, in which podcasts were made available for all lectures given during the semester by the author, as coordinator of that subject. By the end of 2007, the law school was well placed to consider a full-scale blended learning trial relying on podcast content in replacement of some face-to-face teaching time.

As part of implementing the recommendations of the curriculum review, the decision was made to trial a replacement model of blended learning in the intensive offering of Intellectual Property planned for Summer Session 2008. This was a new direction for the School of Law in that it involved the replacement of some face-to-face teaching with podcasts for the first time.

#### IV DESIGNING FOR BLENDED LEARNING

Having settled on the elements of the model to be trialled in this subject, the next step was to set about redesigning the subject's content and delivery. When offering a subject in blended mode for the first time, it is important to redesign it specifically for that blended delivery. Quality course design is considered by many to be critical to the success of a blended delivery.<sup>27</sup> Simply converting existing materials into electronic formats or placing part of a subject online does not represent quality in the absence of a careful redesign of the subject's curriculum, resources and delivery.<sup>28</sup> This process of redesign is particularly important when a replacement model of blended learning is being introduced.

## *A Structural and Scheduling Issues*

Prior to the Summer Session of 2008, Intellectual Property had been offered in the traditional manner, with 13 weekly lectures of three hours duration during semesters. For the blended delivery, the subject was divided into approximately 21 hours of lecture-style content, delivered via podcasts, and 18 hours of face-to-face seminars. The seminars were offered as four seminars of four hours duration, plus a two hour introductory session. The introductory session served an important purpose, functioning as an induction for the subject,<sup>29</sup> as well as introducing the broad themes of Intellectual Property, providing an overview of each topic in the subject and as a forum for discussing potential research paper topics with the students.

The spacing of seminars within the overall schedule for the subject required particular attention in order to allow students enough time to absorb the content of the prescribed readings and podcasts before attending each class. Placement of seminars in the timetable was also carefully planned to keep the group moving through the materials, particularly as the subject was being offered in intensive mode on this occasion. As Graham observes, '[o]nline learning components often require a large amount of self-discipline on the part of the learners'.<sup>30</sup> Accordingly, students were explicitly required to complete the prescribed reading, listen to the podcasts and to have worked through the relevant parts of the seminar guide before attending each class.

## *B Timetabling and Class Sizes*

In response to a much higher than expected enrolment, a second evening class was added in order to keep class numbers to a reasonable level in each group. Interestingly, it would have been quite difficult to fit the additional group into the existing Summer Session timetable if the subject had not been conducted in blended mode. In order to accommodate all students, a single class would have had to be very large. The reduced amount of face-to-face time in the replacement blended mode made the extra group possible, allowing more students to be accommodated while also taking the pressure off class numbers.

## C *Division of Content*

The best means of dividing content between the online and offline components certainly varies between subjects. ‘The proportion of online to offline, and the type of offline activity favoured, will be informed by both the pedagogical and ... operational preferences’ relating to each subject.<sup>31</sup> Division of this subject required careful revision of the content and structure to arrive at a balance between the podcasts and the seminars. In view of the objectives described above, the decision was taken that the podcasts would cover the central concepts and principles of intellectual property law, with a particular focus on the structure and content of the legislation, combined with explanations of most of the prescribed cases. These podcasts would provide the foundations, or building blocks, necessary to support the seminar program.

The seminars were then designed to cover the more complex aspects of intellectual property, with a focus on current developments and new applications of the law, recent or proposed statutory amendments and new cases, in addition to working on problems and questions.<sup>32</sup> In this way, the principles and authorities already learned from the podcasts and other online materials could be further developed and applied in the seminars. The content of each seminar was specifically designed to leverage off the foundation provided by the online materials on that topic. For example, the coverage of music piracy was largely reserved for the face-to-face seminars as it is one of the more difficult and, arguably, still developing aspects of copyright infringement. The podcasts set out the core concepts of copyright infringement and authorisation of infringement, covering the relevant provisions and the central authorisation case of *University of New South Wales v Moorhouse*.<sup>33</sup> A brief introductory podcast on the issues involved in music piracy, and another covering the important early American case *A & M Records v Napster*,<sup>34</sup> were also provided prior to classes to set out the core concepts. Students were then required to read the current cases<sup>35</sup> by way of preparing for discussion in class on the topic. In the seminar, only a fairly brief rejoinder was necessary to ensure students had correctly understood the authorities and concepts from the podcasts and to answer any questions before moving on to the new cases. Class time could

therefore be focused on discussion of new cases and the issues raised by those cases, both for the music industry as a whole and in terms of developments in copyright law more broadly.

#### D *Seminar Guide and Learning Resources*

A central part of redesigning Intellectual Property for a blended delivery was the redesign of the online seminar guide. The design of the new online seminar guide was specifically intended to reinforce the content of the podcasts. Allison Littlejohn and Chris Pegler consider ‘wrapping’ conventional teaching methods (such as the seminar guide and the face-to-face seminars in this subject) around the e-learning component (the podcasts in this subject) to be an ‘elegant’ design approach that is more ‘seamless’ than simply placing the e-learning component ‘alongside legacy materials that were designed for the course in its earlier form’.<sup>36</sup> Their approach informed many of the decisions made while redesigning the learning resources for this subject.

Accordingly, the seminar guide was redesigned to interact closely with the content of the podcasts, drawing students’ attention to the central points and principles to be taken out of each podcast through a series of questions and problems on each podcast or group of podcasts. A particular design feature of the online seminar guide was that each module contained the relevant podcasts embedded within it. The subject’s content was divided into 10 modules containing 53 sub-modules between them, with the online version of each sub-module typically containing several embedded podcasts. The embedded podcasts opened with the default media player on each student’s computer (including *Windows Media Player*, *Quicktime* and Macintosh applications). This online version of the seminar guide was designed to allow students to listen to the podcasts in the correct order while looking over the related seminar questions and other materials on the topic.

Students were instructed to use these materials by first reading the prescribed primary and secondary sources, ideally noting down their own initial understanding of that material, then listening to the podcast explanation of that content to compare and check their understanding of the concepts, then working through the seminar guide questions to review the central concepts. Problem questions were also provided at intervals in the seminar guide for students to

work on applying the principles learned from the other resources, and to practise for exam problems.<sup>37</sup> In this way, the seminar guide was designed to reinforce the podcast explanations of content and the students' own reading of the prescribed materials, allowing them to be well prepared for the seminars. Questions and problems from the seminar guide were revisited in face-to-face classes, giving students a further opportunity to verify their understanding. Students were also encouraged to use class time and the online discussion board, or to contact the coordinator directly, to raise any remaining questions about the content.

### *E Podcasts*

The podcasts used in Intellectual Property were a mix of podcasts that had been recorded and edited specifically for this iteration, interspersed with some selections from lecture content recorded during the previous offering of the subject. Lecture content of the subject was divided into short segments, and 96 separate podcasts were prepared for use in and with the seminar guide. Each of the 96 podcasts was kept fairly short. The aim was to keep the average length of podcasts around 10 minutes and the content was divided so that one podcast would typically cover one case, one aspect of the legislation or one principle. There were a range of reasons for keeping the podcasts quite short, as opposed to producing lecture-length slabs of content. The main, practical imperative for keeping the podcasts short was download times. Smaller files can be accessed online without having to wait too long for them to open or, if they are being downloaded, this can be done within a reasonable time. Short podcasts also allow the verbal explanations of content to be interwoven with the questions and other materials within the seminar guide. In this way, short podcasts supported the overall design objective of enabling close interaction between the seminar guide and the podcast content at a level of detail that would not have been possible with longer lecture-length sections of audio material.

### *F Adjusting Learning Resources*

The approach to redesigning the seminar guide described above, in particular embedding the podcasts, was founded on the assumption that students would sit at their computers when using

the interactive seminar guide and would listen to the podcasts online, with the guide and the other materials available to them on the subject's website while they listened. However, as the session progressed, it became clear that not all students were studying this way, and that many were listening to the podcasts separately, using iPods or similar portable media players. Even those who were working at a computer expressed an interest in having the podcasts available separately so they could listen to them again in other locations as further revision. Later feedback from students also indicated that many of them had been printing the pages of the seminar guide for separate use, away from the computer.

These were some interesting variations from the assumptions made when designing the learning resources for this subject. Requests for the podcasts to be made available separately, as well as being embedded in the guide, were easily accommodated by placing the podcasts in a new folder on the website. Design of future subjects using blended learning will provide the podcasts separately, in addition to any embedded use of the podcasts within seminar guides. A separate printable version of the seminar guide will also be available.

## *G Assessment*

The redesign of this subject also involved a review of the assessment structure to ensure that the new modes of delivery, and the balance between those modes of delivery, were appropriately reflected in and aligned with the assessment tasks.<sup>38</sup> Assessment consisted of a research essay and an exam involving theory and problem questions. Students' knowledge of the core principles and authorities, learned primarily through the podcasts, and their ability to apply these in a practical context,<sup>39</sup> were tested primarily by the problem questions in the exam. The online seminar guide and the face-to-face seminars were both designed to help students prepare for the exam by providing them with plenty of practice on problem questions, while the face-to-face seminars also introduced the types of policy aspects that might be addressed in a theory problem in the exam.

In the research essay, students were required to identify and research their own topics, and were encouraged to examine the newer or evolving areas of the subject, to analyse recent

amendments or policy debates or to discuss potential new applications of the law, such as to new technologies or internet developments. The redesigned seminars therefore provided important foundations for students' research papers, with many choosing to expand on topics introduced and discussed in the seminars. However, as a good research paper typically involves a critical analysis of the relevant primary authorities, which must themselves be accurately explained, students also needed to base their papers on a strong grasp of the podcast content to do well on this assessment item. In this sense, both elements chosen for the new blended model contributed to students' work on the research paper.

As discussed above, in previous iterations of the subject, the lecture program left very little time to discuss topics suitable for research papers in any detail. The new balance struck between the podcasts and the more interactive face-to-face seminars therefore provided better support to students for each component of the assessment.

## V BENEFITS

The blended learning model produced a range of benefits, both to the students and their lecturer, such as greater flexibility and more interactive classes, as outlined in the following sections. Although several of these features of blended learning are already well established in the literature, this trial confirmed that they were also beneficial in legal education. To establish whether the students saw the blend, and the various features trialled in the subject, as beneficial to their learning, they were invited to complete a voluntary, anonymous online survey. The survey was available for several weeks after conclusion of classes and after the exam was taken. Almost two-thirds of the cohort responded to the survey. Student perceptions as to the overall success of this trial of blended learning were almost entirely positive. Almost all who responded to the survey indicated that they felt the blend of podcasts containing the lecture-style content with face-to-face seminars had helped them to learn in the subject.

### A *Flexibility*

Flexibility for students in time, place and pace of listening to

the core content of the subject is a benefit of e-learning that students almost universally identify, particularly evening students and those with family responsibilities or work obligations.<sup>40</sup> While online learning management systems in general offer improved flexibility to students, inclusion of podcasts in this blend clearly introduced a whole new level of flexibility,<sup>41</sup> ‘tak[ing] us much, much nearer to “anytime, anywhere” learning’.<sup>42</sup> It is very well established, particularly in the literature dealing with what is referred to as mobile learning, that students listen to podcasts in all kinds of locations, while on the move — travelling to and from university or work, both in cars and on public transport — and even while performing other tasks, such as housework or exercise.<sup>43</sup> So-called ‘digital natives’ in particular are considered to be good at this kind of multi-tasking.<sup>44</sup> Having control of the pace at which they moved through the material was a feature several of the students in Intellectual Property indicated that they particularly liked. The students’ survey responses were consistent with these observations, clearly identifying flexibility as a feature of the blended model they found particularly beneficial.

### *B Short Podcasts: Engagement and Updating*

Breaking the audio content up into shorter podcasts, rather than longer lecture-length recordings, had several benefits. Close integration of the shorter podcasts with the online seminar guide is described above. Other benefits for student engagement and updating of resources were also noted. The cohort Marc Prensky refers to as ‘[d]igital natives are used to receiving information really fast ... [t]hey have little patience for lectures, step-by-step logic and “tell-test” instruction’.<sup>45</sup> Although not all law students are digital natives, many are of the view that students in all demographics benefit from the delivery of material in shorter sections<sup>46</sup> rather than, for instance, the more traditional 50-minute lecture. Students nowadays ‘often view ... what transpires in college classrooms as slow-moving and uninteresting’.<sup>47</sup> Presenting content in ‘manageable chunks’ can help to maintain students’ attention and interest.<sup>48</sup> Despite the potential for students to lose concentration during a class of some length,<sup>49</sup> longer classes have, to date, been necessary as a practical and timetabling reality. It would obviously not be possible to schedule 10-minute lectures.

Providing lecture-style explanations of content in much shorter sections is possible through podcasting in ways that are not possible in a traditional lecture setting. Short sections of content can also be interspersed with other activities, such as discussion or problem-based work, in a face-to-face seminar or tutorial class. However, the trial discussed in this paper demonstrates that using podcasts in a suitably designed blended model can have at least equal benefits in maintaining student engagement.

There are also benefits to academics to be gained from division of materials, and particularly podcast content, into shorter sections. This design facilitates updating of learning resources for future offerings of the subject. Where changes in the law require content to be altered, removed or replaced, smaller sections of the learning resources are affected and can more easily be replaced or discarded, almost as one does with a looseleaf service. This approach is particularly beneficial for updating podcasts. Where lecture-length recordings may require extensive editing, or in some cases even wholesale re-recording, which can be extremely time consuming, shorter podcasts may much more easily be replaced or edited for future iterations.

### *C Revision*

Students' ability to revise the material is also frequently identified as a benefit of blended learning, particularly for any models that involve podcasting.<sup>50</sup> As Janet MacDonald indicates, '[t]he contribution of asynchronous online media is well documented as important for reflection and in supporting a more student-centred approach to study'.<sup>51</sup> The benefits law students derive from lecture-style explanations of content, discussed earlier in this paper, are further enhanced by being able to revise that material as many times as they choose. This is particularly so for international students and those for whom English is a second language. Several students in this subject commented on the benefits of being able to stop and start, make notes and replay or review sections of the podcasts as necessary. Belinda Tynan and Stephen Colbran report a range of similar survey responses to their much larger trial of podcasting undertaken at the University of New England in early 2006.<sup>52</sup>

## D *More Interactive Classes*

Overall, the seminar classes in this subject were much more interactive than they had been in previous offerings. Such discussion of principles and authorities that was required could be presented to students in a pithy manner, in the nature of rejoinders with the central concepts explained in the podcasts, before moving into the more complex concepts that had been reserved for the seminars. The quality of discussion and the spontaneous way in which it developed in the seminars was particularly pleasing. Many students raised excellent issues and questions, often drawing on observations related to their own experiences, demonstrating that they really were thinking about how the topics discussed in class applied to their daily lives.

Many other academics have commented on how much more interactive their classes became when they started offering podcasting as part of their teaching blend.<sup>53</sup> Deborah Vess reports a ‘much more open atmosphere for discussion’ in which students indicated that they felt the ‘exchange of ideas went beyond what they normally experienced in classes’. She attributes this, at least in part, to ‘the additional time given to think about material in podcasts before class discussion’.<sup>54</sup> Although Vess describes a graduate history course, the author’s impressions of the level of interaction in the seminar component of Intellectual Property were very similar.

The podcasts and other online materials had therefore performed their intended function of laying a foundation for more advanced discussion and problem work in seminars very well. Student perceptions matched those of the author on this issue. In response to survey questions on this aspect of the subject, students almost uniformly agreed that there was a high level of interaction in the face-to-face seminar component. Further, almost all students agreed that the availability of podcasts prior to classes had driven this, by allowing and encouraging them to be better prepared for discussion and interaction in the seminars.

## VI CHALLENGES AND CONCERNS ABOUT BLENDED LEARNING

### *A Time Taken to Convert to a Blended Delivery*

As indicated in section IV above, a great deal of planning and decision making, not to mention work on the technical aspects, was necessary to redesign Intellectual Property for a blended delivery. The time required for these aspects should certainly not be underestimated. Redesigning this subject took around 350 hours, including recording and editing all the podcasts, building the website and producing the new seminar guide and problems. Planning for redesign of ‘replacement model’ blended learning subjects needs to ensure plenty of time is available to prepare the materials well in advance. Needless to say, it therefore has significant workload and potentially also staffing implications for the tertiary education sector overall. What Paul Ramsden describes as early ‘wilder’ predictions that e-learning would lead to ‘the demise of campuses, the redundancy of lecturers, the end of face-to-face teaching’ have not eventuated.<sup>55</sup> Indeed, as in many other sectors, new technologies appear to have created more rather than less work to be done. Barbara Allan considers the ‘planning and design of blended learning programmes [to be] more challenging than that of traditional programmes’.<sup>56</sup> Having redesigned both traditional and blended subjects, and despite being pleased with the results of the redesign in this subject, the author shares that view. It is therefore important for academic staff, who may be less comfortable with the technology than their students<sup>57</sup> and are often already time-poor,<sup>58</sup> to give careful consideration to whether it is realistic to take on all aspects of this type of innovation without the support of specialist development staff.<sup>59</sup>

### *B Attendance at the Seminars*

One of the most common concerns about teaching methods that involve any element of podcasting is that students will stop attending classes. This concern is particularly pronounced, and is arguably most justified, where podcasts consist of recordings of the live classes. However, the literature has demonstrated that, perhaps somewhat surprisingly, this is not always so, even where podcasts consist entirely of unedited recordings of the live classes.<sup>60</sup>

Where a blended model involves replacement of some of the face-to-face classes with podcasts, the situation is quite different. In the blended model trialled in Intellectual Property, the face-to-face content differed from the podcast content and the seminars were not recorded for later podcasting. It was made clear in the subject outline for Intellectual Property, and in the early classes, that the material covered in live classes built and expanded upon the podcast content and that the live classes contained examinable material as well as exam practice in the form of problem-based work on both seen and unseen problems. Class discussion was informed by the questions set out for each podcast topic in the seminar guide, although it did not necessarily involve systematically working through every question. In this sense, although the podcasts operated as ‘pre-work’ or homework to be completed ahead of class, the face-to-face classes retained their importance in drawing together and then building on the students’ earlier work.

Although attendance at seminars was not compulsory for this subject, classes were well attended and little, if any, reduction in class sizes was apparent compared with previous iterations. The intensive mode, coupled with fewer face-to-face classes that were not separately podcast, may have contributed to this. In response to a survey question aimed at identifying which of the blended elements students had made most use of in the subject, almost all indicated that they had attended the seminars, with most indicating that they had also listened to the podcasts in addition to attending the seminars. Concerns that students would rely on the podcast content and would not do the prescribed reading were also not supported by the survey responses. Notwithstanding the particular characteristics of this iteration identified above, this would appear to contradict concerns about students relying only on the podcasts and not engaging with the other materials or attending classes.

### *C Technical Issues*

Levels of access to, and use and ownership of, emerging digital technologies among students are certainly significant.<sup>61</sup> However, recent studies<sup>62</sup> have cast doubt over early assumptions about the technological skills of ‘digital native’<sup>63</sup> or ‘Net Generation’<sup>64</sup> students and how directly these affect their learning habits. Digital

native students may not all be as comfortable with technology, and their experiences may not be as uniform, as has sometimes been presumed.<sup>65</sup> Also, of course, not all tertiary students are digital natives.<sup>66</sup> On the other hand, the predominantly older academic workforce and, presumably, mature age students are commonly thought to have lower levels of technical competence,<sup>67</sup> although the universality of this claim has also been queried.<sup>68</sup> However, regardless of the levels of competence of academics and students of all generations, concern about the potential for technical difficulties to cause problems, for academics as well as students, in the delivery of a subject is natural whenever a new technology is introduced.

Technical challenges the author encountered in this subject primarily involved learning to record and edit the podcasts. This was not as difficult as one might first expect, given a moderate level of existing technical competence. That said, however, the time taken to pre-prepare podcasts was really quite extensive and is not to be underestimated. Learning to edit the podcasts can also be a double-edged sword in that it allows a really good quality, clear explanation of the content to be captured, but there is also real potential to get caught up in pursuit of an almost word-perfect iteration, particularly where the podcasts are intended to be re-used in future offerings of the subject. Keeping this tendency under control can be a challenge with pre-prepared podcasts. On the other hand, a very high quality iteration is something one can feel comfortable re-using in future offerings. The recommendation here is that podcasts should all be prepared and ready well in advance of the subject offering, particularly if it is an intensive offering.

The students in this subject reported hardly any technical problems during the trial. However, many had already been exposed to the podcasts during trials conducted in other subjects, which may have contributed to their competency. Access to podcasts via library computers was also available to students throughout the session as a back-up, although student equity, particularly in relation to ownership of MP3 players and general levels of comfort with the technical aspects of downloading podcasts, is also an important issue deserving further consideration.<sup>69</sup> One technical issue that was raised by a few students in this subject was download time for some of the longer podcasts. The most straightforward solution to this issue is to make

sure no podcasts are significantly over 10 minutes in duration. Additional reductions in file size for the podcasts can also be achieved by slowing down the bit rates of those podcasts. Other approaches to this issue, such as issuing CD versions or pre-loaded media players, are also being investigated.

## VII FUTURE DIRECTIONS

### *A Scheduling to Reduce Class Sizes*

The discussion, earlier in this paper, of scheduling decisions made while redesigning Intellectual Property dealt with the intensive offering that was the subject of this trial. However, in a semester-length offering, there are a range of different options as to how the face-to-face component could be presented, depending on the particular outcome sought. Over a semester, the 18 hour seminar component in Intellectual Property, for instance, would be scheduled as six fortnightly sessions of three hours duration. Seminars might also be scheduled in blocks. There would also be opportunities to either halve class sizes or accommodate more students by offering repeat seminars in the alternate week. Of course repeating seminars would not necessarily result in any overall reduction of face-to-face time from the academic's point of view, meaning that one of the primary benefits of the replacement model to the academic would be lost.

However, where reduction of class sizes is a particular objective, the potential to offer more face-to-face classes of smaller size is one benefit of a replacement model of blended learning. Replacing the lecture component of larger subjects with podcasts would allow the time saved to be redirected to more, and consequently smaller, seminar or tutorial groups. This would be of particular benefit to students in larger subjects, such as core subjects, allowing them to have more personalised attention from the lecturer in those smaller classes. Alternatively, teaching loads could be reduced by adopting a model that did not introduce additional classes. The best option in each situation would vary according to the particular subject, the number of students and the level of importance attached to reducing class sizes. However, as the benefit to students of smaller class sizes for seminars and tutorials is well known, this is an area where blended learning has real potential to improve the quality of time spent with students,

provided one accepts that classes may be fortnightly, or in blocks, rather than the traditional weekly approach. Although meetings are less frequent under this model, they can and should be much more beneficial to student learning.

### *B Re-use of Resources*

Blended learning should not be viewed as a time saver in the first offering, or even in the first few offerings, where materials and podcasts may be expected to continue evolving. However, subject to the observations immediately above about scheduling decisions, there are obvious benefits where materials produced to a high standard can be re-used in later iterations. Re-use of podcasts may be equated to re-use and ongoing development of seminar guides and other hard-copy materials, and is perfectly valid in that sense. It should not be viewed as giving the students less. In fact, it can allow greater quality control over the audio material provided to students than is possible in a traditional lecture setting or through lecture-capture systems. Further, in terms of workflow, it should allow academics more time to focus on research and maintaining currency in their areas of specialisation. At the same time, academics can be available to their students outside the classroom more often, in what is sometimes referred to as a ‘pastoral’ role, and also in terms of time spent on quality feedback to students. While academics may benefit from re-use of resources in future iterations, students should therefore be the ultimate beneficiaries of the time freed up while still receiving the high quality ‘lecture’ content and the associated benefits that flow from the blended model.

### *C Opportunities to Expand*

Following the positive outcomes of this trial, further controlled trials will be conducted within larger core subjects in the undergraduate law program at UWS. It also appears that blended learning, particularly the replacement model discussed in this paper, has real potential for service and interdisciplinary law subjects, particularly in order to ensure consistency across what are often very large cohorts.

## VIII CONCLUSION

It would be naïve to suggest that moving to a blended delivery model is a straightforward process. The challenges, particularly in terms of time, technology and the need to redesign learning resources, are real and should not be underestimated. However, as the trial discussed in this paper demonstrates, those challenges are not insurmountable.

The central reason for moving to a blended learning model for Intellectual Property was to build a more active learning experience for the students in this subject and, in particular, to offer them much more interactive seminars that address the ‘leading edge’ aspects of the subject more directly. The central challenge was to retain the detailed explanations of content that had characterised the previous lecture-style delivery, and to strike an appropriate balance between core black-letter content and the newer and more advanced aspects of the subject. The changes made to this subject addressed both of these challenges while successfully introducing the improvements sought. A particularly pleasing result in this respect was that the new model *did* allow time to discuss each of the leading edge aspects of intellectual property described earlier in this paper. The students also had much more opportunity to ‘talk about what they are learning ... [and] ... relate it to past experiences and apply it to their daily lives’.<sup>70</sup> Students in this subject returned particularly positive responses to survey questions about the use of blended learning, indicating that they also felt the model had enhanced their overall learning experience. The central objective of the trial was therefore achieved and future iterations of Intellectual Property will certainly use this replacement model of blended learning.

It is only on the second and third iterations of blended subjects that academics may expect to see benefits in the form of time saved by not having to repeat the central content of subjects each year. The benefits become more apparent as that time is channelled into other, more productive, modes of interaction with students, into ongoing improvement of learning resources and also into research. As indicated above, students should be the ultimate beneficiaries of any time freed up by blended learning. However, and more importantly, the trial discussed in this paper demonstrates how blended learning can *improve* the quality of students’ learning

experiences at the same time.<sup>71</sup> The model used in Intellectual Property allows students to be better prepared for more interactive seminars while still receiving detailed explanations of the content, which can be so important to law students, through the podcasts. The trial demonstrates that once the initial time investment required to redesign the subject and produce the learning resources has been made, blended learning can offer students the best of *both* the face-to-face and online worlds.

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<sup>1</sup> Allison Littlejohn and Chris Pegler, *Preparing for Blended e-Learning* (2007) 1.

<sup>2</sup> The term ‘hybrid learning’ is also often used: see, eg, Barbara Ross and Karen Gage, ‘Insight from WebCT and Our Customers in Higher Education’ in Curtis J Bonk and Charles R Graham (eds), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (2006) 155, 156, 160–1.

<sup>3</sup> See, eg, Charles R Graham, ‘Blended Learning Systems: Definition, Current Trends, and Future Directions’ in Curtis J Bonk and Charles R Graham (eds), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (2006) 3, 4–5; Janet MacDonald, *Blended Learning and Online Tutoring* (2006) 2–3.

<sup>4</sup> Norah Jones, ‘E-College Wales: A Case Study of Blended Learning’ in Curtis J Bonk and Charles R Graham, (eds), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (2006) 182, 185–6.

<sup>5</sup> Graham, above n 3, 5 (emphasis in original).

<sup>6</sup> Ibid 5. See also MacDonald, above n 3, 3.

<sup>7</sup> Jones, above n 4, 183, 188.

<sup>8</sup> Graham, above n 3, 5–7. See also Jones, above n 4, 185; Littlejohn and Pegler, above n 1, 36–39, 101–103. There are a range of replacement elements in use: for information on the use of personal digital assistants (PDAs) and other mobile devices such as mobile telephones, e-books, video and camera equipment, see Agnes Kukulska-Hulme and John Traxler, *Mobile Learning: A Handbook for Educators and Trainers* (2005) 7–24.

<sup>9</sup> Graham, above n 3, 17.

<sup>10</sup> MacDonald, above n 3, 49–53.

<sup>11</sup> Elliot Masie, ‘The Blended Learning Imperative’ in Curtis J Bonk and Charles R Graham (eds), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (2006) 22, 24.

<sup>12</sup> Lee Dunn, Chris Morgan, Meg O’Reilly and Sharon Parry, *The Student Assessment Handbook* (2004) 121.

<sup>13</sup> See, eg, *Legal Profession Admission Rules 2005* (NSW) sch 5.

<sup>14</sup> Paul Ramsden, *Learning to Teach in Higher Education* (2003) 147.

<sup>15</sup> Roy Stuckey et al, *Best Practices for Legal Education: A Vision and a Road Map* (2007) 171–2 <<http://cleaweb.org/resources/bp.html>> at 8 December 2008.

<sup>16</sup> Ibid 173.

<sup>17</sup> Ibid 171–2 (emphasis added).

<sup>18</sup> Ibid 119.

<sup>19</sup> Anthony Chan, Mark Lee and Catherine McLoughlin, ‘Everyone’s Learning with Podcasting: A Charles Sturt University Experience’ in *Proceedings of the 23<sup>rd</sup> Annual Ascilite Conference: Who’s Learning? Whose Technology?* (2006) 113, 118<[http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf\\_papers/](http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf_papers/)

- p171.pdf> at 8 December 2008.
- 20 John Biggs and Catherine Tang, *Teaching for Quality Learning at University* (3<sup>rd</sup> ed, 2007) 72, 81, 88.
- 21 Dunn et al, above n 12, 122.
- 22 Ibid 113.
- 23 An exhaustive treatment would also include designs, confidential information, plant breeders' rights and circuit layouts. However, a deeper and more detailed examination of the central regimes is considered by many teaching in this subject to be preferable to a treatment that covers all aspects but must do so in less detail in order to fit into a single-semester offering. Confidential information is also now covered in many compulsory Equity subjects.
- 24 Arthur W Chickering and Zelda F Gamson, 'Seven Principles for Good Practice in Undergraduate Education' (March 1987) *American Association for Higher Education Bulletin*, Principle 3 <<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/7princip.htm>> at 8 December 2008.
- 25 Also known, more colloquially, as the 'home copying' or 'iPod amendments' to the *Copyright Act 1968* (Cth).
- 26 *UWS School of Law Curriculum Review: Bachelor of Laws Programs — Final Report* (2007) Recommendation 18.
- 27 Charles Dziuban, Joel Hartman, Frank Juge, Patsy Moskal and Steven Sorg, 'Blended Learning Enters the Mainstream' in Curtis J Bonk and Charles R Graham (eds), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (2006) 195, 196.
- 28 Littlejohn and Pegler, above n 1, 30.
- 29 Jones, above n 4, 188–190.
- 30 Graham, above n 3, 15.
- 31 Littlejohn and Pegler, above n 1, 31.
- 32 Ron Oliver and Jan Herrington, *Teaching and Learning Online: A Beginner's Guide to e-Learning and e-Teaching in Higher Education* (2001) 81–83.
- 33 *University of New South Wales v Moorhouse* (1975) 133 CLR 1.
- 34 *A & M Records Inc v Napster Inc* 239 F 3d 1004 (9<sup>th</sup> Cir 2001).
- 35 See especially *Cooper v Universal Music Australia Pty Ltd* (2006) 156 FCR 380; *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* (2005) 65 IPR 289; *Metro Goldwyn Mayer Studios Inc v Grokster Ltd* 545 US 913 (2005).
- 36 Littlejohn and Pegler, above n 1, 30.
- 37 Oliver and Herrington, above n 32, 81–83.
- 38 As to John Biggs' model of constructive alignment, see, eg, Biggs and Tang, above n 20, 50–63. See also Ramsden, above n 14, 182; Dunn et al, above n 12, 216–8.
- 39 The importance of application in the problem questions was emphasised to students, indicating that the task was not a 'simple recall' form of assessment: see Ramsden, above n 14, 184–6.
- 40 Graham, above n 3, 9; MacDonald, above n 3, 41–42, 45, 53; Barbara Allan, *Blended Learning: Tools for Teaching and Training* (2007) 2–3.
- 41 See, eg, Belinda Tynan and Stephen Colbran, 'Podcasting, Student Learning and Expectations' in *Proceedings of the 23<sup>rd</sup> Annual Ascilite Conference: Who's Learning? Whose Technology?* (2006) 830, 831 <[http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf\\_papers/p132.pdf](http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf_papers/p132.pdf)> at 8 December 2008; Noeline Wright, Ross Dewstow, Mark Topping and Sue Tappenden, 'New Zealand Examples of Blended Learning' in Curtis J Bonk and Charles R Graham (eds), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (2006) 173–5; Pablo G Molina, 'Pioneering New Territory and Technologies' (2006) 41(5) *Educause Review* 113, 122–3.

- 42 Kukulska-Hulme and Traxler, above n 8, 42. See also Beverley Oliver and Veronica Goerke, 'Australian Undergraduates' Use and Ownership of Emerging Technologies: Implications and Opportunities for Creating Engaging Learning Experiences for the Net Generation' (2007) 23(2) *Australasian Journal of Educational Technology* 171.
- 43 Tynan and Colbran, above n 41, 829.
- 44 Marc Prensky, 'Digital Natives, Digital Immigrants' (2001) 9(5) *On the Horizon* 1, 2.
- 45 'Digital natives' are those born after 1980, who have grown up with technology: *ibid* 2–3.
- 46 Chan, Lee and McLoughlin, above n 19, 118. See also Stuckey, above n 15, 173.
- 47 Dziuban et al, above n 27, 204.
- 48 Allan, above n 40, 82.
- 49 Gregor E Kennedy, Terry S Judd, Anna Churchward, Kathleen Gray and Kerri-Lee Krause, 'First Year Students' Experiences with Technology: Are They Really Digital Natives?' (2008) 24(1) *Australasian Journal of Educational Technology* 108, 109.
- 50 Tynan and Colbran, above n 41, 829.
- 51 MacDonald, above n 3, 47–48, 55.
- 52 Tynan and Colbran, above n 41, 830.
- 53 Lydia Lum, 'The Power of Podcasting' (2006) 23(2) *Diverse Issues in Higher Education* 33.
- 54 Deborah L Vess, 'History to Go: Why iTeach with iPods' (2007) 39(4) *The History Teacher* 7.
- 55 Ramsden, above n 14, 151.
- 56 Allan, above n 40, 9.
- 57 Kennedy et al, above n 49.
- 58 The workload implications of e-learning are widely acknowledged: see, eg, Debbi Weaver, Christine Spratt and Chenicheri Sid Nair, 'Academic and Student Use of a Learning Management System: Implications for Quality' (2008) 24(1) *Australian Journal of Educational Technology* 30.
- 59 Institutional models for implementation and development of e-learning vary significantly between universities. For example, some models involve centralised teams of e-learning developers, who do much of the technical and design work, while others are more distributed models, in which academic staff are the primary designers and developers: compare Robert A Ellis, Nerida Jarkey, Mary Jane Mahony, Mary Peat and Stephen Sheely, 'Managing Quality Improvement of eLearning in a Large, Campus-based University' (2007) 15(1) *Quality Assurance in Education* 9 and Weaver, Spratt and Nair, above n 58.
- 60 See, eg, Sarah Bryans Bongey, Gerald Cizaldo and Lynn Kalnbach, 'Explorations in Course-casting: Podcasts in Higher Education' (2006) 23(5) *Campus-Wide Information Systems* 350, 357–359.
- 61 Oliver and Goerke, above n 42: this study confirms similar levels of access, use and ownership in Australia to those reported in several large studies in America.
- 62 Kennedy et al, above n 49, 109, 117; Robert Kvavik, 'Convenience, Communications and Control: How Students Use Technology' in Diana Oblinger and James Oblinger (eds), *Educating the Net Generation* (2005) 7.1, 7.17 <<http://www.educause.edu/educatingthenetgen/>> at 8 December 2008.
- 63 Prensky, above n 44, 2–3.
- 64 Oblinger and Oblinger, above n 62.
- 65 Kennedy et al, above n 49, 109, 117–8.
- 66 Joel Hartman, Patsy Moskal and Chuck Dziuban, 'Preparing the Academy of Today for the Learner of Tomorrow' in Oblinger and Oblinger, above n 62.

- <sup>67</sup> Oliver and Goerke, above n 42.
- <sup>68</sup> Oblinger and Oblinger, above n 62.
- <sup>69</sup> Kennedy et al, above n 49, 118.
- <sup>70</sup> Chickering and Gamson, above n 24, Principle 3.
- <sup>71</sup> Similar findings are reported by Jones, above n 4, 192. See also Dziuban et al, above n 27, 202.