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"It's the Combination That Works": Evaluating Student Experiences with a Multi-element Blended Design in First-year Law

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Abstract

This mixed method study involved twenty students enrolled in three consecutive intakes of an Australian Bachelor of Laws program's introductory unit. Pioneering a multi-element blended design, the unit featured three key elements: summary videos, self-test online quizzes and interactive discussion boards. These elements were chosen based on evidence-based research into digital tools found effective in enhancing students' face-to-face learning experience in blended and fully online designs. The study's main goal was to evaluate how students utilized these elements and in what ways their previous experiences with blended designs influenced their learning process in this unit. A focus-group and online surveys were used to collect data. Based on literature review, four areas of student experience with this blended designs formed a particular focus of this study: student expectations, support, resources, and collaboration. It was found that students extensively used videos and quizzes for catch-up, revision, and clarification, while discussion boards were not perceived as useful, with students preferring to have discussions face-to-face, in and out of classroom. Findings also indicated that students' expectations of and previous experiences with blended learning can be leveraged to strengthen blended designs.

Keywords*: Blended learning; Videos; Quizzes; Discussion boards; Law program; Student experiences*

Introduction

Responding to a demand from students for a more personalized and flexible education (Wanner & Palmer, 2015), universities invest funds and resources into various teaching and learning innovations in a bid to improve student experiences and increase retention. In particular, a move to develop from scratch or redesign previously fully face-to-face units of study in a mixed-delivery mode, combining various teaching approaches and/or utilizing technological tools, is on the rise (Fox, 2014). Its conceptions and applications are diverse, this mode of education came to be known as 'blended'. Main ongoing questions around blended learning today deal with its models, strategies, best practices, design processes, and implementation modes (Halverson et al., 2014).

Depending on intended learning outcomes, discipline-specific pedagogies, student cohort composition, resources available and many other factors, blending can be achieved by mixing or combining pedagogical strategies, educational technologies and tools, and/or delivery modes

(Pombo & Moreira, 2012). For example, blended delivery can be achieved by moving some activities from face-to-face into online environment in order to offload content-heavy teaching, or by taking advantage of available technological tools to help students effectively collaborate with peers or self-regulate their learning process. However, blending is not just about redistribution of teaching and learning activities—it is about pedagogical seamlessness and how all the elements of the blend work together to enhance learning.

A blend's design, especially its online components, is found particularly influential in shaping students' overall satisfaction with blended learning (Chen & Yao, 2016). As today's blends tend to combine more than one digital element, discussions concerned with finding the perfect balance between face-to-face and online ingredients are central in the research into effective blends. However, there is still paucity in exploration of blended designs which combine multiple technological elements (Wang et al., 2015). The study discussed in this article proposes to offer some new insights on the matter.

Building on previous research into impactful elements of blended learning designs (McGee, 2014; Alammary et al., 2014), this study reports on an evaluation research of a multi-element blend that was developed to improve learning experiences of first-year law students in a Bachelor of Laws program in a mid-sized Australian university. An exploratory small-scale case study at its core, the research draws on mixed data collected from three intakes of students enrolled in one of the program's introductory units trialling a multi-element blended design. Focusing on students' perspectives, the article reports on student usage preferences of the blend's key elements and draws conclusions in regards to the most effective combination of elements in a blend. The main purpose of this small scale case study was twofold: to evaluate this new blended learning offering for effective student usage and determine key elements of the blend to be replicated in future designs.

The main questions the study asked were:

- Which elements of the trialled multi-element blended design were of particular use to students; how did students use these elements; and how did their usage differ (if at all) from what was intended?
- How did students' previous encounters with blended learning influence their experience with this unit's blended design?

Blended Learning and Teaching

Definitions

Blended learning refers to "multiple and distinct instructional modes that combine to produce an instructional sequence", where pedagogically-sound design is central to meaningful blended learning experience (McGee, 2014, p. 33). Driven by a variety of educational, administrative and financial goals and affected by such factors as student cohort composition, teaching goals, learning focus and so forth (Pombo & Moreira, 2012), blending can be achieved by mixing or combining pedagogical strategies, educational technologies and tools, and/or delivery modes. While definitions and conceptions of blended learning design are diverse, those can generally be divided into two broad, at times overlapping, categories: designs achieved via "the combination of media and tools employed in an e--learning environment" and designs entailing "the combination of pedagogical approaches, irrespective of the learning technology used"

(Oliver & Trigwell, 2005: 17). Blended courses can also use one or several types of technologies introduced into the design to accomplish a particular educational goal (Driscoll, 2002). Regardless of the blended approach taken, mindful, seamless integration of online and face-to-face activities, pedagogies and environments is central to an impactful blend (Picciano, 2009). Moreover, each blend should be driven by context and the specific needs of a unit and its student cohort (Garrison & Vaughan, 2013).

There are various ways to conceptualize a blended design. For example, based on the intended impact, there are three types of blends (Alammary et al., 2014): low-impact blends, achieved by adding extra activities to an existing course; medium-impact blends, developed by strategically replacing some activities within an existing course with blended elements; and high-impact blends, built from scratch, requiring the most conceptual and technical input. Blended designs can also be accomplished at activity-level, unit-level, course-level or institutional-level (Graham, 2006); or blends can be enabling, enhancing or transformative, depending on their goals, intended cohorts and underlying pedagogies (Graham, 2006). Blended learning can also be discussed in the context of student and staff experiences, satisfaction and preferences. However, when discussing the 'best' practice of blended designs, it is argued that instead of defining 'best' practice, it is more pertinent to talk about the design's *effectiveness* and the pedagogy behind it (McGee, 2014).

Effectiveness

Blended learning can encourage active learning and student engagement with content as well as with peers (Garrison & Kanuka, 2004) by facilitating "questioning, investigation and discussion" (Moore & Gilmartin, 2010: 238). The personalized element that blended learning entails allows students a greater flexibility in their learning choices, more opportunities for interaction, at times development of new ICT skills, and overall increased engagement in and out of classroom (McCarthy, 2010). Online spaces, which form an important component of blended learning, can help make blended learning less intimidating to students compared to physical learning environments: students can 'trial' ideas virtually first and receive feedback before partaking in face-to-face discussions (McCarthy, 2010). However, low readiness for engagement with blended learning from both students and staff can be a challenge to effective blended experience (Zaka, 2013).

Student expectations and prior experiences are important, as they influence how students approach learning tasks and situations (author de-identified for peer review, 2016). However, the issues of quality, effectiveness and convoluted connections between students' perceptions of blended learning and their ultimate academic success and grades have been called into question (Ginns & Ellis, 2007). A range of factors, including a lecturer's engagement with technologies and online platforms (Brook & Beauchamp, 2015) and the pedagogies of blended designs, can affect the design's effectiveness.

With pedagogy understood as a "guidance [of learning] through direction towards a pre-determined end" (McGee, 2014: 35) comprising of all elements (face-to-face and online) of the learning process, pedagogical approaches driving blended learning are diverse. McGee (2014) identified 17 distinctive models. Based on the pedagogical principle known as *chunking* (McGee, 2014), blended course designs can be achieved through *frontloading* or *backloading* (Chatfield, 2010). Frontloading means the content is presented online and students are expected to engage with it prior to attending face-to-face meetings; whereas backloading is when content is

introduced face-to-face and the online components are meant to be completed before the next lecture (McGee, 2014). Regardless of the designs' overall goals, the integration of technology and face-to-face elements to enable the blend emerges as central to the blend's success (McGee, 2014). Further, students should not be overloaded with competing demands and expectations of their engagement must be made clear from the start, hence the importance of presenting all blended material and activities in a thematic way, scaffolded and aligned with learning (Moore & Gilmartin, 2010).

As today's blends tend to combine more than one digital element, discussions concerned with finding the perfect balance between face-to-face and online ingredients are central in the research into effective blends. There still remains a need for more studies reporting on multiple-element blended designs which take advantage of LMS as well as various external features (Wang et al., 2015). The study discussed in this article offers some new insights on the matter. Further, students' previous experiences with and perceptions of blended learning have not been researched with great detail, and this study offers some new insights in this regard as well.

Blended Learning and Technology

Videos

The wide-ranging use of videos in education include podcasts, clips available from free depositories and full-length lecture-recordings (author de-identified, 2017). Videos can be 'talking heads' clips, voice-over presentations and multimedia-enabled lectures (Guo et al., 2014). Aligned with lecture content and resources, videos can present information to learners in an interesting way (Cherrett et al., 2009), reinforce learning by facilitating both visual and audio engagement with content (Balslev et al., 2005) and engage students in 'real-life' simulations (Fearing et al., 2010), boosting their problem-solving skills and critical thinking (Mitra et al., 2010)

Video-based learning has been used in education for decades; however, the question of what type of videos are better for learning, and how students engage with video components of their study, remains a topical issue. With videos ranging from those professionally made and those recorded using personal capture software, the impact of video production value on student learning remains uncertain (Hansch et al., 2015). What is known, however, is that lecture capture and picture--in--picture videos are superior to the voice--over videos (Chen & Wu, 2015), while shorter videos (under five minutes) are more engaging to learners than longer ones (Guo et al., 2014). Evidence from neuroscience (Bashman & Treadwell, 1995), showed that because visual memory is overall better than verbal memory, videos can make a significant difference in the information recall, especially if both audio and visual processing are engaged (Mitra et al., 2010). To avoid split--attention effect, using one type of video delivery over several is better as it reduces cognitive overload; while a lecturer's visual presence in the video gives learners a sensation of interaction, fostering the sense of belonging (Chen & Wu, 2015). Overall, videos are sustainable resources that can be used with each new student intake and accessed from any device, anytime.

Students perceive videos as useful in improving understanding, clarifying difficult topics, improving information recall and stimulating critical thinking (Mitra et al., 2010; Loch et al., 2014; Henderson et al., 2015). Students' prior experiences can influence their engagement with videos: if at school students were exposed to videos that were effectively integrated into the

educational context, they come to expect the same pattern of use when in university (Mitra et al., 2010). Students also find it useful when they are guided in their use of videos (Mitra et al., 2010) – ideally, videos should be structured around a topic or a question.

In this study, we distinguish between full-length lecture-recordings and purposefully created shorter summary videos, the latter specifically scripted to capture key points to trigger students' memory of the lecture. When developing the Law unit in question, summary videos formed an integral part of the unit's design, their content aligned with lecture topics and readings. The other two elements in this design were self-test quizzes and discussion boards.

Quizzes

In the context of blended learning, quizzes are "offered *for learning* to reinforce reading and provide the learner feedback about their understanding rather than as an assessment *of learning*" (McGee, 2014: 40). "Low stakes assessments" enabled via quizzes have a capacity to support effective learning (McGee, 2014: 40). In regards to self-testing more broadly, it was positively associated with achievement (Hartwig & Dunlosky, 2012), and improved learning (Carpenter, 2012). As testing of prior material can facilitate the comprehension of new material (Wissman et al., 2011), memory retrieval practice enabled by self-testing tools, even when no feedback is given, is preferable to memorization (Roediger and Butler, 2011).

Students use self-testing to evaluate their progress rather than to boost performance (Hartwig & Dunlosky, 2012). Self-testing however can also be used ineffectively – for instance, when students self-test by gauging how familiar they are with a concept rather than trying to recall it from memory (Dunlosky et al., 2005). The use of self-testing quizzes in blended designs remains underreported: no studies were identified where quizzes were considered as part of a multi--element blended design.

Discussion Boards

By "allow[ing] students to scaffold and peer tutor each other" (McGee, 2014, p. 42), online discussions can foster learner autonomy and self-awareness of levels of knowledge and skill. Online discussions "serve… as a strategy to reinforce reading assignments", enable "teamwork, content clarification, and communication" and "provoke or support deeper understanding through questioning and problem solving" (McGee, 2014, p.12). Participation in LMS-hosted discussion board activities, which are mainly classified as feedback-seeking, can predict how well students perform in multiple-choice tests (Hwang & Arbaugh, 2009) as well as promote cooperation rather than competition among students (Hwang & Arbaugh, 2009). Online discussion boards can assuage students' shyness and uncertainty, allowing them to 'trial' ideas before articulating those in class (McCarthy, 2010).

Multi-element Blended Design in a First-year Law Unit

Mandatory introductory Bachelor of Law units, such as the one described in this study, are important as they welcome students into the profession, often constituting their first experience with legal studies. As students are more likely to drop-out during their first-year of studies (O'Keeffe, 2013), it is important to design their learning in a way that is engaging and encourages

future study. Therefore, the intent of this unit was to utilize blended learning design to engage students and enhance learning outcomes. The unit's teaching and learning activities include two hours of lectures, a one-hour tutorial and one hour of independent study enabled through the use of videos, quizzes and discussion boards.

Drawing on the research into effective blended models, key design elements to be implemented were identified. Understanding the needs of our cohort (Garrison & Vaughan, 2013) and that law is an information-heavy field, summary videos were introduced to provide students with the opportunity to review and revise lecture material. Self-test online quizzes were created to help students identify knowledge gaps and areas for improvement. All quizzes had three questions, however as some weeks covered more topics multiple quizzes were available in those weeks. Students who completed 10 of 18 available quizzes were awarded 10 marks (one mark for each completed quiz for a maximum total of 10 marks for the unit).

Students were offered online channels of communication (LMS based discussion boards) in addition to traditional face-to-face discussions as a means to empower students to ask questions and engage with peers and lecturers. The decision to combine summary videos with self-test quizzes was inspired by recent research (Chen & Wu, 2015) showing that learners became less apprehensive and more focused when they knew their knowledge from videos was to be tested. Aligned with the textbook material, the unit's online elements corresponded with the lecture topics rather than the order of the textbook chapters, the idea being that each lecture, comprising face-to-face and online components would work as discrete content, contextualized within the unit's broader framework.

According to the Alammary et al. (2014) typology, this unit was a high-impact blend, built from scratch, and requiring a team of experts –legal academics, academic developers and learning technologists– to create it. Based on Graham's (2006) conceptualization, this was a unit-level blend combining the elements of enabling, enhancing and transformative blends.

This Study

Research Model

Purposed with understanding cohort-based student experience in a blended law unit, this research was designed as an exploratory case study. Case study methodology was chosen because it offers a wholesome understanding of a complex phenomenon contextualized in a specific setting (Patton, 2002a; Patton, 2002b), something that large-scale studies may not offer in great details. Besides, as the unit at the center of this study was a newly design blended learning offering to the university's first intakes of undergraduate law students, a large-scale study would not be feasible. Thus, the case study model allowed a deeper focus on student experiences across three consequent cohorts, hence offering a holistic understanding of the phenomenon of student engagement with blended learning design.

A combination of focus-group and survey data sources was guided by a thematic analysis where shared understandings were highlighted without sacrificing the importance of individual differences.

The Participants

Twenty law students took part in this study (11 identified as women and 9 as men). Table 1 shows the breakdown of participants across the unit's first three consecutive iterations encompassing Semester 1 2015, Winter term 2015 and Semester 1 2016.

Table 1. Case Study Data Collection Breakdown

Teaching term	Data collection method, N	Total N of students in cohort
Semester 1, 2015	Focus-Group, N=8	64
Winter, 2015 (unit not offered in Semester 2)	Qualitative survey, N=3	24
Semester 1, 2016	Qualitative survey, N=9	55

The largest age group among the participants included those aged 18-20, and most of participants have completed high school certificate, suggesting the program attracts a large number of direct school leavers who transition into higher education after completing secondary schooling. Most participants were enrolled as local students, their primary language being English. Majority of participants worked part-time jobs in addition to studies. Further details are presented in Table 2.

Table 2. Participants' Demographics

Gender	Age	Background & enrolment	Employment	Prior education
Female: 11 Male: 9	Group 18-20: 16 Group 21-24: 2 Group: 36-40: 2	Australian born: 14 Overseas born: 6 Enrolment Domestic: 19 International: 1 Language: English as first: 17 English as second: 3	13 of 20 employed: 1 worked 1-5 hours per week 5 worked 6-10 hours per week 3 worked 11-20 hours per week 2 worked 21-25 hours per week 2 worked full time	High School: 15 Unfinished High School: 1 (admitted via Graduate Entry) Undergraduate degree: 4

Data Collection and Analysis

Drawing on prior blended learning research, four areas emerged as important for consideration when conceptualizing blended designs: student expectations (and prior experiences with blended learning), guidance and support available to students, student engagement with blended learning resources and tools for peer collaboration. These doubled as the topics of inquiry utilized during focus-group discussions with students as well as questions asked in the survey. These topics of inquiry and relevant questions are provided in Appendix A.

Focus groups were moderated and audio-recorded, then transcribed and de-identified. As per the conditions of ethical clearance received from the university's ethics committee, de-identification was performed to ensure the confidentiality and privacy of all participants. No lecturers teaching in this unit were involved in data collection or analysis for this study. Once de-identified, all data was processed and analyzed using NVivo. Wherever significant patterns in answers (frequencies of a response or a thematic co-dependency) were detected, the observation was added into the findings write-up. As survey participants responded to questions matching those asked during the focus-group, the survey answers were added into the relevant sections of the focus-group transcript and reported together. Findings are presented as uniform narrative around key themes, with direct quotes from participants used where relevant to support key ideas introduced.

Reliability and Validity

Qualitative data generated from three cohorts enrolling in this unit is reflective of real experiences of student participants and can therefore serve as a basis for some generalization (Cohen et al., 2007). The findings presented in this article provide valuable insights into the benefits and challenges that come with a multi-element blended design.

The researchers had little control over behavioral factors which may have influenced this research as student learning was occurring in real-time as the study was unfolding (Yin, 2013). This inability to control for behavioral factors as well as the small-scale nature of the study constitute the primary limitations of this research.

The data gathered from the student cohorts is reported as one set as there were no significant differences in student experiences across the cohorts, and the unit's content, delivery and teaching staff team remained constant. Twenty students participated in this study (Tables 1 & 2). Data was collected via a focus-group and online survey, both centered on four areas of investigation identified earlier (expectations, support, resources and collaboration).

Findings

Expectations

The student participants generally had no prior experience with blended learning, only one student saying they "listen[ed] to the online lectures in... a previous degree". Students had no preconceived ideas about blended learning, with only one student being "not in favor" of blended courses, while others were "excited by the opportunity" to experience blended learning

for the first time. Students' general expectations of the unit can be summarized as anticipating the unit to be "dry" and "content-heavy", requiring "heavy reading" and memorization. Students were clear about why they were taking this unit, highlighting their goal of gaining the skills and knowledge necessary to become a legal professional. Some expressed a general excitement about their entrance into law, expecting the unit to be "intense and challenging".

Most students were exposed to video-enhanced learning in school, but those videos were sourced from public repositories and presented to students as 'additional' resources rarely utilized as part of the overall learning experience. One student commented that videos sourced from external repositories (e.g., YouTube) were "not always completely relevant" to the topic and that custom-made videos were an advantage. Students agreed that custom-made summary videos aligned to lecture topics demonstrated dedication from the teaching staff in helping students to get the best out of study.

Students perceived the summary videos as valuable learning tools: watching videos, or even "short snippets", in addition to reading the text and other written materials led to "deeper learning". Videos were helpful in recalling key points from the longer lecture and this method of multi-channel learning was perceived as more effective than relying on reading and memorization only. Videos were referred to as "informative stimulus material" that helped spark interest in each new topic introduced throughout the unit: videos served as a "good introduction into the content covered each week" and "helped gain an initial insight into the area of law [students] would be looking at in class". Students also found summary videos to be a "great revision tool", however "the face-to-face component has been key to… learning as it is the best way to ask questions and further… knowledge of the content".

Students particularly appreciated videos as a learning support tool when preparing for assessments: "Everything that was in videos [was] relevant to the assignment as well [as for lecture review]". The videos presented information in a "condensed" way that "[made it] easier to remember rather than in a lecture" format: as one student elaborated, "I don't learn in lectures, I don't know what the heck is happening in lectures… But then in the online mode it's giving me the option to apply the knowledge with the questions and then revisit the information… I really liked that!"

The self-test quizzes attached to each video were provided an opportunity to immediately test new knowledge. Having access to videos and quizzes allowed for "accountability between face-to-face components," helping students gauge "what [they] did and did not know". Videos and quizzes also "worked so much better as pre-class material than reading from the text book, and the combination helps you remember it." There was overall agreement that the unit met expectations, the majority agreeing that the blended delivery "worked for them", with only one student stating that quizzes were a "waste of time". The latter may be due to the nature of the quiz questions as some students wanted quizzes to be more challenging and more specific. For example, one student suggested that "instead of asking… what the precise name of the Act is [the quiz should ask] more what it means" as "you can always look in a book what the Act's proper title is, rather than just little memory tests actually testing the application."

Overall, the students were positive about the multi-element design, noting that it was the mix of available learning materials (videos, quizzes, etc.) that made their learning more effective. As one student commented: "going through the material and then the videos [helped] solidify what [was] already known and just make it very concrete."

Support and Resources

Students discussed videos and quizzes as elements of support they found valuable: quizzes were "a way to learn content and test myself" while "[blended elements] have… become invaluable revision tools as exams loom closer". Students also valued the opportunity to ask question in class while the question was contextualized in the lecture's topic. The consensus was that when asked in an online mode, the question lost its immediacy: "When I'm reading… [lecture] slides and I'm reading the textbook I can come up with lots of questions and sometimes just emailing… those questions [to the lecturer] can seem really a little too much… It's not really going to make sense if I just email it… – you need face-to-face and doing it during the lectures when [the lecturer] is actually doing the material."

Comparing this unit's blended mode with fully face-to-face units which offered no videos or quizzes, students felt they needed a balance between face-to-face and online, and the model where one hour of lecture was replaced with online component was their preference. Experiencing videos in this unit meant students came to expect the same tools to be offered in other units, one student commenting that "[another legal unit] is really full-on with three hours [of] lecture" and that student "really liked the component in [the blended unit] where [they] could revisit the information." The clear message from the students was that "it's the combination that works."

Students felt there was no particular need for a textbook in this unit because of other ways to access information (e.g., by watching videos or reviewing lecture notes). Some felt the textbook was not as useful to their learning as they expected because in their sequencing the lectures did not follow the book's structure and hence students felt other resources were of more use to them: "The reading set was sometimes not particularly relevant and so the videos were helpful to contextualize these."

In addition to students using summary videos as learning tools ("I really, really like the videos. I think that's saving me right now, it's saving me!"), they appreciated having their activities led by questions set by teaching staff: "[the lecturer] puts up questions after she puts up the slides and everything on [LMS]." However, students expressed a preference for having the answers provided as well so that way they could verify the correct answer: "if we all do it and we all somehow get the same answer it might not be right or it might not be what [was] said in the lecture." Overall, in regards to the combination of face-to-face and online elements, the consensus was that the balance was just right and this blended design worked well for students.

Collaboration

In parallel to working with their peers in face-to-face settings, students also frequently used Facebook to organize informal study groups and to coordinate their face-to-face meetings. Students tended to blend their interactions with their peers: while they were aware of the LMS online collaboration affordances (discussion boards), they did not rely on LMS for this purpose, except for special circumstances: "I feel like the only time you do it is late before your assignment is due and you need an answer quickly and you're just doing everything that you can."

Students preferred not to reach out to peers (and instructors) via LMS ("I prefer to ask [my study group] rather than go on [LMS]"). Students' perception of the LMS's usefulness did not match their actual patterns of use: "I think the [LMS] discussion group… is really good because at least everyone's getting the same advantage compared to if you would just email [lecturers] privately… everyone can see it." It was noted that every time an important question was asked, the lecturer would post a response on the LMS for everyone to see and students appreciated these shared responses as well as LMS announcements informing them of these postings. However, some technical aspects of LMS presented a challenge to collaboration: students commented that they had to scroll through large amounts of digital content to get to the information they wanted. The consensus on digital versus face-to-face collaboration skewed in favor of the latter where both peer-to--peer and peer-to-instructor collaboration were concerned – overall, LMS was considered to be difficult to navigate and not conducive to effective collaboration.

A difference in collaboration modes emerged between direct school-leaver students and mature-age students: the latter expressing a preference for online collaboration over face-to-face. The mature age students all held full-time jobs, their primary modes of collaboration and communication with their peers being social media and texting. In regards to interacting with lecturers, these students preferred email over face-to-face. While the mature-age students appreciated face-to-face, there were other factors that hindered and/or helped collaboration, such as how engaged and motivated other students were. This difference between direct school leavers and mature-age student highlights that giving students various opportunities to collaborate (face-to-face or online) means taking into account their personal circumstances and providing diversified opportunities for students to learn.

To reiterate, most students in this unit, except for mature-age learners, preferred face-to-face collaboration over online, going as far as to say that "the online sections were individual; it didn't have an impact; the online mode didn't really encourage any kind of peer collaboration". What helped to make collaboration effective in this unit, especially for direct school leavers, were face-to-face activities as these facilitated a higher "level of comfort" and helped achieve better peer-to-peer rapport. Online discussion space was perceived as a barrier to successful communication and only a handful of students found it useful.

Conclusions

The main purpose of this small-scale case study was twofold: to evaluate this new blended learning offering for effective student usage and determine key elements of the blend to be replicated in future designs.

The main questions the study asked were:

- Which elements of the trialled multi-element blended design were of particular use to students; how did students use these elements; and how did their usage differ (if at all) from what was intended?
- How did students' previous encounters with blended learning influence their experience with this unit's blended design?

Guided by the above questions, this study investigated student experiences in a first-year multi-element blended law unit. According to the Alammary et al. (2014) typology, this unit was a

high-impact blend, built from scratch, and requiring a team of experts –legal academics, academic developers and learning technologists– to create it. Based on Graham's (2006) conceptualization, this was a unit-level blend, which combined the elements of enabling, enhancing and transformative blends. Ultimately linked to learning outcomes (Ginns and Ellis, 2007), student perceptions of blended learning were also taken into account when designing this unit. As it was expected for most students enrolling in this unit to be direct school-leavers, a working assumption dictated that only a few of them would have experienced learning in a blended prior to coming to university. While this assumption was validated during data collection stage, it was also found that students were quick to realize the benefits of learning in the blended mode and came to use videos and quizzes extensively and precisely in the way it was intended for those elements to be used. However, the unit's blended model worked generally well for other types of students as well, the blend itself being the key ingredient to success as lectures were not completely replaced with online components. Students saw this blended format as having the 'best of both worlds': they benefitted from face-to-face elements and appreciated all the learning possibilities that peer-to-peer and peer-instructor interactions provided. Students also valued the online components for review, revision, clarification of topics, and self-testing.

Students' expectations of their learning experience are important, and these need to be taken into account when designing a blend. As students in our study had minimal to no prior exposure to blended learning, they had no specific expectations from this experience. However, students were quick to realize the benefits of the blend and used videos and quizzes extensively and precisely in the way it was intended for those elements to be used.

While some studies found that digital spaces could be less intimidating to students compared to physical environments (McCarthy, 2010), students in this study mostly avoided online spaces, preferring to communicate and collaborate face-to-face. Students in this unit did not use online spaces to 'trial' their ideas before face-to-face discussions and perceptions of LMS 'flaws' prevented students from using LMS-based discussion boards. In terms of how online elements of the blend were used by students to enhance their learning, some elements were perceived as more useful as others. Videos and quizzes were used for catch-up, revision, retention of content, and clarification of concepts, but discussion boards were not seen as useful for collaboration and the face-to-face environment was preferred for effective discussion. Overall, with its access to a variety of additional resources, the multi-element design presented in this study was the key to students' positive experiences with blended learning. In the words of one of the students, it was the "combination" of elements that worked.

As blended learning entails at least some face-to-face components, it is important to design elements in a way that adds value to student experiences rather than attempting to replace those experiences that students see as critical to their success. Our research demonstrates that students valued the opportunity to ask lecturers questions in real-time and collaborate with peers face-to-face, therefore, online discussion boards were seen as limited in value. This is in contrast to students studying in fully online modes where discussion boards may provide the main opportunity for questions and collaboration. The value of summary videos, used in combination with self-test quizzes, is clearly adding value for students. It appears that cognitive triggers, such as a short video summarizing a lecture's key points, serve as a mnemonic device helping students retain information. Future research into the neuroscience of cognitive triggers and their aid in recall of information will provide even greater insight into the effectiveness of tools such as short videos and quizzes in enhancing the learning experience. What is clear from our research is that the additional resources provided through videos and quizzes were

perceived by students as adding value, particularly in relation to deepening understanding and enabling revision for assessments. The mindful integration of such resources is therefore an interesting area for continued research to enhance understanding of high quality blended design and its effect on student learning.

Ethics Statement

This research project received ethical clearance from [university de-identified for peer review] Human Research Ethics Committee (SUHREC) and follows the Australian Government's National Statement on Ethical Conduct in Human Research (2007). Any conflicts of interest were minimal and resolved by having all recruitment and data collection activities managed by researchers who had no teaching duties with participants. All data was de-identified to ensure the confidentiality and privacy of participants. To access the data used in this study, please email the corresponding author and provide a statement regarding the purposes of your request.

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Appendix A
Survey based on topics of inquiry

Consent

• Do you consent to participate in this study? Y/N

Demographics

Q1: Which gender do you identify with?
- Female
- Male
- Other
- Do not wish to answer

Q2: Please select your age range from options below
- 18-20
- 21-24
- 25-30
- 31-35
- 36-40
- 41-45
- 46-54
- 55+
- Do not wish to answer

Q3: What course are you studying?
- Write-in answer

Q4: Please enter the postcode where you currently live
- Write-in answer

Q5: You were born in:
- Australia
- Overseas

Q6: Is English your first language?
- Yes (including one of languages if bilingual from early childhood)
- No [If No, please choose from the drop-down menu]

Q7: What is your enrolment mode?
- Full Time
- Part Time
- Other (please specify)

Q10: What is your enrolment type?
- Domestic
- International

Q11: What is your highest level of education?

- High School Certificate
- TAFE/Vocational degree/Diploma
- Undergraduate degree (Bachelor)
- Postgraduate degree – Masters
- Postgraduate degree – PhD
- Other [write-in option]

Q12: If you are employed, how many hours per week do you work?

- Not employed
- 1-5 hours
- 6-10 hours
- 11-20 hours
- 21-35 hours
- Full time

Q13: How were you admitted into Swinburne Law School?

- Direct school leaver
- Non-school leaver/mature-age applicant
- Other (write-in answer)

Expectations & Experiences

- Q14: What were your expectations of this unit? (Write in your response)
- Q15: Was the unit what you had expected? Y/N
- Q16: Did the mixed mode of delivery in this unit (combining face-to-face and online components) work for you? Y/N (In the space provided, please explain what worked/did not work)
- Q17: Prior to starting this unit, what experience have you had at school or in other study of a mixed delivery mode? (Write in your response)

Support

- Q18: Did you manage to stay on top of your tasks and assignments? Y/N
- Q19: What kind of support were you offered as part of this unit? (Write in your response)
- Q20: What support did you access yourself? (Write in your response)
- Q21: What kind of support you would like to have received? (Please write your response)

Resources

- Q22: What kind of resources did you find the most useful in this unit and why? (Please write your response)
- Q23: What kinds of resources would you like to see in the future in your legal education? (Please write your response)
- Q24: What are your preferences in accessing/consuming content?
  - Face-to-face lectures
  - Online content (including videos)
  - A combination of face-to-face lectures and online content
  - Other
- Q25: Would you like more online elements in this unit or less?
  - More online elements

- Less online elements
- The same amount of online elements

Peer collaboration

- Q26: How did you mostly communicate with other students in this unit?
  - In person during lectures/tutorials
  - Online via Discussion board
  - Via email
  - Other
- Q27: How did you mostly communicate with teaching staff in this unit?
  - In person during lectures/tutorials
  - Online via Discussion board
  - Via email
  - Other
- Q28: Do you think mixed modes of delivery in this unit strengthened peer collaboration or not? If yes, in what way. If no, how do you think this could be addressed in the future?
- Q29: What helped or hindered your ability to collaborate with peers in this unit? (Please write your response)
- Q30: Did you find discussions online/face-to-face beneficial to your studies? Y/N
- Q31: Do you have preference for either online or face to face discussions, or was the blend key?
  - I prefer online discussions
  - I prefer face-to-face discussions
  - I prefer the mixed-mode/blend
- Q32: Are you a part of a study group? Y/N
- Q33: If yes, Do you find you collaborate with your group members online or face-to-face?
  - Online
  - Face-to-face
  - Other
- Q34: Do you participate in online forums as part of this unit?
- Q35: Anything else that you would like to discuss in regards to your experiences in this unit? (Please write in your response)

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