### On the Record: The Trials and Tribulations of Lecture Recording in Law

### SHARON MASCHER\* & NATALIE SKEAD\*\*

In 1999, a lecture capture, publication and management system was developed and implemented by the University of Western Australia. The system received national recognition as an innovative teaching resource and has been embraced by many universities across Australia. In the Faculty of Law at UWA, although lectures are recorded in many units, questions abound as to the effect this technology has on student learning and skills development. In first semester 2010, a comprehensive study of the use of lecture recording technology by both students and teachers in the Faculty of Law was undertaken. This article describes and analyses the results of this study with a view to informing faculty decision-making on the appropriate use of lecture recording in the teaching and learning of law.

In recent times web-based lecture technologies ('WBLT'), being 'distributed recording systems designed to digitally capture face-to-face lectures for web delivery',<sup>1</sup> have experienced a dramatic increase in popularity in higher education institutions. The appeal of WBLT lies in their capacity to provide expanded lecture delivery options for institutions in an increasingly globalised and competitive sector<sup>2</sup> and flexibility and convenience for students experiencing increasing extra-curricular commitments.

<sup>\*</sup> Professor, Faculty of Law, Thompson Rivers University, British Columbia.

<sup>\*\*</sup> Associate Professors, Faculty of Law, University of Western Australia. The authors acknowledge the significant, valuable contribution to all aspects of this project by Dr Jill Howieson, Associate Professor and Associate Dean, Faculty of Law, University of Western Australia and of Shane Rogers, Research Assistant from the Department of Psychology, University of Western Australia who conducted the statistical analysis for this project.

M McNeill, K Woo, M Gosper, R Phillips, G Preston & D Green, 'Using Web-based Lecture Technologies: Advice from Students' (Paper presented at HERDSA Annual Conference, Adelaide, 8–11 July, 2007) 2.

M Fardon, 'Internet Streaming of Lectures: A Matter of Style (Paper presented at EDUCAUSE in Australasia Conference, Adelaide, 6–9 May, 2003); R Phillips, M Gosper, M McNeill, K Woo, G Preston & D Green, 'Staff and Student Perspectives on Web Based Lecture Technologies: Insights into the Great Divide' (Paper presented at the ASCILITE Conference, Singapore, 2–5 December 2007) 854.

While there has been substantial research and scholarship on the impact of WBLT on teaching and learning in higher education,<sup>3</sup> there is little research on the use and impact of WBLT in the teaching of law.<sup>4</sup> It may be surmised that the absence of scholarship in this specific area of tertiary education is because the take-up of these technologies was not embraced with the same degree of enthusiasm in law than it was in other disciplines.<sup>5</sup>

In 1999, a lecture capture, publication and management system, now known as Lectopia, was developed and implemented by the University of Western Australia ('UWA'). This system received national recognition as an innovative teaching resource and has been embraced by many universities across Australia.<sup>6</sup> In the Faculty of Law at UWA, although lectures are recorded in many units, questions abound as to how to integrate Lectopia with teaching law and what effect the adoption of this technology has on students' learning and, more particularly, on the

- 4. An unpublished survey of law students conducted at Monash University in 2006 is discussed, and a further survey about attendance and the use of recorded lectures is foreshadowed in K Buxton, K Jackson, M DeZwart, L Webster & D Lindsay, 'Recorded Lectures: Looking to the Future' in L Markauskatte, P Goodyear & P Reimann (eds), *Proceedings of the 23rd Ammal ASCILITE Conference: Who's learning? Whose Technology?* (Sydney: Sydney UP, 2006). A survey was conducted in 2006 and 2007 by an organisation in the United States called Computer-Assisted Legal Instruction (CALI) to assess the results of a Legal Education Podcasting Project in which 30 faculty members from Law faculties across the United States volunteered to record their classroom lectures or create weekly summary podcasts for their students <a href="http://caliopolis.classcaster.org/blog/legal\_education\_podcasting\_project/2006/07/05/leppsurvey">http://caliopolis.classcaster.org/blog/legal\_education\_podcasting\_project/2006/07/05/leppsurvey</a>. See also DWatkins, 'Podcasting: A Lawyer's Tale' (2010) 44 *The Law Teacher* 169, which discusses the introduction of podcasting in Trusts and Equity at the School of Law, University of Leicester.
- 5. In a 2008 survey of law student experience conducted across nine UK universities, only 31% of students agreed or strongly agreed with the statement 'Podcasts or other uses of technology (such as wikis and blogs) are used by my tutors': see A Bone, 'The 21st Century Law Student' (2009) 43 *The Law Teacher* 222, 242–3.
- 6. <a href="http://www.catl.uwa.edu.au/elearning/lectopia/about">http://www.catl.uwa.edu.au/elearning/lectopia/about</a>>.

<sup>3.</sup> This research includes a collaborative project by Macquarie University, Murdoch University, University of Newcastle and Flinders University funded by the Carrick Institute for Learning and Teaching in Higher Education (now the Australian Learning and Teaching Council), an initiative of the Australian Government Department of Education, Employment and Workplace Relations. This research project resulted in numerous papers in the area including McNeill et al, above n 1; Phillips et al, above n 2; M Gosper, M McNeill, K Woo, R Phillips, G Preston & D Green, 'Web-based Lecture Recording Technologies: Do Students Learn from Them?' (Paper presented at EDUCAUSE Australasia Conference, Melbourne, 30 April-2 May 2007); K Woo, M Gosper, M McNeill, G Preston, D Green & R Phillips, 'Web-based Lecture Recording Technologies: Blurring the Boundaries Between Face-to-face and Distance Learning (2008) 16 ALT-J 81: M Gosper, D Green, M McNeill, R Phillips, G Preston & K Woo, Report on the Impact of Web-Based Lecture Recording Technologies on Current and Future Practices in Learning and Teaching (April 2008). An extensive amount of research has also been conducted at UWA by Michael Fardon, Academic Director of the Multimedia Centre, including a 2004 case study on the usage of lecture recordings by students at UWA which included an online survey completed by 1,262 students. The results of that survey are reported in J Williams & M Fardon, 'On-Demand Internet-Transmitted Lecture Recordings: Attempting to Enhance and Support the Lecture Experience' (Paper presented at ALT-C, 6-8 September 2005). See also M Fardon & A Ludewig 'iLectures: A Catalyst for Teaching and Learning?' in R Sims, M O'Reilly & S Sawkins (eds), Learning to Choose - Choosing to Learn: Proceedings of the 17th Annual ASCILITE Conference (Lismore: Southern Cross UP, 2000) 45.

development of attributes and skills law graduates are expected to demonstrate on completion of their law studies.<sup>7</sup>

Recently, the need for Australian law schools to identify and develop graduate attributes and skills-based learning outcomes has received renewed attention. A new national standards-based quality assurance framework is driving the articulation and embedding of graduate attributes and learning outcomes in higher education generally. Under this framework, the Tertiary Education Quality and Standards Agency ('TEQSA') will be tasked with evaluating University programmes of study against a range of agreed standards. In line with this new regulatory development, the Australian Government tasked the Australian Learning and Teaching Council with facilitating and coordinating the development of discipline-specific academic standards in preparation for the creation of TEQSA. In turn, the Learning and Teaching Academic Standards project was established to develop 'Threshold Learning Outcomes' ('TLOs') for the various discipline communities, including law. The TLOs define the 'minimum discipline knowledge, discipline-specific skills and professional capabilities including attitudes and professional values that are expected of a graduate from a specified level of program in a specified discipline area'.<sup>8</sup> The TLOs for the Bachelor of Laws ('LLB') are: (i) knowledge expected of a law graduate; (ii) ethics and professional responsibility; (iii) thinking skills; (iv) research skills; (v) communication and collaboration; and (vi) selfmanagement. The adoption of these TLOs for Law built on earlier national initiatives focussing on the development of graduate attributes including the development of graduate attributes specific for the discipline of Law.9

In making specific reference to skills and attributes in the articulation of TLOs, it is now critical for all law schools and law teachers to take the development of such skills and attributes seriously. Apart from broader questions of embedding and mapping skills development into a curriculum, at unit level individual teachers will be required to integrate skills-based teaching into their unit programmes. Difficult questions as to how this can be achieved in the face of increasing reliance on WBLT will require careful consideration and planning. For UWA, these questions become more acute as the university moves to a new course structure in 2012, which will result in the study of law in a post-graduate Juris Doctor ('JD') degree rather than the undergraduate LLB currently offered. At UWA, in order to answer

These attributes and skills are detailed at <http://www.law.uwa.edu.au/courses/outcomes>. For a
discussion of the development of these graduate attributes and the overall LLB course outcomes
see: N Witzleb & N Skead 'A Bottom-up Approach to Developing LLB Course Outcomes and
an Integrated Curriculum' (2009) 43 *The Law Teacher* 62.

<sup>8.</sup> See S Kift, M Israel & R Field, *Learning and Teaching Academic Standards Statement*, Academic Standards Project, Bachelor of Laws (ATLC, 2011) [1]. The TLOs are accompanied by Explanatory Notes that offer non-prescriptive guidance on interpretation

<sup>9.</sup> For a discussion on the various national initiatives that led to the development of TLOs for Law, see N Witzleb & N Skead, 'Mapping and Embedding Graduate Attributes Across the Curriculum' in S Kift, J Cowley & P Watson (eds) *Excellence and Innovation in Legal Education* (Sydney: LexisNexis, 2011).

these difficult questions, it was considered necessary to first understand how and why law students are using lecture recordings. It was also considered important to appreciate choices teachers are making about the use of this technology in the classroom and their perceptions of its impact on teaching and learning in their units. To this end, a comprehensive survey of students and teachers in the Faculty of Law was conducted in first semester 2010. This article describes and analyses the results of this survey with a view to informing faculty decision-making on the appropriate scope and extent of lecture recording in the teaching of law both in teaching out the LLB as well as in the imminent postgraduate law degree. While the discussion and analysis in this article is based on student and teacher practices in the Faculty of Law at UWA, the information gleaned from this study provides a useful resource for all those grappling with the place and value of ever-increasing information technology options available in the teaching of law.

#### LECTOPIA - THE INSTITUTIONAL CONTEXT

Initially known as the iLecture System, Lectopia was developed by the Arts Multimedia Centre at UWA in 1998 as a means to automatically capture audio and/ or video materials presented during a lecture and make these materials available via the web to students in a variety of streamed and/or download formats. With the information available 24 hours a day, seven days a week, the development of this system reflected and responded to UWA's 'commitment to flexible modes of teaching and learning'.<sup>10</sup> The system was first implemented in 1999 and is currently used widely across the institution in all faculties. The extensive impact of and reliance on lecture recordings is evidenced by the report that in first semester 2010 Lectopia 'recorded over 700 lectures each week at UWA, and received an average of 45,000 hits per week'.<sup>11</sup> Further afield, by 2009 Lectopia had been licensed to 20 Australian universities and colleges.<sup>12</sup> That Lectopia was an innovative and welcome teaching resource is reflected in the project winning an ALTC (previously Carrick Institute) award for 'Services Supporting Student Learning' in 2007. Lectopia was acquired by Anystream Apreso in 2007 and in 2009 was replaced by EchoSystem.13

In light of the history of Lectopia, it is perhaps not surprising that the technology has enjoyed significant institutional support at UWA. Indeed, in November 2009 the UWA Teaching and Learning Committee recommended to Academic Council:

That all lectures in all venues which have recording facilities be recorded and made available to students. Exceptions should only be made when approved in advance by the Head of School and when at least one repeat lecture is provided.<sup>14</sup>

<sup>10. &</sup>lt;http://www.catl.uwa.edu.au/elearning/lectopia/about>.

<sup>11.</sup> Ibid.

<sup>12.</sup> Ibid.

<sup>13. &</sup>lt;http://lectopia.com.au/index.lasso?-session=iComm\_Client:8AD9F4040eace1C47Bxtt1B90E AA>.

<sup>14.</sup> Extract from minutes of the meeting of UWA Teaching and Learning Committee (12 November 2009) R53/09.

In response, the Academic Council referred the recommendation back to the faculties.

The current UWA policy on lecture recording, approved by Academic Council in September 2010, does not compel lecture recording but rather 'strongly encourages the continued provision of captured lectures as a complement to face-to-face lecturing'.<sup>15</sup> The policy also states, as one of many principles, that 'when captured lectures are the primary method of teaching they must be specifically prepared for the purpose, appropriately supported with relevant learning resources and the Learning Management System must be used to ensure active engagement'.<sup>16</sup>

#### LECTOPIA - THE UWA FACULTY OF LAW CONTEXT

In order to acquire an LLB degree, law students at UWA are currently required to complete 21 core units and a specified number of elective units. The vast majority of students enrolled in the LLB are combined degree students, completing their LLB and another degree over a combined period of five or more years. In keeping with the Australian legal tradition, the majority of core law units are taught using a lecture/tutorial format. However, a select number of core units are offered by way of small groups which, while resource intensive, provide an opportunity for broad participation, more active engagement with the substantive content and the opportunity to develop important skills such as the ability to formulate clear and coherent arguments and answers to questions in the course of class discussions. The format of the elective law units also varies, with some taught by way of lectures/tutorials, others by seminars and still others in an intensive format. An intensive format is particularly common for units with a practical orientation.<sup>17</sup> In 2010, lectures in 15 core units were recorded while lectures in only six core units, four of which are taught in small groups, were not. In the same year, Lectopia was used to capture lectures in 15 law elective units while 15 law electives were not recorded.<sup>18</sup> In no instance were tutorials recorded.

Historically there has been concern on the part of several members of the teaching staff within the UWA Faculty of Law as to the impact of lecture recording on learning and skills development. This concern resulted in development of a faculty policy on the use of lecture recording in 2008. The policy provides, in part, that:

The UWA Law School is not a distance education provider and it is therefore educationally desirable for students to attend all classes. We have not adopted Lectopia as a substitute for your face-to-face engagement with Law School staff and peers. The extent to which units in the Law School utilise Lectopia is at the discretion of the lecturers teaching that unit. The merits of using Lectopia are

<sup>15.</sup> UWA Policy on Lecture Capture, UP10/9, approved by Academic Council (28/09/2010).

<sup>16.</sup> Ibid.

<sup>17.</sup> Eg, Alternative Dispute Resolution ('ADR'), Forensic Advocacy and Negotiation and Mediation.

<sup>18.</sup> These numbers count only once limited enrolment units such as Forensic Advocacy, Negotiation and Mediation, and ADR which are offered more than once during the academic year.

weighed up for each unit after careful consideration of that unit's needs and learning outcomes and therefore you should not have an expectation that all lectures or units in the Law School will necessarily be recorded.<sup>19</sup>

The UWA Teaching and Learning Committee recommendation in 2009 to record all lectures in venues supporting the technology unless exceptions are granted, prompted the Faculty of Law to examine more closely its attitude to lecture recordings.

While acknowledging the importance of lecture recordings in supporting and accommodating students' disabilities and the reliance of the student body generally on lecture recordings, the need for greater understanding of the impact of lecture recordings on teaching and learning was regarded as necessary for informed decision-making in this regard. As noted by Larkin in commenting on Kane, Sandretto and Heath's description of the general characteristics of excellent teachers,<sup>20</sup> '[t]his model reinforces the need for educators to evaluate and reflect upon new teaching techniques and technologies as they become available ... new initiatives and practices need to be accompanied by evidence of a sound pedagogical basis'.<sup>21</sup>

The need for evaluation and reflection is of particular relevance to the Faculty of Law at UWA in light of the impending changes to course structures. From 2012, UWA will introduce a new streamlined course structure. Under the new structure undergraduate students will enrol in one of five broad undergraduate degrees providing a simple, flexible course structure allowing students 'to move from a broad range of subjects in first year to a more focussed approach as you progress'.<sup>22</sup> Professional degrees will be taken at postgraduate level. In relation to

<sup>19.</sup> For details of the UWA Faculty of Law Lectopia Policy, see <http://www.law.uwa.edu.au/ students/policies>. This policy is not unique, with other Australian law schools adopting policies similarly aimed at the relationship between class recordings and attendance. The University of Melbourne Law School, for example, has also developed a policy regarding Lectopia within a Policy on Learning & Teaching Culture for its LLB program which similarly provides its Faculty with the discretion to determine whether or not to record lectures and the 'expectation that students attend lectures, tutorials and seminars for all classes in which they are enrolled': see <http://undergraduate.law.unimelb.edu.au/go/current-students/policies-on-learning-andteaching-culture/index cfm>. In relation to the JD program, the JD Course Rules and Policies state that '[o]wing to the discussion-based nature of JD classes, the Law School does not record JD seminars': see <http://jd.law.unimelb.edu.au/index.cfm?objectid=B67829BC-5056-B405-517C83DA30B0AE6C>. Monash University Faculty of Law refers students to the Monash University Codes of Practice for Teaching and Learning which states: 'Students ... have the following responsibilities - for on-campus students, to attend lectures, tutorials and seminars for each unit in which they are enrolled'.

<sup>20.</sup> R Kane, S Sandretto & C Heath, 'An Investigation into Excellent Tertiary Teaching: Emphasising Reflective Practice' (2004) 47 *Higher Education* 283.

H Larkin, "But They Won't Come to Lectures...". The Impact of Audio Recorded Lectures on Student Experience and Attendance' (2010) 26 Australasian Journal of Educational Technology 238, 241.

<sup>22.</sup> See <http://www.newcourses2012.uwa.edu.au/courses/undergraduate>.

law this will mean that from 2012, the Faculty of Law will no longer run an LLB programme. Rather, from 2013 students wishing to study law will enter the three year JD programme on completing an undergraduate degree.<sup>23</sup> As a result, it is anticipated that, under the new course structure, students enrolling in a law degree at UWA will, as a whole, be more mature, skilled and experienced learners. This change in student profile will require law teachers to reassess learning outcomes and teaching, assessment and feedback strategies. Entering this transition phase, it is crucial to understand how current pedagogical practices, including the use of WBLT and lecture recordings, impact on students' learning practices and outcomes. The study described and discussed in this article was aimed at providing this understanding.

#### **OBJECTIVES OF STUDY**

The objectives of the study were fivefold: (i) to assess whether and the extent to which law students at UWA use lecture recordings; (ii) to determine if, as the anecdotal evidence from teachers suggests, students use lecture recordings as a substitute for class attendance; (iii) to ascertain how students use the technology as a learning tool; (iv) to determine the impact of lecture recordings on student learning; and (v) to examine the effect of student use of lecture recordings on the attitudes and teaching practices of UWA law teachers.

It is intended that achieving these objectives will result in meeting the overarching objective of better informing teaching practices within the faculty so as to optimise student learning and the student tertiary experience, particularly as the faculty transitions into the JD.

#### METHODOLOGY

This study complies with the National Health and Research Council of Australia's National Statement on Ethical Conduct in Human Research. Institutional ethics approval for this study was obtained from the UWA Human Research Ethics Committee before the study commenced.

Information for this study was gathered by way of both student and teacher surveys. The student survey was conducted in class. To encourage broad participation from law students at various stages in their degree, the survey was run through tutorials and small group classes in a core law unit at each level of study.<sup>24</sup> None of the classes in which the survey was conducted are recorded and all generally report very high student attendance thereby optimising the number of students captured by the survey. Stating in the preamble that the survey was voluntary and

<sup>23.</sup> For further details on the new course structures at UWA, see <a href="http://www.newcourses2012.uwa">http://www.newcourses2012.uwa</a>. edu.au>.

<sup>24.</sup> The surveys were administered in Torts I small group classes and Criminal Law 1, Equity, Administrative Law 1 and Civil Procedure tutorials.

anonymous, the survey included 43 questions and instructed students to direct their response specifically to their law units.

Teachers were invited to complete the teacher survey which was similarly voluntary and anonymous. Hard copies of the survey form were distributed to law teachers and returned through internal mail.

#### RESULTS

#### 1. Response rate

A total of 986 law students completed the student survey. While it is not possible to state with precision what proportion of all UWA law students this represents, it is estimated that it represents 63% of all undergraduate students enrolled in the LLB degree at UWA and 68% of all students enrolled in the units in which the survey was conducted.<sup>25</sup> Of the students completing the survey, the vast majority (94.8%) indicated that they were full-time students. As anticipated by virtue of the units selected in which to administer the survey, the students who responded to the survey were well distributed across the various years of law study.<sup>26</sup> A total of 19 law teachers responded to the teacher survey representing a response rate of around 50%, with the respondents teaching across core and elective, recorded and non-recorded units offered in a variety of formats (lectures, small groups and seminars).

#### 2. Student survey results - quantitative analysis

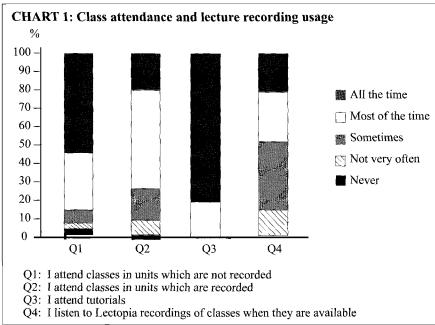
#### Class attendance and lecture recording usage

The student survey commenced by collecting general information about class attendance and lecture recording usage. In the first part of the survey, students were asked to indicate how often they attend classes in units which are not recorded and in units which are recorded and how often they listen to recordings of classes when they are available. The responses to these questions are shown in Chart 1 opposite.

The responses indicate that attendance at non-recorded classes is very high, with 99% of respondents indicating they attend non-recorded tutorials 'all the time' or 'most of the time' and 1% attending 'sometimes' and 85% indicating they attend other non-recorded classes 'all the time' or 'most of the time'. Only 15%

<sup>25.</sup> It should be noted, however, that some law students were enrolled in more than one of the five units in which the survey was conducted. For example, a graduate entry student would enrol in both Criminal Law and Torts in his or her first year of study and Administrative Law and Civil Procedure in his or her third and final year of study. These students were instructed to only complete the survey once. As a result, the response rate for the survey was significantly higher than the 68% indicated.

<sup>26.</sup> Approximately 28% of the students who completed the survey were in their 1st year at UWA, 23.4% in their 2nd year, 18.3% in their 3rd year, 14.3% in their 4th year, with the remaining 13.9% having spent 5 or more years studying law.



of respondents reported that they attend classes that are not recorded 'sometimes' (7%), 'not very often' (3%) or 'never' (5%). It is acknowledged that there may be students enrolled in the units in which the survey was conducted who never or rarely attend classes who were not in attendance at their small groups and/ or tutorials on the day the survey was conducted and therefore would not have participated in the survey resulting in this percentage of 15% being artificially low. The high response rate to this survey<sup>27</sup> would suggest, however, that these students represent a small proportion of students enrolled in law at UWA.

In relation to attendance at law classes which are recorded, 20% of respondents indicated that they attend 'all the time', and 53% 'most of the time', while 27% responded that they attend 'sometimes' (17%), 'not very often' (8%) or 'never' (2%). Overall, these results indicate that attendance at non-recorded classes is significantly higher than attendance at recorded classes (t(727) = 12.94, p < .001).

The responses also indicate a very high usage of lecture recordings, with 84% of respondents indicating that when available they use Lectopia 'all the time' (21%), 'most of the time' (27%) or 'sometimes' (36%). Those students that report a lower level of attendance at recorded classes also report higher usage of recordings while, conversely, students who report higher attendance at recorded classes tend to listen to recordings less often (r = -0.37, p < 0.001).

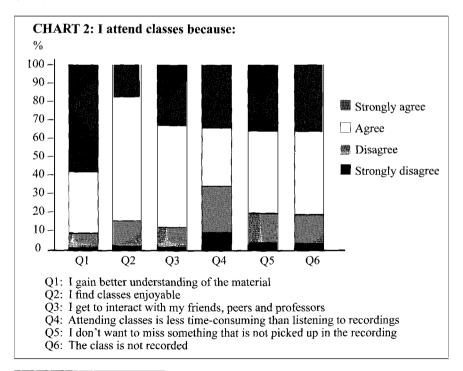
415

<sup>27.</sup> See above n 25.

#### Reasons law students attend or do not attend classes

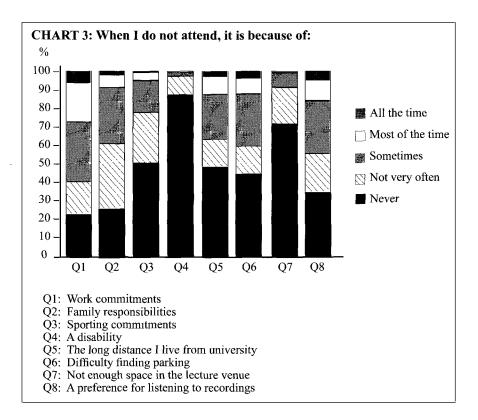
The second aspect of the survey was aimed at ascertaining why law students attend and do not attend classes in law. The survey provided a wide range of reasons for attending and not attending class (respondents were asked to 'strongly agree', 'agree', 'disagree' or 'strongly disagree'). The relevant responses relating to reasons for attending or not attending classes are shown below in Charts 2 and 3 respectively.

According to the survey results, the primary reason law students attend classes is to gain a better understanding of the material, with 92% of respondents 'agreeing' or 'strongly agreeing' with this reason.<sup>28</sup> A very high 84% either 'agreed' or 'strongly agreed' that they attend classes because they find attending classes enjoyable, while 87% 'agreed' or 'strongly agreed' that they attend class to interact with friends, peers and professors. However, a large number of law students also reported the non-recording of classes as a factor in their attendance. Eighty percent of the respondents 'agreed' or 'strongly agreed' that they attended classes because they do not want to miss something that is not picked upon in the recording or because the lecture was not recorded. A majority of students also 'agreed' or 'strongly agreed' that attending class was less time-consuming than listening to recordings (65%).



<sup>28.</sup> Indeed, this reason is significantly higher than all other reasons for attending class by about half a response point (all ps < 0.001).

Law students who reported attending classes to gain a better understanding of the materials also tended to be those who report higher levels of enjoyment from attending classes, value interaction with friends, peers and professors, are concerned about missing something if relying on a recording and find attending classes less time consuming than listening to recordings (the correlation of Question 6 with Questions 7, 8, 9 & 10 is r = 0.39, r = 0.28, r = 0.3 and r = 0.25, p < 0.01, respectively). There is also a strong correlation between students who report enjoying class and those who value interactions with friends, peers and professors (r = 0.49, p < 0.01). Together the responses to these questions suggest that students who attend class to learn also engage with the materials and the other members of the faculty community, which in turn results in a higher level of enjoyment in their studies. In addition, the survey sought to ascertain the reasons for law students not attending classes by asking respondents to indicate whether specified reasons prevented them from attending classes 'all the time', 'most of the time', 'sometimes', 'not very often', or 'never'. Of the reasons specified in the survey, work commitments is the most common reason reported for nonattendance, with 59% of law students completing the survey indicating that when they do not attend class it is because of work commitments 'all the time' (6%), 'most of the time' (21%) or 'sometimes' (32%). Another significant, although



less common, reason identified for non-attendance is family commitments, with 39% of respondents indicating that family commitments present an obstacle to attendance 'all the time' (2%), 'most of the time' (7%) or 'sometimes' (30%). Interestingly, those students who report that work commitments impact upon their attendance also point to family commitments as an obstacle to attendance (r = 0.36, p < 0.01). As might be expected, occasional illness or dentist and doctors appointments are also cited as reasons for non-attendance at class by law students although this is the reason for non-attendance only 'sometimes' (40%) or 'not very often' (33%).

Of particular note for the purposes of this study is the number of law students (45%) who report that the reason they do not attend class is a preference for listening to recordings. Five percent of respondents indicated this is the reason for not attending classes 'all the time' while 12% and 28% respectively selected this as the reason 'most of the time' or 'sometimes'.

Also of note is the least common reason identified for non-attendance at law classes, that of disability. In relation to disability, 0% percent of survey respondents indicated this is a reason for non-attendance 'all the time', 1% report this was the reason 'most of the time' and 3% report it is the reason 'sometimes'. These results suggest that disability prevents a very small minority of law students from attending classes. However, it is recognised that a law student with a disability which prevents them from attending classes may well not have been in attendance to complete the survey and further research is warranted to fully understand the extent to which disability impacts on attendance at law classes.

Respondents were also given the opportunity to indicate reasons additional to those listed in the survey which result in them not attending classes. A variety of additional reasons (162 in total) were provided by individual students. Common themes occurred in relation to many of the responses. In particular, several students indicate that when they do not attend it is because they are completing assignments or preparing for exams in other units (32), recordings offered a better alternative to attendance in classes where, for example, the material is delivered too quickly (34), students have clashes with other classes (27) or have timetabling issues, such as early classes or only one class in the day (21). Given the total response rate of 986, each of these reasons, on their own, represent a very small proportion of the overall student sentiment.

Of further interest is the relationship, if any, between the reasons law students identify as interfering with class attendance and the frequency with which they report missing recorded and non-recorded classes. No correlations were apparent between the different reasons for non-attendance and the degree of non-attendance at classes which are not recorded. Rather, individual students report relatively high levels of attendance at non-recorded classes regardless of the reason they identify

as presenting an obstacle to attendance. In short, when classes are not recorded the respondents report that they generally find a way to get to them.

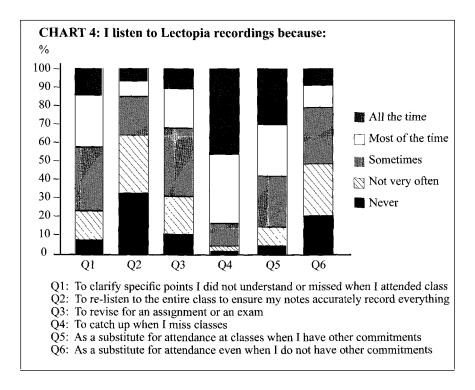
However, work commitments and a preference for listening to recordings do become factors affecting attendance when classes are recorded.<sup>29</sup> Indeed, law students who report a preference for listening to recordings as the reason they do not attend classes 'all the time' or 'some of the time' also report a substantially lower level of attendance at recorded classes. That is, a preference for listening to recordings is the most meaningful predictor of non-attendance at classes which are recorded classes is work commitments, although less predictive than a preference for recordings (b = 0.45, p < 0.05). Given that students appear to try to attend classes which are not recorded, regardless of their work or other outside commitments, this might suggest that law students are more likely to structure their work commitments to coincide with recorded law classes than those which are not recorded.

#### Importance and uses of lecture recordings as reported by law students

An important outcome of the study discussed in this article was to determine how and why law students at UWA use lecture recordings. To this end, the third part of the student survey asked students to first indicate whether they 'strongly agree', 'agree', 'disagree' or 'strongly disagree' that lecture recording in law is important to them. The vast majority of respondents either 'strongly agreed' (66%) or 'agreed' (27%) with this proposition, indicating that UWA law students regard the recording of lectures as an important aspect of their learning. Understanding why this is so was an important focus of this study. To elicit this understanding, respondents were asked to indicate the reasons they do and do not make use of lecture recordings. Again, the survey provided a wide range of reasons in relation to each. Respondents were asked to indicate whether they listened to lecture recordings for each of the given reasons 'all the time', 'most of the time', 'sometimes', 'not very often' or 'never'. In addition, respondents were asked to indicate whether they 'strongly agreed', 'agreed', 'disagreed or 'strongly disagreed' with each of the reasons given for not listening to lectures. Respondents were given the opportunity to state their own reason for their use or non-use of lecture recordings. The relevant responses relating to reasons for listening or not listening to lecture recordings are shown below in Charts 4 and 5 respectively.

In relation to the use of lecture recordings, Chart 4 demonstrates that of the reasons specified in the survey instrument, by far the most common reason for listening to lecture recordings is catching up on missed classes with 83% of respondents reporting this as a reason 'all the time' (46%) or 'most of the time' (37%). Fifty

<sup>29.</sup> The analysis was conducted by way of a backwards (reverse) stepwise progression of responses to survey question 2 (relating to attendance at recorded classes) using all questions relating to reasons for non-attendance as the predictor variables with SPSS removing statistically unimportant predictors one at a time until the best model was reached. The best model significantly predicted attendance to recorded classes, R2 = 0.3, F(5,964) = 83.46, p < 0.05.

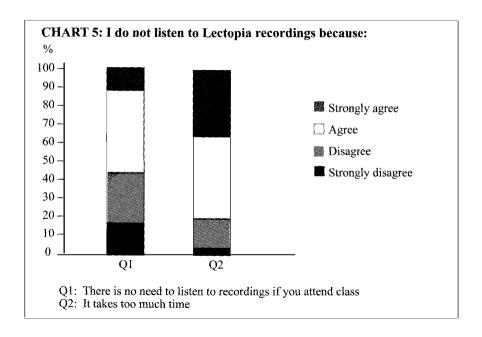


eight percent of respondents indicate that 'all the time' (30%) or 'most of the time' (28%) they listen to lectures as a substitute for attendance at classes when they have other commitments, while 21% report the reason they use lecture recording is to substitute for attendance either 'all the time' (9%) or 'most of the time' (12%)even when they have no other commitments. There is a strong negative correlation (r = -0.49, p < 0.01) between students who report using lecture recordings more often as a substitute for classes even when they do not have other commitments and students who attend recorded classes. In other words, students who report less attendance at recorded classes report increased use of lecture recordings as a substitute for attending recorded classes even when they do not have other commitments. This correlation suggests that the mere fact that a class is recorded is a compelling reason for a student not attending that class. Further, and perhaps not surprisingly, the statistical analysis undertaken indicates a strong positive correlation (r = 0.5, p < 0.01) between those students who expressed a preference for lecture recordings above lecture attendance and those who report using lecture recordings as a substitute for attendance at classes even when they do not have other commitments. While the reasons for such a preference are not clear from the survey,<sup>30</sup> it is reasonable to suggest that the recording of lectures in law is a

<sup>30.</sup> Thirty three students report using lecture recordings to aid note-taking when the lecture is too fast or is difficult to follow while 35 students cite reasons relating to cost, convenience and comfort including, 'l enjoy sleeping in' and 'laziness on my part'.

significant stand alone factor affecting class attendance in law at UWA independent of disability, work and other outside commitments and timetable clashes.

Chart 4 further indicates that over 40% of respondents listen to lecture recordings 'all the time' (13%) or 'most of the time' (28%) even when they have attended classes in order to clarify issues raised in the class. Further, one-third of respondents report listening to recordings to revise for an assignment or an exam 'all the time' (11%) or 'most of the time' (22%). There is a strong positive correlation (r = 0.49, p < .01) between these two student study habits, indicating that there are a number of law students at UWA for whom lecture recordings complement their class attendance and are an integral part of their study regimen.



Regarding reasons given for not listening to lecture recordings, 56% of respondents 'strongly agree' (12%) or 'agree' (44%) that they do not listen to lecture recordings 'because there is no need to listen to recordings if you attend class' and 38% either 'strongly agree' or 'agree' that listening to lecture recordings takes too much time.

#### Predicting academic performance

In the student survey respondents were asked to indicate whether or not they are Honours students. Typically, a student must be ranked within the top 20% of his or her cohort to be invited into the UWA LLB Honours program. Twentysix respondents indicated that they were Honours students. This represents 78% of the 2010 Honours cohort in law at UWA. A multiple regression analysis of the survey results was not particularly informative as a predictor of academic results of law students at UWA. However, the student responses do indicate that, proportionately, Honours students do not make as much use of lecture recordings as other students.<sup>31</sup>

#### Additional student comments

Student respondents added a total of 414 comments to the survey instruments. In keeping with the survey results, the comments reflect the fact that the vast majority of law students surveyed regard lecture recording as an important and necessary study tool. Many of the supporting comments do not give reasons, for example; 'Never get rid of it! It is the best' and 'I love Lectopia! Small group classes should be recorded too!', and 'I would die without Lectopia', while others cite reasons relating to work and family commitments, timetable clashes, catching up missed classes, clarification and revision in support of the technology. Support for the recording of law classes is not, however, unanimous, with some comments not supportive or, at best, ambivalent, about the use of this technology. Examples of these comments include, 'I do not use it!', 'Don't use Lectopia as recordings are unclear...', 'Recordings are seen as a substitute and not a complement', and 'I don't particularly find Lectopia useful because I find that lectures aren't particularly detailed.'

#### **Teacher survey results**

#### Reasons given by teachers for recording or not recording classes

The teacher survey instrument asked teachers in the Law Faculty to indicate the types of classes they record and do not record and to give their reasons for recording or not recording their classes. The survey provided a range of reasons for recording or not recording classes, with respondents instructed to rank the reasons from most to least relevant. All respondents indicated that they do not record small group classes and tutorials, 88% do not record seminars while only 12% do not record lectures. It follows that, generally, the classes that are recorded are mostly lectures.

The three most relevant reasons given by teachers for not recording classes are: (i) the format of the class is not appropriate for recording; (ii) I want the students to attend my classes rather than listening to the recordings; and (iii) there are pedagogical reasons not to record. The pedagogical reasons given to support reason (iii) above include:

<sup>31.</sup> This finding is supported by the findings of a survey conducted in an undergraduate software engineering unit at Curtin University of Technology as reported in B von Konsky, J Ivins & S Gribble, 'Lecture Attendance and Web Based Lecture Technologies: A Comparison of Student Perceptions and Usage Patterns' (2009) 25 Australasian Journal of Educational Technology 581, 590–1. See also S Chang 'Academic Perceptions of the Use of Lectopia: A University of Melbourne Example' (Paper presented at the ASCILITE Conference, Singapore, 2–5 December 2007).

Promoting active learning and skills development. Also, students should be free to contribute without their comments being recorded and available online...

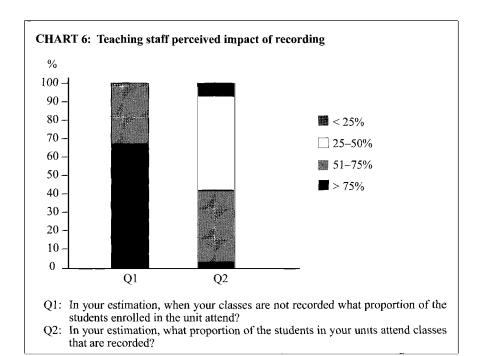
Interaction, participation, embarking on the journey with teacher and peers.

By not recording, the student must attend class and engage in the discussion. If students do not attend classes they do not take up this opportunity to be an active and engaged learner but rather get through as a passive non-thinking recipient.

In contrast, the five most relevant reasons given for recording classes are: (i) to assist students with timetable clashes; (ii) to assist students with disabilities; (iii) lecture recordings are a valuable supplement to student learning; (iv) students demand that the classes be recorded; and (v) the classes are not repeated. By far the most highly-ranked reasons relate to timetable clashes and student disabilities.

#### Perceived impact of recording on class attendance

As shown in Chart 6 below, the teachers report a large difference in attendance at recorded and non-recorded classes. Sixty-seven percent of respondents estimate an attendance of 75% and above at non-recorded classes with 33% estimating an attendance of 50% to 75%. In stark contrast, 38% of respondents estimate that 50% to 75% of students attend recorded classes while 50% estimate attendance at between 25% and 50%.



#### Impact of lecture recordings on teaching experience and teaching practices

A vast majority (76%) of teachers in law at UWA report that the use of lecture recording technology affects their teaching experience and attitude to teaching.<sup>32</sup> The explanations given indicate that this effect is negative and include:

It can be demoralising when students do not turn up to the lectures. It can lead to an existential crisis concerning the purpose of an academic.

It makes it harder to do workshop type classes, where students can talk in groups or prepare an answer in class, because I am conscious that it will not translate to listening.

We are moving to a form of distance education without fully preparing ourselves for that shift. Although Lectopia is useful for occasional absences I feel that it is cultivating extensive absence and distance from the educational experience along with student alienation from the school and each other. This is evident when/if students attend tutorials.

Despite the negative effect of lecture recording on their teaching experience and attitude, the majority of respondents (71%) report that they do not modify their teaching to accommodate the lecture recording. The 29% of teachers who do modify their teaching do so with a view to making listening to the recording easier for students, for example by making 'less attempt to try for interactive classes' and 'stand[ing] at the lectern and [not moving] about as much as I would like to'.

#### Additional teacher comments

The additional staff comments indicate that the primary concern of teachers in law at UWA surrounding the use of lecture recordings is the impact that it has on student attendance at classes with students using the technology as a substitute for rather than a supplement to class attendance.

#### DISCUSSION AND FUTURE DIRECTIONS

As noted at the outset, crucial to a discussion about the use of WBLT and, in particular, lecture recordings, in the teaching of law at UWA is understanding of how and why law students are using lecture recordings and how this use impacts on the development of attributes and skills expected of graduates of the LLB, and, going forward, the JD.

It is clear from the student survey conducted in this project that individual students are using lecture recording to varying degrees and in different ways, with some students relying on recordings when available to replace physical attendance

<sup>32.</sup> For a discussion of a study of the effect of e-learning on academic perceptions and the impact on academics' identity, see J Hanson, 'Displaced But Not Replaced: The Impact of e-Learning on Academic Identities in Higher Education' (2009) 14 *Teaching in Higher Education* 553.

and others using recordings to supplement their learning. Each of these uses has implications for the teaching of law which need to be identified and addressed.

## 1. Lecture recordings as a replacement for physical attendance at lectures

The student survey results support the conclusion that when lecture recordings are available, some students use the recordings to replace their physical attendance at classes. That this is occurring is perhaps not surprising as the flexibility afforded learners to listen 'at a place, time and pace of their choice: anywhere, any time'<sup>33</sup> is often highlighted as a key attribute of this technology. That attendance is impacted is consistent with research carried out elsewhere although those studies often characterise the impact on attendance as 'minimal'.<sup>34</sup>

It is worth noting, however, the apparent mismatch between student and teacher perceptions of student attendance rates at recorded classes. While anecdotal evidence from teachers in the Faculty of Law at UWA who have recorded student numbers at both recorded and non-recorded classes tends to support the teacher perception, further research would be required to ascertain specific rates of attendance and to probe the reasons for these differing perceptions amongst teachers and students. However, even the more conservative response of law student respondents indicates that the availability of lecture recordings has a significant impact on attendance.

For some student respondents, the choice to not attend is based simply on a preference for listening to recordings. For others, lecture recordings are used to substitute physical attendance at class in order to accommodate other commitments, with work commitments most notable in this context. While the survey did not explore the number of hours individual law students are working during the semester, 94.8% of survey respondents indicated they were full-time students, yet 27% of those same students indicated that when they do not attend class it was because of work commitments 'all the time' or 'most of the time'. That full-time law students work while undertaking their studies is not a new phenomenon. However, it might be presumed that in the past students structured their work commitments around their studies. But, it appears from this survey that some law students are structuring

L Rothwell, 'Podcasts and Collaborative Learning' in G Salmon & P Edirishingha (eds), *Podcasting for Learning in Universities* (Maidenhead: Open University Press, 2008) 121, 125.

<sup>34.</sup> See, eg, the CALI Legal Education Podcasting Project <http://classcaster.net> where 12.8% of law students reported that they did not attend classes when podcasts were available; Williams & Fardon, above n 3, where a 2004 survey of 1,262 students from across the UWA campus found that '25% of students indicated they prefer to use iLectures rather than attending the face-to-face lecture. 42% of this group of students indicated that they either 'always' or 'regularly' attend the face-to-face lectures'. See also D Watkins, 'Podcasting: A Lawyer's Tale' (2010) 44 *The Law Teacher* 169, 175 where the author refers to research in the UK and the USA which indicates the podcasting of classes decreases attendance by only 3 − 6%. For a summary of several international studies on lecture webcasts, see Carnegie Mellon University, *Lecture Webcasting: A Teaching with Technology White Paper* (Pittsburgh, January 2007) 4.

their studies, at least in units which are recorded, around their work commitments. This in turn suggests that the recording of lectures has created the perception that attendance in recorded units is considered less important than attendance in other units and that listening to lecture recordings is an adequate replacement.

Yet, as responses to the teacher survey indicate, teachers in the Law Faculty have not made the decision to record classes with a view to making attendance optional. Rather, teachers indicate they are recording lectures to accommodate a very small and select group of students, namely those with timetable clashes<sup>35</sup> and disabilities<sup>36</sup> and thereafter to supplement in-class learning. With the already very small percentage of students identifying timetable clashes as the reason they rely on lecture recordings likely to diminish substantially as the Law Faculty at UWA transitions to a post-graduate JD, and accommodation of the very small number of law students with disabilities best met on an individualised basis,<sup>37</sup> the opportunity presents itself for law teachers to examine the pedagogical basis for recording and to make explicit to students how the availability of lecture recordings interacts with expectations to attend class.

While it is true that student attendance at classes is not a learning outcome in itself,<sup>38</sup> increasingly far more is expected of a law graduate than an extensive knowledge base of certain key areas of law. There are essential skills and attributes expected of a law graduate. For example, a UWA law graduate is expected to demonstrate competence in confident and respectful oral communication and advocacy skills, competence in relational skills including interacting with others, working in teams, interviewing clients, taking instructions and negotiation and the ability to critically interpret, analyse and comment on legal issues and principles, primary and secondary resources and contextual debates about the law.<sup>39</sup> The development and refinement of these skills can not be achieved by a student remotely. They require not only attendance at classes but also active participation and interaction in class. The introduction of TLOs will mandate an even stronger shift from knowledge-based to skills-based teaching. This shift will require a significant effort by Law faculties to ensure the integrated, cohesive and progressive embedding of skills and attributes development in a law degree (whether at undergraduate or postgraduate

<sup>35.</sup> Out of the 984 law students who responded to the survey, a small percentage indicated that timetable clashes (38 comments) and university workload, including assignments (39 comments) affect student attendance at classes and student reliance on lecture recordings.

<sup>36.</sup> As noted above, only a very small number of students who responded to the survey reported missing classes due to a disability ('all the time' (1%) or 'sometimes' (3%)).

<sup>37.</sup> For a description of a study undertaken at UWA to assess the role recorded lectures can play in allowing access to higher education for students with disabilities, see J Williams & M Fardon, Lecture Recordings: Extending Access for Students with Disabilities, Research Paper (ALT-C, 2007).

<sup>38.</sup> Larkin, above n 21, 247.

<sup>39.</sup> For a complete statement of the UWA Faculty of Law Graduate Attributes and Outcomes, see <a href="http://www.law.uwa.edu.au/courses/outcomes">http://www.law.uwa.edu.au/courses/outcomes</a>. For a discussion of development of the course outcomes, see Witzleb & Skead, above n 7.

#### LECTURE RECORDING IN LAW

level).<sup>40</sup> In addition, individual law teachers will be required to rethink their teaching, assessment and feedback practices to give effect to such embedding. Class time will become a crucial element of the skills development process. If students do not attend classes they will forgo the opportunity to properly engage in the process and to acquire and demonstrate the skills and attributes required.

It is of course noteworthy that the type of classes most commonly recorded in the Faculty of Law are lectures, where the opportunity to hone these essential skills and attributes may be less obvious. Indeed, the literature analysing lectures as a teaching method often highlights the value of the lecture for 'transmitting information' but points to shortcomings of this teaching method as a vehicle to 'promote thought, change attitudes, or develop behavioural skills'.<sup>41</sup> However, as Fardon has pointed out:

[A]ny analysis of the lecture method needs to consider the variation in the ways in which the lecture time-slot is used for teaching and learning. Within the broad parameters of the lecture method ... there is considerable room for varying approaches adopted by lecturers. It is the challenge for lecturers in higher eduction to [turn] the traditional lecture time-slot into a good learning experience for students.<sup>42</sup>

And, as others have noted, to the extent that a good learning experience is not delivered to students within a lecture, 'is it better to address what is lacking ... or to ... package it for remote consumption, even further removing students from what little engagement might have existed in the face-to-face setting?<sup>13</sup>

In law, as in any other discipline, there are challenges associated with maximising the learning experience for students in the lecture environment and devising techniques which allow for opportunities to actively engage with the materials

<sup>40.</sup> Witzleb & Skead, above n 9. See also S Barrie, C Hughes & C Smith, The National Graduate Attributes Project: Integration and Assessment of Graduate Attributes in Curriculum, GAP Final Report (ALTC, 2009) 1; S Barrie 'Understanding What We Mean by the Generic Attributes of Graduates' (2006) 51 Higher Education 215; S Barrie, Today's Learners; Tomorrow's Graduates, Yesterday's Universities (Keynote address at the Improving Student Learning for the 21st Century Learner Conference, London, 7 September 2009); J Bowden, G Hart, B King, K Trigwell & O Watts, Generic Capabilities of ATN University Graduates (CLT, 2000); Australian Learning and Teaching Council and Council of Australian Law Deans, Learning and Teaching in the Discipline of Law Achieving and Sustaining Excellence in a Changed and Changing Environment, Project Final Report (ALTC/CALD, 2009); W Sullivan, A Colby, J Welch Wegner, L Bond, L Shulman, Educating Lawyers: Preparation for the Profession of Law (San Francisco: Jossey-Bass 2007); R Johnstone & S Vignaendra, Learning Outcomes and Curriculum Development in Law (AUTC, 2003)

<sup>41.</sup> D Bligh, What's the Use of Lectures? (San Fransico: Jossey-Bass, 2000) cited in M Fardon, 'Internet Streaming of Lectures: A Matter of Style' (Paper presented at EDUCAUSE in Australasia Conference, Adelaide, 6–9 May, 2003) 699, 701. See also J Biggs, *Teaching for* Quality Learning at University (Berkshire: Open University Press, 2003) 100–4.

<sup>42.</sup> Fardon, ibid.

Carnegie Mellon University, Podcasting A Teaching with Technology White Paper (Pittsburgh, June 2007).

and refine these skills. However, what is clear from the survey is that a very high percentage of UWA law students attend lectures because they find attending enjoyable (84% of respondents) and because attendance affords the opportunity to interact with friends, peers and professor (87% of respondents). There is a strong correlation between students who report enjoying class and those who value interactions with friends, peers and professors.

One interesting student comment provided insight into the impact of lecture recording on a student's study habits and tertiary experience. The student commented:

If lectures weren't recorded I would always attend class, which I would prefer. It is too easy to just watch the classes and catch up. I only attend uni when I have tutorials which for law is once a fortnight. I have barely any interaction with teachers and other students.

These results are consistent with previous studies undertaken by Howieson and Ford in 2007 and 2010 in the Alternative Dispute Resolution ('ADR') unit at UWA. Howieson notes that:

[T]he results of the ... studies confirm the strong links between participation in the ADR unit and engagement with the UWA Law School, particularly in terms of a sense of belonging to the School.... A further significant finding is that enjoyment of the interactive components of the ADR curriculum predicts the level of a sense of belonging and well-being.<sup>44</sup>

In developing future teaching, assessment and feedback strategies teachers must be mindful of the positive effect of class attendance and interaction in the classroom on students' sense of belonging and their tertiary experience. An important factor in this regard is the role assigned to WBLT. Currently, this technology is used in the UWA Faculty of Law to record and make available full lectures. Rather than increasing opportunities for interaction, this results in fewer students being present to interact within and outside the class and, for at least some teachers, reduced attempts to conduct interactive classes for those students who are in attendance. However, it may well be that the innovative use of WBLT could allow for increased, rather than decreased opportunities for interaction. For example, supplemental recordings specifically designed to deliver substantive material may be used to free up face-to-face lecture time for more interactive exercises.<sup>45</sup>

<sup>44.</sup> J Howieson, ADR Education: Creating Engagement and Increasing Mental Well-being Through an Interactive and Constructive Approach (Paper presented at the 4th NADRAC ADR Research Forum, Brisbane, 16–17 July 2010). See, also, Larkin above n 21, 245.

<sup>45.</sup> For a description of the use of podcasts to restructure class time in a software engineering class, see: Carnegie Mellon University, above n 43, 8–9. For a discussion of the incorporation of online elements with existing methods of delivery into a post-graduate professional legal education course, see: I McCall, 'Online Enhanced Problem-based Learning: Assessing a Blended Learning Framework' (2010) 44 *The Law Teacher* 42.

It is perhaps in this respect that WBLT offers the most interesting and exciting opportunities to supplement student learning into the future.

# 2. Lecture recordings as a supplement to learning: clarification and review of notes after class attendance?

Consistent with the student responses in this study, other research on the impact of WBLT on learning in higher education indicates that students consider that the current practice of recording of lectures has a positive effect on their learning.<sup>46</sup> The student survey in the study discussed in this article did not collect data enabling an evaluation of the relationship between the use of lecture recordings and student performance. Indeed, the educational implications of WBLT are not yet fully understood.<sup>47</sup> Nevertheless, it may well be that the positive student perception is correct as regards the acquisition of knowledge, as students are able to re-listen to material covered in a recorded class when they need clarification on an issue/s they missed or did not understand.<sup>48</sup> The literature suggests this might serve a particularly important role for students who are not auditory learners.<sup>49</sup>

The student survey supports the conclusion that many law students are making use of the technology for precisely these reasons. As noted above, 76% of respondents reported using lecture recordings 'all the time' (13%), 'most of the time' (28%) or 'sometimes' (35%) to clarify a point they did not understand or missed in the class. In the additional comments to the student survey, many students indicated that they use lecture recordings to take notes more efficiently, particularly when the lecture proceeds through the material too fast. Several points specific to the discipline

<sup>46.</sup> See, eg, P Donnan, M Kiley & C McCormack, Lecture Streaming: Getting the Pedagogy Right (Paper presented at the OLT, Brisbane, 2004); HR Goldberg & GM McKhann, 'Student Test Scores are Improved in a Virtual Learning Environment' (2000) 23 Advances in Physiology Education 59; M Maag, 'iPod, uPod? An Emerging Mobile Learning Tool in Nursing Education and Students' Satisfaction' (Paper presented at the ASCILITE Conference: Who's Learning? Whose Technology?, Sydney, 3–6 Dec 2006) 483; J McElroy & Y Blount, 'You, Me and iLecture' (Paper presented at the ASCILITE Conference, Sydney, 3–6 December, 2006); Watkins, above n 34; S Soong, L Chan, C Cheers & C Hu, 'Impact of Video Recorded Lectures Among Students (Paper presented at the ASCILITE Conference, Sydney 3–6 December, 2006).

<sup>47.</sup> Carnegie Mellon University, above n 43, 5. This White Paper notes that 'some critics point to this disconnect between students' perceptions and reality [in the context of a lack of evidence to positive outcomes] as evidence that students might overestimate the usefulness of reviewing recorded lectures – possibly drawing them away from more effective study strategies'

<sup>48.</sup> There is some support for this conclusion in the literature: see, eg, D McKinney, J Dyck & E Luber, 'iTunes University and the Classroom: Can Podcasts Replace Professors?' (2009) 52 Computers & Education 617 for the results of a study which supports the conclusion that students with access to podcasts, which they listened to multiple times, performed better when examined than students who took notes during lectures. See also O Meade, D Bowskill & J Lymn, 'Pharmacology as a Foreign Language: A Preliminary Evaluation of Podcasting as a Supplementary Learning Tool for Non-medical Prescribing Students' (2009) 9 BMC Medical Eudcation 74; T Bird, SW Morris, J Martin, J Brownbridge & T Gill, Using Enhanced and Video Podcasts of Lecture Recordings to Support Student Learning, Final Report (School of Psychology, University of Bangor, 2006).

<sup>49.</sup> Williams & Fardon, above n 3, 3-4.

of law should be made in this regard. First, the ability to distil the relevant from the irrelevant and to paraphrase critical information into a simplified form (ie, good note taking) is a very important skill that is being eroded by the imposition of readily-available-at-the-press-of-button electronic repeats of lectures. For law students, good note taking is not only an important academic skill but an important professional 'lawyering' skill. Whether interviewing clients or acting as their representative in negotiations or the courtroom, lawyers require the mental dexterity to sift through and process oral and written information quickly.

Secondly, when a law student requires clarification on, or does not properly understand, a particular issue, a far more appropriate course of action would be for the student to re-visit the primary and secondary resource/s dealing with that issue (in law this would be the case law, legislation, textbooks and published scholarly works). As indicated, the ability to critically read, interpret and analyse primary and secondary resources is an essential legal skill. Students at a university in the United Kingdom reported using WBLT more than their textbooks for reviewing.<sup>50</sup> Such a practice is entirely inappropriate for law students.

Further, the discipline of law does generally not require the rote learning of substantive content spoken in class. As such, there is little value in law students accessing lecture recordings in order to listen repeatedly to the same material. Given this, the value of using lecture recordings to support learning by 'listening and learning' or 'repetition' reported in other surveys<sup>51</sup> does not translate well to law. Rather, UWA law graduates are expected to demonstrate a fundamental understanding of the substantive legal concepts and principles discussed in class together with the ability to critically interpret, apply, analyse and comment on legal issues and principles.<sup>52</sup> The lecture undoubtedly creates the foundation upon which law students build this more sophisticated understanding but the acquisition of lecture content is not an end in itself.

It follows, therefore, that whether students use lecture recordings as a substitute for regular attendance at classes or to supplement their learning, the development of critical academic and professional 'lawyering' skills and, with them, graduate competencies will be compromised.

#### CONCLUSION

The introduction of any technology into a learning environment impacts on the learning and teaching experience. Whether that impact is positive or negative depends on the use to which that technology is put and how that use interacts

<sup>50.</sup> C Evans, 'The Effectiveness of m-Learning in the Form of Podcast Revision Lectures in Higher Education' (2008) 50 Computers & Education 491, 496.

<sup>51.</sup> See, eg, Maag, above n 46, 487-88.

UWA Law Graduate Attributes and Skills: Expected Outcomes <a href="http://www.law.uwa.edu.au/courses/outcomes>">http://www.law.uwa.edu.au/courses/outcomes></a>.

with articulated educational outcomes. WBLT are no different – the technology itself does not contain 'any inherent value'.<sup>53</sup> Rather, it is only valuable to the extent that it can be used in a manner which supports and enhances educational outcomes. The results of the surveys discussed in this article provide important insight into how and why law students and teachers in the Faculty of Law at UWA are using lecture recordings and the perceived impact of that use on teaching and learning in the faculty. Whether used as a substitute for class attendance or to supplement student learning, the impact of reliance on lecture recordings on skills and attributes development is a concern for law teachers. The challenge going forward is to evaluate whether, and how, WBLT and, in particular, lecture recordings, can best be integrated and aligned with other teaching, assessment and feedback practices to support skills-based learning and teaching in the Faculty of Law so as to ensure our LLB, and in time JD, graduates acquire and demonstrate the attributes and skills articulated for graduates of the UWA Faculty of Law.

<sup>53.</sup> This point is noted in the context of podcasting in Carnegie Mellon University, above n 43, 12.