

BEYOND THE WHITEBOARD: E-LEARNING IN THE LAW CURRICULUM

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This article discusses the development of an e-learning tool (the E-CAT) for teaching legal case analysis skills. The paper canvasses a range of issues that may impact the development of e-learning strategies in higher education and more specifically within the law curriculum. Of primary consideration are the pedagogical issues raised by the use of e-learning strategies and the need to balance clear educational objectives against the cost, time and technological limitations of developing and adopting e-learning tools and e-based teaching strategies. This paper argues that e-learning tools should be designed to promote active, critically engaged and reflective experiences for students consistent with the aspirations of higher education. The paper demonstrates the E-CAT is a pedagogically driven e-learning tool that encourages deep and autonomous student learning and offers a model that can be adapted to teach a range of legal skills to students with diverse learning needs.

I INTRODUCTION

Over the past two decades advances in technology and widespread pressures from within the higher education sector to develop cost effective teaching programs have transformed the face of higher education.¹ Legal education has not escaped the impact of these forces.² Institutional pressures combined with professional expectations and the changing needs of contemporary legal practice – a landscape today characterised by multi-national firms and practitioners increasingly vying for, and operating within a competitive transnational and e-based global legal market - have demanded that law schools harness every available resource to deliver a suitably progressive law curriculum. E-learning tools unquestionably are enabling law schools to offer more innovative programs consistent with these

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¹ See, for example, Beth Tennent, Karen Becker and Jo Kehoe, 'Technology-Enabled Delivery and Assessment: Are we Addressing Student Expectations and Learning Preferences?' (ASCILITE, 2005). See also Lawrence McNamara, 'Lecturing (and not Lecturing) Using the Web: Developing a Teaching Strategy for Web-based Lectures' (Flexible Delivery in a First Year Law Subject, Part I) (2000) 11 *Legal Education Review* 149, 150.

² Andrew Field, 'The Agency of Innovation: Subject Websites, their Perceived Value and Student Performance' (2004) 14 *Legal Education Review* 127, 127.

expectations and the needs of the legal profession and the labour marketplace more generally. However, to deliver such programs legal academics must balance the constraints of limited resources - in time, money or technical expertise - without compromising the quality of students' learning experiences. Moreover, a key challenge for legal educators in development of e-based teaching strategies is to find ways to overcome the:

profound tension between the deep learning reflected in contextualism and critical knowledge-building, and the potentially shallow learning often associated with acquiring techniques, including the use of new technolog[ies]. Often the latter is reflected in a "techno-fetishist" preoccupation with simple, crude information gathering.³

Havemann and Mackinnon urge educators to 'struggle to resolve [this] tension and convert it into a dynamic synergy.'⁴ For the law teacher this necessarily means establishing clear learning outcomes at the outset in application of e-learning strategies for teaching skills, and thus ensuring that the learning experience is neither compromised by an overly rigid focus on skill acquisition, nor by the mode of delivery itself.

This paper analyses some of the varied uses that have been made of e-based and technology enhanced modes for teaching legal skills and legal reasoning over the last decade or so, and the specific challenges raised in adopting e-learning tools as a teaching strategy and learning resource within the law curriculum.⁵ Against this backdrop the paper evaluates the development of the Electronic Case Analysis Tool (E-CAT), an e-learning tool, developed at Sydney Law School to assist in teaching case reading and analysis skills. The E-CAT aims to enhance classroom teaching and learning by providing an additional learning resource for students that promotes the pedagogical objectives of flexible, independent and self-directed student learning in acquisition of core legal skills.

This discussion is presented in three parts. Part I of the paper maps out different teaching approaches and paradigms that have framed program delivery in higher education generally, and more specifically in the law curriculum over the past two decades. Part II of the paper examines specific models for e-based learning that have emerged and have been tried in higher education, including within law programs. Part III of the paper discusses the E-CAT. This final part of the paper examines the E-CAT's educational objectives, its design and development, and its potential scope for future development and broader use as a learning tool within the law curriculum.

³ Paul Havemann and Jacquelin Mackinnon, 'Synergistic Literacies: Fostering Critical and Technological Literacies in Teaching a Legal Research Methods Course' (2002) 13 *Legal Education Review* 65, 75.

⁴ Ibid.

⁵ This paper uses the term 'e-learning' tools to refer generally to web-based, online, technology-enhanced and computer-based forms of teaching and course delivery.

II PART I: LEGAL PEDAGOGIES AND TEACHING PARADIGMS IN LAW

Few legal academics would disagree that teaching law students critical reasoning skills is an essential pillar of legal education and a foundational skill for successful legal practice.⁶ Law teachers, however, have seemingly been confronted by a cyclical shifting in the preferred paradigm for delivery of legal education. This uncertainty reveals an ongoing and profound schism between theoretical and doctrinal approaches to teaching law and providing students with contextualised opportunities to develop ‘core’ legal skills.⁷ It also points to uncertainty in legal education about how the relationship between ‘academic’ skills and ‘practical’ skills is best conceptualised.

The integration and teaching of ‘skills’ within law curricula has been a constant concern in legal education and continues to raise vexed questions for law teachers.⁸ For example, what are the core legal skills that law students need to develop? When in the law curriculum are these skills best taught? How are these skills most effectively taught? Goldring states that:

[p]ractising lawyers do not need to know how to memorise rules or pass exams. They need to know how to learn to find, understand and apply changing rules and practices, how to develop rational and telling criticisms of outmoded laws, how to conduct research independently, how to analyse fact situations, present arguments, and communicate and how to think creatively and laterally.⁹

Thus the efficacy of specific teaching strategies are to be measured against the objectives in teaching such skills¹⁰ bearing in mind that:

students of law seek some knowledge, and probably some skills and attributes, but their motivation varies. There is no agreement on the knowledge that might be said to constitute a ‘common core’ of studies in law (at any level), or even on whether there is such a common core. Even if a common body of knowledge can be identified as the object of study, the level of abstraction or generality, and the detail in which students need to understand it will vary considerably, depending on the desired learning outcomes.¹¹

In other words, the knowledge and set of skills taught in legal programs is a dynamic field, contingent on the goals of the specific program, which arguably, must reflect and remain astride the changing demands of the marketplace. Laurillard speaking more generally about higher education, has suggested that ‘lecturers need to understand what it takes to learn their subject in the context of

⁶ Robert Illig, ‘The Oregon Method: An Alternative Model for Teaching Transactional Law’ (2010) 59 *Journal of Legal Education* 221, 226.

⁷ Ibid.

⁸ Fiona Martin, ‘Teaching Legal Problem Solving: A Problem-based Learning Approach Combined with a Computerised Generic Problem’ (2003) 14 *Legal Education Review* 77, 77.

⁹ John Goldring, ‘Coping with the Virtual Campus: Some Hints and Opportunities for Legal Education?’ (1995) 6 *Legal Education Review* 91, 92.

¹⁰ Ibid 92-3.

¹¹ Ibid 103.

the environment their learners inhabit' and will enter.¹² Not only may questions be raised then, about what 'core' skills are required to be taught in the law curriculum, but also questions about what actually defines such skills in the current legal services landscape, bearing in mind the type of technology that now shapes and drives this terrain.¹³ For example, good legal research skills today most often means, 'that law graduates [are] able to "handle" IT and know their way around the legal databases' and other e-based resources.¹⁴

In Australia, the *Priestley II* prescribes the general parameters of the substantive content that must be covered within law curricula.¹⁵ In terms of 'skills' teaching, the Council of Australian Law Deans (CALD) has described the general aims of legal education in Australia as being directed towards: teaching fundamental principles of Australian law and the ability to apply these principles to client problems; equipping the student with a knowledge of fundamental legal procedures — such as court procedures; giving some introduction to practical skills such as legal research, legal writing, advocacy; helping students appreciate the role of law in society; assisting the student understand and respect the ethical standards of the profession; and helping students learn fundamental practice skills.¹⁶ This directive offers general guidance on the outcomes expected of a legal education, but leaves unanswered the question of what constitutes the 'fundamental' components of legal education and how such are to be assessed. Moreover, what constitutes 'practical' or 'practice' skills also remains unresolved. This further supports the view that legal education is a dynamic field of study and training, which is difficult to precisely define, indeed even irresolvable, and which must inevitably remain receptive to the needs and demands of the profession and the current legal services marketplace.

Accordingly, the Threshold Learning Outcomes for the Bachelor of Laws have been expressed only in broad terms of capability to include: understanding of a coherent body of knowledge (TLO 1); understanding of approaches to ethical decision-making and capacity to reflect upon professional responsibilities (TLO 2); develop appropriate thinking (TLO 3) and research skills (TLO 4); the capacity to communicate and collaborate effectively (TLO 5); and learn and work independently (TLO 6).¹⁷

On a more concrete level, the demands of modern legal practice suggest that, at the very least, the core 'skills' that are today deemed essential in the training of law students includes some facet of legal problem solving and reasoning, critical analysis and writing, legislative interpretation and advising. More recently, greater attention in the law curriculum has also focused on developing broad-

¹² Diana Laurillard, 'Technology Enhanced Learning as a Tool for Pedagogical Innovation' (2008) 42 *Journal of Philosophy of Education* 521.

¹³ Havemann and Mackinnon, above n 3, 74-5.

¹⁴ Ibid.

¹⁵ The *Priestley II* subjects are: Criminal Law and Procedure; Torts; Contracts; Property, both Real (including Torrens system land) and Personal; Equity; Administrative Law; Federal and State Constitutional Law; Civil Procedure; Evidence; Company Law; and Professional Conduct.

¹⁶ See CALD website at <<http://www.cald.asn.au/slia/Legal.htm>>.

¹⁷ Sally Kift, Mark Israel and Rachael Field, Learning and Teaching Academic Standards Project - Bachelor of Laws: Learning and Teaching Academic Standards Statement (Australian Learning and Teaching Council, 2010).

based research skills, advocacy, negotiation and computer literacy skills. These more ‘contemporary’ legal or service oriented practice skills reflect the changing contours of the legal profession and the legal services marketplace. For example, Havemann and Mackinnon point to the increased pressure on the law curriculum to be ‘biased’ towards the direction of ‘technological literacy’ as students strive to position themselves to be among the infocrats at the apex of the knowledge economies and ‘to be employed as infoferfs, not left as infopaupers trapped in poverty in some informational black hole.’¹⁸This view accords with Laurillard’s assertion that:

Technology creates another important pressure for change. It is changing both what we need to know, and how we come to know it. As the workplace diversifies, graduates need to keep renewing and developing their high-level skills, e.g. for information-handling, independent learning, critical thinking, reflective innovation, project management, resource modelling, knowledge management, communication, networking, interpersonal negotiation, design, creativity, time management, and enterprise, and they need ICT skills to support all these. In particular, there are new skills and patterns of knowledge that employees increasingly need in the workplace where technology is ubiquitous.¹⁹

In any case, law teachers increasingly seem to be recognising the need to offer law students extended opportunities to develop ‘core’ legal skills and opportunities to practice these skills repeatedly and incrementally throughout the law curriculum. Electronic learning tools or computer based learning, represents a medium through which structured opportunities for skill acquisition and practice can more readily be extended to students in a way that encourages independent learning and provides access to flexible combinations of legal information resources and research tools compared with traditional modes of learning.²⁰ E-learning tools, however, can augment traditional methods of teaching legal principles and skills and accordingly provide law students²¹ with an enriched and more individualised learning experience.²²The real challenge in utilising e-learning tools rests in the integration of such tools and traditional classroom teaching so as to achieve a balanced and rich learning environment for students.²³The material presented and the student’s engagement with it and their overall learning experience is more important than boasting a particular mode or format of delivery. Research suggests that course offerings, which utilize a ‘blended’ teaching strategy,ie, they combine opportunities for e-learning and face-to-face teaching, are more successful and increase student satisfaction with the

¹⁸ Havemann and Mackinnon, above n 3, 75-6.

¹⁹ Laurillard, above n 12, 524-525.

²⁰ Andrew Clark, ‘The Case for Computer-based Learning in Law’ (2010) 1(2) *Law Technology Journal*<<http://www.egov.ufsc.br/portal/sites/default/files/anexos/19426-19427-1-PB.htm>>.

²¹ Law teachers also have reported enhanced teaching experiences by utilizing e-learning tools reporting that the medium challenges them to view their subject areas and their teaching methods in freehand exciting ways: Clark, above n 20.

²² Clark, above n 20.

²³ IneHege et al, ‘Experiences with Different Integration Strategies of Case-Based E-Learning’ (2007) 29 *Medical Teacher* 791. Hege et al discuss the integration of e-learning strategies and traditional modes of teaching within the context of the medical curricula.

learning experience.²⁴ Importantly, not only do such blended teaching strategies enhance student satisfaction but evidence also suggests they may generate deeper learning experiences for students.²⁵ Some of the advantages identified in the educational research on online or e-based learning include, that such learning may encourage deeper levels of understanding; the ability it offers to more carefully consider responses due to the asynchronous nature of the medium; and the minimisation of the power differential between student and teacher²⁶ as well as power differentials between students, which may surface within the classroom and impact individual student learning.²⁷ Importantly, e-learning spaces provide students with a safe and more private learning environment in which they can experiment with new skills.²⁸

Thus e-learning tools are increasingly being utilised not only in response to the pressures for higher education institutions to deliver programs in more cost effective and resource efficient ways, but also because of the increased recognition of the pedagogical benefits such strategies offer for enhanced learning experiences. Moreover, in part, increased use of technology in learning also reflects the demand from students themselves, as postgraduate and undergraduate students increasingly strive to juggle study, work and family responsibilities and thus seek more flexible modes of course delivery that minimise face-to-face contact and permit greater autonomy in organising individual schedules and workloads.²⁹ A competitive market of full fee paying students, for which tertiary institutions are vigorously vying, has also fueled the push for more flexible and accessible learning.³⁰ Distance education, which arguably now, is more aptly termed simply e-based education, its offerings and its users, has clearly moved into a new phase and into the next generation.³¹

An additional factor that may also be driving the increased use of technology in higher education, alongside the demand from students, is the demand coming from employers 'for graduates to be cognizant with communications, technology

²⁴ Sarah Lambert and Chris Brewer, '1st, 2nd and 3rd Generation Implementations of an eLearning Design: Re-use from Postgraduate Law to Block/online Engineering Course' (2007) 2 *Journal of Learning Design* 70, 71-2.

²⁵ Hege, above n 23, 796.

²⁶ Glenn Smith and David Ferguson, 'Teaching Over the Web Versus in the Classroom: Differences in the Instructor Experience' (2002) 29 *International Journal of Instructional Media* 61 cited in Tennant et al, above n 1, 650.

²⁷ See also Tennant et al, above n 1, 650, the authors point to the fact that e-learning leads to a change in the way students learn and potentially changes to the role of educators to more of an advisory rather than instructing role. See generally Martin, above n 8, 82-3.

²⁸ Martin, above n 8, 82-3.

²⁹ Lambert and Brewer, above n 24, 71.

³⁰ Ibid. Many students are now studying through e-modes of learning even where they have physical proximity to a university: see for example, Jeremy Stuparich 'E-learning in Australia: Universities and the New Distance Education' (2002) <<http://www.oecd.org/dataoecd/16/52/1854142.pdf>> cited in Lambert and Brewer, above n 24, 71.

³¹ James Taylor, 'Fifth Generation Distance Education' (2001) *e-JIST: Journal of Instructional Science and Technology* <<http://www.usq.edu.au/electpub/e-jist/docs/old/vol4no1/2001docs/pdf/Taylor.pdf>> cited in Lambert and Brewer, above n 24, 71.

and group work skills.³²This demand is now clearly manifest in the legal services labour marketplace. Legal practices increasingly are utilising e-spaces and technology to service consumer needs and expectations and deliver quick, cheap and high quality legal services. Indeed so much so, that arguably, traditional learning tools alone can no longer sustain preparation of adequately skilled law graduates.³³As Richards argues, the pivotal role of the Internet, for example, in the business and everyday world renders its use essential in the teaching and learning domain as well:

In legal practice a shift is occurring in the legal paradigm - from being surrounded by print media to a situation where the internet now plays an active role in the daily conduct of business in law firms. Hence, the student who is sheltered from the internet and all that it entails whilst at law school will be disadvantaged when they graduate and move into a world where it is a part of everyday life.³⁴

Legal educators must acknowledge that ‘the university ... like all other human institutions ... is not outside but inside the general social fabric of a given era.’³⁵Accordingly, law students must be equipped with the knowledge and skills enabling them to ‘compete and to survive as players in the "knowledge economy"; to participate as intelligent citizens in a globalising polity; and to serve as ethical professionals in the changing and uncertain world of globalised practice.’³⁶

Some commentators, however, have suggested that legal education has been slow to utilise modern technologies³⁷ compared to other disciplines and have pointed also to the fact that legal practice, in contrast to legal education, has more rapidly embraced the digital age.³⁸Arguably, this has widened the gap between legal academia and the reality of legal practice. At the same time a number of reports on reform of legal education have identified the need to enhance skills training in the law curriculum, ideally through experiential learning.³⁹ Certainly more law teachers today recognise that ‘[t]eaching students how to do something without allowing them to put it into practice may be a poor way of encouraging learning.’⁴⁰This is particularly important in a professional program like law, because, developing the student’s capacity for career-long learning is key to maintaining professional competency. So then, do e-learning tools represent a panacea for higher education and more specifically legal education? Certainly, such tools offer a medium through which law students can gain extended opportunities to practice and develop core legal skills through active and contextualized learning. However, as Richards cautions ‘[t]he introduction of a

³² Lambert and Brewer, above n 24, 72. See also Havemann and MacKinnon, above n 3, 65. See also, Laurillard (2008), above n 12.

³³ AbdulPaliwala, ‘Learning in Cyberspace’ (1999) 3 *The Journal of Information, Law and Technology* 1 cited in Lambert and Brewer, above n 24, 72.

³⁴ Bernadette Richards, ‘Alice Comes to Law School: The Internet as a Teaching Tool’ (2003-2004) 14 *Legal Education Review* 115, 115.

³⁵ Havemann and MacKinnon, above n 3, 68.

³⁶ *Ibid.*, 69.

³⁷ See, for example, Goldring, above n 9.

³⁸ Ms Kelly Y Testy, Dean of School of Law, University of Washington cited in Peter Monaghan, ‘Due Processors: Educators Seek a Digital Upgrade for Teaching Law’ (2008) 55 *The Chronicle of Higher Education* 1, 1.

³⁹ Monaghan, above n 38, 1.

⁴⁰ *Ibid.*, 2.

new learning path such as [e-learning] should be approached as an evolutionary, rather than revolutionary process.’⁴¹

One of the main reasons begetting caution, is that we know very little about how law students actually learn.⁴² Moreover, as Tennent et al have highlighted, e-learning is not a neutral medium for learning.⁴³ E-learning arguably changes the way students learn and the way teachers teach, but as law teachers, we do not know exactly how a particular mode of delivery impacts student learning in law. This is an area that needs further research. Ultimately, however, as McNamara argues, understanding how e-learning differs as a medium for subject delivery is central to how teachers should deal with such difference.⁴⁴ This includes understanding the impact of student perceptions of the mode of delivery on their learning. As several commentators have noted there is no point in helping students develop deep learning skills ‘if the educational environment is giving them the message that surface ones are rewarded.’⁴⁵ Accordingly, it is important that law teachers carefully consider the medium of course delivery and avoid utilising e-learning tools and strategies that promote ‘a linear or step-by-step approach [to learning] as this would defeat the concept of professional problems being complex and requiring a range of approaches to solve.’⁴⁶

Thus, despite a palpable urgency on the part of many law students to ‘position themselves to be among the infocrats at the apex of the knowledge economies’⁴⁷ law teachers must not, in seeking to embrace e-learning tools and respond to student demands, sacrifice ‘the critical and reflexive approach to law teaching which dominates the best of contemporary practices in the classroom.’⁴⁸ This view is strengthened, by recognising ‘that knowledge and higher order skills such as analysis and synthesis are [also] required for the optimal use of information-finding techniques.’⁴⁹

Indeed one of the greatest benefits offered by well-designed e-learning tools and strategies is the opportunity they can create for problem-based learning (PBL). PBL recognises that students need to develop core skills in responding to and managing unique and ill-defined situations, in which they have no previous experience and which often have no clear solution.⁵⁰ Professor Charles Engel has explained the process of PBL from the student's point of view, as involving: analysis of the problems presented, identification of information required for devising solutions, specification of the required information in the form of questions, study in order to formulate answers to the questions and application of

⁴¹ Richards, above n 34, 123.

⁴² Ibid, 125.

⁴³ Tennent et al, above n 1, 650.

⁴⁴ McNamara, above n 1, 151.

⁴⁵ Paul Ramsden, *Learning to Teach in Higher Education* (London: Routledge, 1992) quoted in McNamara, above n 1, 169.

⁴⁶ Martin, above n 8, 33.

⁴⁷ Havemann and MacKinnon, above n 3, 75.

⁴⁸ McNamara, above n 1, 152.

⁴⁹ Havemann and MacKinnon, above n 3, 75.

⁵⁰ Dianne Smith et al, ‘The Introduction of Problem Based Learning to Students Through A Computer Based Education Module’ (paper presented at The Inaugural Pacific-Rim-First Year Experience Conference, Brisbane, Australia, 11-14 July 1995).

newly acquired knowledge to the initial problem.⁵¹ Accordingly, PBL can be seen to compel a critical and engaged approach to student learning.

The role of PBL⁵² in teaching law has attracted fair attention in the academic literature and its value as an approach to active student learning is now recognised widely in legal education.⁵³ PBL is particularly effective in teaching legal problem-solving, and because of 'its emphasis on autonomy and collaborative, active learning, [PBL] appears to be one way to encourage students, particularly first years, to develop the skills needed to deal with the dynamic complexity with which they are increasingly confronted'⁵⁴ and which, they will need to continue to navigate in the course of legal practice.⁵⁵ According to Martin PBL in the law curriculum promotes a number of educational objectives.⁵⁶ First, PBL provides an opportunity for students to develop the skills necessary to implement decisions.⁵⁷ This is an essential feature of legal practice. Secondly, PBL permits students to solve and 'practise their problem solving skills whilst they acquire substantive contextualized knowledge.'⁵⁸ Thirdly, PBL encourages student autonomy that 'paves the way for continuous learning, an essential prerequisite for dealing with the constant changes of post-modern environments in which "the shelf-life" of discipline knowledge is frequently considerably shorter than a graduate's period of professional practice.'⁵⁹ Fourthly, PBL provides an often needed but rarely utilised opportunity for law students to develop collaborative learning skills.⁶⁰ Finally, PBL challenges the student's ability to structure and integrate knowledge 'through self-directed study rather than through more transmissive approaches such as the traditional lecture. Thus the ability to structure and analyse the knowledge acquired becomes essential.'⁶¹

Therefore PBL helps students become active learners by situating their learning in real and practical world situations and by encouraging students to take responsibility for their own learning.⁶² This is important in preparation of law students for professional practice as:

[r]esearch indicates that knowledge taught in schools and universities which uses a didactic approach does not transfer to real life situations because learning and context are separated and that instructional design models which are situational problem solving environments are critical for the learning and application of

⁵¹ Charles Engel, 'Problem Based Learning' in Kenneth Cox and Christine Ewan (eds), *The Medical Teacher* (Edinburgh: Churchill-Livingstone, 1982), 94-101 cited in Martin, above n 8, 78.

⁵² Problem based learning may be defined in general terms as 'a method or strategy in which the starting point for learning is a fact situation (the problem) that the learner needs to solve': *ibid.*

⁵³ See Martin, above n 8.

⁵⁴ *Ibid.*, 77.

⁵⁵ *Ibid.*, 79-81.

⁵⁶ *Ibid.*

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*

⁶⁰ *Ibid.*

⁶¹ *Ibid.* 81.

⁶² Lambert and Brewer, above n 24, 73. See also generally Tony Herrington and Jan Herrington, *Authentic Learning Environments in Higher Education* (Information Science Publishing, 2006).

skills.⁶³

Despite the benefits identified in using e-learning tools to offer law students increased opportunities for enhanced learning, particularly PBL, caution must nevertheless be exercised in development of such tools. Three areas warrant especial care. First, is the need to utilise technology against clear learning objectives and well-formulated outcomes.⁶⁴ Secondly, careful thought needs to be given to how new technologies can supplement and enhance traditional teaching rather than simply supplant it.⁶⁵ Thirdly, pedagogical goals should drive the technology rather than vice versa.⁶⁶ If caution is exercised and if technology and its limitations are well understood, then e-based learning tools undoubtedly provide a platform for innovative pathways to learning, which can serve to better prepare law students for the modern professional marketplace.

III PART II: A SURVEY OF E-LEARNING MODELS IN HIGHER EDUCATION

A *E-learning in higher education*

A wide array of e-learning tools have been developed and utilised across disciplines in higher education to equip students with a broad range of skills and also deliver substantive content. E-tools are also increasingly being used in higher education to assess student learning both formatively and summatively. Electronic modes of student assessment offer numerous advantages to both teacher and student. From the student's perspective, e-spaces offer greater flexibility in accessing and submitting assessments remotely. From the teacher's point of view, electronic assessments can facilitate marking and recording of student results and may also more readily permit analysis of student performance, which in turn can inform development of teaching and assessment strategies.

A brief survey⁶⁷ of the uses of e-learning tools in higher education reveals a spectrum of possible uses including:

1. *Delivery of lecture and course material on line:* the use of electronic tools to deliver material online to students is most commonly used as a supplement to traditional face-to-face course delivery.⁶⁸ Increasingly though because of various pressures on higher education, we are seeing more e-modes of delivery as a substitute for at least some facets of traditional modes of course delivery.
2. *Distribution of learning materials for distance education modules:* increasingly e-spaces are being utilised to enable units of study to be offered remotely. Materials may also be distributed electronically to facilitate

⁶³ Ibid.

⁶⁴ Tennant et al, above n 1, 650.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ A detailed survey of the types of e-learning tools used more broadly in the higher education sector is beyond the scope of this paper. This section seeks to broadly map out significant developments in the use of e-based learning tools for higher education students and the application more specifically to teaching law.

⁶⁸ See, for example, McNamara, above n 1.

collaborative learning strategies and set-up channels or forums for group work.⁶⁹E-channels are particularly useful for connecting people and facilitating communication and exchange of information between them.

3. *Online assessment:* technology allows a range of modes of online assessments to be developed and tailored to the needs of individual programs and groups of students including multiple-choice quizzes, other test formats and discussion lists.⁷⁰
4. *Presentation of case scenarios or case studies for student evaluation and analysis:* e-learning tools can be strategically used in problem based learning and contextual student learning. For example, online case studies are increasingly being utilised within medical curricula.⁷¹Typically such models present the medical history of a real patient through a variety of sources, eg, hyperlinks, multimedia material and expert comments. This information may also include inbuilt questions that students answer online and which on response provide detailed answer comments. This type of model has a number of parallels with the structure used in the E-CAT (as discussed below) and offers some ideas for future development of this tool.
5. *Creating virtual worlds in cyberspace that open up opportunities for learning through simulations and problem based learning:* the e-world offers an infinite domain for creating virtual worlds. Complex real-life problems can be simulated for students to solve without danger of real-life damage ensuing in consequence of poor decision-making.⁷²The freedom to make mistakes and learn from them is an important component of contextualised learning.

Of course each of these different types of e-learning tools may be utilised separately or in various combinations with one another.

The following hierarchy represents one possible way of conceptualising the educational value and goals of different e-learning models and tools:

- a. At its most basic level, e-learning provides a medium for learning through information exchange or sharing, for example, the use of BlackBoard in teaching a unit of study, which permits teachers to post information and students to access such information;
- b. At a higher level, e-learning provides a medium for active and/or interactive learning by engaging students conceptually either as individuals or in collaboration with one another. An example of this may be, engaging students in a BlackBoard discussion Forum or Blog.

⁶⁹ See, for example, Lambert and Brewer, above n 24.

⁷⁰ See, for example, Tennent at al, above n 1.

⁷¹ See, eg, Hege et al, above n 23.

⁷² See, eg, Des Butler and Janice White, 'A Slice of Second Life: Academics, Support Staff and Students Navigating a Changing Landscape' *Proceedings ascilite Melbourne 2008: Concise paper: Butler and White*, 2008.

See also *LawWithoutWalls* <<http://www.lawwithoutwalls.org/about/>>.

- c. At a higher level again, e-learning encourages deep learning through analysis and application of principles and understandings facilitated through the channel itself; for example, students may be provided an online case study with questions that students answer by conducting research through embedded hyperlinks.
- d. At its highest level e-learning requires students to learn through total immersion in the e-learning experience and e-construct – the rules, information, structure and links provided by the tool set the framework within which students engage in high order decision-making. Learning at this higher level occurs not only through the process of autonomous decision-making but also through what the decision-making creates or uncovers. An example of this is students engaging in an online simulation or virtual activity where their choices or input shape the actual outcomes or output. The Virtual Thought Leader Sessions in the *LawWithoutWalls* syllabus is illustrative of this level of engagement.⁷³

The E-CAT in its current form resides at the third level of this hierarchy. At each level, but increasingly as you move down the hierarchy from a to d, there is scope to develop and build a community of learners and practice, in order to facilitate even deeper, more diverse, resource rich and contextualised learning. Learning in ‘communities of practice reflects natural, informal learning processes that capitalise on access to expertise, mentors and opportunities to collaborate and legitimately participate from the periphery.’⁷⁴ E-spaces offer the ideal channel for building such communities.

Whilst students can benefit from e-learning tools irrespective of their individual learning style, educators should be mindful that many students report they do not want learning to be exclusively through an e-learning format.⁷⁵ This supports the view that new technologies should be designed to complement, supplement and enhance more traditional forms of teaching and learning, rather than supplant them.⁷⁶ Clearly, the challenge for higher education is to use innovative mediums for teaching and learning in innovative ways that ‘accommodate [varied] learning styles whilst catering to changing expectations [but recognise that] students still wish to engage in a meaningful way with those facilitating their learning.’⁷⁷ The value and importance of a personal and shared dimension to teaching and learning should not be underestimated.

B E-learning tools in the law curriculum

One of the earliest documented uses of computer-based learning in a law curriculum is the use of computer-based tutorials to teach International Law developed by Alan Tyree.⁷⁸ This approach utilised a question-short answer format,

⁷³ See *Lawwithoutwalls* <<http://www.lawwithoutwalls.org/virtualsessions>> (see further below for a discussion of LWOW).

⁷⁴ Butler and White, above n 69, 130.

⁷⁵ Tennent et al, n 1, 657.

⁷⁶ *Ibid*, 650.

⁷⁷ *Ibid*, 657.

⁷⁸ See, Alan Tyree, ‘Cost-Effective Computer Tutorials’ <<http://austlii.edu.au/~alan/alta92-2.html>>.

which essentially required the student to mark his or her own answer. The format chosen was used to alleviate the time demands required in developing a traditional 'pseudo-Socratic' module of computer-based tutorials, ie, where information is provided to the student, a question follows, and the next piece of information provided to the student is contingent on the student's answer. There were two main benefits of the model used by Tyree. First, Tyree dramatically slashed the time necessary to develop this tutorial program compared to using the traditional model. Secondly, the approach at least in part, shifted responsibility for learning from teacher to student by providing the student with feedback to assist 'the student to remedy deficiencies early before being trapped by "incremental ignorance."' ⁷⁹The work undertaken by Tyree demonstrates the importance for legal academics to constantly question how best to balance limitations in resources with the pedagogical outcomes of e-based learning tools.

Chetwin and Edgar provide another notable example of an electronic tool used in teaching law. ⁸⁰These scholars developed a simple program designed to offer students an opportunity to review certain key aspects of partnership law. The program utilised three question types: problems that required a yes or no answer; multiple-choice questions; and problems that required a brief typed answer. In developing this tool Chetwin and Edgar confirmed as others had before them, ⁸¹ the huge potential drain on a scholar's time of developing computer assisted learning tools. Chetwin and Edgar's approach demonstrates the potential value of developing standardised templates and the economies of scale achievable by developing such tools in collaborative networks across institutions including internationally. Chetwin and Edgar noted, however, the need to establish whether a standardised approach to development of a particular e-learning tool might not compromise its pedagogical objectives. ⁸²

McNamara has demonstrated how combining e-based learning and traditional face-to-face teaching can redefine the learning process in law. ⁸³McNamara replaced the traditional lecture in an introductory law subject with a web-based module. The primary aim was 'to teach with the Internet, rather than through it.' ⁸⁴This example highlights the importance of establishing clear learning objectives as integral to the process of developing an e-based tool. McNamara's approach demonstrates how critical and reflexive learning, need not be compromised by using e-learning tools. He also identifies the importance of considering how the chosen medium of delivery impacts communication and thus the learning process, particularly raising questions about the impact of e-based learning tools on the formality of teaching and on the de-personalisation of teaching and learning. ⁸⁵

⁷⁹ Ibid.

⁸⁰ Maree Chetwin and Cally Edgar, 'Legal Education in the Technology Revolution: The Evolutionary Nature of Computer-Assisted Learning' (1999) 10(2) *Legal Education Review* 163.

⁸¹ See, for example, Tyree, above n 78.

⁸² Ibid 170.

⁸³ McNamara, above n 1, 161.

⁸⁴ Ibid.

⁸⁵ Ibid, 171.

Martin also described the use of a computer-based module designed to introduce first year law students to legal problem solving.⁸⁶ This module utilised a problem-based learning strategy, ie, the learning process started with a fact situation (the problem) which students needed to solve. This model emphasised that the problem itself represented the stimulus and reason for the learning. Development of this tool sought to resolve the need to avoid a linear approach to learning, whilst at the same time encouraging reflection throughout the learning process. This was achieved by using several design features. First, the design of the tool included loops, which ensured 'that students could in fact make choices and move along paths that more experienced decision makers might deem inappropriate at a particular time (for example, offering options prior to gaining understanding of the issues involved).'⁸⁷ Secondly, careful attention was paid to ensuring quality graphics so as to encourage 'students in their use of computers as learning tools and enhance their understanding of the technology.'⁸⁸ Moreover, a number of other design features were also included to ensure active engagement by students, eg, requiring students to maintain a notebook embedded in the program, encouraging students to work with a partner, and at certain strategic points requiring students to reflect on their learning.⁸⁹

Moving on to even more complex use of e-learning tools, Richards utilised an on-line tutorial system (named ALICE) with a focus on participation and collaboration.⁹⁰ ALICE was characterised by a series of stages the student had to move through while exploring the answers to set questions. An important part of the ALICE tutorial system was the common room, which is similar to a discussion board. This tool highlights the utility of cyberspace for sharing ideas and building shared communities.

More recently Tyler and Cukier have described the use of an e-learning tool specifically for teaching law students negotiation skills.⁹¹ Other academics who also teach negotiation skills have similarly trialed various novel methods including electronic negotiation bulletin boards to post or respond to critical ideas; employing a web based discussion room before and after simulation; polling systems; and internet based cross border negotiation simulation with coaching for aided learning.⁹²

Other academics have utilised online learning to deliver Practical Legal Training (PLT),⁹³ for example, Lambert and Brewer have used online student activities and assessments to develop students' skills in drafting legal documents, negotiation, and clarifying legal concepts.⁹⁴

⁸⁶ Martin, above n 8.

⁸⁷ Ibid, 86.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ Richards, above n 34.

⁹¹ Melissa Tyler and Naomi Cukier, 'Nine Lessons for Teaching Negotiation Skills' (2005) 15 *Legal Education Review* 61.

⁹² Ibid, 82-4.

⁹³ See, for example, Lambert and Brewer, above n 24.

⁹⁴ Ibid.

To date, the pinnacle in the use of e-learning tools comprises computer simulations of practice and the use of virtual spaces for legal education. A recent highly innovative initiative that demonstrates the utility of e-spaces is *LawWithoutWalls* (LWOW), which is a part-virtual, collaborative academic model, created by academics at the University of Miami School of Law.⁹⁵ LWOW creates a community of practice by bringing together students, faculty, practitioners, and entrepreneurs from around the world to innovate legal education and practice. The goal of LWOW is to collaboratively develop creative solutions to real problems in the way law is taught and practiced. Law students from around the world are teamed up to identify and address a problem in legal education or practice. Participants engage largely in cyberspace but are also required to meet twice during the program, face-to-face. This sophisticated use of e-spaces, which is at the cutting edge of legal education, demonstrates how face-to-face interaction continues to be valued as an essential and integral component of the overall learning experience.

IV PART III: DISSECTING THE E-CAT

A *The E-CAT described*

1 *The educational objectives of the tool*

The E-CAT is an electronic case analysis tool designed to assist students develop their skills in reading and analysing legal judgments. The tool to date has largely been utilised as an adjunct teaching resource in the unit of study, *Foundations of Law*, at Sydney Law School. This is the first core subject undertaken by students entering the Law School.⁹⁶ The aim of this unit of study is to provide students with a basic but solid grounding in the legal knowledge and skills needed for the rest of their legal studies. A core skill taught in this foundation unit is the skill of case analysis. Effective teaching of case analysis skills demands structured opportunities for reinforcement throughout the learning process and over an extended period of time, however, seemingly, this fundamental skill is frequently, relegated to learning by ‘osmosis’ in the law curriculum. Yet many first year law students find case reading and analysis challenging, particularly when the structure of law curricula increasingly is demanding the rapid acquisition of this skill, for example, through the more frequent use of intensive modes of delivering core and early units of study.

The E-CAT was specifically designed to augment case reading and case analysis skills taught in class through face-to-face teaching not to supplant classroom teaching. Traditionally students studying the *Foundations of Law* subject at Sydney Law School undertake at least two case reading and case-note writing exercises in class. These tasks are typically completed in small groups and as a whole of class activity, and are directed towards students learning to identify the key elements of a judgment. These in-class activities are subsequently built upon by setting a take-home case-note assignment as the first piece of written

⁹⁵ See LWOW at < <http://www.lawwithoutwalls.org/about/>>.

⁹⁶ More recently some non-law postgraduate students have also since been referred to the tool. It could also be used by other groups of students, for example, students who need to develop a common law skill of case analysis. This is discussed further below.

assessment for the unit. This assessment item requires students to perform the same task as that previously undertaken in class, but now on their own and using an unfamiliar case. This assessment task is mirrored in the E-CAT.

In 2009-2010 the E-CAT was first made available on-line to students after they had completed the in-class case analysis exercise, and prior to the deadline for the case-note assignment. Students were told the case-note tool was available but its use was optional. We reasoned that offering the E-CAT as an optional learning resource rather than making it mandatory was consistent with the principles of self-directed, independent, flexible and autonomous student learning - principles the E-CAT is designed to develop and enhance. However, it was noted that making the E-CAT optional would likely reduce its use by students.⁹⁷ This is borne out by the findings of Hege et al in the context of the medical curricula, reporting that voluntary case studies were utilised significantly less often compared to case studies with a mandatory component and those more strongly integrated into the assessment regime.⁹⁸ Richards suggests that low participation rates in e-learning strategies may reflect 'fear and a lack of willingness on the part of students to take responsibility for their own learning.'⁹⁹

Development of the E-CAT was directed towards four principal pedagogical goals:

1. To provide students with additional opportunities to develop their case reading and analysis skills beyond the opportunities provided within the classroom. Skills are best developed through structured practice, but often competing teaching and learning objectives prevent more time being allocated to skill development in class, particularly in a foundation unit of study, where there are multiple core skills to be taught, as well as considerable substantive material needing to be covered.¹⁰⁰ With limited class hours, the E-CAT offers a way to supplement face-to-face teaching by using knowledge that teachers themselves have gained, about the typical difficulties experienced by students in learning this skill. Accordingly, the E-CAT was designed to leverage teacher experience and in-class teaching exercises and thereby provide students with an additional means of learning complementary to face-to-face classroom instruction.
2. To develop a medium for learning case analysis skills that encourages self-directed and active learning by students.¹⁰¹ The E-CAT requires students to interact with the tool through active self-evaluation of their responses.

⁹⁷ This is supported by the fact that in 2009-2010 only 40 students out of a cohort of ~320 students chose to use the tool.

⁹⁸ Hege, above n 23.

⁹⁹ Richards, above n 34, 10.

¹⁰⁰ Additionally, the *Foundations of Law* unit had recently been reduced from 52 to 39 hours (in reducing core units of study from 8 to 6 credit points due to a restructure in the degree program).

¹⁰¹ See also Howard Barrows 'A Taxonomy of Problem-Based Learning Methods' *Medical Education* (1986)20, 481.

3. To provide a flexible tool that permits students to develop case analysis skills in a way conducive to their individual learning needs. This recognises that student learning is not linear but can follow an array of trajectories.
4. To provide a medium for learning that permits students to reflect on their learning experience and thereby secure deeper and long-term learning outcomes.¹⁰² As Tennent et al highlight '[i]t has been widely recognised that regardless of the measure used, making learners aware of their learning styles and how to accommodate this in the learning environment reaps significant benefits to learning outcomes.'¹⁰³ The asynchronous and flexible design of the E-CAT facilitates this important process of reflection in student learning.

It seemed to us that these pedagogical goals could best be achieved, bearing in mind our limited resources,¹⁰⁴ by using predominantly a series of multiple-choice type questions in constructing the E-CAT and augmenting these with some informational cues. The online multiple-choice questions utilised by the E-CAT offer a number of design and educational benefits. First, as is widely recognised, multiple-choice questions provide students with instant feedback.¹⁰⁵ This is important in terms of maintaining student motivation and interest in using the tool. The E-CAT was also specifically designed to permit students to freely move between the multiple-choice questions so as to compare and contrast answers in order to understand why one option is better than the other. This dimension of the tool is central to encouraging self-evaluation by students. The E-CAT is directed towards giving students feedback against which to compare their responses and in doing so necessitates that students actively engage and distill the feedback provided. More generally, the E-CAT offers a means through which students can rapidly gain the opportunity for feedback and accordingly also improvement.¹⁰⁶ Further the E-CAT provides flexibility for students to utilise the tool when and where they wish, and to wed the learning benefits attached to the tool, with in-class learning, in a more individualised manner.

Despite the advantages of using multiple choice questions such as those designed for the E-CAT, it must be acknowledged that generally, the use of multiple-choice questions as a teaching tool, particularly in law, also raises pedagogical concerns.

¹⁰² See also David Kolb, *Experiential Learning: Experience as the Source of Learning and Development* (Prentice Hall, 1984); David Boud, and Graeme Feletti, *The Challenge of Problem Based Learning* (Routledge, 1998).

¹⁰³ Tennent et al, above n 1, 652 citing Neil Fleming, 'I'm Different; Not Dumb: Modes of Presentation (VARK) in the Tertiary Classroom' (Paper presented at the 1995 Annual Conference of the Higher Education and Research Development Society of Australasia, 1995), 308; Eugene Sadler-Smith, 'Learning Styles: A Holistic Approach' (1996) 20 *Journal of European Industrial Training* 29; Tammy Schellens and Martin Valcke, 'Re-engineering Conventional University Education: Implications for Students' Learning Styles' (2000) 21 *Distance Education* 361; Annette Vincent and Dianne Ross, 'Personalize Training: Determine Learning Styles, Personality Types and Multiple Intelligence Online' (2001) 8 *The Learning Organization* 36.

¹⁰⁴ This is discussed further below.

¹⁰⁵ Tennent et al, above n 1, 652.

¹⁰⁶ Sandra Edmonds, 'On-line Subject – Enter at Own Risk (Teach Bound and Gagged).' (Paper presented at the Australian Association of Research in Education Conference, 1999) cited in Beth Tennent, Karen Windeknecht and Jo Kehoe, 'Teaching with Technology: Value-Added Innovation or Necessity?' (2004) 21 *Campus-Wide Information System* 144, 147.

The main concern with multiple-choice questions is that they encourage surface learning only and erode higher-level thinking.¹⁰⁷ However, as Tennent et al have noted:

[w]hilst a valid concern, this may be overcome with careful authoring of the questions involved to ensure that questions are clear and unambiguous, and that it is the content being tested, not the ability to understand the question. It is also possible even within the constraints of the multiple choice question, to introduce case studies and questions that require application of concepts rather than simply recall.¹⁰⁸

These concerns were addressed, as far as possible, in the design characteristics of the E-CAT and balanced against efficiency and workload imperatives, but not at the detriment of student learning. The multiple-choice questions utilised by the E-CAT and the tool's overall structure, were deliberately aimed towards achieving deeper and analytical thinking and learning. The questions and corresponding answers developed for this tool are clear and unambiguous and directed towards eliciting student reflection and a deep understanding of how to read and analyse a case and identify its constituent parts.

2 *Other design considerations in developing the E-CAT*

The E-CAT was initially developed with the assistance of a University of Sydney, *Small Teaching Improvement and Equipment (TIES)* grant (\$5,130).¹⁰⁹ Apart from this modest grant, very limited resources were available initially for development of this tool – essentially, at the outset, all that was available was the time and expertise of the three academics involved¹¹⁰ and the invaluable ‘pro-bono’ technical expertise and advice offered by the Faculty’s WebCT administrator(s).¹¹¹

As a consequence of the limited financial and other resources available for development of this tool, we were mindful of, and to varying degrees influenced in our decision-making in development of the E-CAT, by the following factors:

- The cost associated with choosing a particular format or platform and balancing issues of cost and efficiency against the tool’s functionality;
- The complexity of different formats and the available technical expertise to assist us in utilising a particular format;
- Potential difficulties in maintaining the tool post-development and sustaining it long-term;

¹⁰⁷ Richard James, Craig McInnis and Marcia Devlin, 2002; Honey and Marshall, ‘Assessing Learning in Australian Universities’ (*Australian Universities teaching Committee, 2003*) cited in Tennent et al, above n 98, 147.

¹⁰⁸ Tennent et al, above n 101, 147-8.

¹⁰⁹ TIES grants were made available to fund projects directed towards improving the delivery of teaching programs or to permit purchase of equipment to that end.

¹¹⁰ Mr Jamie Glistler, Dr Belinda Smith and Dr Rita Shackel.

¹¹¹ Special thanks to Ms Mai Stringer and Ms Kirsty Holmes for their generous support in time and expertise in developing and maintaining this tool.

- The scope for adaptation of the format and platform to the teaching of other legal skills and use in other parts of the law curriculum.

Although some consideration in development of the E-CAT was directed to how this tool might be utilised in teaching other aspects of the law curriculum and other core legal skills, at the outset such concerns played only a small part in our decision-making. As we have moved through the process of expanding and refining this tool, however, we have become more cognizant of design issues that may be relevant to application of this tool beyond teaching case analysis skills. For example, we have been thinking about how the structure of the E-CAT might be adapted to teach students the skill of statutory interpretation.

Despite the modest resources we had available to us, the *Small TIES Grant* enabled us to employ a research assistant to undertake a brief survey of other electronic tools being utilised in the teaching of legal skills and more broadly in higher education. We felt it was important to undertake this survey to minimise any wastage of our valuable and limited resources and learn and benefit from past lessons. This survey revealed that whilst computer based learning and technology was being utilised in a myriad of ways across disciplines, significantly less use was being made of e-learning tools in the teaching of legal skills and legal reasoning more specifically. This confirmed the view of others that legal education has been slow to respond to advances in technology. Importantly, as we envisaged, this preliminary research alerted us to some of the key pitfalls to avoid. The main one being that we needed to be aware of the dangers of developing a tool that was labour and resource intensive. Alan Tyree's work almost two decades before ours was particularly constructive in alerting us to the benefits of developing a tool which prompted self-evaluation and represented a model that was both effective and resource efficient to develop.¹¹²

The *Small TIES Grant* also allowed us to utilise research assistance to help develop multiple-choice responses that were molded to reflect typical student errors. We considered that grounding our multiple choice options in typical student errors was essential to challenging students and encouraging higher level analysis. In identifying typical student errors we drew first on our own experience in marking student case-note assignments and secondly we drew on a database of actual student responses to a case-note writing assignment from the previous year.¹¹³ So, for example, the multiple choice options that related to the 'Material Facts' of the case reflected the errors students typically make in identifying such facts, ie, they often include irrelevant details; omit relevant details; and conflate material facts with procedural history or analysis.

3 *The format of the E-CAT*

With all of the foregoing pedagogical and other considerations in mind and the various practical restraints coming into play, we developed the E-CAT initially by utilising a HTML format. In this format the E-CAT consisted of a series of

¹¹² Tyree, above n 75.

¹¹³ Technological advances have also impacted the way students submit their work. Most student assignments are now submitted electronically.

connected word documents, accessible to students for use via the *Foundations of Law* unit of study WebCT (e-learning) site.

Students were instructed to print out a specific case, read the judgment and then prepare a case note consistent with the format taught in class. After completing the case note students accessed the online tool and by attempting a series of multiple choice questions tested their reading and understanding of the case and specifically their capacity to identify and describe the following key elements of the judgment: citation, procedural history, material facts, ratio decidendi, obiter dicta, outcome and orders. Each multiple-choice option is linked to a response that provides students with detailed feedback about why that option is correct or incorrect, and where incorrect, why other options represent a better response.¹¹⁴ Students can access the tool as often as they want and can answer all or only selected questions. The design of the tool permits students to move freely between questions and answers as best suits their individual needs.

B Evaluation and feedback on the E-CAT

The E-CAT was initially piloted in 2009-2010 with a single case - *Newcastle City Council v Lindsay* [2004] NSWCA 198. This case was chosen to pilot the tool, because it was the most recent case-note assignment used in the *Foundations of Law* unit of study.¹¹⁵ Thus the case had been previously tested and validated for its instructional utility. Furthermore, a sample case-note had previously been prepared and circulated to students as general feedback in 2008; this provided the basis for development of the tool. Additionally, since this case had previously been used as a student assessment, which had been submitted electronically for marking, we also had access to an extensive database of student case-notes, which we could draw on to identify typical student errors and use as the basis of developing alternative multiple choice options for the case-note tool.

We also developed a feedback survey to assist us in evaluating the pilot. Students were asked to complete the feedback survey after using the case analysis tool. Forty responses to the survey were received as part of the pilot study.

1 The Survey

The survey consisted of 12 questions (except for some open-ended questions most responses were provided on the basis of a typical 5 point Likert item: Strongly Agree: Agree, Neutral, Disagree, Strongly Disagree). The survey questions are provided in Appendix 1 to this paper.

2 The feedback received from students

¹¹⁴ Appendix 2 provides an example of the options available to students for one of the elements of the case extracted from one of the 7 cases we used.

¹¹⁵ This case was chosen for use in Foundations of Law because the case is not difficult to read and relates to a negligence claim, with interesting facts and the relevant law is relatively easy for the students to understand and unpack.

Overall the feedback received for the pilot study was very positive. An overwhelming majority (95 percent) of students agreed¹¹⁶ that the tool is easy to use and most (89.1 percent) agreed that the exercise helped them develop their case analysis skills and better understand what is involved in writing a good case note. Only one respondent disagreed with this view. Further, a clear majority of students (91.9 percent) agreed that each answer provided information and feedback that was useful. Similarly a clear majority of students (91.7 percent) agreed that the case analysis tool builds upon what has been learnt in class. Every respondent indicated they would complete more case analysis exercises of this kind if available.

The feedback received via the survey revealed that a majority of students (88.9 percent) used the tool by testing themselves on the whole case and only a small minority of students (11.1 percent) tested themselves only on specific points. Of those students who tested themselves only on specific points, half tested themselves on the facts of the case; the remainder was equally split between each of the other elements of the case, (ie, citation, procedural history, legal issues, ratio decidendi, obiter dicta, orders). In some respects this is a curious finding as one might expect students to test themselves only on the more challenging aspects of case analysis such as the ratio or obiter, rather than the facts of the case.

A more detailed analysis of the open-ended feedback provided by students on the survey revealed that the following features of the E-CAT were perceived as being helpful to students:

- The tool supplemented the other components of learning in the subject, namely, classroom learning and assessment tasks;¹¹⁷
- The answers provided by the tool were detailed and sufficiently instructive in scope to help students discriminate subtle differences in the responses and how best to express these;¹¹⁸
- The additional informational cues aided understanding and learning;¹¹⁹
- The structure of the answers in providing feedback on what should be included as well as what should not be included was considered very useful;¹²⁰
- The ease of the design of the tool permitted for comparison between responses and student answers.¹²¹

In response to being asked how the tool might be improved, the main points made by students were: providing more cases;¹²² providing more difficult cases;¹²³ and

¹¹⁶ Reference to student agreement includes Strongly agree and Agree on the 5 point item used in the survey.

¹¹⁷ Responses 1, 22, 30.

¹¹⁸ Responses 3, 4, 5, 6, 7, 8, 16, 22, 25, 26, 27, 28, 29, 32, 35.

¹¹⁹ Responses 6, 19.

¹²⁰ Responses 4, 5, 6, 7, 9, 11, 12, 14, 15, 16, 19, 20, 27, 28, 31, 32.

¹²¹ Responses 11, 13, 16, 17, 18, 19, 20, 31.

¹²² Responses 6, 8, 10, 11, 13, 14, 15, 19.

allowing responses to be downloaded or printed.¹²⁴ Clearly, this feedback received from students, tells us very little about the actual learning efficacy of the tool but rather helps evaluate student responses to the tool and their perception of the utility of the tool for their learning.

C Further development of the E-CAT

At the outset in development of the E-CAT we envisaged that the tool could, over time, be developed further in three key ways:

- i. By adding more cases so as to compile a bank of cases ranging in difficulty and focus.
- ii. By exploring other possible users of the tool such as students from civil law jurisdictions who need to understand common law legal method, or postgraduate students from other disciplines undertaking legal studies.
- iii. To consider whether the tool could be used to teach other legal skills, eg, statutory interpretation; critical analysis and essay writing.

One of the recurring points in the feedback received from students in the pilot study was the desire to see the tool extended by adding further cases. Fortunately, this was made possible with the assistance of a University of Sydney *E-Learning Project Support Grant 2010*.¹²⁵ The technical support provided through this scheme, enabled extension of the bank of cases to include a further six cases.¹²⁶ Thus in its current form the E-CAT provides students with more opportunities to learn how to read and analyse cases using a greater number and range of cases with varied characteristics.

In the process of building our bank of cases we considered, by reflecting and drawing on the feedback received from students, how the tool could be refined and whether certain features of the E-CAT needed tweaking. We focused on the following aspects:

- A few students in their feedback commented that some of the multiple-choice options were too obvious and that more detail and explanation was needed in some sections, eg, orders; and possibly greater clarity was required in distinguishing between the ratio and obiter of the case. The ratio and obiter tend to be the most difficult elements of a case for students to identify and explain. We have taken all of this feedback on board and have incorporated student suggestions in developing our multiple-choice options and informational cues in the additional cases added to the E-CAT bank.

¹²³ Responses 5, 10.

¹²⁴ Responses 4, 8, 9, 15.

¹²⁵ This grant provided us with 120 hours of e-learning technical support to assist us to further develop and extend the E-CAT.

¹²⁶ *Marrickville Municipal Council v Moustafa* [2001] NSWCA 372; *Portelli v Tabriska Pty Ltd & Ors* [2009] NSWCA 17; *Povey v Qantas Airways and British Airways Australia* [2005] HCA 33; *Hart v Rankin* [1979] WAR 144; *Regina v King* [1998] NSWSC 289; *Fitzpatrick v Sterling Housing Association Ltd* (2001) 1 AC 27.

- Some students stated they would have liked to have been able to either download or printout all the answers and feedback provided in the E-CAT in its entirety. We considered the possibility of providing students with a unified option for feedback. Whilst we recognise that such options may facilitate student learning by allowing students to further revise the answers independently of the E-CAT, at this stage, we instead favour limiting downloading and printing options for the tool. Our reasoning is based on our own experience that sometimes, making ‘answers’ available to students actually impedes rather than enhances learning. Students may walk away with the ‘answer’ and view this as ‘learning’. In requiring students to navigate the tool to access the ‘answers’ we are encouraging active and deeper learning rather than passive learning that may result from students simply downloading or printing answers from the E-CAT. The tool has been specifically designed to facilitate navigation so that students may access all or any part of the tool as often as they like. Accordingly, there is no bar to ease in accessing ‘answers’ by students.

We are yet to pilot the E-CAT with other groups of users. We believe, however, that the tool may represent a useful teaching and learning tool for the following additional groups of students:

- *JD/Graduate students* - the tool might be particularly useful for this group of students given that the *Foundations of Law* subjects, as well as other subjects, increasingly are being delivered via intensive mode. This means that graduate law students must acquire core legal skills, such as case reading and analysis skills, much more rapidly than combined students, in order to be able to progress and keep pace adequately with their legal studies. The E-CAT provides a channel through which such students can reinforce their learning of key skills contemporaneously with in-class teaching and also provide further opportunities to practice and refine skills previously attained.
- *Post-graduate non-law students in specialist masters programs* - increasingly students from other disciplines are seeking to undertake specialist postgraduate degrees in Law at a Masters level. Many of these students have no training in legal skills, methodology or reasoning. Without prior legal training, key legal skills such as case analysis skills would most likely be lacking and might be difficult for students to develop independently without some instructional support.¹²⁷ Accordingly, the E-CAT provides a tool to assist students who feel they would benefit from learning such skills or for whom development of such skills is essential because they have opted to undertake research in a technical area that demands such skills.
- *Postgraduate students and undergraduate exchange students from civil law countries* - consistent with broader trends in other law faculties across the country and internationally, we are mindful of the fact, that many more students from civil jurisdictions compared to common law countries are now seeking to study law in Australia. The E-CAT represents a particularly

¹²⁷ In most instances, such skills will not be taught within the Masters program itself.

useful resource for these students who, irrespective of the level or subject(s) of study, will need at least a basic understanding of how to read and analyse decisions of courts. The E-CAT may be accessed by these students at any point in time in preparation for their study, potentially even prior to travelling to Australia and certainly before they undertake any formal study in particular units or subjects. The E-CAT in its more developed state, now with seven cases, is sufficiently broad in scope to offer this group of students a functional mode to develop such skills.

- *Students in other faculties taking law units* - similarly, there is a growing need for professionals in other disciplines to understand law and understand judgments of courts. The E-CAT again could very easily be adapted and utilised for the purpose of service teaching in other faculties.

In relation to developing the E-CAT to aid teaching and learning of skills beyond case reading and analysis skills we believe there is certainly scope to utilise the tool in teaching at least statutory interpretation, critical analysis and essay writing skills. However, to date, we have not taken any steps to extend the E-CAT to these skills.

As the E-CAT is further developed, in any of these possible directions, we are mindful of the cost of the tool, both in terms of time and money. Developing e-learning tools and strategies is a time-consuming venture for already very busy academics. Undoubtedly the educational gains make the time commitment easier to bear, however, as Lambert and Brewer warn:

we cannot expect that academics will have the time, skills or inclination to step outside their own discipline knowledge and skills to adopt the role of a learning designer to effectively redesign their subject/course for blended learning with no additional support. Additional research is required to identify how much time and staff development is required to increase the skill level to such that they can independently achieve this, and a comparison done to weigh up that commitment with the effectiveness of centrally resourced learning design specialists.¹²⁸

The cost and time associated with developing e-learning strategies has led to increased interest in recycling e-learning models and tools. Lambert and Brewer, for example, demonstrate how e-learning tools can be modified for use in different disciplines, in their case engineering and law – two very different areas of study and learning. This has been a relevant consideration in development of our tool, as we contemplate other potential user groups and conceive of different learning objectives and skills that the E-CAT can be directed towards.

A related consideration in further development of the E-CAT and e-learning tools generally is student expectations. Monaghan points to students' increasingly high expectations of the quality of e-learning formats.¹²⁹ This has implications for the cost of developing such tools and the time such development demands. As technology becomes more elaborate and its outputs, eg, graphics more sophisticated, this will increasingly become a live issue that needs to be factored into the development matrix of e-learning.

¹²⁸ Lambert and Brewer, above n 24.

¹²⁹ Monaghan, above n 38, 2.

Finally, in further development of the E-CAT continued feedback of the tool is critical. Not only is student feedback essential but so too is testing the learning efficacy of the tool, eg, comparing the grades of those students who use the E-CAT against those that do not. Field reported that better performing students accessed a commercial law unit of study e-learning site, more often than other students.¹³⁰ Importantly, however, this was found to be attributable to those students being more attentive and active on the site earlier than other students.¹³¹ This finding points to the importance of being able to track the use of e-learning tools by students across a number of dimensions in order to properly evaluate the efficacy of such tools.

V CONCLUSION

The development of e-learning tools to teach legal skills and legal reasoning poses a series of challenges for law teachers that demand careful planning, the clear mapping of educational objectives, and the innovative integration of e-learning strategies with traditional teaching methods.

The E-CAT provides a useful platform for teaching case analysis and reading skills to law students by building on classroom activities and learning and more specifically by extending the skills acquired by students in class, through the use of structured multiple-choice questions and informational cues that encourage self-directed and independent learning by the student. The E-CAT is a flexible tool that permits students to shape their own learning in a way that is conducive to individual learning needs.

Student feedback strongly indicates that students view the E-CAT as an intuitive tool that is well designed to develop case analysis and reading skills, in a way that complements classroom learning and skill acquisition. The strongest feature of the E-CAT seemingly is the flexibility the tool offers students for individualised learning.

¹³⁰ Field, above n 2, 21-2.

¹³¹ Ibid.

APPENDIX 1

PILOT STUDY – SURVEY QUESTIONS

- Question 1:* The online tool was easy to use.
- Question 2:* This exercise has helped me further develop my case analysis skills and better understand what is involved in writing a good case note.
- Question 3:* Please explain the reasons for your rating in Q2.
- Question 4:* Each answer provided information and feedback. This was useful.
- Question 5:* Please explain the reasons for your rating in Q4.
- Question 6:* This online case analysis tool builds upon what I have already learnt in class.
- Question 7:* Would you complete more case analysis exercises like this one if they were available? (YES/NO).
- Question 8:* If you answered “No”, please explain why not?
- Question 9:* Please tell us how you used this assessment tool (I tested myself on the whole case; I tested myself on specific points).
- Question 10:* If you tested yourself only on specific points, please mark which points you tested yourself on (Citation; Facts; Procedural History; Legal issues; Ratio Decidendi; Obiter Dicta; Orders).
- Question 11:* Please provide any further comments about how you used this practice tool e.g. did you use this tool more than once.
- Question 12:* Please provide any other suggestions for improving this online case note practice tool.

APPENDIX 2

Marrickville Municipal Council v Moustafa [2001] NSWCA 372

ELEMENT: LEGAL ISSUES

Typical Problems	Evaluative Question: Which of the following best summarises the legal issues facing the court in this case?	Responses
Lack of specificity & accuracy	<p>A.</p> <p>(1) On 15 February 1993 did Marrickville Municipal Council owe a duty of care to Moustafa, an 11-year-old schoolboy and other entrants to the park?</p> <p>(2) Did the Council breach a duty of care to entrants of the park?</p> <p>(3) Did the Council cause injuries to the schoolboy due to its failure properly inspect the park?</p>	<p>Incorrect.</p> <p>This answer does not specifically and accurately identify the legal issues facing the court.</p> <p>The questions are not clear and concise:</p> <ul style="list-style-type: none"> • The duty of care issue contains irrelevant facts such as the date of the alleged breach of duty of care and the fact that the plaintiff was a schoolboy. • Questions 2 and 3 do not specifically indicate that the issues of breach and causation were determined in relation to the plaintiff i.e. Did the Council breach its duty of care to Moustafa? Did the Council cause Moustafa's injuries? Alternatively, the legal issues may have been framed in more detail, elaborating on how the court interpreted the question specifically with reference to the facts of the case. For example, Does a Council owe a duty of care to ensure a public park adjacent to a children's playground, is kept free of dangerous material through a proper system of inspection, so as to avoid causing physical injury to children entering the park? <p>Issues must be clearly framed as questions to be answered by the court.</p> <p>Have another look at the question before selecting the best possible answer.</p>
All legal questions not identified	<p>B.</p> <p>(1) Was the Council negligent?</p> <p>(2) Did the Council owe a duty of care to the plaintiff?</p> <p>(3) Did the Council cause the plaintiff's injuries?</p>	<p>Incorrect.</p> <p>All the issues facing the court must be correctly and specifically identified. The issue of whether the Council breached the duty of care it owed Moustafa is not included in this answer.</p> <p>Have another look at the question before selecting the best possible answer.</p>
Best Answer	<p>C.</p> <p>(1) Did the Council owe a duty of care to the plaintiff?</p>	<p>Correct.</p> <p>All the issues facing the court have been correctly identified.</p>

	<p>(2) Did the Council breach its duty of care to the plaintiff?</p> <p>(3) Did the Council cause the plaintiff's injuries?</p>	<p>It is also permissible to include the question as to whether the trial judge's conclusions of fact could be justified as a legal issue as this was listed as a ground of appeal and the Court addressed it, although it was made clear that 'this case does not make it necessary...to come to any firm conclusion about the claimed errors of fact made by the trial judge' (Priestley JA at [25]).</p> <p>Issues have been appropriately framed as questions to be answered by the court.</p>
Incorrect legal issues are identified	<p>D.</p> <p>(1) Did the Council owe a duty of care to the plaintiff?</p> <p>(2) Did the Council breach its duty of care to the plaintiff?</p> <p>(3) Did the Council cause the plaintiff's injuries?</p> <p>(4) Was the trial judge wrong in his apportionment of fault?</p> <p>(5) Was the trial judge's assessment of the plaintiff's damages unjustifiably high?</p>	<p>Incorrect.</p> <p>This answer has covered all the issues addressed by the court but also includes the following grounds that were not legal issues to be decided by the instant court:</p> <ul style="list-style-type: none"> • Was the trial judge wrong in his apportionment of fault? • Was the trial judge's assessment of the plaintiff's damages unjustifiably high? <p>Issues must be clearly identified as the questions to be answered by the instant court.</p> <p>Have another look at the question before selecting the best possible answer.</p>
Presenting the legal issues incorrectly – must frame as a question	<p>E.</p> <p>(1) The Council did not owe Moustafa a duty of care.</p> <p>(2) The Council did not breach its duty of care to Moustafa.</p> <p>(3) The Council did not cause Moustafa's injuries.</p>	<p>Incorrect.</p> <p>This answer has identified the issues correctly however the issues have not been framed appropriately and accordingly are ambiguous in terms of the precise questions the court has been asked to answer.</p> <p>This answer states the findings of the court and what the court considered in the process of making a decision. Issues facing the court are best framed as questions to be answered by the judges.</p> <p>Have another look at the question before selecting the best possible answer.</p>