

Editorial: Legal Education and Information & Communications Technology (ICT)

The issues raised by the new way of life are difficult and painful, because they strike at the heart of our most complex and intransigent social problems: problems of community, identity, governance, equity, and values. There is no simple good news or bad news.¹

With the recent failure of large-scale ICT projects in higher education it looks as if we've finally woken up from the technology dream.² In spite of this, though, ICT seems to be an increasingly important medium for teaching and learning the law. New forms of course design are being used widely to exploit it. The range of technologies we can use is rich and fast-changing, with portable PCs, wireless technology, and increasing use of mobile hardware and communication networks over the internet. Web applications themselves are increasingly blurring the distinctions between hypermedia, multimedia and the internet. The convergence of online and face-to-face teaching methods *via* learning management systems such as WebCT or Blackboard, for example, is creating new learning situations for our students, with fresh challenges and opportunities for both students and staff. At a deep level it is also influencing module design, the ways law teachers think about teaching, and the way students learn. It is all the more important, therefore, to analyse and explore the key pedagogical and policy issues involved when ICT is used for legal learning, to learn from international use of ICT in legal education, and to consider the practical challenges facing teachers and learners globally, and their possible solutions.

Contributors to this special issue of *The Law Teacher* were invited to consider issues such as organisation of learning (eg new HE partnerships), technical standards (eg second-generation internet applications), learning and instruction theory, the jurisprudential nature of legal education, and use of ICT at different stages in legal education. The result is a collection of truly international articles that span educational innovation within legal jurisdictions in Australia, Europe and the USA.

Process of review

The review process for this edition was carried out using web-based technology. We created a web page on which we posted authors' draft articles, special edition guidelines and other relevant information. We then invited all authors to take part in an online discussion where each piece of work produced by authors was reviewed and commented upon by the editors and other authors. Throughout the period of the forum we spent approximately one week focusing on each article and discussing it in the context of the other articles, and whatever else we brought to the discussion.

¹ Turkle, S. (1995) *Life on the Screen: Identity in the Age of the Internet*, Touchstone Press, NY, 232

² In Australia, Melbourne University Private went under, the UK Open University has had to withdraw from the US recently, Columbia University's Fathom venture closed in 2003, while in the UK the £50M e-University project disappeared earlier this year, having signed up only 900 students to date. Not all have suffered this fate. In Scotland for example, Edinburgh University's Interactive University has had considerable success, attracting over 90,000 students from 23 countries to date. See <http://www.interactiveuniversity.net/>

The discussions gave authors review points for their articles for the final deadline of the issue. The process was stimulating and useful for the editors when they came to edit the papers after final re-submission by all the authors.

ICT and educational research

It is sometimes argued that the use of ICT is a general medium of learning, in much the same way as video, or a tutorial. However we would argue that the technology can create significantly different learning experiences; and that the approaches to ICT as a teaching and learning method, and to its research, are significantly different to warrant special treatment. Moreover, there is insufficient research that tells us what actually goes on when students study with ICT – the ways that they understand educational situations, how they use the tools that they have at their disposal to understand the discipline of law, and so on. Such research needs to be interdisciplinary, and to take account of pre-existing and much older lines of educational research

Take the following example of a study from the phenomenographical tradition of research, carried out by Ference Marton. In this study, 30 students reading Economics and Political Sciences were asked to read a chapter from a textbook on political science. An experimental group was asked to read a form of the text where after each section they were presented with a set of questions designed to help them think about the text's meaning, its overall structure, the relations obtaining between sections, thus stimulating a 'deep' approach to reading and understanding. The control group were given the unaltered text. Students were tested immediately on finishing reading, then two months later. The results were surprising: on both tests, the students who read the *unaltered* text performed better, their understanding and memory richer.³

Why was this so? As Ference Marton summarised it in his book *Learning and Awareness*, the questions distracted students from dwelling on the experience of reading the text itself and became themselves the focus of attention – 'students had been focusing on the act of learning rather than on the object of learning'.⁴ Parallel studies confirmed these results. As Marton described the learning processes of the students in the experimental group,

'[t]he task of reading the text became trivial and mechanical rather than challenging and reflective. Such a text manipulation was dubbed pointing out and its effect on learning, the erosion effect, the whole being a technification of learning.' (p.169)⁵

These studies were carried out in the 1970s, but they bear directly on new learning technologies. If we supply students with resources, we have to ensure that the resources actually enhance rather than inhibit learning; or else the result may well

³ Marton, F. (1976) On non-verbatim learning. IV: Some theoretical and methodological notes, *Scandinavian Journal of Psychology*, 17, 125-128

⁴ Marton, F., Booth, S. (1997) *Learning and Awareness*, Lawrence Erlbaum Associates, Mahwah, NJ, 169

⁵ These phenomenographical studies should be seen in the light of the broader research on interventions into the reading process. See in particular Anderson, R.C., Biddle, W.B. (1975) On asking people about what they are reading, in *Psychology of Learning and Motivation* (vol 9), ed. Bower, G., Academic Press, New York, 85-132; and Andre, T (1979) Does answering higher level questions while reading facilitate productive learning? *Review of Educational Research*, 49, 280-319. Both studies come to broadly the same conclusion.

be redoubled 'technification of learning'. Law teachers construct elaborate teaching environments with multiple-choice questions, branching learning and so on, and with VLEs such as Blackboard, with ever-increasing facility – but what evidence do we have that students learn better using them?

Over 25 years later the question was posed by Howard-Jones & Martin, this time within the context of a hypertext application which offered questions on a text that students were asked to read and then gave feedback to them.⁶ Students were then tested on their concept learning. Using this environment, the authors reported that student learning was significantly *reduced*. They went on to analyse why this occurred, why student learning was improved when the subjects were asked to summarise information, and how ICT can be used to enhance learning. Curiously enough, none of Marton's studies was quoted by Howard-Jones & Martin, though those earlier studies would have enriched and reinforced the conclusions of the later study. Nevertheless, this study is a useful example not only the general educational research in ICT we need to read and implement, but of the research that we need to produce and discuss in our own legal discipline. This special edition is a contribution to that process. It aims to present a snapshot of current international research into ICT in legal education, and to site that research within the broader field of educational research.

The special edition on ICT

The papers themselves represent a wide variety of approaches to the research and use of ICT in legal education, from single, highly focused research projects to practical experiential narratives. This is as it should be: we should learn from research, but we can also learn from the grounded experiences of other teachers, from different times and in different places.⁷ Reflection on the past helps us understand the future; and this is particularly true of Paliwala's article on Iolis. Paliwala provides a useful overview of the developments that Iolis has undergone over the last decade, and shows why the application is still an impressive and invaluable resource for law students in England and Wales. Calling for a reconceptualisation of courseware, his conclusion shows us how far we have come, and how far we have yet to go. The next two articles take quite different approaches to the learning of legal skills and knowledge. Le Brun *et al* describe a curriculum-wide approach to the development of reflective skills in a professional legal education course at the Australian National University. Their work shows the potential for learning when reflective practice is integrated with online learning. By contrast, Nadolski & Wöretshofer focus their research on the effectiveness of ICT to support the skills of interviewing. Their study, involving experimental and control group comparison, was based on students at a number of Dutch HE institutions, and demonstrates how ICT can be used for skills-learning in distance-learning and face-to-face classes.

Using a different methodology, McKellar & Maharg present the results of a research project based upon a virtual learning environment centred around video lectures and which was implemented in a professional educational course, the Diploma in Legal Practice. Muntjewerff & Leijen conduct a review of the utility of learning

⁶ Howard-Jones, P.A., Martin, R.J. (2002) The effect of questioning on concept learning within a hypertext system, *Journal of Computer Assisted Learning*, 18, 10-20

⁷ For explorations of different approaches to ICT research, see *Technology, Pedagogy and Education*, 2004, 13, 2, Special Issue into Information and Communications Technologies

management systems, widely used in HE in the Netherlands as in the UK, through the medium of a thought experiment: what would be lost to staff and students if we unplugged Blackboard and other learning management systems? Their approach discusses what is needed to turn these systems into real learning systems.

The next two articles from the USA take a broad view of distance-learning. Martin outlines the substantial experience he has had at Cornell in running online inter-law school courses. The details of his experience are an invaluable guide to anyone thinking of embarking on distance-learning in law. Mayer, Executive Director of the highly successful Centre for Computer-Assisted Legal Instruction, describes a radical approach to partnership in distance-learning that picks up a number of points made by Martin and applies this approach to audiences beyond the law school. His project, CODEC, could well provide a model of partnership for UK as well as US law schools. Finally, Bloxham's experience of using ICT on a new Qualifying law degree demonstrates the valuable role that ICT can play in widening access to non-traditional students, particularly in areas such as induction programmes and in retention strategies.

The themes are wide-ranging and vital to our practice as teachers. We see ICT used in first-year undergraduate courses (Bloxham) and postgraduate professional courses (McKellar & Maharg). It is used to teach skills (Nadolski & Wöretshofer), reflection (Le Brun *et al*), substantive law (McKellar & Maharg), legal theory (Paliwala). It is used in blended learning (Bloxham) and distance-learning (Martin). Most articles emphasise the need for integration of learning approaches (Muntjewerff & Leijen) and for collaboration (Mayer, Martin, Paliwala). All of them touch on the issues raised by Turkle in the epigraph to this introduction; none of them suggest the news is simple.

In all of this, we need to take the long view of the technology and the way we use it to improve teaching and learning. The field is not, as one article has it, a 'junkyard of discarded jargon, mantra and acronyms'.⁸ Rather think of it as woodland, filled with rising, full-growth and dying organisms, all of them contributing to the ecological cycles of research, implementation, development and reflection. Above all, there are the students who every year arrive with more and more sophisticated expectations derived from the postmodernist technological communications revolution going on around them. The Dutch town of Almere, sited appropriately enough in the new-claimed polder of Flevoland, can lay claim to be the world's first wireless broadband town⁹ In the UK, pupils studying GCSEs can now download content from the BBC's 'Bitesized Revision' webpages to their mobile phones via SMS. This isn't just corporate gadgetry used for the sake of novelty: it's providing the multivarious environment for a step-change in communication and learning equivalent to that of manuscript to print culture in the fifteenth century. School children from these cultural backgrounds in postmodernity will be coming through to our undergraduate law courses in a couple of years, and we need to provide similarly sophisticated and converged learning environments. Are we ready for them?

Paul Maharg

⁸ Hamilton, D., Dahlgren, E., Jult, A., Roos, B. Söderström (2004) When performance is the product: problems in the analysis of online distance education, *British Educational Research Journal*, 30, 6, 841-54; 846

⁹ See Versnel het tempo om idealen van een 'Digital Life' te realiseren at <http://www.almerekennisstad.nl/seminar2004>

Antoinette Muntjewerff