BILETA

16th BILETA Annual Conference

April 9th - 10th, 2001.
University of Edinburgh, Scotland.

A Tiger by the Tail - Student Laptop Computers on a Legal Practice Course

DAVID WILLIAMSON
(De Montfort University, UK)

Abstract

De Montfort University is in its second year of requiring all its students (Full Time and Open Learning) on its Legal Practice Courses at Leicester, Birmingham and Bristol to use a laptop computer. The computers a supplied by DMU and purchased by the students as part of their course fees. The laptops come loaded with office and legal software. The students can connect to networks, including the World Wide Web, in their dedicated LPC library as well as at 'home'. These network connections allow them to access further legal resources. The Computers are also used within small group teaching, which is the keystone of the DMU LPC.

This paper reviews the use of the laptop computers how they are integrated into teaching. The paper looks at the practical problems of dealing with a large number of students with computers from a support view point - at Leicester we have 110 full time and a 80 first and a 80 second year Open Learner Students. The paper looks at what lessons can be learned on the provision of computers to such large numbers of students - how a University adapts to becoming a 'box shifter'. The Paper also deals with the students reactions to the use and need of a personal laptop computer. The paper finally looks at the future use of the laptop computer, on the Legal Practice Course.

The use of IT in Legal education

The Educators View

That Information Technology (IT) or, should that be, Information and Communication Technology (ICT), has a role in legal education is a 'truth' held by the attendants of past, current and future BILETA conferences. What forms this IT should take is the debatable point, which fires such gatherings.

The definition of IT incorporates:

* Hardware such as audiovisual devices and computers.

* Software such as the World Wide Web, electronic databases, computer aided learning.

* Skills to use the hardware and software to produce both research materials (documents and presentations) and educational outcomes.

The most power full symbol of IT is the computer.

The uses of IT within a legal education courses cover a broad spectrum. For example, one band on the spectrum would be 'simple' video or audio technologies as shown by Smith and Walpole in their 1998 paper on the use of selected technologies in the delivery of a legal education program (Smith and Walpole, 1998). Another more 'sophisticated' band on the spectrum is illustrated by the 1997 work of Migdal and Cartwright - with their 'Pure Electronic Delivery of Law Modules' (Migdal and Cartwright, 1997). Many more examples exist in the body of work - See also the works of Palawala e.g. 'Learning in Cyberspace' (Palawala, 1999); and the works of Widdison e.g. 'Computerising Legal Education (Widdison, 1999). The body of work on legal education (including IT) is so extensive that it must now be considered as the separate discipline of 'the study of legal education' (Bradney, 1997).

The study of legal education points to the use of IT providing an increased understanding of concepts in law. It "has shown what can be done given proper planning, resouceing and implementation...It has provided a unique educational and research experience for its students" (Smith and Walpole, 1998). A call has been made to 'Go out and prepare for the age of electronic legal education' (Migdal and Cartwright, 1997).

Another reasons for use of IT in legal education come out of the changes to society. The law must reflect these changes and thus so must legal education.

The Legal Professions View

Reinjintjes and Valcke (Reinjintjes and Valcke, 1998) point out that what they call 'electronics' (IT) effects the law its self. The past introduction of 'new technology', such as the airplane, meant that existing laws had to be intepretated differently and new laws introduced. IT has brought us a number of new laws e.g. on computer viruses, hacking copyright etc. These new laws will effect legal education.

The nature of the legal profession, which is still the major 'next step' for those undergoing legal education, is changing. E-commerce, sharing of information electronically etc are all changing the legal profession. "An increasing number of law firms are transforming into 'virtual' practices, using the Internet to access a wealth of legal information" (Christain et al, 2000). "Lawyers for the 21st Century must learn to use electronic information tools to find the law, interact with government agencies, prepare their own work and communicate with Courts, other lawyers and their clients. (Staudt 1993)" (Abbey, 1995). These changes to the legal profession can also be seen in the works of Susskind e.g. 'Transforming the Law - Essays on Technology, Justice and the Legal Market Place' (Susskind, 2000).

An outline of the use of IT in legal education was given by educators in "The BILETA Report" (Terrett 1997). In relation to LPC type courses it says that for 'Course Type 3 -The Profession - Based Learners' should be able to produce documentation, Research and communication using IT.

To meet changes in the legal profession those governing the Legal Profession have changed the nature of legal education. The big change took place in 1990 when as Solrch and Nathanson put it "...The Society of England and Wales started a revolution in legal education. It decided to replace the LSF [Law Society Finals - with its lean and regurgitate format] with the new course the Legal Practice Course, which would include the teaching of legal Skills..." (Solrch and Nathanson, 1996). In 1990 Law Society did not mention IT skills either in there own right or in support of any other subject. The omission 'is all the more curious in the light of the comments made by Philip Jones, Director of the Legal Practice Course at the University of Sheffield and one of the authors of the LPC standards. He specifically identified IT skills as professional practice skills in the same context

as client relationships skills or personal work management skills. For Jones the IT skills are thus, "IT skills, both generic - the ability to use general computerised tools, the ability to use legal specific applications, and the ability to use legally specific tools. (Jones 1994)'" (Abby, 1995).

The Law Society did not at the lunch of the LPC explicitly mention IT but the research skills that it does mention are now dependent on IT. This is because the medium that contains the source materials of research are now IT based. Thus IT is important to those taking the LPC.

Over the period of the existence BILETA the students experience of IT has changed dramatically.

The Students View

When BILETA was founded a few, if any students, would have been exposed to IT or even recognise what it was. Once if students had any experience of computers it would have been at school or collage. A few fortunate Law Schools, which had the facilities, would be the first to introduce the computer to students. To-day young students are likely to have access to a computer at home. Parent or garden has supplied these home computers. They are supplied not just for games or entertainment (still an important reason) but also for pedagogical reason - to give their offspring (or charge) 'an advantage' in their education (see the work of Sutherland et al, 2000). At home adults are on hand to 'sort out' any problems with the computers for these young students.

Older students have met the computer during their employment. They see the computer as a work related tool only being for one specific task - their work. A work situation will most likely be highly supported by in house IT experts or have access to outside help in the form of Helpdesks. Older students may also see the computer as a devise that only young students can understand.

In general students see IT is an important part of their study and will play an important part in their future employment.

The Overview

Educators want IT especially in the form of computers to be part of education but to what extent. The power per pound (should that be euro) when purchasing computers is currently at its highest (though this is true of any moment in the history of computing). The Open University began in the 1980 to require computer 'ownership' on some of its courses e.g. computing engineering other science-based courses. Some UK Universities have dallied with the notion of making computer ownership an intragal part of studding at the University, Warwick University being the latest. But, Recession, removing of grants and the need to make Universities 'open to all' has all intervened to prevent the move to one computer per student. But what about the use of computers on legal education courses?

The LPC course looks ideal course to start a practice of one computer per student. It is skills based and the students are postgraduate. The students also wish to join a profession that is dependent on IT. But what are the practicalities of having every student on an LPC course with a computer. The practicalities are now developed in this second part of the paper via a series of questions and answers - starting with -

Information Technology on a LPC courses - Why?

From what has been said before there are a number of resions to introduce IT to a LPC course:

* The Educators wish it - for pedagogical reasons.

* The Profession requires it - because of the changing nature of work.

* The Students expect it - because they are use to it.

But why take that extra step of having each and every student equipped with a computer - a laptop at that?

There are a number of reasons:

* The laptop can be a portable library containing numerous database of information such as Butterworths Encyclopaedia of Forms and Presidents.

* The laptop can reduce printing costs by allowing distribution of materials to all students.

* Laptops make you different - making your LPC stand out in a competitive market.

* 10:1 was the BILETA recommendation for students to computer ratio (Terrett, 1997)- will not 1:1 be the ultimate? 'The successful delivery of CAL...crucially depends on the availability of and access to computer hardware' (Migdal and Cartwright, 1998).

* Having students with individual laptops is practically more 'doable' than having a very large computer laboratory dedicated to the LPC.

* Students go into the legal profession processing a laptop.

So we have decided to have each student equipped with a laptop. The next question is -

How can Laptop computers be integrated into teaching?

'...the LPC is relatively fluid in its portfolio of pedagogical techniques' (Abby, 1995)

One answer is the role they can play in small group teaching

* Able to work in groups in any situation not only in computer room but - tutorial room, lecture theatre, refectory or at 'home'.

* Look at different databases at the same time in the group without having to wait for space in a computer laboratory.

* Exchange digital information with out having to queue for a computer.

* Tutor and students can work though problems in groups.

Laptops can also be used in student collaborative work and individual work where and when students wish to work. Students with disabilities such as epilepsy (no screen flicker), Dyslexia (constant availability for note taking) and blindness (ease of working any where) will find the laptop 'better' to use than a desktop in a computer laboratory.

There is the flip side of the coin in using laptops -

What are disadvantages of having each student with a laptop?

The disadvantages rest with the laptop its self. They are:

* Difficult to repair - I have seen a trained engineer on one model take a morning to replace a hard

disk removing and replacing 21 screws. - Design is very important it is not just an extra twist or curve of a case as in a desktop computer. In a laptop design is fundamental to the nature of the computer.

* Difference in construction between different manufactures - I have changed a hard disk in 2 minutes on one models removing and replacing just two screws.

* Difficult to upgrade hardware and expensive to upgrade.

* Expensive power per pound - you are paying for the portability not the computer power.

* Difficult to carry around - they are still a relatively heavy devise

* Dangerous to carry around - very 'nickable'

* Battery life does not live up to expectations - which can effect the ability to carry out small group teaching.

* Laptops have, small screens, small keyboards and none standard pointer devices. These factors have Health and Safety implications (see for example Starry et all, 1998 or your University Health and Safty Policy). These Health and Safety issue effect how long a student should be continuously using a laptop on University property.

* Long-term reliability, which links to cost and difficulty of repair.

Health and Safety issues effect the whole workstation not just the laptop. The workstation also consists of lighting and seating and these have to be considered in the rooms students are expected to use during small group teaching, collaborative work or individual work.

The 'backup' supplied by the University can counter some of the disadvantages of the laptop. The 'backup' starts with chose of laptop model. This leads to the next question -

How do you ensure that each student has a laptop?

There are at least four options of supplying the laptop:

(1) Require all students to come to the course with a self-supplied computer to your specification.

(2) Set-up a favoured supplier who can supply computers to the given specification and have the students purchase from them.

(3) Have the University Purchasing Department purchase, to your specification from a supplier. The University then 'sell on' the computer to the student. This is the University as 'box shifter'.

(4) Purchase computers and lend or rent them to students for the duration of the course.

These four methods have advantages and disadvantages:

(1) Advantages - Problems with hardware are left to the students to sort out with their supplier. Hardware problems involve screen damage and hard disk, battery, keyboards, CD-ROM, pointing devises problems.

Disadvantages - Difficulty in initially setting-up computers with software. Problems may arise

within the student body when some students have computers in excess of the minimum specification.

(2) Advantages - Suppler is point contact for hardware problems.

Disadvantages - Difficulty with initial set-up of software and networking.

(3) Advantages - The University has control of initial set-up of computers i.e. software loading network settings etc.

Disadvantages - Students become dependent on the University as supplier - they expect the standard of service they would get form a high street outlet. You have that tiger by the tail. This is Some students will become dependent on the school to fix the problems even when they have left the School - that is actually left the course because of, completion of the course, dropping out of the course, interrupted the course or re-sitting the course. You have to collect the money for the computers. You need a document, which details the extent of the responsibility of the University and the student for the laptop. Security problems arise when distributing computers to students or moving the computers across to other sites on mass.

(4) Advantages - The University has control of initial set of computers. You know who is responsible for the computer.

Disadvantages - You get to know any 'problems' that this model has. The 'ware and tare' on computers means that they may not last for many cohorts of LPC students. Not taking advantage in new developments in computing in terms of technical and cost developments because you use same computers over a number of cohorts. Students do not go into profession with laptop.

All four options have the problem of updating existing software and adding new software. If you are to set-up one computer then image this on all the other computers great care must be taken in the set-up of the master image - any mistake and that tiger is very lively. How lively the tiger can potentially be is will depend on which of the four options you choose i.e. were the responsibility for hardware problems lies.

Option 3 is perhaps the first choose because of the control it gives the University over the computers interms of set-up licensing software etc. Option 3 is the assumed choose for the rest of this discussion.

Whichever method is chosen you will have a lot more computers on site. A typical Law School will contain less than fifty computers for student use (plus, say forty for staff use). If you have a full-time LPC with all students equipped with laptops you are looking at in excess of hundred extra computers in the School. If you also have a part-time Open Learner LPC then for three days a month you will have nearly another hundred computers in the School on top the full-time LPC computers. When you have two years of OL students for three days a month nearly another hundred computers on top of this - two tigers by the tail. In total it is possible that you have three hundred computers extra in the School for part of each month. An increase in 'Support Staff' will be required if other parts of the School's IT support is not to suffer.

A major problem is, that according to the manufactures/supplies, "6% of laptops do not work out of boxes [or soon after being taken out of the box]" - they are 'duds'. In practice the 6% 'dud' rate is nearer to 12%. That is 6 to 12 actual computers in every 100 will be 'duds' and need dealing with from day one of the LPC. These problems will occur at the beginning of the course. Dealing with these problems is time consuming and but more importantly 'off putting', to say the least, for those students' who are in this 6 to 12%. With OL LPC students' this problem, as it seems with all problems relating to laptops, is magnified due to their short periods of 'face to face' contact with the School and thus sort 'face to face' IT support time.

There are a number of remedies, which can be applied:

 * Test all computers before distributing them to students.

* Have enough spare computers to cope with replacing those that are going to be faulty - if you have a total of 200 new students' you actually need between 212 - 224 computers. These computers can be lent to students while computers are returned to manufacture/supplier. This will not be a popular with those who control the purse string but does ensure students are not without a computer for any part of the course.

* Use a laptop model that has an easily changeable hard disk and have spare hard disks.

* Ensure fast reliable repair service ether with the suppler or in-house.

* Have a Web pages set-up were software fixes and updates can be downloaded.

So the student now has a laptop loaded with software and with support and backup in place - the next question is-

What are the students reactions to the of a personal laptop computer on their LPC course?

Students reaction to the use of IT and to having a computer will depend on their past experience of computers. This will dependent on:

* Where they did their previous legal education.

* Nature of previous legal education (undergraduate or PgDL).

* The age of the Student.

* Work experience - have they been working for a number of years, have they worked in the legal profession as paralegal.

It my also depend on gender (see for example Selwyne, 1998).

In reality:

* A large number of students come to the course from an undergraduate or PgDL law programs with limited research skills. When asked about past research skills experience comments such as "we had an half hour course on it" are common. This may be due to misunderstanding about what research is - they have done it but not realised it.

* Their experience of IT seems more to do with socialising than legal education.

* Students that use the web have over reliance on the web as a solver of problems. The view that all you have to do is 'Ask Jeeves' to solve a legal problem and that no further work is, initially, widely held - perhaps this is triumph of advertising. Students do not seem to think that a client may have all ready 'Asked Jeeves' and want to know if Jeeves is right.

* Students who have no experience of IT see that acquiring experience is a good idea and they way to do it is to go on a course that is to some extent reliant on IT. These students need very basic IT training.

The reaction to the laptop its self will depend on other factors:

* Expectations of students to type of computer they will receive as part of the course - Young students are 'streetwise' consumer. Old students are 'ashored' both know what they want - if not how to acquirer it.

* There perception of how integrated its use is to the course if a student can say after a few weeks "I don't see what the computer is for" then some thing is not right.

* Physical problems of actually carrying a portable computer and fear of carrying such an expensive item about.

* Fees - the laptop adds expense to an already expensive course.

* Current ownership of a computer.

* How difficult it is to set up and get working an Internet connection at home.

* How difficult it is to get working a printer at home.

* Quality of support when they have a problem with their computer - is there prompt replacement or a loan of a laptop to replace theirs.

On the whole students see that they will need IT in legal work and having a laptop will be an advantage to them in seeking training contracts. They perhaps see even more that the legal software will be of advantage to them in the future. That the Universities legal contracts with software supplies will not allow them to use or update the software after they have finished the course comes as a disappointment.

Laptop computer, on the Legal Practice Course - is this the future?

Portable computers can be an important and useful part of an LPC course but they change the relationship between, Student, University and Course. The University needs to have policies to deal with this change.

These policies must cover:

* What to do with a student who has had their computer broken, stolen or has been given a 'dud' computer.

* What to do with a student who have left the course interrupting or resitting the course in terms of supporting their computer.

* Make sure that supplies can deliver to repair schedules.

* To ensure that students know why theoretically and practically they are being asked to purchase a computer for their course.

* To ensure that teaching materials are being distributed with computers and that group working does involve the use of computers.

* To make sure that places are available for collaborative and individual working with the computers.

There seems to be an unwritten universal rule, which says, "if you have trouble with a computer then you always will have trouble with that computer". Ii some times it seems that this is true even you replace the entire computer. How much is computer and how much, in this case, student as yet to be determined. But the large majority of students will have no problems with their computers and never seek support during the course. It is clear that educator, student and the profession see that IT both, directly as in the use of computers and word processing and indirectly as research skill are an import part of legal education. The use of laptops is part of the LPCs future.

What now needs to be done to ensure the most effective use of laptops on the LPC?

What needs to be done can be summarised in the following points:

* Research, with a quantitative study, is now needed into the reaction of students to the use of personal laptops on LPC courses.

* Research of the alternatives to laptops for an OL LPC.

* Research what is the best type of Laptop to use. Where is the triple point of cost (i.e. power), usefulness and expectance?

* Research investment in educating educators to make best use of computers?

* Research the possibility of initial streaming of students dependent of previous IT experience.

* Research the best methods for achieving network connection to allow students to work at any point in the School- i.e. Wireless Local Area Networks.

* Research the total working environment of the student.

* Research new software suitability.

* Research the simulation of professional environment.

* Research the best ratio of information loaded on computer too information available on the web (either subscription services or own web pages).

"If we wait for cast-iron proof of success before we introduce an innovation we will never introduce it. We will never innovate. We will stagnate (Ella Rule)"(Hinett, 1999).

Bibliography

RM Abbey, 1995, 'Information Technology and the Legal Practice Course', 5 Web JCLI.

A Bradney, 1997, 'The Rise and Rise of legal Education', 4 Web JCLI.

M Cartwright, 2000, 'Electronic delivery in law: what difference does it make to results?', 4 Web JCL.

C Christain, J Smerin, P Banks, J Lymbury and A Terrett, 2000, 'Virtual Practice', Law

Society's Gazette, Vol 97 No 9 p24.

K Hinett, C Maughan, B Lee and K Stantons, 1999, 'Managing change in assessment and Learning

in Legal Education: A Tale of Two Cities', Law Teacher, Vol 33.

S Migdal and M Cartwright, 1997, 'Pure Electronic Delivery of Law Modules - Dream or Reality?', JILT 2.

S Migdal and M Cartwright, 1998, 'Information Technology in the Legal Curriculum -Reaction and Realities', Law Teacher, Vol 32.

A Paliwala, 1999, 'Learning in Cyberspace', JILT 3.

J Reinjntjes and M Valcke, 1998, 'Implementations of Electronic Developments for Distance and face to face Learning', Law Teacher, Vol 32.

S Slorach and S Nathanson, 1996, 'Design and Build the Legal Practice Course at Nottingham Law School', Law Teacher, Vol 30.

A Smith and M Walpole, 1998, 'An Australian Experience of the use of Selected Technologies in the Delivery of Legal Education Program - Some Lessons for Faculties and Educational Program Planners', JILT 3.

C Stary, T Riesenecker-Caba and J Flecker, 1998, 'Implementing the directive for VDU work - EU-state of the art', Behaviour & Information Technology, Vol. 17 No. 2 65-81p.

N Selwyne, 1998, 'The effect of using a home computer on students educational use of IT', Computers and Education, 31, 211-227p.

R Susskind's, 2000, 'Transforming the Law - Essays on Technology, Justice and the legal Marketplace', OUP, ISBN 0-19-829922-2.

R Sutherland, K Facer, R Furlong and J Furlong, 2000, ' A new environment for education? The Computer in the home', Computers & Education, 34 195-212.

A Terrett, 1997, 'Information Technology for UK Law Schools: The Second BILETA Report into Information Technology and Legal Education', http://www.bileta.ac.uk/B2/b2.html

R Widdison, 1999 'Computerising Legal Education What's in Store', JILT, 3.