provides practical suggestions on how the teacher should make them clear to students. Choose a manual that provides concrete teaching advice on how best to use the casebook, such as what materials to include and what to omit and what materials should come first and what later. Careful examination of a teachers' manual will tell you whether it really will help you adapt the casebook to your own needs, or simply leave you to your own devices in taming what may be a somewhat unruly text.

TECHNOLOGY

Multimedia teaching and the law—perspective and future applications in law schools
S Colbran
6 *J Law & Info Sci* 2, 1995, pp 164-173

The information superhighway brings with it an unparalleled opportunity for gathering and disseminating information. This, together with advances in legal courseware, will redefine the concept of a law school and alter the current method of legal education and examination.

The traditional lecture method of teaching is open to error and places an overemphasis on verbal communication. Students take poor notes and time spent travelling would be better spent on research. The lecture system is also inefficient. Students and staff waste time travelling to and from lectures; large class sizes necessitate the repetition of lectures; funds spent on building and maintaining lecture theatres could be better spent elsewhere; and there is an economic cost associated with the spread of disease consequent upon cramming large numbers of people into one location.

Interactive self-paced teaching, which may take several different forms, is a more effective way of learning and eliminates many of the problems associated with the lecture system. The only limits on the legal course materials presented through this medium are the imagination of their creator. Interactive seminars can encompass a broad range of materials from simple text to expensive multi-media programs. Interactive moot courts can be created which enable students to engage in the adversarial process with strict guidance by an expert electronic judge.

The law library will become a virtual library accessible from any location with all currently printed works, books, seminar papers etc. available electronically. This will revolutionise the library. We will not need to build large buildings to store materials; book retrieval costs will be a thing of the past because they will be available on line to all interested users; there will be no reshelving costs; there will be increased expenditure on electronic services and infrastructure; looseleafs will be converted into electronic form, saving on filing costs; the profiles of library staff will shift to a higher level research and advisory role; electronic books with interactive and multimedia capabilities may be developed. Furthermore, instead of a number of libraries duplicating the same resources, a central library offering electronic resources to all university law libraries, law firms and students via direct access links may emerge.

There are other possible developments. The concept of telecommuting may eventually lead to the replacement of academic and administrative offices in favour of home offices. Students will be able to undertake legal education in their own homes from any location on the planet. The Queensland University of Technology is already using electronic study guides which allow students to modify course notes with their own ideas and lecture material. Electronic casebooks are presently being used at some law schools in the United States, alleviating the need for students and universities to waste time photocopying a single frayed copy of a report.

Distance education is the future of legal education. Technology will free us from the university infrastructure and will free the universities from their present level of funding on infrastructure. What infrastructure does exist will be shared amongst several law schools. Physical attendance at lectures and seminars and physical searching at libraries for standard printed material will be things of the past.

Electronic sites could be established to distribute course material such as multimedia programs, prerecorded lectures and access to virtual libraries. E-mail and video conferencing will enable direct communication with lecturers and the possibility of seminar groups and discussion groups. More can be devoted to content, presentation, and delivery rather than the repetition of instructional materials.

The decline of the traditional law school and the growth of distance education will see fewer law schools with consequent staff reductions. Economies of scale and reduced costs will occur as multimedia courseware can be used by large numbers of students simultaneously from any location.

There are advantages and disadvantages in implementing multimedia. Obvious advantages include an emphasis on student interaction, individual teaching adjusted to student ability, reduction in course cost through competition, countering lack of primary material and increasing class sizes and convenience in that students will be able to study the programs at their own pace. Disadvantages include an inevitable level of dehumanisation, reduction in staff/student and student/student interaction, costs for infrastructure and programmers, updating costs, loss of academic staff

and the creation of an information-poor underclass.

Law firms will be major beneficiaries of the information revolution. Precedents, client marketing, in court presentations, in-house training, World Wide Web kiosk information and marketing sites for foreign clients are all set for drastic changes. There have already been obvious advantages in cost reduction and speed offered by the availability of cases and legislation in full text search and retrieval systems. One can expect to see links between law firms and the universities' virtual library opening up even greater possibilities.

Where does computer aided learning fit in the tertiary education equation?
R Mason
7 *J Law & Info Sci* 1, 1996 pp 105-118

There is evidence that computers are having an impact on curriculum development, instructional planning and assessment as well as on student learning. In the area of curriculum development, there are two basic strands for a syllabus comprising computers and the law. First, computers may be relevant as a specialist subject examining legal issues raised by the manufacture and use of computers. Secondly, there is the use made of technology by lawyers — the collection, classification, storage, retrieval, manipulation and evaluation of information by means of computers.

There are various instructional strategies available through the use of computers. In the domain of knowledge representation, the innovation of hypertext technology is beneficial. Research shows that improved learning occurs where students are not just passive recipients of knowledge but are actively involved in the process of learning, in constructing their own world picture from experience. Learner control of the learning experience is an important instructional design feature of hypertext used in multimedia. But computers can also provide students with the opportunity to test their ability to apply knowledge by testing their problem solving skills. Computer aided learning of basic principles may be valuable in these days of burgeoning curricula and larger classes and can free up precious class time for tackling more open ended problems.

While problem-solving exercises may also be used for assessment purposes, there are significant difficulties in using computers for assessment. These include the large investment of time and effort required to write data banks of questions, particularly if a range of question types is used. The items need to be unambiguous, capable of discriminating between high and low achievers and free from cues that might lead to response biases. More worrying is the possibility that questions may be directed at factual knowledge and not test higher order skills and the objectives of the course.

The more fundamental problem with using computer-aided learning programs is their lack of integration into the assessment regime. Unless students can see that working through computer programs will improve their performance in formal assessment items, such as assignments and examinations, it is unlikely that they will make use of them.

In a general sense, computers may contribute to learning through word processing facilities and electronic database searches. On the specific matter of student learning, empirical studies on available research indicate that computer assisted instruction in classroom teaching may improve learning and consistently reduce the time needed for instruction; is reasonably well liked by the students; and is probably most effective when used with conventional instruction. Students appreciate the anonymity, politeness, and patience of the computer, the immediacy of the feedback, the specific guidance and being able to learn what they want to learn at their own pace. Negative comments are that the exercise may be treated as a game rather than a serious academic activity and the fact that computers cannot pass judgment on student queries.

Given the multidisciplinary nature of development teams, their technological complexity and their high cost in terms of time and resources, infrastructure support in the university context is particularly important for the development and implementation of computer aided learning. Infrastructure support also involves implementation of computer aided learning programs. For example, whether the institutions deliver multimedia educational technology on campus once the programs are developed. The final point on infrastructure support is that the degree of commitment of the university, the department and the teaching team to integrating the new technology, is crucial. Numerous commentators warn of the need to approach the issue of computer aided learning as part of an educational strategy, not as an end in itself.

Teaching a law seminar over the Internet
S A Taylor
7 *J Law & Info Sci* 1, 1996 pp 41-53

Once communication is unshackled from the confines of place, the world becomes a classroom occupied by a world of students and a world of teachers. For students looking for coursework, the Internet may provide learning opportunities without limitation. Internet email is fast and so cheap it is virtually free. But speed and cheapness also constitute the major drawbacks of email because without some sort of self-imposed controls or software-managed filters,