9th BILETA Conference
Building Systems

1st & 2nd April 1993
John Moores University
Liverpool

Law on-screen: new tools for students

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Keywords: computer based learning - multimedia, interface design -coordination - communication.

Abstract: This paper discusses of the issues facing the Law Courseware Consortium in defining a standard interface for the development of software packages for law teaching whilst not limiting their adaptability.

Now that the Law Courseware Consortium is established and has selected and started on the development of the first subject areas (contract and criminal law) it seems worth discussing some of the issues involved with developing these packages and the benefits that they may produce.

The most obvious deficiency in legal computer based learning to date has been the piecemeal nature of its development. This has had two particular consequences: the software has covered only certain subject areas, and has been developed using a variety of interfaces. Clearly both these factors are likely to reduce the acceptability of CBL within academic institutions. The Consortium now has the opportunity to attempt to redress these problems by producing a large body of material covering most of the core undergraduate subjects, and by defining a standard interface which can be adhered to throughout the entire project.

In order to achieve these goals, however, a number of difficult problems have to be overcome:

- Working with a number of authoring teams at a variety of institutions. Coping with different levels of expertise and requirements.
- Acquiring, collating and editing a large quantity of data.
- Designing an interface which will allow authors to present materials as they wish, yet be consistent between modules.
- Ensuring that the finished materials are useful at as many institutions as possible.

Considering each of these briefly in turn:

1. As part of the terms under which the Consortium was set up it was required that the final materials should be useful within as wide a range of institutions as possible. One strategy for achieving this is clearly to involve authors from as many institutions as possible in the creation of the materials. However this leads to difficulties in co-ordinating the work of the various authors, arranging times and places at which the whole team can meet and coping with the very different requirements and levels of technical expertise of various team members.

In order to address these issues the Consortium has tried to ensure that there are efficient mechanisms for distributing information within the various teams. Where possible, communication is through e-mail lists and in addition there are databases allowing easy writing to an individual author, a specified group, a subject team or all the authors at once. Visits to participating institutions

for demonstrations and training are also important.

2. Given the intention to produce a large body of materials spanning most undergraduate core courses it is inevitable that a significant quantity of text, charts, pictures, sound samples and so on will go into the production of the finished product. Some of these materials will be produced or acquired by authors, others will have to be acquired centrally by scanning or sampling or filming. They will all have to be prepared and formatted so that they can be integrated into the final materials. In addition, they will have to be maintained so that authors can revise, annotate or delete materials during the course of development. This requires careful organisation both manually so that source materials can be easily located, and electronically so that a check can be kept on materials as they pass through the various stages of preparation and compilation. The other major problem with a large collection of materials is of course copyright; the Consortium already has permission to include cases and statutes without restriction and also material from certain periodicals. It will be interesting to see as development progresses the extent to which publishers are prepared to sanction the inclusion of their materials in a project of this type.

3. Recent advances in interface design (using the term in its widest possible sense) have allowed us to consider the possibility of including a greater range of materials than just text, as was the case until recently. This obviously raises issues of the value of materials such as sound and video within legal education, particularly when it is remembered that such materials take orders of magnitude more storage space than an equivalent piece of text and in many cases are considerably more difficult (and hence expensive) to acquire.

The other interesting area is that of the user interface itself. Systems such as *Windows* and *Motif* offer graphical interfaces which include devices such as push buttons, scroll bars, menus and so on. These devices are designed to present users with a better representation of tasks and objects. Although they were designed originally to assist in task-based rather than knowledge-based manipulation (editing a document, say, rather than representing probabilities), it may be that they can also be used to improve the quality of computer-based learning by extending the possible range of interactions with students and hence lead to a better computerised representation of legal knowledge.

4. A concern which is frequently raised about the application of computer materials such as these is that if successful they may lead to standardisation and if not they may be of limited appeal to legal academics who already teach materials with their own distinctive style. Given that our intention has been to try and produce materials which can be integrated into a wider teaching and learning context according to the needs of individual institutions, it is important that we do as much as possible to allow the materials to be as adaptable as possible by individual users.

This means that lecturers should be able to examine the complete materials and then make choices about which parts should be included for their course and which parts excluded. It might also mean that lecturers should be able to annotate the materials with their own notes or references, or exclude references to other materials where they are not appropriate. Being able to link the materials in with any local computer-based materials would also be valuable, as would being able to integrate any relevant locally available applications such as email, word processing, cd-rom databases, on-line systems and so on.

Providing these facilities makes the production of the materials technically more difficult, but improves the chances of them being widely acceptable.

(NB This is a summary version of the paper.)