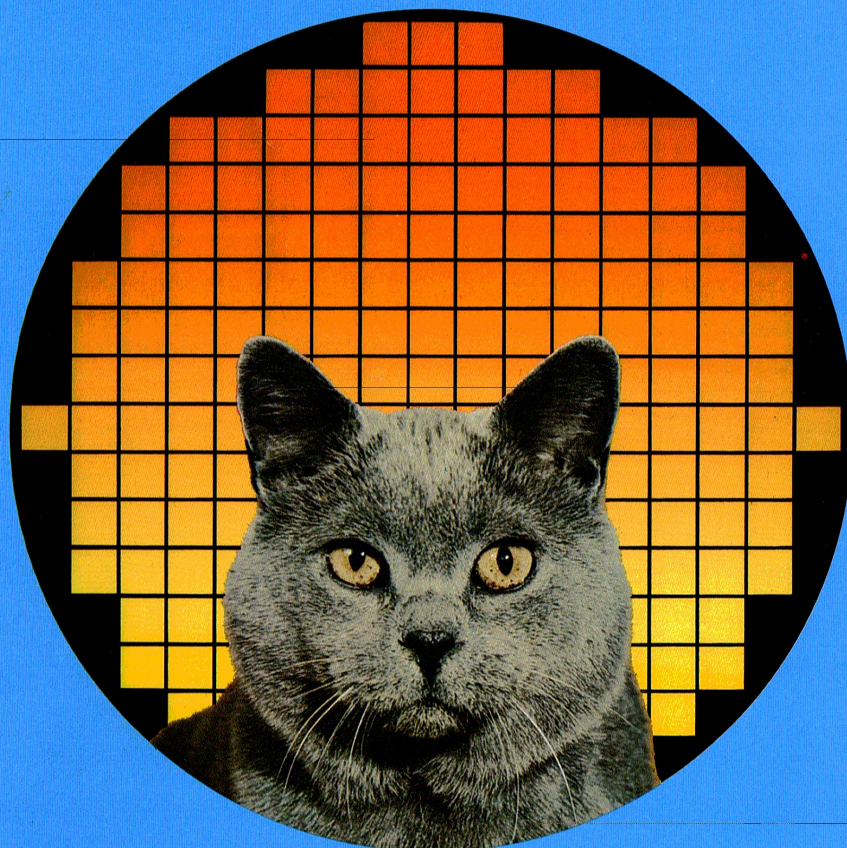




Sperry Limited Head Office:
Level 40, 100 Miller St., North Sydney, N.S.W. 2060
Telephone (02) 929 7800. Telex 21146.

Computer Aided Training Systems



The Computer as a Training Tool



The Concept

In this fast changing world, new skills are continually demanded in the workplace. The need for regular retraining takes up more and more productive time. The cost and limited availability of good trainers is hampering industrial growth.

Many industrial training tasks, such as emergency procedures, cannot be fully satisfied as they tie up expensive and dangerous equipment. Full simulation is too expensive for all but a few applications.

Within the education system, reductions in staff to student ratios make it harder to maintain individual motivation in the classroom. There are also practical limitations for teachers trying to balance the different pace and learning patterns of their students.

Education and training cannot now be considered complete without experience of the computer in the learning process and the

working environment. Most office tasks and manufacturing processes are now carried out in conjunction with a computer. Computers are opening up new access to information and services (via databases and teletext).

All these needs can be met by the C.L.C. System. It turns a Sperry PC into a powerful tool for education and training. The personal computer can be used to interact with a student or trainee to aid their skill acquisition. It can also control the presentation of training material from a variety of the most modern audio visual sources.

The students' progress can be monitored throughout their educational commitment and guidance provided to maximise their achievement.



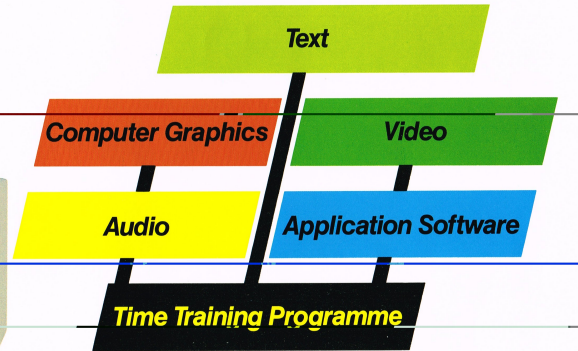
The Approach

First the educational objective has to be analysed and understood. What is to be learned? — a new skill, a concept, a behaviour pattern, a new environment or just information?

The qualification level of the students should be assessed together with the performance expected after the course is completed. Then conventional techniques should be considered.

performance and learning characteristics. Exposure to other environments may be very powerfully presented by video tape or disk and shown when appropriate by the computer. Audio background can be used to emulate role play and to further reinforce guidance.

Computer application programmes may be considered as a student tool or may be simulated to provide training in their use. Based on experience of classroom



The C.L.C. System adds to them the new dimension of computer interaction and source material presentation.

The many options available include presenting the information needed in a course book or a reference list; using the computer to guide the student through the material, to test at key stages and to redirect study based on

teaching, the various approaches and pace of the range of students, should be considered. A flow chart is then prepared with a story board, linking all the student activities intended.

The material is then prepared and the C.L.C. Authoring System used to integrate the course and its material.

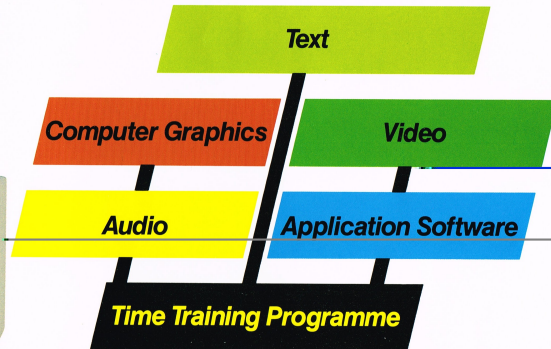
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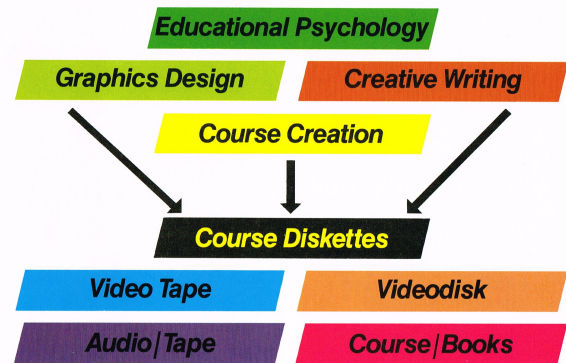
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The Solution



Each student has to have access to a Sperry PC linked to the recommended audio and video players, if needed.

They can then learn in their own time and place and at their own pace. Sperry Usenet can be used to distribute courses or to provide a classroom environment. In this, the tutor can observe and monitor each student's performance and control the presentation of the course.

The course author is provided with a Sperry PC with a hard disk and Colour Monitor coupled to any players or communication links to be used and also to a printer.

The C.L.C. Authoring System has a powerful screen editor to simplify the preparation of all the information to be presented on the computer screen.

It links with a mouse-driven graphics design package for the preparation of computer displayed colour pictures. A digitising camera may be used to capture images which may then be edited.

A library facility is provided for computer material. This may be stored, sorted and retrieved to avoid the need to recreate material. Special software tools, a unique feature of the C.L.C. System, allows screens from running application programmes to be captured, edited and incorporated in the library. This includes mainframe programmes operating with the PC as a terminal.

Preparation work can be minimised by a utility which allows computer screens to be converted to word processing files and word processing files converted back into screens for editing. Editors are provided for scanning audio and video tape material for content segments.

A course compiler is the major C.L.C. tool. It combines, under the author's direction, all the computer material, the audio and video segments, etc.

With the compiler, the author sets up the answers acceptable to a variety of question types and the subsequent actions. Like all the C.L.C. System this is done by following simple, plain English instructions; no programming is involved.

Many features have been included to maximise productivity including an intelligent programme which only presents options to the author if they are deviations from an expected pattern and relevant to the choice of media to be included.

The last stage is to prepare the course in a form suitable for the student to use without detailed computer knowledge. This is done by transferring the compiled material to a diskette. On that diskette, a special licensed C.L.C. programme is loaded. This ensures that, when the student places the diskette in his PC and switches on, the course commences and runs automatically.

*C.L.C. is a registered business name of Video Tutor Holdings Pty Ltd.

The Support

Very productive teaching material can be prepared for delivery on the PC by teachers with no programming skills. Exploiting the system to the fullest extent needs a team effort, bringing together a wide range of different skills.

Recognising this need, Sperry and C.L.C. have identified a group of professionals competent in each aspect of computer-aided learning and content production.

A two day training course is provided for course editors. This assumes no elaborate computer skills and will enable authors to create basic courses in their speciality.

Consultancy help can be provided in Educational Psychology,

Visual Design, Interactive Techniques, Application Programmes and Simulation Programming.

A service is available to produce Audio and Video content including the production of Video disks.

Contracts can be accepted for the production of complete courses.

With the software license agreement, an additional fee provides improvements and enhancements.

Our application support group will respond promptly to requests for special custom designed features.

To suit individual needs of an organisation, special management modules can be provided for the monitoring and control of students and courses.

