

Lecture Notes in Medical Informatics

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**A PROGRESS REPORT ON THE USE OF CAL/CML
IN A THREE YEAR PRE-REGISTRATION DIPLOMA PROGRAM**

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The School of Health Science (SHS) at the University College of Central Queensland (UCCQ) provides initial professional preparation for nurses in the Central Queensland area. While there is a great wealth of potential clinical experience available to students and their instructors, the large geographic spread of these resources does mean that we are under some pressure to develop imaginative ways of linking students and staff to the main campus.

In 1989 UCCQ, SHS, the National Priority Reserve Fund and Apple/Byte Technologies made a major commitment to Computer Assisted/Managed Learning through the SHS CAL/CML Project. The project concentrated during the first year on developing materials for the the pre-registration Diploma of Health Science (Nursing) program. While this development is continuing, the change from diploma to degree and the success of the CAL/CML process has accelerated the development of materials for post-registration degree-completion programs and in-service education programs for practicing professional nurses.

The decision to devote a major portion of the School's resources to CAL/CML techniques was, and still is, a gamble. Fortunately the nursing students have accepted the CAL materials with enthusiasm. Perhaps more importantly, the SHS staff have been very enthusiastic in their acceptance of the process and in their support. Their computer skills are improving daily and they have begun to accept ownership of the project.

1990: A Progress Report

SALISBURY 1990 1992

In 1989 SHS academic staff decided that their greatest need was for materials that students could use to expand and consolidate information which they had received through regular lectures. Using this strategy, a typical CAL lesson is a Case Study with questions that demand thoughtful discussion and are accessed by students in twos or threes. Increasingly case studies are illustrated and include activities for further study.

A decision was made to develop the initial instructional materials using a Macintosh HyperCard "stack" format. The teaching strategy and stack format allows academic staff to easily develop the CAL content using a standardized instructional design and normal word processing skills. A "guide to instructors" is in draft form and approximately 20 case studies have been prepared for first year student use. Videotaped demonstrations and other resource materials have also been developed.

Second year materials are under development as this report is being prepared and will be available for use in 1991. A scheduling system for the management of clinical placements has been developed, and is being adapted for use by other Queensland nurse education programs.

Continuing education materials for in-service nursing personnel, adapted to Australia from Canadian materials, are now being delivered to students in the Registered Nurse Re-Entry program. The Project has also involved a number of related activities: supervision and facilities for a dozen applied computing students to develop educational materials; and assistance with the general development of CML on the UCCQ campus. In addition to using the teaching resources, nursing students are encouraged to prepare their written class assignments using computers and to use electronic mail for some assignments.

1991: The Priorities

If 1990 established the student lab, staff facilities and initiated the development of student learning materials, then 1991 will have to consolidate these developments and build a strong and functional system for the continuing development of student materials. The National Priority Reserve Fund support was for two years only, thus another priority for the year will be to develop a management plan and proper funding.

The decision to devote a major portion of the School's resources to CAL/CML techniques was, and still is, a gamble. Fortunately the nursing students have accepted the CAL materials with enthusiasm. The participation of the UCCQ computing students in providing technical support to the project has been invaluable. Perhaps more importantly, the SHS staff have been very enthusiastic in their acceptance of the process and in their support. Their computer skills are improving daily and they have begun to accept ownership of the project.

The screenshot shows a window titled "Message" with a "Quit" button in the top left and a home icon in the top right. The main text reads: "Mr Jones explains that his wife's behaviour suddenly changed yesterday evening. You ask Mr Jones:"

Below this text is a list of four numbered options:

1. To tell you what he thinks led to his wife's change
2. To describe the events during yesterday
3. To detail what happened immediately prior to their argument
4. [A useful choice if you want to get Mr Jones' perspective. It is also a way of showing that you value Mr Jones contribution.]

Option 4 is highlighted with a white background. At the bottom left of the message area are two circular buttons labeled "1" and "2". At the bottom right is a button labeled "Click to Choose Again". A vertical scrollbar is on the right side of the message area, and a return key icon is at the bottom right of the window.

A "card" from a case study on Alzheimer's Disease showing the use of the "Standard Stack". Response 1 was chosen.