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# Using AARNet to Broaden the Scope of Nursing Education

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The Australian Academic and Research Network, AARNet, provides Australian universities with both a gateway to the Internet and with opportunities for the exchange of electronic information between staff at all Australian universities. It has, however, generally not been accessible to students, other than for some communication with instructors, although this situation is rapidly changing.

## Background

Nursing education in Australia has moved from being primarily hospital-based schools of nursing to university-based undergraduate degree programs within the last 5–10 years. However, many university-based programs are still rather narrowly focused and pre-registration programs often follow rather traditional lines or, at the very best, are rather "heavy" as both staff and students attempt to prepare school-leavers and mature students for professional practice within a three-year period.

At the same time the health care system is changing rapidly and the growth of health information systems is beginning to make an impact on all aspects of professional practice—including nursing. Several articles exploring aspects of this phenomenon have appeared in nursing journals in the past couple of years. Sharp (1993) summarised the current status in the USA and Australia is not far behind.

Given the growth of communications on the Internet it is not surprising to find that there are some lists and other facilities which have developed specifically for nurses (for example

*NurseNet*) but to the best of our knowledge, as at mid 1994, no facility has been developed specifically for undergraduate nursing students.

Although most nursing education programs, including the two participating in this project, are making some use of computer-assisted instruction, most Computer Aided Learning applications do not prepare students to use computer technology within their practice.

In several other countries nursing programs are still largely hospital-based rather than being part of the higher education system, with the result that it is difficult for Australian students or staff to contact colleagues in those programs. Although it is unlikely that many of the hospital-based schools in other countries in this region have easy access to the Internet, it would seem to provide a potential link for sharing information which is not otherwise available.

## Discussion

### *The Participating Programs*

The Faculty of Health Science at Central Queensland University (CQU) is primarily located on the Rockhampton campus of a relatively small university, one of the "new" universities within the Australian national unified system. The pre-registration nursing program admitted its first students in 1990 and admits one class of about 100 students in February each year. Students are able to use a fairly extensive set of computer-based instructional programs and have access to a computer laboratory for preparation of assignments, independent study, and so on. The

Faculty of Health Science staff use electronic mail and other network facilities quite extensively but students have had little opportunity to use this facility (Zelmer, 1992).

Since Rockhampton is situated approximately 600 km from the state capital and is the centre for a large rural area, most of the students are drawn from the surrounding rural area and staff have expressed some concern that students lack experience with other life situations.

Graduates of nursing programs are apt to practice in many different geographic and social situations; they must have an understanding of different lifestyles, health hazards and situations. It is often difficult to gain this understanding only by reading, or even by watching films and videos; direct contact with those in other situations would be ideal, but is difficult to provide in a geographically isolated situation.

The School of Nursing at Northern Territory University (NTU) is also of relatively recent origin; two classes of pre-registration students are admitted each year. The university is situated in Darwin, the capital of Northern Territory, but this is a relatively small city and is situated at some distance from other major population centres in Australia. Staff of the NTU School have also expressed concerns about the limited range of experiences available to their students.

### *Origins of the Project*

Some schools at the elementary and secondary level have experimented with direct communications with other schools in different parts of the world for some years now. *Computer Pals* (Carlton) and *Kidlink* (Stefansdottir, 1993) would be examples of this type of approach.

Two of the authors of this paper (Zelmer and Roberts) began a speculation about how useful such an approach might be for undergraduate nursing students and began to plan for a student-centred link between their two schools as a trial for a more ambitious international link. Given the time required to put the project in place a start-up date of second semester 1994 (second half of the calendar year) was agreed.

### *Technical Requirements*

Both universities already had access to AARNet, and the Faculty of Health Science at CQU already had full access to computers and connections to AARNet through the university system. The School of Nursing at NTU had more limited access and very little computer equipment which was accessible to students. However, the NTU School was able to obtain a

grant of about \$9,000 through the internal university system (on the grounds of equity since that School had been previously some what disadvantaged) and was able to establish an appropriate linkage by the beginning of the trial period.

### *Human Requirements*

Another communications program, *SpaceMet* (Sternheim and Sternheim, 1993) suggested the following lessons growing out of their experience:

- The system must be free of any cost to the end user, convenient to access, easy to learn and use, but flexible;
- It is important to provide a well defined task or activity to participants;
- Projects require a good facilitator, a "critical mass" of participants, realistic timelines and a simple concept; and
- Above all educational telecommunications must empower the teachers and avoid top-down models (Sternheim and Sternheim, 1993).

Our project is attempting to meet these criteria, but we will not be able to evaluate our success until later in the project.

As with most communications projects, the human factors in this project have turned out to be more formidable than the technical requirements. Even with enthusiasm and a common language there have been problems to overcome.

These are listed below, not to discourage others, but simply to indicate the variety of issues which need to be addressed:

- the curricula of the two schools, while covering a great deal of common ground, are organised rather differently and the need to find a common group of students who might work productively together has meant that eventually students in different "years" of the program will be the first trial group;
- the need to involve several instructors and technical staff (witness the number of authors acknowledged in this paper) has meant that a great deal of time has had to be spent in explaining the project and briefing all concerned;
- computer managers at both universities have had concerns about security with the relatively open access of students to the system. Although we believe that this issue has been adequately addressed (and will be



the topic of a later paper after the first trial), monitoring is being built into the project;

- this has been a rather "top down" project in its initial inception. We are trying to provide a project which is both relevant to students and which will have its own rewards in broadening their contacts with other colleagues. It is far from clear, however, whether this will be accomplished, or whether the computer contact will become simply another classroom exercise; and
- access to AARNet facilities is currently available without charge to Australian universities, but future costs are unknown (VCs mull over computer network price rise, 1994).

### Progress to Date

From the initial idea which was first discussed in late October 1993 we have:

- established the project within the two universities;
- obtained the co-operation of teaching and technical staff;
- obtained student access to the network for the purposes of the project;
- acquired the necessary equipment (through the NTU grant);
- established student tasks to be accomplished in the first semester of the project; and
- arranged with both teaching and technical staff for appropriate records to be kept to permit evaluation of the project.

### Hopes and Plans for the Future

The first step will be to evaluate the project this semester, both in terms of the number of messages and other indicators of use as well as the students' and instructors' subjective impressions of the value of the program. Another key evaluation criterion will be whether other instructors and students seek to join the program next year and whether those who were in the first group wish to continue their use of this facility.

On the assumption that this project does prove to be successful, we have variously discussed enlarging it to include:

- other university-based nursing programs (a beginning has already been made on this with a nursing program in the USA);
- more flexible contact between students and staff in the two original programs; and
- nursing programs in countries which are still primarily hospital-based (recognising that this will likely require more organisation and possibly financial assistance).

We would welcome contact with any others who would be interested in participating with us in the development of this project—particularly those who are in countries of Asia or the Pacific Rim.

### References

- Carlton, S. (n.d.). *Computer pals*. Personal correspondence.
- NurseNet [On-line electronic discussion forum]. Available: listserv@vm.utcc.utoronto.ca.
- Sharp, N. (1993). Nurses link up to high-speed communication network. *Nursing Management*, 24(5), 16-18.
- Stefansdottir, L. (1993). KIDLINK: Creating the global village. *Teleteaching 93 Proceedings* (pp. 837-844). Elsevier Science Publishers.
- Sternheim, M. M., & Sternheim, H. R. (1993). Lessons from the SpaceMet network. *Teleteaching 93 Proceedings* (pp. 845-854). Elsevier Science Publishers.
- VCs mull over computer network price rise. (1994). *The Australian*, 21 September 1994, p. 27.
- Zelmer, A. C. L. (1992). CAL/CML from the ground up: In-house CAL/CML development and change in a tertiary nursing program. In B. Chia, R. Pennell, & R. Sims (Eds.), *A Future Promised: Proceedings of the 1992 Conference of ASCILITE* (pp. 116-127), Sydney.

