

**School of Nursing
2003 Vision Plan for Information Technology
February 2003**

Introduction

This report outlines the proposed projects, acquisitions, and/or upgrades for student IT resources within the School of Nursing. Student Information Technology fees generated by nursing students and Vision funds awarded to the School will finance improvements delineated in the proposal. Occasionally, there are funds identified by the dean in special accounts or in research grants that may augment purchases or renovation.

The focus of the School's instructional technology (IT) goals and objectives are detailed at <http://www.nur.utexas.edu/it-ni/2003itstratplan.html> (active after 2/10/03). Briefly, our objective is to encourage and facilitate the inclusion of instructional technology and nursing informatics concepts in the curricula. Further, we aim to promote the competent use of technology by faculty and student, preparing student and faculty to teach and practice nursing in the future health-care system. Therefore, we want to provide sufficient power and resources to enable teaching and learning activities that foster the innovative use of technology and assist faculty and students in viewing technology as yet another tool to improve nursing practice, teaching, and research.

Summary of 2003-2004 Projects

The projects identified to be addressed during the next academic year include 1) complete the large classroom system redesign and 2) continue the digital video project.

1. Large classroom system redesign

Initiated in past Vision plans, the renovation of the School's Technology Classrooms has begun. At this time the following progress has been made:

1.106 (the School's Telecommunication Classroom) – has been upgraded to UT/Bartelmehs standards.

1.108 – has been upgraded except for the podium, which will be installed Spring 2003 semester.

1.110, 1.116, and 1.118 – have been rewired and await new consoles that will be ordered as funds come available.

2. Digital video project

Instructional videotapes and CD-ROMs of clinical skills are commonly used methods of instruction for students in the baccalaureate program. Basic clinical skills are areas of great concern to beginning nursing students. Teaching methods that facilitate mastery of these skills will be of great value to students, faculty, and the patients with whom they work. Our plan is to digitalize programs for which we have copyright permission, produce other videos and deliver them via the web, making them available to students 24/7 from any location.

ITAC Expenditures for 2001/2002 and 2002/2003

		2001-02	2002-03
Income	Grant to School	\$63,000	\$69,300
	Vision Funds	\$110,000	\$52,098
	TOTAL	\$173,000	\$121,398
Expended	Hardware	\$71,000	\$88,004
	Software/Supplies	\$7,410	\$23,641
	Renovations/Repairs	\$10,000	\$19,950
	Compensation/ACITs		\$37,000

contract

\$88,410**\$168,595**

During the 2002-2003 academic year, the bulk of SIT funds went to the upgrade of hardware in student computer facilities and classrooms. The major purchase was new PCs for the Learning Center and Research computer labs. Another major investment was the renovation of the large tiered classrooms. During this academic year renovation was completed in one of the tiered (1.106) classrooms. Newly installed equipment brought this room up to the UT/Bartelmehs standard. Three other large classrooms (1.108, 1.110, & 1.116) were wired and 'finished' (including projector) except for the consoles. At this time, three of the four rooms are using a Cole McClellan switcher box to control the projectors and computers—substituting for the console. One console for 1.108 is being constructed and will be installed spring 2003 semester. The other three rooms await consoles as money comes available

Focusing on the capabilities in other classrooms, two additional mobile projectors and computers were added to the existing 4 units. Computers on all of the mobile projection units were upgraded.

The 2002-2003 vision plan also included a project to maintain the School infrastructure. During this year, much progress was made in installing 100 Mb/s Ethernet connections to students work stations, classrooms, and faculty computers. Connections to student computers and classrooms are essentially completed, whereas faculty connections (not on student funds) are approximately 50% installed.

A **1998-1999 Vision project** proposed the addition of a fiber optic feed to the nursing building. This was finally accomplished fall of 2001. The video component of the fiber, separate from the data component, will be installed this year.

Review of Infrastructure, Services, and other Services supported by Local and Special Funds

Equipment:

All faculty members have desktop computers that are networked to SON and external servers. All have access to the School's intranet, e-mail, Internet, and FTP servers. Although some faculty computers are slower than we would like, all are at least the grade of a PowerMac/Pentium II or better. During the past year, approximately 100% of student and 50% of the faculty network connections have been upgraded to 100 Mb/s. All classrooms have been wired with faster network access. The weakest links in IT resources continue to be the lack of computing power on faculty desks (although this has been greatly improved due to the Faculty Computer Initiative) and our staff's inability to respond quickly to student, faculty, and staff technical and educational needs due to workload.

IT Staff:

One full-time Sr. LAN Administrator, one half-time student employee (assigned to user education), and three 20-hour teaching assistants are responsible for the School's infrastructure. During the Fall 2001 semester the SON subcontracted the management of the student network to ACITS. We have continued this relationship and have been pleased with the expertise and responsiveness of the ACITS personnel. We feel that the School continues to profit from this relationship and that our staff and management systems benefit from the research, development, and best practices developed by ACITS.

The Learning Center staff consists of two full-time members, who work with faculty, staff, and students on the multiple data management/data acquisition questions that come up. For example the LC librarian teaches users to locate resources on the many on-line databases available. The full-time staff plus approximately 30 hours of student employees and 120 hours of Work Study Students comprise the user-education and technical assistance programs available for faculty and staff. The Learning Center is open 64 hours a week (16 of which are evening hour and four, weekend hour.

The Research Lab, primarily a resource for graduate students, is staffed by research assistants thirty hours a week. They provide one-on-one training and assistance in the use of the lab's statistical software as well as in supporting techniques such as connecting to servers and importing/exporting

data. Expert assistance in technical statistical issues is provided by a full-time Research Scientist and a 30-hour Research Associate.

The SON also has a production staff consisting of a graphic artist and a radio, television, film (RTF) production manager, and 40 hours of student assistants. Both of the full-time individuals are highly skilled in information management and instructional technology and provide valuable computer graphic design and production services for the school. Furthermore, an important responsibility of the production manager's role is that of the School's Webmaster.

Access to Computers:

Students gain access to computer resources through the Learning Center (LC) and the Research Computer (RC) Labs.

Learning Center (LC) Computer Resources:

The LC Computer classroom consists of 12 computer workstations and a teacher station. Ten (83%) are Pentium IVs. Two (17%) are Macintosh G4s. All computers, managed by LabManager software, have a full complement of software needed by students, plus Internet access. This area is closed to general student use approximately 6-8 hours a week for special classes. The other time it is available to students for individual work.

A general use computer facility provides students with an additional 18 workstations (G4s and Pentium IVs), one graphic workstation (G4 with full graphic capabilities, scanner, film recorder, and printer), two computer-video interactive stations, and other traditional audiovisual stations: VCR, slide projectors, and audio tape players.

Research Computer (RC) Lab:

The RC Lab has 8 workstations (Pentium IVs and one G4) with software needed by graduate students learning about and conducting original research. Software such as SPSS, SAS, N5, nQuery, EQS, and N6 are examples of applications available.

Other LC resources with IT implications:

The Simulation Lab features three clinical simulation classrooms with computerized hospital information systems (HIS) used in local facilities. One classroom is using PracticePartner®, a community health clinic management and patient record system. The second classroom has Meditec® hospital information system (HIS) used in the South Austin Medical Center (SAMC), St David's Partnership, and North Austin Medical Center. Implementation of the Temple VA's electronic charting system is underway in the third simulation lab.

The Production Facility provides a graphic artist, a production manager, and a full array of design and graphic tools. The production staff creates or helps users learn to create multimedia presentations, posters, newsletters, logo design, slides, HTML documents, and promotional materials for various programs of the School. This department also is responsible for the design and maintenance of the School's Web page.

Research Program:

The faculty have successfully competed for a total of approximately \$17 million in extramural research funding that will be disbursed over the next five years. All programs depend heavily on technology to support collection, management, and analysis of data, and dissemination of findings. All programs depend on SON IT staff for support and consultation.

Specific ITAC Funding Requests

PROJECT #1: Large classroom audiovisual control system redesign.

Upgrades in one of the large classrooms (1.106) are completed. Rewiring has been completed in the four other rooms. They await the purchase of equipment as funds come available.

The upgrade of these rooms will benefit the entire student body. Other University units who use these rooms, such as the Office of Admissions will benefit from the upgraded capabilities and the more user-friendly controls.

Dr. Kurt Bartelmehs, Coordinator of Computational Resources for the College of Natural Sciences, assisted us with the design and estimate of the renovations.

Resources, Equipment, and Software Needed to Accomplish Project Goals:

Item	Cost per item	Cost
Projector 2000 lumen XGA with long throw lens	1 @ \$8,000	\$8,000
Console (includes computers, document camera, matrix switcher, and necessary control systems)	3 @ \$20,000	\$60,000
Cables and Installation	3 @ \$6,000	\$18,000
TOTAL for all room		\$86,000

PROJECT #2 DIGITAL VIDEO PROJECT

Instructional materials should be created and made available to students 24/7 wherever they happen to be studying. The majority of equipment needed to digitize and distribute videos has been assembled. Just a few additional pieces of equipment are needed to create and post digital videos on the school's website.

Resources, Equipment, and Software Needed to Accomplish Project Goals:

Item	Cost per item	Cost
Video Streaming Web server	1 @ \$2,000	\$2,000
TOTAL		\$2,000
TOTAL all Projects		\$88,000
