Request

For

Information Technology
Management Flexibility

Submitted by
The University of North Carolina at Pembroke

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University of North Carolina at Pembroke
IT Management Flexibility Plans

Executive Summary

Information technology at UNCP is driven by the recognition that planning and sound decision-making will yield positive results; that a vision of empowerment will result in focusing the IT resources where they will do the most good. Both planning and decision-making are participatory, inviting discourse and consensus in the best tradition of the academy.

The leadership elements are in place; beginning at the highest level with the Chancellor and extending down into the office of Information Resources and UCIS. To the degree possible under the current economic situation, the funding is in place. A renewed planning process has been initiated. And, a desire permeates the University to move forward with IT as catalyst, agent and suite of tools. In short, the ingredients for success are in place and they are working.

Over the next several sections, we will present the details of what the University has done to wisely manage the application of information technology in pursuit of its mission. We will review the results of earlier planning and management. We will also present how we are organized and how we currently manage the assets of the University for continued success.

Introduction

This Plan articulates how UNCP manages it information technology assets: How plans are laid; how decisions are made, and how resources are employed in the interest of the community and region served by the University of North Carolina at Pembroke.

The Office of Information Resources is chartered to manage information technology at UNCP. The Office, headed by the Associate Vice Chancellor for Information Resources and Chief Information Officer, reports to the Provost and Vice Chancellor for Academic Affairs. The Office, which is responsible for information technology management at UNCP, consists of two units: University Computing and Information Services (UCIS), and Instructional Development Services (IDS).

University Computing and Information Services (UCIS) provides academic and administrative computing support for UNC Pembroke along with technology training for faculty, staff and students. The primary function of <u>Instructional Development Services</u> (IDS) is to provide instructional design and development assistance to faculty.

Mission

The Office of Information Resources provides the technological resources and infrastructure necessary to support the University's mission of teaching, research and service.

Current Goals

- To provide instructional design and development assistance to the faculty.
- To provide leadership, education and training for all aspects of computing and instructional development.
- To provide hardware to facilitate administrative and academic computing across campus.
- To provide networking resources to support computing across campus.
- To provide systems analysis, programming and on-going technical support to administrative departments and the administrative function of academic departments and provide software, programming and on-going technical support for faculty to support teaching, learning, service and research.
- To provide video facilities and support to enable classes to be delivered to other public schools, community colleges or universities and to be received from other universities to our campus.
- To provide telephone services to the University.

State of the University of North Carolina at Pembroke

Its recent successes notwithstanding, the University of North Carolina at Pembroke is an institution at a crossroads. During the past three years our student body has grown by 48%. This exceptional growth and impact on all corners of the institution has resulted in serious challenges in meeting the demands for the delivery of support services – particularly as it relates to information technology. We are challenged as we introduce new technologies, forcing us to address the ongoing costs of these new technologies and their support services. We are challenged because there is an imbalance in the level of technology fluency in the students, faculty and staff. We are challenged because there is an insufficient flow of communications regarding information technology. And, finally, we are challenged because we are attempting to move forward under plans developed five years ago, from a different time when the institution growth was stable.

In spite of the current somewhat chaotic situation we are making remarkable progress in deploying new information technology. For example, we now permit students to register for their courses and faculty to post their grades for courses via the web. We are at the beginning of a migration to SCT Banner Enterprise Business applications. During this high growth period, we have renewed our data network infrastructure. We are in the midst of replacing our legacy telephone system with new telephone technology that converges our data network and our phone network. We are also poised to deploy wireless technology at pilot locations on the main campus. However, we are not maximizing our potential with regard to budget, people, and skill.

Early in 2002 the UNCP Chancellor and Provost instituted the new position of Associate Vice Chancellor for Information Resources and Chief Information Officer. This new position was founded for the express purpose of providing strategic direction for the University's information technology agenda. UNCP has experienced a very rapid growth in student population, an impending major renovation and construction program which would dramatically impact the physical facilities of the University, and several major technology initiatives including the replacement of the enterprise business applications. Hence, it was deemed extremely important to focus on strategic planning and resource direction.

Planning – Past and Present

Planning for information technology at the University of North Carolina at Pembroke has been continuous from at least 1998 and has influences from the UNC Board of Governors, the Information Resources division of the UNC Office of the President and the University's campus wide strategic planning activity.

Our work finds its frame of reference in the strategic direction provided by the UNC. The IT Strategy set forth by the UNC Office of the President provides an over-arching dimension to our planning perspective. These Strategic Initiatives are derived from the

strategic direction provided by the UNC Board of Governors[1]. Within the Board of Governors' strategic direction, the UNC IT Strategies[2] are:

"The UNC IT Strategy:

- *Administrative systems, with an emphasis on services for students,* to ensure all UNC campuses have the technologies to effectively and efficiently manage routine business and student functions, from registering for courses to making a donation.

- *Teaching and learning with technology* to ensure faculty and students effectively use the world's leading edge tools and resources to enhance the educational process, from course planning and content development through the pedagogical process and assessment.

- *e-Learning* to ensure UNC keeps pace with the growing demand for distance and distributed education and the capability to learn anywhere, anytime.

- *Logistical needs* to ensure adequate IT infrastructure, meaning the complex hardware, software, networks and services that make technology come alive on a desktop, laptop or in the palm of a hand."

- UNCP has realized the following highlight results that align with the UNC IT Strategies

- UNCP is a participant in the Shared Services Alliance and is currently participating in the Banner initiative to migrate to the Banner Finance module. Since the Banner migration will be several years in process, we have implemented the "Web for" products that complement the SCT Plus suite of products. These products provide substantial self-services for students. A web mail interface has

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[1] The Board of Governors has selected six interrelated strategic directions to pursue in the fulfillment of its mission during this planning period.

> *Access:* Ensure affordability and access to higher education for all who qualify and embrace a vision of lifelong learning
> *Intellectual Capital Formation*: Through high quality and relevant graduate, professional, and undergraduate programs, develop an educated citizenry that will enable North Carolina to flourish
> *K-16 Education:* Continue to propose and support initiatives to serve the needs of the State's public school
> *Creation and Transfer of Knowledge:* Expand the frontiers of knowledge through scholarship and research and stimulate economic development in North Carolina through basic and applied research, technology transfer, and public service activities
> *Internationalization:* Promote an international perspective throughout the University community to prepare citizens to become leaders in a multi-ethnic and global society
> *Transformation and Change:* Use the power of information technology guided by IT strategy and more effective educational, administrative, and business practices to enable the University to respond to the competitive global environment of the 21st century

[2] Information Technology Strategy Update, 2000-2001. Information Resources Division, UNC Office of the President.

been added to facilitate off-campus access to our email server.

- UNCP, an active participant in the TLTC and represented on its Board of Directors, is active in the system wide programs to encourage collaboration among faculty and the application of technology in teaching and learning. Meanwhile, the UNCP Media Integration Project has taken the leadership position in the UNC Digital Consortium, an academic collaborative focusing upon digital literacy in the curriculum.

- Efforts are underway to add an Instructional Development Services unit to the Office of Information Resources. IDS will offer instructional designer services focusing on pedagogy and assessment. The services, delivered in collaboration with the Center for Teaching and Learning is expected to compliment the technology development services offered by UCIS and Continuing and Distance Education.

- In the distance education arena, use of online courses has quadrupled since last year. Throughout the University, online components in courses have doubled since last year. UNCP has adopted the Blackboard course management system and has recently upgraded to the most current version of the software.

- With support from the General Administration, UCIS designed and installed improved network access in all areas of the campus.

- UNCP continues to take advantage of Office of the President sponsored and negotiated procurements.

- The first phase of an Internet telephone (Voice over IP) deployment is underway – which will replace our legacy telephone system. Wireless Internet access is set to be deployed on a limited basis in the next several months.

- Several support programs were added, including a helpdesk operation and two student employee groups (BraveTechs and LabTechs). Both of these initiatives have had a dramatic impact on customer services.

The principle plan for information technology at UNCP is the IT Strategic Plan that was developed in 1998 and was recently supplemented. The UNCP IT Strategic Plan of 1998 elaborates on the University's Strategies. The UNCP IT Initiatives, Objectives and some of the Results are reviewed in the Appendix A. While results are noted, the objectives still stand and work still progresses.

UNCP IT Strategic Planning Initiative, 2002-2005

The IT Strategic Planning Initiative commenced during the Fall 2002 term. A new strategic plan must be developed and maintained that dovetails with the latest phases of the statewide UNC IT Strategic Initiative (including the Teaching and Learning with

Technology Collaborative) and our own UNCP Master Plan (including the new emphasis upon distance education). Generated through an open dialog among the stakeholders of UNCP against the backdrop of a number of current major IT initiatives, the plan will provide general direction and broad objectives for the deployment of IT resources for the next 3 years.

The results fall into three categories: the themes and proposed strategic initiatives that emerged; several areas that require further study before they can be translated into strategic initiatives; and, a category we have chosen to call sidebars.

 In sum, five themes emerged from the planning activities:
- **Improve communication with the University community,**
- **Improve support of IT,**
- **Enhance IT training/awareness/fluency is a basic need,**
- **Enhance access to University IT must be improved,**
- **And, harness IT within the strategic direction of the University.**

At the outset we observed, "These aren't just technology issues." In fact, we found that the two most central themes -- training and communications -- could aptly serve as the strategic themes for any support service arena at UNCP. Hence, this is about taking care of the basics. We need to proceed with developmental work, build momentum, and continue our current progress. A copy of the current strategic plan is available at http://www.uncp.edu/ucis/strategic_planning/

From this strategic plan, specific action plans can be launched. The process of developing action plans under the recently released Strategic Plan for Information Technology will be carried out during the Fall of 2003.

Organization

The chart below details the organization of the Office of Information Resources. The Office of Information Resources reports to the Provost and Vice Chancellor for Academic Affairs. The Office, which is responsible for information technology management at UNCP, consists of two units: University Computing and Information Services (UCIS), and Instructional Development Services (IDS).

The University of North Carolina at Pembroke
Organizational chart for the Office of Information Resources
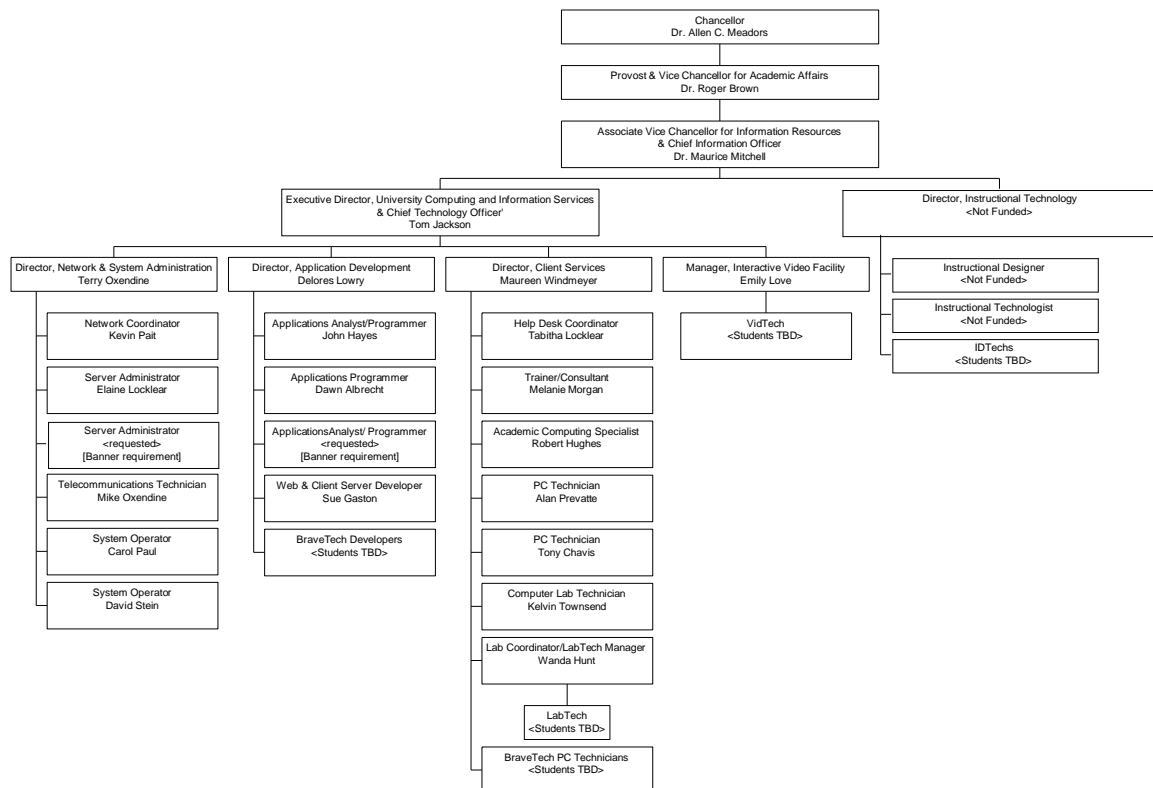
The primary function of <u>University Computing and Information Services</u> (UCIS) is to handle all aspects of computing and telecommunications for the University and provide the technical infrastructure and support needed to meet the mission of the University.

UCIS is currently structured into four organizational units. One unit is responsible for network and system administration. A second unit is responsible for application development and support. A third is responsible for client services and the fourth unit is responsible for the NC-REN Interactive Video Facility.

In the application development environment, UCIS provides systems analysis, design and programming for the administrative application systems. Among these are Financial Records, Purchasing, Human Resources, Student Records, Financial Aid, Admissions,

Fixed Assets and Alumni Development. University website support, also in the Applications Development unit, includes maintaining the hardware and software, as well as system administration and technical support of the University's web servers.

In the client services unit, UCIS provides technical support for academic instruction, faculty computing support, student computing support, and student lab management. Client Services also supports the use of technology in teaching and learning and provides training for faculty, staff and students in the use of computers and production software such as MS Office, WordPerfect, presentation software, spreadsheets, databases, etc. Client Services is responsible for the installation, service and repair of microcomputers, printers and peripherals. The NC-REN Interactive Video Facility contains a teleclassroom and teleconferencing room that supports instruction and conferencing with other UNC institutions, community colleges, public schools and other organizations.

The Network & System Administration unit is responsible for the campus computer systems, production processing of installed software and programs and the Campus data and video network and telecommunications.

The primary function of Instructional Development Services (IDS) is to provide instructional design and development assistance to faculty. While the initial service focus will be directed toward pedagogy and design of online-enabled instruction, the services will not be limited totally to e-learning. IDS is currently in the formative stages. Funding has been identified. Position classification and recruitment is underway. IDS will be co-located with the Teaching and Learning Center.

Standing IT committees

The Academic Support Services Sub-Committee of the Faculty Senate is the current standing advisory body for UCIS. The Associate Vice Chancellor is a member of the Deans Council. And, a staff member sits on the Staff Council, the representative body for SPA personnel.

A new committee structure is under development. The first of these new advisory bodies is the Administrative Systems Advisory Committee. A list of the participants (with current incumbents) can be found in Appendix B. An Academic Computing Advisory Committee is planned. For issues that impact both areas of interest, a joint committee comprised of limited representation from both committees will be empanelled.

As additional input on specific issues is warranted, ad hoc committees are assembled and convened. Examples of ad hoc committees include the task force assembled for the current strategic planning process and the campus-wide steering committee for the Banner Implementation.

<u>The IT decision-making process</u>

Decision-making in the Office of Information Resources can be characterized as participatory. Routine tasking is handled be the immediate supervisor. Work planning and non-routine tasking are handled through consultation within the management team that consists of the Associate Vice Chancellor, the Chief Technology Officer, and the unit Directors/Managers.

Decision-making is guided by current policy, the systems approach to problem solving, life cycle management best practices, the UNCP Strategic Plan for IT, and the current tactical Work Plan. Certainly, funding and budget have a direct impact on our decisions.

Additionally, advice from the Chancellor's Cabinet, the Council of Deans, and the aforementioned Academic Support Services Sub-Committee of the Faculty Senate, and the newly instituted IT advisory committees are all taken into account when making decisions. The Associate Vice Chancellor sits on the Council of Deans and the Academic Support Services Sub-Committee of the Faculty Senate.

Infrastructure, Standards and Policies

<u>UNCP campus IT infrastructure</u>

The Office of University Computing and Information Services provides the technical resources necessary to meet the University's mission of teaching, research, and service. The office operates a campus-wide network with a 2Gb fiber backbone and a 45Mb connection to the North Carolina Research and Education Network (NC-REN). NC-REN provides access to the Internet and Internet2. All buildings have LAN access and dedicated 10 or 100Mb desktop connections. ResNet connections are available in each dorm room, and CommuterNet is available in selected areas of the Chavis University Center and the Sampson-Livermore Library. The office also supports the campus voice network with a Lucent Definity G3R PBX, dual Cisco MCS 7835 call managers and an Octel 250 voice mail system.

To facilitate academic computing, UCIS operates a Sun e450 Enterprise server, four Sun e250 Enterprise servers, a Compaq Alphaserver 2100, and a Compaq Alphaserver 2000. Administrative computing applications are supported by mirrored Compaq Alphaserver DS20s, a Compaq Alphaserver 800 and a cluster of Sun 280s. Additional resources include Novell Netware 5.1 file and print servers as well as several Windows 2000 and Linux application servers.

The office provides traditional and computer-based training for faculty, staff, and students. Individual support is available to faculty or staff, and faculty may request workshops tailored to the needs of specific classes. University Computing provides technical support for over 20 microcomputer labs and directly supervises the Sampson-

Livermore Library lab. Help Desk assistance is available during normal business hours at (910) 521-6260 or helpdesk@uncp.edu.

UCIS also manages the Interactive Video Facility, which provides MPEG2 and H.323 videoconferencing and well as C-Band and Ku-Band satellite uplink/downlink capabilities. These allow UNCP to participate in live, two-way video classes and conferences with other sites connected to NC-REN and the North Carolina Information Highway (NCIH).

UNC Pembroke provides its students with a wealth of computer resources. Each classroom building houses one or more microcomputer laboratories that are available during normal business hours. In addition, the D. F. Lowry Building laboratory is available 24 hours a day; the Sampson-Livermore Library laboratory is available for evening and weekend use and the Pine Hall lab is available to residents of that dorm at any time. Most campus lab computers run Windows 2000 and provide a variety of software including Microsoft Office, Netscape Navigator, SAS, CRT, AbsoluteFTP, UltimateZIP and McAfee Antivirus. Some labs also offer Microsoft Visual Studio, WordPerfect, PageMaker, SPSS, DreamWeaver MX and Photoshop LE. Specialized labs include the Foreign Language Lab, the Cartography Lab and the Education Technology Center in the School of Education. The Digital Art Studio houses Macintosh G4s running OS X, with Adobe Photoshop, Illustrator, InDesign and Acrobat. The Media Integration Lab operates Macintosh G4s running OS X with Photoshop, DVD Studio Pro and Final Cut Pro.

All permanent faculty members have a Pentium 4 or Macintosh G4 microcomputer with access to the campus LAN, the Internet and Internet2 from their office. Each classroom has a LAN connection and many have computers and digital projectors. Blackboard is used to support class web sites. UCIS offers laptops and digital projectors for faculty checkout for short periods. A Compaq 2100 and a Sun e250 provide minicomputer support for academics.

Policies related to IT

Policies provide the framework for managing information technology at UNCP. They represent the Information Technology Policies of the University of North Carolina at Pembroke. It is the basis for operations and procedures to be followed by technical staff as well as all individuals who access or use the information technology resources of the university. These policies have been developed over some period of time and exist to provide guidance and protection to the university, its resources and those who utilize them. The current active UCIS policies are:

- Information Security – This covers a myriad of sub-policies regarding data, server, facility and network security. It addresses such issues has who is authorized access to University IT resources and how data security is prioritized.

- [Appropriate Use Policy](#) – This policy spells out UNCP expectations for appropriate use of its IT infrastructure. Limitations on the use of the network and servers are covered, as well as how UNCP complies with Federal and State laws governing IT.

- [Disposal of Computer Equipment](#) -- This policy addresses issues surrounding the proper disposal or reassignment of computer equipment. It requires that all transferred or disposed computers must be swept clean of any information to protect privacy.

- [Web Accessibility](#) – This policy spells out how UNCP will address website accessibility under the Americans with Disabilities Act. It dictates that all University web pages must comply with the provisions of the Act.

- [GLBA Required Information Security Program](#) – This policy addresses the requirements spelled out in the Graham-Leach-Bliley Act (GLBA). These requirements address the privacy of student financial transactions, such as Federal Financial Aid.

The complete policy statements for the above can be viewed on the UCIS website at UNCP (http://www.uncp.edu/ucis/policies/index.htm).

UNCP has additional policies that guide us on general matters. The following policies have a direct relationship with information technology practices. They can be viewed on the University website.

- [UNCP Copyright Policy](#) – This document, found in the UNCP Faculty Handbook, spells out the patent and copyright policy for the UNC.

- [Solicitation Policy HR 65 02](#) -- This policy applies to solicitation activities conducted on the grounds or within buildings under the control of UNCP, including solicitation using UNCP's electronic mail network ("email").

- [Training for UNCP Employees HR 73 01](#) -- Training will be provided for UNCP staff and supervisors on a continuous basis. Training that is listed as core courses will be mandatory. Training listed as electives is optional, unless the position has direct responsibilities in the areas of elective courses, i.e. supervisors with fiscal responsibility should attend training related to budget management and staff with responsibility for processing travel claims should attend travel regulations training. The policy includes IT training courses/seminars.

- [UNCP Web Policy](#) -- The UNC Pembroke web site is available to official departments, offices, committees and organizations of the University; currently employed faculty and staff; currently enrolled students; and student organizations recognized by the Office for Student Affairs.

- [UNCP Residential Network Policy](#) -- ResNet is the residential computer network service provided to students living at UNCP. ResNet lets students connect their personal computer directly to UNCP's computer network and, through the University network, to the Internet.

Technical standards

The University of North Carolina at Pembroke supports and encourages the use of standard solutions to IT issues. Such use of standards improves the compatibility and interoperability of technologies. It also makes the use of our human resources more effective and efficient. The two primary standards statements currently in force are listed below.

- [Faculty/Staff computer purchasing recommendations](#) -- This set of recommendations is provided to our University community to ease the process of selecting and specifying computer systems and components for purchase.

- [UNC Network Assessment Minimum Network Specifications](#) – This set of standards spells out the baseline requirements for campus network infrastructure. A bond issue in 2001 as provided much needed funding to assist our institution, as well as the others in the UNC, to retrofit our campus network infrastructure to meet these standards.

Management Processes

IS/IT Audit performance

The Information Technology Audit of 2001 resulted in one major finding and five minor findings.

The major finding dealt with weaknesses in the Information Technology Disaster Recovery Plan. The first issue concerned the lack of network connectivity and equipment within the alternative processing site. This issue has been resolved, as a different location has been identified as the alternative site. The new site includes a core network switch with redundant connections to other core switches, environmental control and monitoring, fire suppression and video surveillance. One of the parallel AlphaServers that hosts critical administrative applications has been relocated to the site and is in production.

As second issue with the plan was the timeframe for restoration of services. With the transfer of this machine to the alternative site, the timeframe for restoration of service for these applications has been reduced to 24 hours.   Some unresolved issues remain with the timeframe for restoration of other services. These will be addressed as we move forward with business continuity plans, as discussed below.

A third issue concerned the business continuity plans of functional offices. These documents were updated to incorporate the change in the technology environment brought about by the new alternative site. They will also need to address some additional issues raised in the audit report. The current Business Process Analysis project, which is part of the implementation of Banner, will provide a great deal of material for these plans. The Business Continuity planning council is being resurrected and when address these issues over the coming year.

The fourth and final issue dealt with the lack of testing of the plan. The parallel operation of the equipment has been tested a number of times in actual production. For one reason or another, one server has been taken down or has failed, leaving the other running. In every case, the remaining server continued to perform and no data was lost. Users could immediately log into the remaining server. The redundancy architecture has now been successfully tested as witnessed by a member of the Office of the State Auditor.

In addition, a vendor has completed a security assessment and risk analysis of our network and we have completed a draft of the Information Technology Disaster Recovery Plan. As we review the results of the assessment, we will continue to revise our plan, which will serve as the foundation for functional business continuity plans.

Of the minor findings, one dealt with reviews by the Office of the Internal Auditor. We have provided assistance in understanding the reports generated by the system and what types of issues should be identified in a review.

The second minor finding dealt with the lack of documented policies and procedures. We have documented the policies. This included drafting some new policies that were taken forward to the executive council for approval. The process to document procedures will continue for several more months.

The third minor finding concerned notification of FRS security administrators in the event that system accounts are deleted. We have modified our procedure to include sending a copy of the list of deleted accounts to all Z security administrators.

The fourth minor finding concerned the lack of refresher training in emergency procedures for staff with access to the machine room. We have undertaken the production of a Emergency Procedures Manual which will provide documentation for all sites assigned to UCIS, including the primary machine room. When completed, we will create and implement a semiannual schedule of training for all personnel.

The fifth and final minor finding dealt with the separation of duties for a member of the staff who had access to both source code and Z security. This issue has been resolved, as the role of maintaining security has be transferred to another member of the staff who does not have access to source code of Z applications.

We will continue to address the unresolved issues, especially the concerns about disaster recovery, as time and resources allow.

Process for major acquisitions for IT goods and services

The University follows the proscribed practices for major acquisitions, including but not limited to using competitive sourcing and favoring local and North Carolina vendors where practical.

The UNC Division of Information Resources provides a process for coordinating major acquisitions when multiple campuses have common requirements. The Coordinated Technology Management program services such circumstances. UNCP is currently acquiring products through a number of the agreements negotiated by CTM. In addition, the University takes advantage of the statewide contracts negotiated by the State Office of Information Technology Services.

Process for major IT implementation projects

When implementing major IT projects, the University has found it not only useful but in everyone's best interest to establish a steering committee comprised of leaders for the effected function user community to guide the progress of the project. The steering committee is central in establishing priorities and providing community leadership for moving the project forward.

UCIS and other marshaled resources from the effected functional units carry out the activities of the project under the eye of the steering committee. Project planning and management follows recognized best practices.

The Shared Services Alliance is currently taking a significant role in some of our major projects. This leads to a two-tiered approach to oversight and management. We continue to employ steering committees and local project planning and management to the local activities. On occasion, the SSA or other external agency is funding a share of the project. External partners on major IT projects can influence the timeliness of our results and accomplishments, usually for the better.

University Computing and Information Services is also integrally involved in all campus construction and renovation projects. UCIS is involved beginning with programmatic discovery and remains involved through the construction and acceptance stages.

IT life cycle management efforts

Life cycle management is handled in three different approaches for enterprise business applications, desktop computers, and the network infrastructure.

Life cycle for our business applications is managed for the most part by our vendor, SCT. As we migrate our enterprise services from the SCT Plus 2000 product line to the Banner 2000 product line, the life cycle will still be managed in large part by SCT.

The University has implemented a 3-year life cycle for technology renewal of student lab computers as well as the desktop computers and peripherals for faculty and staff.

Life cycle management of our network infrastructure assets will be based upon a retirement plan developed in partnership with our network hardware vendor.

IT professional development and training efforts

Online, offline, group, individual, onsite, offsite, conferences/workshops/meetings: all of these strategies are employed to meet the development and training demands in our University community.

- Internal staff -- Much of the training and development is tied to specific initiatives and consists of offsite training. Most staff members are also actively engaged in personal professional development through courses offered by UNCP. We are commencing a program to cross-train for a number of position requirements. Some of the training will be vendor-delivered offsite. Most of this training will be group and OJT onsite. As we move forward, individual training plans will become indispensable.

- Faculty -- UCIS offers, either on its own or in collaboration with the Center for Teaching and Learning (CTL), a curriculum of group sessions in our dedicated lab. The curriculum is determined through survey of faculty, preponderance of individual request, and in response to specific requests by department chairs. One on one, task specific, sessions are also provided upon request. Custom workshops are developed and delivered at the request of faculty.

- Students -- Much of the development of student IT literacy is accomplished in the General Curriculum of the University. All freshmen receive an orientation to UCIS services. However, UCIS does offer a specialized curriculum delivered in group sessions. The curriculum focuses on specialized software skills and is offered in our dedicated lab. Customized workshops are available at the request of faculty. One on one, task specific, sessions are also provided upon request.

- Staff -- UCIS offers a curriculum of group sessions. The curriculum focuses on specialized software skills and is offered in our dedicated lab. The curriculum is determined through survey of staff, preponderance of individual request, and in response to specific requests by department directors. In addition, Service units, such as the Controller's Office, offer training sessions for specific business applications. One on one, task specific, sessions are also provided upon request.

Assessment and Accountability

How UNCP measures success using IT

> *"We measure success one [customer] at a time!"*
> … Paraphrase of a popular TV advertising campaign.

In fact, a **Vision of Empowerment** drives us. We seek to empower the members of our University community to meet their visions and goals. If they are successful, then we have been successful.

Assessment

IT performance is assessed through several vehicles: feedback provided at the time of service; feedback provided through the Deans Council, the Academic Support Services Sub-committee of the Faculty Senate, and the Staff Council. In addition, the UNC Graduating Senior Survey routinely polls the students, and a campus-based survey that is administered by the Faculty Senate under the auspices of the Academic Support Services Sub-Committee polls all UNCP students.

The Faculty Senate Survey rotates yearly through the major support services: UCIS will be the one of the two agencies for which surveys will be conducted during the 2003-2004 academic year.

Accountability

The performances of the information technology units at UNCP are accountable to the Associate Vice Chancellor for Information Resources and Chief Information Officer. The AVC/CIO is accountable to the Provost and Vice Chancellor for Academic Affairs, who is in turn accountable to the Chancellor and thus the Board of Trustees.

In practice, though, all members of the IT units including the AVC/CIO are routinely accountable to any member of our University community. That is the key to good customer services. And, we are a service unit of the University.

Funding

The funding elements available to support IT at UNCP

The illustration below shows how funding is currently administered to support the IT venue at the University.
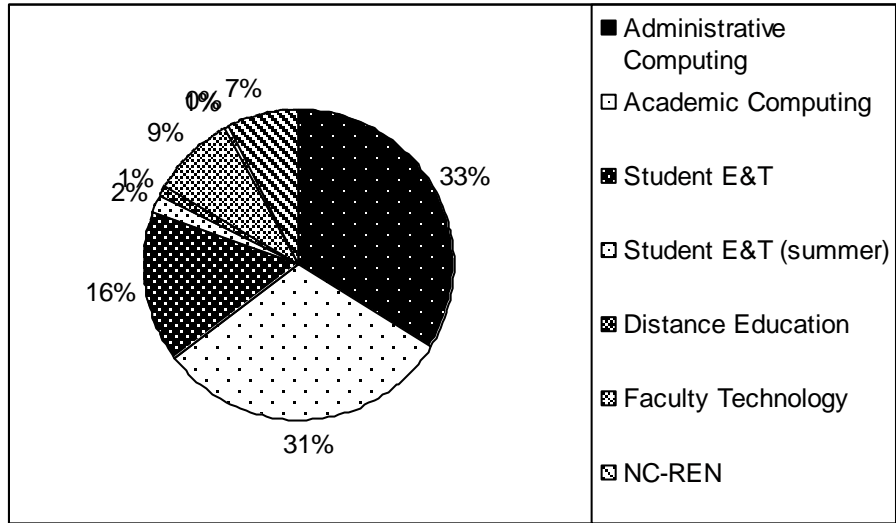
Funds are also available from the Sale of Bonds to construct IT infrastructure. As available, funds generated through competitive grants and contracts are used to further impact the University IT venue.

Use of centrally provided IT funds

Additional IT funds distributed through the UNC Office of the President are used in accordance with the purpose intended. For example, the 2001 IT Bond funding has been used to upgrade our campus network infrastructure to meet the baseline standards set forth in the UNC Network Assessment Minimum Network Specifications. The same funding source is being used to migrate from our legacy telephone system to Internet convergent IP telephone system. And, the same funding source will be used to deploy our wireless Internet infrastructure.

Our campus is currently in the early stages of a massive facilities renovation and construction program. Those facility improvements, including the IT infrastructure that is integral to each project, are funded by a capital funds bond authority administered through the UNC Office of the President.

Another example is the use of centrally provided funds to compliment UNCP funding of the Banner initiative.

<u>Budget Management</u>

Budget management practices are in accordance with University, local, State, and Federal regulations. The Office of Information Resources currently manages 10 different budgets and monitors 2 others.

Managed

- Administrative Computing (1-17074) -- This state funded account is for personnel, services, supplies, software, and equipment for administrative computing.

- Academic Computing (1-15250) -- This state funded account is for personnel, services, supplies, software, and equipment for academic computing.

- Student Education & Technology (1-10150) -- This account is funded through student Education and Technology fees and is for personnel, services, supplies, software, and equipment for administrative computing. It is earmarked specifically for expenditures to support programming during the normal academic year and can be used for student related expenses such as student wages, student laboratory computers and software for student use.

- Student Education & Technology -- Summer (1-10250) -- This account is funded through student Education and Technology fees and is for personnel, services, supplies, software, and equipment for administrative computing. It is earmarked specifically for expenditures to support programming between the end of the Spring term and the beginning of the Fall term.

- Distance Education (1-10750) -- This state funded account is for services, supplies, software, and equipment for technologies in support of the distance education initiatives of the University.

- Faculty Technology (1-10151) -- This state funded account is for personnel, services, supplies, software, and equipment in support of faculty development. It will used as the primary budget for the new Instructional Development Services unit.

- ActiveAdmissions (1-10674) -- This account is for services, software and equipment for the ActiveAdmissions admission website development project.

- NC-REN (5-55241) – This is a receiving account used for funding provided through NCREN to subsidize the salary of our interactive video coordinator.

- Communications Services (2-27025) – This is a receiving account for network support services rendered to the University Courtyard Apartments adjacent to the

University. This facility is owned by the University Foundation and operated for UNCP students.

- Rural Access Grant – This account is for grant funds provided by the Rural Internet Access Authority, a North Carolina entity. The funds are being used to pay wages to student laboratory technicians in the UCIS computer lab in Sampson-Livermore Library.

Monitored

- Telephones (3-31901) -- This account is used for expenditures for services, supplies, and equipment for campus telephone services.

- Capital Campaign (8-88065) -- This account is for services, supplies, software and equipment for our IT network infrastructure. This account is being used to upgrade our campus network infrastructure to meet the baseline standards set forth in the UNC Network Assessment Minimum Network Specifications and to migrate from our legacy telephone system to Internet convergent IP telephone system. It will also be used to deploy our wireless Internet infrastructure.

Conclusion

During the past three years our student body has grown by 48%. This exceptional growth and impact on all corners of the institution has resulted and serious imbalances in the delivery of support services – particularly as it relates to information technology.

We are making remarkable progress in deploying new information technology. Online course deployment for distance education is expanding at a breath-taking pace. Students are now able to register for their courses and faculty to post their grades for courses via the web. The SCT Banner Enterprise Business applications (albeit, without any certainty as to continued funding for the new costs) migration is underway. During this high growth period, we have renewed our data network infrastructure. We are in the midst of replacing our legacy telephone system with new telephone technology that converges our data network and our phone network. We are also poised to deploy wireless technology at pilot locations on the main campus. These IT advances are occurring in the midst of the largest facilities renovation and construction effort (4 years) in UNCP history.

At this juncture, the University took a reasoned step in establishing the position of Associate Vice Chancellor for Information Resources and Chief Information Officer to provide a new level of leadership for IT. This step signals the recognition that IT is now "mission critical" for the University.

Information technology at UNCP is driven by the recognition that planning and sound decision-making will yield positive results; that a vision of empowerment will result in focusing the IT resources where they will do the most good. Both planning and decision-making are participatory, inviting discourse and consensus in the best tradition of the academy.

The leadership elements are in place; beginning at the highest level with the Chancellor and extending down into the Office of Information Resources. To the degree possible under the current economic situation, the funding is in place. A renewed planning process has been initiated. And, a desire permeates the University to move forward with IT as catalyst, agent and suite of resources (both human and technology). In short, the ingredients for success are in place and they are working.

Under this formula for success, we respectfully request Information Technology Management Flexibility.

Appendix A. UNCP IT Strategic Plan, 1998 - 2002

The principle plan for information technology at UNCP is the IT Strategic Plan that was developed in 1998. It was recently supplemented. The UNCP IT Strategic Plan of 1998 was basically a derivation of the University's Strategies. The IT Initiatives and Objectives are reviewed in the table below. While results are noted, the objectives still stand and work still progresses.

Strategic Initiative	Objective	Results
II: Instruction and Academic Programs -- "To continue the University's long-standing commitment to excellence in undergraduate and graduate instruction in quality academic programs."	**8**: Explore distance-learning opportunities as a means of increasing program offerings.	UCIS implemented the BlackBoard course management system to assist the University in entering the online distance education arena. Currently, UNCP offers two complete degree programs (B.S. in Business Administration with a concentration in management and the MPA). In addition to offering these programs to the region, they are being offered to groups in China and France. UNCP's Spring 2003 offerings include over 34 courses via the internet and 5 courses via two-way interactive video.
IV: Students and Student Services -- "To provide a campus learning environment which is diverse and enables students to reach their fullest potential through quality programs and services."	**5**: Expand student accessibility to technology.	UCIS designed and installed improved network access in all areas of the campus. Student computer labs were modernized and expanded, including the addition of a 24-hour lab. Finally, the University has begun an aggressive campaign to provide online self-services for information (Web for Students) and technology services (ResNet). All classrooms have internet connectivity and over 30 have ceiling mounted data/video projectors. Three positions have been added to support student accessibility.
V: Faculty and Staff -- "To continue the University's recruitment and retention of highly qualified and culturally diverse faculty and staff through competitive salaries, responsive benefits and opportunities for professional growth."	**4**: Broaden the opportunities for staff development.	UCIS instituted a campus-wide training curriculum for faculty and staff and constructed a dedicated training facility that is used not only for staff development, but also student technology training. A series of learning guides have been developed to aid students, faculty and staff in learning software.
IX: Public Services -- "To promote and expand the opportunities for public service through collaboration with various local and state agencies and groups."	**4**: Improve and increase distance-learning opportunities for the local and regional community.	UCIS implemented the BlackBoard course management system to assist the University in entering the online distance education arena. In addition, UCIS was awarded a competitive Rural Access grant to improve community access to the Internet – a key capability in participating in online distance education opportunities. UNCP implemented H.323 video services with 3 of our regional centers.
X: Academic Support Areas -- "To maintain or increase the quality of academic programs while providing adequate support for development or implementation of new curriculum areas."	**6**: Enhance and strengthen UNCP Website Resources. **7**: Ensure student access and availability to computer technology resources. **9**: Develop and Implement a Technology Plan.	6. UNCP added a dedicated web publisher and instituted standards for the "look and feel" of its website. Substantial storage capacity was also added. 7. UCIS designed and installed improved network access in all areas of the campus. Student computer labs were modernized and expanded, including the addition of a 24-hour lab. The University has begun an aggressive campaign to provide online self-services for information (Web for Students) and technology services (ResNet). The University is currently implementing a 3-year life cycle for technology renewal of student lab computers. 9. IT Strategic Planning Initiative commenced during the Fall 2002 term. A new strategic plan must be developed and maintained that dovetails with the UNCP Master Plan and the UNC IT strategic plan. This cycle of planning will take into account the changing nature of the institution in terms of its strengths, weaknesses, and emerging opportunities (the institution has increased in student enrollment by 48% since the previous planning cycle began).

Appendix B*.*

Administrative Systems Advisory Committee
UNC Pembroke

Bruce Blackmon	Director, Financial Aid
Sara Brackin	Registrar
Suellen Cabe	Director, Institutional Research and Planning
Lela Clark	Director, Admissions
Paulette Dial	Assistant Controller
Kathleen Hilton	Dean of Graduate Studies
Ila Killian	Controller
Roger Killian	Director, Financial Planning and Budgets
Pamela Barkett	Director, Human Resources
Delores Lowry	Director, Application Development
Tom Jackson	Executive Director, UCIS
Warren McDonald	Director, Continuing Education and Distance Education
Ed Schempp	Director, Business Services
Karen Swiney	Director, Bookstore
Preston Swiney	Dean of Students
Janet Taylor	Data Coordinator, Advancement
Maureen Windmeyer	Director, Client Services
Susan West	Internal Auditor *(ex officio)*
Maurice Mitchell	Associate VC, Information Resources *(ex officio)*