

**College of Communication**  
**Information Technology Vision Plan**  
**2005-2006**

**Introduction**

Information Technology serves as a means to enrich the educational experience and invigorate emerging areas of scholarly research and education. IT is also a mixture of tools that can improve the nature and efficiency of our business. Considerable investments are made in support of instructional technology initiatives and daily operations.

Information Technology enhances every area of our curriculum. Classrooms, computer facilities and the online environment are enhanced to provide a pervasive technology presence. We provide state-of-the-art networks, instructional computer labs, special-purpose equipment, media production facilities, and technology rich classrooms. We have a professional staff to support and maintain these facilities and services. We provide our faculty with direct support for developing Instructional Technologies in their coursework. These efforts highlight our commitment to our students and their success as Communication graduates.

**Synopsis of IT and Related Funding**

The College of Communication received \$420,969 from the University-wide Information Technology Advisory Committee fee. We also generate approximately \$1 million from the College's Information Technology Fee (ITF). Other instruction-related projects, most of which involve a great deal of IT resources, are funded through a \$1 million Communication Learning Equipment Fee (CLEF).

A large portion of the ITAC Fee allocation is spent to operate the Communication Computer Center (<http://www.utexas.edu/computer/labs/ccc/>), a joint-use facility open to Communication majors during traditional business hours, and to all registered University students after hours. Management and upkeep of the facility is provided by Instructional Technology Services, at an annual cost of \$163,000. ITAC funding support for this facility remains a primary concern.

ITAC-funded projects include the Classroom Experience Archive, described in last year's Vision Plan (<http://www.utexas.edu/computer/itac/plans/>). A faculty focus group has been assembled to discuss practices and requirements for the system, and three courses will participate in the pilot project Spring 2005. Most of the expense is related to installation of cameras, microphones and related accessories, plus the investment in an automated digital video encoding and video on demand system.

Another ITAC-funded project is the improvement of a number of classrooms within CMA, with electrical and data outlets provided in great quantity to support our increasing mobile computing audience. This is described further in the Vision section below.

The principal use of the ITF remains professional and temporary staff. We employ 17 FTEs in IT-related positions, with duties ranging from instructional media production to audiovisual systems support to computer facility and faculty/staff systems support. Instructional Technology support falls primarily in four areas. The Technology Team Help Desk provides network and systems support for

student labs, faculty and staff. The Instructional Design Group assists faculty in the development of instructional media. The Media Services unit provides assistance for classrooms and audiovisual equipment, as well as providing duplicating and media archiving, playback and checkout. We also employ professionals to support highly specific technical areas, such as our digital audio and video editing facilities. A recent addition is that of Infrastructure Support, with one FTE. This unit is responsible for our critical information systems and network, providing day-to-day maintenance and emergency support. Our mission statement places student needs above all else, and our support priorities reflect this.

CLEF provides for much of our instructional equipment, software and services. The process of allocating these funds represents department-specific needs and is distributed based on project proposals. There was also a College-wide improvement to our CMA/CMB building networks to support bringing every one of our student labs to Gigabit Ethernet. The next round of proposals will begin in February and awarded before the end of the spring semester, for disbursement in 2005-06.

## **Our Vision**

Much of our technology vision depends upon the facilities and services we provide. These are described below, and present URLs for additional detail. Listed below are the initiatives we expect to undertake, the resources required to enable them, and challenges we expect to overcome.

### **Classroom Infrastructure Upgrades, Phase II (Funding request: \$140,000)**

As described in last year's Vision Plan, our Mobile Computing Transition requires improvements to our building infrastructure before we can adequately support a mobile computing environment. The College is currently improving classroom infrastructure by installing new furniture systems that include electrical and network outlets. In most cases, this is one port per seat. Currently, eleven rooms are planned.

This year, we request funding to upgrade departmental classrooms and computer labs. These currently support a variety of fixed computer systems, but as we transition them towards mobile-friendly spaces, we must invest in laptop-friendly furniture. This will include an additional 7 rooms.

In addition, we will outfit these and other classrooms with a campus phone with speed dial buttons for quick access to our support staff. Lighting systems will be slightly modified so they are standardized with common controls and dimming capabilities. These are recommendations from faculty who have taught in our classrooms.

### **Computing Center of Tomorrow, Planning Phase (Funding request: \$30,000)**

Again, our Mobile Computing Transition plan demands that we rethink the use of traditional computing resources, including our Communication Computer Center and CMA lobby. While we are actively improving mobile computing support in classrooms and student computer labs, we lack an open, highly available space to support individual work and group interaction. Initially proposed to internal groups as a "CyberCafé" concept, our investigation yielded a very similar project at the University of Chicago that parallels our objectives ([http://intech.uchicago.edu/ccr/crerar-project/011031\\_ec\\_crerar.pdf](http://intech.uchicago.edu/ccr/crerar-project/011031_ec_crerar.pdf)). We will effectively open the floorplan of the CMA lobby and adjoining space currently occupied by the Communication Computer Center. This will reduce the number of seats in the CCC, which will be reduced to supporting only a few specialized activities such as scanning or media encoding. These will be augmented by a series of "information kiosks" located around the entire floor, with a few found in

halls on other floors (see next section). These kiosks will support the primary use of the expensive systems currently installed in the CCC: email and web surfing. Students with their own laptops will be able to plug into the electrical and data drops situated throughout the space, as well as wall-mounted plasma displays or projection screens in “collaboration booths” meant for group activities. These displays will double as information panels (see next section) when not in use.

This project will not be simple, and cannot be completed in one year. For the coming year, we request funding to develop a plan, in cooperation with the University’s Architectural and Engineering Services and any outside architectural and design agencies they may employ, that meets the requirements stated. A College working group composed of students, faculty and staff will oversee the plan’s development.

### **Information, Service and Resource Location and Reservation (Funding request: \$50,000)**

Another difficulty mentioned in our Mobile Computing Transition plan involves the location of resources, whether they are online or physical. We are developing an online system that will integrate the various resource reservation and tracking systems used today to provide checkout equipment, reserve rooms and locate individuals or facilities. This all-things-in-one-place service will be available via the web, but we also intend to install information kiosks in locations throughout CMA and CMB. Students, faculty, staff and visitors will be able to stop by any kiosk to, among other things, check on the availability of a digital camcorder, review the events calendar or view a building map to locate an instructor’s office. When these kiosks are not being used, they will display helpful information currently served by a limited-reach closed-circuit TV system. The kiosks could also be used to demonstrate student work selected by each department, with a “news ticker” providing up-to-date information about deadlines or events. This is the same content that will be displayed on the Computing Center collaboration booth displays.

### **WiFi Upgrade (Funding request: \$40,000)**

We are requesting an ITAC allocation to further increase the scale of our wireless (“WiFi”) network (part of the University’s Public Network Access service). Because of the success of our 60-unit “mobile lab,” available for checkout for classes, we need to invest in a greater capacity to avoid bottlenecks and improve reliability. As we move along with our Mobile Computing Transition plan, our demands on this network will increase. We are working with ITS Networking to thoroughly blanket CMA, CMB and the exterior locations where students meet and work daily.

### **Technology Staff Relocation (Funding request: \$30,000)**

As Technology Staff support has become such an important factor in the successful use of instructional technologies, it is becoming increasingly clear to our faculty and staff population that the haphazard way in which the staff have been allocated building space no longer serves us adequately. At the moment, we support operations in five buildings, with a staff spread out in seven locations in two buildings. Our Help Desk is located on a floor that is inaccessible to the public because of restricted access requirements for studios rented by KLRU. As our entire operation is increasingly dependent on tightly coordinated effort between our units, there is much benefit to locating the entire Technology Services operation in one easily accessed location. Liberal Arts, for example, has a dedicated space in the new Mezes wing. No matter the issue, students, faculty and staff could locate the technical support they require in one spot; instant gratification.

We are requesting funding to once again initiate a architectural and modeling plan that will determine the best configuration for an IT Support Center. Ideally, this will be central to our building, within easy

reach of our classrooms and the Computing Center. It will allow us to have an actual walk-in “help desk” instead of a “phone-in” service.

### **Instructional Video Infrastructure Collaboration (Joint funding request: \$200,000-250,000)**

This project continues from last year as we investigate the use of classroom recording and video on demand with a faculty focus group and three pilot courses. As the project has been described and technologies demonstrated to other units on campus, it is clear that there is significant overlap between our requirements and those of the Colleges of Fine Arts, Liberal Arts, Nursing, Pharmacy and Social Work. Each unit requires an automated system for encoding video and audio from classroom presentations and performances that will support at least two “streams” per recording. In most cases, this would include a camera and microphones trained on the lecture or performance, and another capturing what is presented on the video projector or technology console. In other cases, this may be multiple camera views of medical procedures or clinical practicum sessions, as in our Communication Sciences and Disorders Speech and Hearing Clinic. The system will allow faculty to log in using their EID, record a session, then make this available on the video-on-demand server for the general public, or to selected individuals or groups (such as a particular class or section). Regular classes or events can also be pre-scheduled for recording. Some uses, such as in Fine Arts and Advertising will provide live video feeds to other users on campus or on the Internet, so that other students and their friends or families can participate in real time from a distance.

We are requesting funds to implement a dedicated audio/video capture solution for classrooms and performance spaces in the participating Colleges’ buildings, and to scale our existing realtime encoding and video on demand system to support the additional streams these Colleges require, and provide storage space for the numerous hours of recording we expect to encode. We will also be hiring contract programmers to customize certain portions of the systems to meet University privacy and fair use requirements. Finally, additional encoding technologies will be deployed to investigate the best available technologies to meet individual College requirements. *This projected is represented in a joint proposal, submitted separately by the collaborating Colleges.*

### **Conclusion**

The College of Communication is dedicated to providing the best possible environment for the development and use of instructional technology. This involves making significant investments in technology, as well as in the personnel required to manage them.

We depend on many campus-wide systems and expect a certain level of investment in University infrastructure. Funding of campus network infrastructure and Internet access should be a top priority, and considered as necessary to our mission as functional classrooms and libraries. This investment should be funded through centralized fees.

The IT community at the University should be regarded as an enterprise service provider. Funding should therefore reflect this. Increasing staffing levels and benefits will ensure the enormous amount of money spent on IT equipment and services will not be wasted. As we add more resources, we must also add staff. We must also seek to improve the skills and abilities of IT staff, so training and certification plans must be developed. Our students, faculty and staff deserve the best IT environment we can provide.

Finally, new IT initiatives should be developed at the College level. These can be funded through ITAC awards that target initiatives, rather than specific departments. We seek and encourage collaboration between departments and across disciplines, wherever needs overlap. Once a service or technology has been developed to a level that it should scale to a campus level or greater, it should be migrated to a central provider for maintenance and administration. The University can then work towards providing continued availability through grants and central budgets.

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