Technology Vision Plan

2005-2006

College of EducationThe University of Texas at Austin

Submitted by

The College of EducationThe University of Texas at Austin

College of Education Technology Vision Plan Committee

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Summary of Requests

The College of Education (COE) has continued its steady advance toward the integration of computing and telecommunication technologies into all aspects of its academic, research, and service functions. The College's goal is to utilize these technologies to facilitate instruction, collaboration, and research, and to improve professional preparation in all components of its undergraduate and graduate programs. The College demonstrates its commitment to this goal by providing an educational environment enriched with high-speed data networks, numerous technology facilities, and the training and support necessary to make best use of these tools.

The Laptop Initiative for Future Educators (LIFE), which is now in its fifth semester and requires all students in the teacher education Professional Development Sequence to purchase an Apple iBook, represents a major step toward this vision of pervasive technology use, and continues to affect all facets of the College's planning for technology services and facilities. As it grows and evolves, LIFE provides a significant impetus for identifying new technology needs and for seizing opportunities to use technology in new ways. It has led to a vision of the College's technology future as one in which technology will be available in a wide variety of settings, such as campus classrooms and cooperative schools, and the use of laptops and wireless networks will be increasingly widespread.

The projects in the 2005-2006 College of Education Technology Vision Plan reflect the College's current priorities and emergent needs based on this long-range vision. The College's commitment to provide a robust technology infrastructure that meets the full range of general technology needs of the entire College of Education community is reflected in proposals to continue the installation of projectors in classrooms, to create a new generation of mobile computer carts that will work in conjunction with the installed projectors, and to update and upgrade the audio systems of the Distance Learning Classroom and provide videoconferencing capability in the Advanced Applications Laboratory.

At the same time, the specific needs of the Laptop Initiative for Future Educators (LIFE) must be met if this groundbreaking program is to continue to evolve and expand, and to relieve demand on resources meant to serve College-wide needs. A project to support LIFE's needs for technology utilization in the fieldwork public school classrooms of apprentice teachers, supply additional "loaner" laptops, and replace aging loaner laptop batteries is proposed. A project to acquire an iVisit server and software to explore and expand the use of iSight cameras for videoconferencing via the Web will support LIFE needs, as well as those of the teacher preparation programs and the College in general.

Though the College remains firmly committed to continual improvement of the overall technology infrastructure, as the general infrastructure has matured and more general needs have been met, the College has begun to address the more specialized needs of specific programs. Several projects reflect this trend: an expansion and renovation of the Assistive Technology Lab, the renovation of a technology classroom for Science and Math Education, and the development of a Movement Sciences Teaching Laboratory.

The budget requested for 2005-2006 is **$406,560**.

If there are questions concerning these projects or other information described in this report, please contact Dr. Paul Resta, Director, Learning Technology Center, College of Education *(resta@mail.utexas.edu).*

Overview of Current IT Programs and Infrastructure

Mission and Goals

Through its mission of teaching, research, and service to the state and nation, the College of Education at The University of Texas at Austin prepares outstanding teachers and other educational leaders and advances society's knowledge of teaching and learning. An integral part of the College's mission is to prepare education professionals who understand, and are skilled in, the educational uses of technology. The College is committed to preparing educators who can effectively use and teach with technology so that they can, in turn, impart to their students the skills and knowledge necessary for a complex 21st century economy.

The College has worked to fulfill this mission by utilizing technology to facilitate instruction, collaboration, and inquiry in all its undergraduate and graduate programs. The College's commitment to this mission is demonstrated by its educational environment enriched with high-speed data networks, numerous technology facilities, and the training and support necessary to make

the best use of these tools.

The College's Vision Plan Committee has developed the following technology goals that have been addressed on an ongoing basis by previous Vision Plans and other technology initiatives:

. • Continue systematic College-wide strategic planning of information resources andtechnologies that include all students, faculty, administrators, and staff.
. • Develop high levels of technological competence in the College's students, faculty,and staff.
. • Increase access to high performance digital services in support of teaching, research,and service, as well as connections to major national and international facilities.
. • Provide access to information technologies for all members of the Collegecommunity and provide the support and experience needed in a range of technologyapplications and environments likely to be encountered in the education profession.
. • Infuse technology into all phases of teaching, research, and service and develop newmodels, tools, and strategies of instruction based on the latest technologies.
. • Provide students, faculty, staff, and other community partners with onlinecollaborative environments and network access, both on and off campus, to promotethe sharing of the information they need for study, teaching, research andadministration.

Programs

Laptop Initiative for Future Educators (LIFE)

The Laptop Initiative for Future Educators (LIFE), now in its fifth semester, is a major step toward the fulfillment of these goals. This groundbreaking initiative requires all teacher education students entering the professional development sequence to acquire a prescribed laptop computer and software, and is designed to immerse preservice teachers in a technology-rich learning environment of ubiquitous access to technology tools, Internet-based resources, and online communication systems in both their coursework and field experiences. Faculty and clinical supervisors are also equipped with the same equipment and software and are given curriculum development support.

This complex program requires considerable recurring funds for the salaries, equipment and resources necessary to effectively carry out its operations. Extensive training is provided to faculty and students. Technical support and equipment are provided to the schools in which cohorts of students have classes and field experiences. A wide array of peripheral technology equipment is available for checkout to students for multimedia assignments created with their laptops, as are loaner laptops when theirs must be sent for repair. The Laptop Help Desk provides walk-in technical support for students, and the Application Support Center (ASC) provides help with software. A coordinator manages this extensive range of efforts and resources. (See "Funding Sources" section below.)

Several Vision Plan projects in recent years have addressed LIFE-related

needs, such as the project to provide checkout projectors to the apprentice teacher cohorts for use in their field experience schools.

Learning Technology Center

The Learning Technology Center (LTC) supports the College of Education's instructional and research activities by providing computer, digital media, and telecommunications facilities, equipment, and services. Through the work of the LTC staff, many new technologies have been made available in the College in recent years. The LTC developed and maintains the College's computer networks, both wired and wireless, and server system. Several large-scale technology facilities have been designed and constructed to serve faculty and students in five buildings, including a Distance Learning Classroom and Model Technology Classroom. The center also provides nine other computer lab facilities, with both Mac and PC platforms. These include an Assistive Technology Lab with specialized hardware and software to teach students about adaptive equipment for people with disabilities, and a Laptop Compatible Classroom where students can plug in power to their own laptops during classes. The LTC checks out peripheral equipment, such as digital camcorders, to students free of charge, and delivers equipment, such as mobile laptop labs, to College classrooms. (See "Infrastructure" section below for more details.)

The LTC's IDEA Studio assists College of Education faculty with the integration of technology into their curricula. Desktop technical help for College faculty and staff is provided by the Technical & Network Services team. The LTC also employs a Web Designer who maintains and updates the College's Web site and assists departments and centers with their sites. And through the leadership of its Director, Dr. Paul E. Resta, the LTC has been involved in a number of research projects and collaborative initiatives which advance the use of technology to meet the needs of teachers and students throughout the state and nation.

These wide-ranging, high-quality resources and services require a large and skilled staff. The LTC employs 18 regular full- and part-time employees and 29 hourly part-time employees. Its IT-related funds consists of ITAC allocations (LTC personnel handle all ITAC-related purchases, and the resources purchased for many ITAC projects are housed and managed in the LTC), and its Learning Technology Center Fee, which is collected from all students enrolled in an education course each semester. (See "Funding Sources" section below for more details.)

In addition to these college-wide programs, some of the College's academic departments have IT personnel, for the most part concentrated on maintaining departmental Web sites. Each of the five academic departments also has a

classroom equipped for instructional presentation with a “Smart Cart,” containing a computer, document camera, VCR, input switcher and projector.

Infrastructure

Below is a list of the computer labs or IT-equipped classrooms within the Learning Technology Center and their resource specifications. All labs have PRS laser printing and image scanners available.

. • Advanced Applications Lab, SZB 324: 40 Apple iBooks, wireless network,instructor console, dual rear screen projection.

. • Distance Learning Classroom: Instructor console, rear screen projection, 2video monitors, 3 video cameras and microphones, technician-operated,providing two-way interactive audio and video communications via theUT video network, satellite, telephone, or webcast.

. • Multimedia Research and Development Lab, SZB 439A: 10 Power MacG5s with Superdrives, 10 Del Pentium 4s with DVD burners, video andaudio capture capability, instructor console and ceiling-mountedprojection.

. • Macintosh Lab, SZB 439B: 30 iMac G5s with Superdrives, instructor console and ceiling-mounted projection.

. • PC Lab, SZB 439C: 24 Dell Pentium 4s with CD burners, instructor console and ceiling-mounted projection.

. • Model Technology Classroom, SZB 439E: 25 Apple iBooks, wirelessnetwork, instructor console with rear screen projection, 2 plasma screens.

. • Open Lab, SZB 439: 6 Dell Pentium 4s and 6 17” LCD iMac with Superdrives. Always “open” for student walk-in use.

. • Laptop Compatible Classroom, SZB 518C: Wireless network and powerfor student-supplied laptops, large screen projection, seating for 23.

. • Assistive Technology Lab, SZB 518E: Specialized hardware and softwareto demonstrate accommodations for the needs of people with disabilities.

. • Open Lab, SZB 536: 8 Dell Pentium 3s, 4 Power Mac G4s withSuperdrives, and 10 laptop-use stations with power and wireless network.

. • Science Education Technology Classroom, in SZB 316: 20 PC workstationsand 4 science lab tables.

□.• Kinesiology Lab in BEL 844: 13 Dell Pentium 3s.

□.Additional computer equipment available for classroom delivery:

. • Mobile presentation carts: 5 available in SZB, 2 available in BEL withPower Mac G4 or Dell Pentium 4 with PowerPoint, monitor, Zip, CDROM,

and Floppy drives, wireless network connection, projector, andspeakers.

- Mobile PC Class Cart: 1 available in SZB, with 21 Dell Latitude C640 laptops, wireless network connection, projector.

Video editing facilities include:

- 3 Digital Video Editing Bays in SZB 537: Power Mac G5s with iMovie orFinal Cut Pro.
- DVD Recorder in SZB 537.
- 2 S-VHS editing bays in SZB 537.

- Stereo Audio Mixing Room in SZB 537: Microphone, tape, and CD inputswith audio mixer, Power Mac G4 with audio editing software.

Other equipment available for student and faculty checkout includes:

- Mini DV Camcorders
- Digital Still Cameras
- iSight Cameras
- Image Scanners
- Apple and PC laptops
- LCD Projectors
- FireWire Hard Drives
- Conference Phones

The Learning Technology Center's Technical & Network Services team maintains the College's computer data networks and servers and works hard to continually update these systems. Pertinent data on these systems include:

- The College's switched data network has 1100 IP addresses spanning 5buildings.
- 22 wireless access points provide wireless networking in 4 buildings.
- TeachNet, the College's mail, conferencing, and chat system has 2,524users and averages 5,240 logins per day.
- The College has 30 servers, running Mac, Windows, and Unix systems.
- The College's Web site (on Web Central) consists of over 180 pages andPDF files, and averaged over 17,500 page requests during a recent week.

Current and Proposed Funding Sources for IT Programs andInfrastructure

- 19-9706-00—Annual Infrastructure Allocation and One-Time ProjectAllocation (ITAC Funding)
- 19-2638-22—Learning Resource Center Usage Fee
- For 2005-2006, the College is requesting a new fee, the Laptop SupportFee, to fund expenses related to the LIFE program.
- 14-7482—Deans Research and Support Account, which supports

theVision Award program. (See Vision Awards, Best Practices Section)

. • $25,000 from The University Coop, for the purchase of hardware andsoftware for the Assistive Technology Lab.

Best Practices

The College has implemented several "best practices" in recent years. Following are short descriptions of those that have had the greatest impact.

Network Policies

Perhaps foremost among the College's best practices are the new policies governing data network use. These policies were developed by LTC staff, approved by the College's Management team (the Dean and departmental chairs) in January 2004, and went into effect in July 2004.

The policies call for the registration of all COE computers with Technical & Network Services, so that they are aware of and have information about every computer connected to the network. A database of this information will allow quick response to security breaches, such as rogue servers and other compromised computers. All College computers capable of running at least Windows 2000 or Mac OS 10.3.3 will be configured to verify logins with a centralized system using complex passwords. All computers maintained by the LTC Technical & Network Services will be set up with a basic security configuration "template," preventing them from running as servers without valid need and advance permission. These system settings allow administrative access to all University-owned networked computers, but the new policies protect users' privacy by strictly limiting the conditions under which the access can be used.

Implementation of the network policies has been piloted on LearningTechnology Center staff computers since this spring, getting the "kinks" out of the procedures. Preparations are currently underway for their College-wide implementation. The new policies should greatly reduce the impact of viruses, operating system vulnerabilities, and hacking incidents. Technical staff will spend less time managing these security breaches and can more easily distribute to College users the latest virus protection and security updates.

Vision Awards

The Vision Awards are certainly an example of a successful best practice. A 2002-2003 Vision Plan project proposed increasing technology integration in College of Education courses by tapping the technology expertise of UT students. The ITAC funded project, dubbed the "Vision Awards," began in 2003 with 10 projects. The program was able to not only continue but expand to 19 projects in

2004, with ITAC funding carryover from the previous year and additional funding from the Office of the Dean.

College faculty propose technology-based projects that will enhance their teaching. Proposals are judged based on their potential to improve instruction in the College. Funded projects receive up to 200 hours of technology-savvy student labor and up to $400 for materials and supplies. Project products range from templates for online portfolios and databases of lesson plans aligned with state standards, to online multimedia simulations on diagnosing reading difficulties.

These projects have been an immediate boon to course instruction, benefiting hundreds of students each semester. This program allows faculty to integrate technology activities into instruction in ways they have been unable to in the past. It is making real progress toward the College's goal to improve instruction with technology.

Applications for Staff Management

Another best practice has been the LTC's development of Web-based applications to assist with the management of its large staff of technical assistants. These applications have been developed by the student employees themselves, and include time clock and scheduling functions, a bulletin board forum where employees can discuss work procedures and issues, and the ability to generate statistics based on facility-use data.

Commercial products with similar capabilities cost over $20,000. The time clock and scheduling functions alone, which generate accurate printed time sheets, save the LTC many hours of labor each month processing and correcting errors on handwritten ones. The application development maximizes the return on students' wages, who must be on duty for lab proctoring and equipment delivery, making full, productive use of their time when they are not busy with these tasks. The process has given the students real-world job experience while meeting critical departmental needs.

Trend Toward Laptop and Wireless Use

The move toward the use of laptops and wireless networking has achieved other cost efficiencies. This trend provides greater flexibility of access to instructional technology and lowers the costs of equipping, maintaining, and staffing computer lab facilities. Through the Laptop Initiative for Future Educators, the use of laptops and wireless networking has even extended into the public schools to enrich the field experiences of teacher education students. The College is also currently piloting the use of laptops with iSight cameras and specialized videoconferencing software, iVisit, to allow students placed in field

settings at great distances to remotely participate in teacher education courses and receive university supervision. This innovation could eventually allow many students to undertake their apprentice teaching in areas around the state, an option that would increase the College's ability to serve the entire state of Texas.

Another goal the College is currently working toward, the installation of ceiling-mounted projectors in most of its classrooms, will result in lower costs, because fewer deliveries of computer carts will be needed, and greater flexibility and convenience for faculty and students.

Use of Previous Academic Year Allocations (2003-2004)

For the year 2003-2004, seven projects were proposed with a total of $604,800 requested in funding. In late January 2004, the College of Education received an ITAC allocation of $240, 582, allowing three projects to be funded.

Programs

None of the funded 2003-2004 Vision Plan projects are categorized as a "Programs" project.

Infrastructure

1. **1. Construct New Network Closets and Rewire Data Network in Sánchez Building.** This project proposed the construction of new closets for data network equipment and the rewiring of all Sánchez data ports to the new closets. The project will result in safer data equipment installations and a faster, more secure data network. $121,000 was the estimated cost for this project. Since it was the top priority project, $121,000 of the $240,582 allocation was budgeted for it. Due to the contingency fees required by Physical Plant, and other unforeseen costs, the expenses to date on the project are $142,482. Physical Plant has received this amount and created the project's construction account. Work recently began on this project.
2. **2. Permanent Projectors in Classrooms.** This project proposed installing ceiling-mounted LCD projectors in College classrooms. Projectors in the classrooms will facilitate the growing use of laptop computers in the College by allowing instructor and student presentations without prior planning for projector reservation and delivery. The project proposed outfitting 20 classrooms with projectors for an estimated cost of $196,600. After the ITAC allocation was received, the project was budgeted for $79,582, to fund as many classrooms as

possible. In April of 2004, a cost estimate was requested from Physical Plant, so that the number of classrooms that could be equipped could be determined. After six months and numerous requests for action, an estimate for a portion of the work was only recently received from Physical Plant. The College is still weighing design options for these installations, but work should begin in spring 2005.

One-Time Projects

1. **Provide Laptop Computers for Field Experience Facilitators.** This project proposed the purchase of 40 laptop computers for semester-long checkout to the facilitators who supervise the classroom field experience of apprentice teachers. The project allows the mentors of the students in the LIFE laptop initiative to acquire a high degree of technology skill and have the same type of equipment as the students. The project cost was estimated at $40,000. Since this was the second highest priority project, it received the full $40,000 after the allocation was received. The computers were purchased in February and March 2004 for $41,318, slightly higher than originally estimated.

IT Projects for 2005-2006

Programs

The following projects support a major College program, the Laptop Initiative for Future Educators (LIFE). These projects address several of the College's technology goals, especially to "infuse technology into all phases of teaching, research, and service and develop new models, tools, and strategies of instruction based on the latest technologies" and "provide…online collaborative environments…both on and off campus, to promote the sharing of information."

Support of LIFE Program and Technology Utilization in Field Experiences

In the fall of 2002, the College of Education implemented a bold technology program for the professional development sequence of its teacher certification programs in which students would be required to have a laptop computer. The Laptop Initiative for Future Educators (LIFE) is a comprehensive effort to immerse future teachers in technology-rich environments so that they become competent in using technology learning tools in their instruction. There are many aspects of the successful growth of the LIFE program in the semesters since, and an excellent technology infrastructure is among the most critical. Along with projects that support the College's technology infrastructure as a whole for the

benefit for all College users, projects that foster the LIFE program more directly are also critical to allow for its continued success and evolution, and to relieve demands on College-wide resources.

2004-2005

The 2003-2004 project "Provide Laptop Computers for Field Experience Facilitators" supported the LIFE program by providing a set of 40 laptops available for semester-long checkout to the field experience facilitators who supervise the classroom experience in area schools of apprentice teachers. This project has been completed with 2003-2004 ITAC funding of $40,000 as originally budgeted. In 2004-2005, 100 LCD projectors were requested to provide each cohort of LIFE apprentice teachers easy access in their schools to this vital piece of technology equipment; 25 were purchased along with replacement lamps with $26,200 in funding.

Update for 2005-2006

As the LIFE program expands and matures, new needs have been identified for 2005-2006. The College needs additional laptop computers for general short-term loan to LIFE students when theirs must be sent for repair, and proposes providing 6 additional Apple iBook laptop computers. Replacement batteries are also needed for the entire fleet of loaner laptops.
The College also proposes providing additional projectors and other equipment to each LIFE cohort of apprentice teachers, which will comprise a "technology kit." Having this equipment available in cooperating schools allows the apprentice teachers to more easily use their laptops to practice the use of technology in instruction they have learned in methods courses. The cameras, camcorders, tripods, microphones, and speakers will expand the types of technology-integrated lessons and assignments possible. Finally, a fleet of iSight cameras will allow Cohort members to videoconference over the Web, facilitating communication among apprentice teachers and their facilitators.

Budget Detail:

Loaner iBooks (6)iBook Batteries (50)Epson PowerLite S1	$6,000 $5,000
Ultra Portable Projectors (35)Digital Video Cameras	$29,050 $35,000
(35)Digital Still Cameras (35)Tripods (35)Wireless	$10,500 $12,460
Microphones (35)Speakers (35)iSight Cameras (50)	$3,500 $2,800
	$6,300

2005-2006 Budget Total **$110,610**

Provide iVisit Web Videoconferencing

iVisit is a multi-party videoconferencing system that allows users to communicate via the Web with video, audio, and text. In fall 2004, it has been used in a pilot project with three apprentice teachers who are working in schools in San Antonio and Dallas and are attending courses and receiving feedback from field experience facilitators remotely. Laval University in Canada has graciously allowed the College temporary use of its iVisit server for this pilot.

The College wishes to expand its use of iVisit in its teacher preparation programs. iVisit can be used to increase contact time between fieldwork facilitators and apprentice teachers and minimize facilitator travel time and expenses. It would also allow facilitators to meet with more than one student at a time and encourage interaction among apprentice teachers. iVisit's file and desktop sharing capabilities would allow instructors to direct students to various resources on the Web and demonstrate their use. Using iVisit to allow groups of students to view and analyze video clips of their teaching is another promising instructional method that the College wishes to explore.

The College of Education therefore proposes the purchase of a server and an iVisit server-client license for 100 users. The iSight cameras detailed in the "Support of LIFE Program and Technology Utilization in Field Experiences" project, along with those purchased for the pilot program, will be used in

conjuction with the server and software.

Budget Detail: Apple Macintosh PowerPC G5Server-client Licenses (100) $6,650 $1500

2004-2005 Budget Total **$8,150**

Infrastructure

The following projects address infrastructure needs, and work toward the College's goals to "continue systematic College-wide strategic planning of information resources and technologies" and "provide access to information technologies for all members of the College community."

Installation of Permanent Projectors in Classrooms

The College of Education envisions its technology future as one in which the use of laptop computing is increasingly widespread. The number of faculty and

students who own laptops continues to grow each year and the LIFE program has greatly accelerated this trend. Providing opportunities for laptop use in a variety of settings is therefore a top priority. The installation of projectors in all College classrooms will allow laptops to be used to facilitate instruction and student presentations without prior planning for projector reservation and delivery. For those without laptops, the projectors will allow for a new generation of streamlined computer delivery carts (see "Update Mobile Computer Delivery Carts.")

2004-2005

As stated above in the "Use of Previous Academic Year Allocations," this project received $79,582 in funding for 2003-2004, and due to its high priority, the project received an additional $97,780 in funding in 2004-2005. Due to the late allocation of 2003-2004 funding and the delay in receiving estimates from Physical Plant, the College is still considering installation options and design. It is therefore not known at this time exactly how many classrooms can be outfitted with this amount, but it is anticipated that approximately 15-20 classrooms can be outfitted in the coming year using this funding.

Update for 2005-2006

The College remains committed to providing uniform installed computer projection capability in as many of its classrooms as possible, and requests funding for 2005-2006 to continue with the project and provide this capability to additional classrooms. The ultimate goal is to have projectors installed in all of the approximately 30 classrooms in the Sánchez and Bellmont buildings. The College proposes funding of $80,000 for the continuation of the project.

Budget Detail:

Classroom projection capability	$80,000
2005-2006 Budget Total	**$80,000**

Update Mobile Computer Delivery Carts

The College of Education is committed to installing computer projection equipment in as many classrooms as possible to facilitate instruction and presentation with instructor- and student-owned laptops. But there will still be great need for the delivery of computers to classrooms for those outside the LIFE program who do not have their own laptops.

Having the projectors installed in the classrooms will mean that a projector will no longer be needed on the delivery cart and will allow for the development of the "next generation" of delivery carts: smaller, more streamlined carts, equipped with laptop computers. The current fleet of carts contain both Mac and PC CPUs, a monitor, video splitter, KVM switch, and Ethernet hub and are bulky, heavy, and hard to maneuver.

The College of Education proposes acquiring and outfitting a new fleet of computer carts. The new carts will be smaller, lighter, easier to push, and more secure. They will contain laptops, eliminating the heavy monitor, dual CPUs, video splitter, and KVM switch. The laptops, one each Mac and PC, can be swapped to the desired platform immediately prior to delivery, or easily replaced during a class in case of failure. The streamlined equipment system will make the addition of a DVD/VCR player possible when video is also required. The resulting video projection size is much larger than the video monitors currently delivered, and will eliminate the need to deliver two types of

equipment carts to the classroom.

Budget Detail: Secure Mobile Cart (12)iBook Laptop (12)PC Laptop (12)Power and A/V (12)Peripherals (12) $14,400 $13,200 $16,800 $3600 $1800

2005-2006 Budget Total **$49,800**

Upgrade and Enhance DLC/AAL Systems

The Distance Learning Classroom (DLC) and Advanced Applications Laboratory (AAL) facilities and their adjoining control room were completed in 1998 and have been heavily used ever since. The DLC provides two-way interactive videoconferencing to sites around the world via the UT broadband network, satellite, telephone, or webcast, not only for the College of Education, but other UT departments as well, such as the School of Information and the College of Liberal Arts. On average, each week it hosts 6-8 videoconferences, and many other meetings and presentations.

Its technical systems are beginning to age, especially the audio systems that are vital to a successful videoconferencing experience. In recent years,videoconferencing audio equipment has been redesigned and new standards have been set for audio conferencing performance.

The College proposes upgrading the DLC audio systems. A new audio

mixer/echo cancellation unit will provide advanced audio processing, improved digital microphone/speaker management, and 8 additional audio inputs. A Netlinks controller will provide more programmed functions, faster processing,and will update the remote control from infrared to the RS 232 standard.

To address continued heavy demand for videoconferencing, the College proposes to provide videoconferencing capability to the AAL. When this large computer classroom was built, wiring and camera housings were included so that this capability could be easily added in the future. A camera with remote pan/tilt and modifications to the touch screen control panel are all that are needed. An upgrade to VGA switching will expand the control room switching capabilities, allowing any signal from either room to feed to the other.

Budget Detail:

8 Channel Audio mixer/echo cancellation unit $5,000 4 Channel Audio mixer/echo cancellation unit w/Telco $4,000 Netlinks Controller $1,500 Installation, calibration $1,500 Video Camera w/pan/tilt $4,500 Installation/Programming $2,000 VGA Switching Upgrade $3,000 VGA Installation/Programming $1,500

2005-2006 Budget Total $23,000 One-Time Projects

The following projects address one-time needs. They support the College's goals to "provide access to information technologies to all members of the College community and provide the support and experience needed in a range of technology applications and environments likely to be encountered in the education profession" and "develop new models, tools, and strategies of instruction based on the latest technologies."

Assistive Technology Laboratory Expansion and Renovation

The Assistive Technology (AT) Lab demonstrates the use of assistive devices in the home, school, and workplace settings for people with disabilities. It provides orientations to more than 1000 students a year, including undergraduates in ALD 322, ALD 326, and Special Education courses, and graduate students in the Colleges of Education and Communication and the School of Information. Many of these students will become classroom teachers who must be familiar with the AT devices and services that their students with disabilities are by law entitled to receive.

Funding from the University COOP for the past few years has supported the acquisition of hardware, software, and low-technology equipment, and has allowed the AT Lab to expand many of its displays and orientation activities.

Additional funding was received from the COOP this year to upgrade computers and expand the display of classroom setting devices. However, the current spacewill not accommodate any further expansion of lab equipment and activities.

Adjoining space is available for expansion, but must first be renovated. Renovation includes the demolition of one wall and the construction of another, and new paint, flooring, furnishings, and electrical systems. UT Architectural and Engineering Services has estimated the work at $20,000.

The College requests $20,000 in funding to proceed with this work, so that this unique resource can continue to expand its instructional activities.

Budget Detail:

Construction and renovation	$20,000
2005-2006 Budget Total	**$20,000**

Create Additional Technology Classroom

The College of Education's Model Technology Classroom, completed in large part with ITAC funding in 2001, has been a great success. The room is constantly in demand for semester-long courses, meetings, training sessions, and workshops. College faculty make effective use of the room's flexibly arranged seating and multimedia projection, and their requests to use the room must often be denied. The College needs an additional technology classroom, with increased seating capacity, to handle the demand.

2004-2005

In 2003-2004, the College proposed "Create Additional Technology Classroom" to construct another larger-capacity technology classroom in the Sánchez Building. ITAC funding for that year did not allow the College to carry out this project. For 2004-2005, the College of Education revamped this project for the renovation of an existing technology classroom/lab. SZB 316 is used extensively for UTeach Natural Sciences and graduate courses in Science and Math Education, but is too small for many of these classes. The renovation will allow for the larger classes the original proposal sought and will better serve the needs of the College. The renovation is designed for use with the Mobile Laptop Computer Lab and will provide cost savings since it will not require its own set of laptop computers.

Update for 2005-2006

$30,000 in 2004-2005 funding was set aside for this project, however, an estimate for the renovation from Physical Plant has since come in at $100,000. The College requests another $70,000 to complete this work.

Budget Detail:

Construction $40,000 Furnishings $30,000

2005-2006 Budget Total $70,000

Establish Movement Sciences Teaching Laboratory

The Movement Science Program in the Department of Kinesiology and Health Education encompasses four undergraduate courses: KIN 321M Motor Development, KIN 326K Biomechanical Analysis of Movement, KIN 336 Motor Control, and KIN 335 Motor Learning; and four graduate courses: KIN 395.8 Motor Control: Neuromuscular Basis, KIN 395.9 Motor Control: Performance and Learning, KIN 395.64 Neuromuscular Basis of Fatigue and Training, and KIN 382.4 Biomechanics Laboratory Techniques. The majority of the 900 undergraduate students in kinesiology programs are required to take three of the undergraduate courses, and the average annual enrollment in all of these courses is 529.

Currently, these courses have laboratory sections in which students discuss movement topics and use simple equipment such as clocks and switches to measure movement, but there are no means to analyze the physiological mechanisms essential to this field of study.

The College therefore proposes the creation of a Movement Sciences Teaching Laboratory in Bellmont 546C. The requested equipment will allow students to learn and practice the collection and analysis of experimental movement data, and will greatly enhance their understanding of motor control, motor learning, and biomechanics.

Budget Detail:

PC Computers (5) $10,000 LabVIEW Software Licenses $1,000 EMG Systems with A/D and Software $15,000 Neuromuscular Electrical Stimulators $19,000

2005-2006 Budget Total $45,000

Total Budget for All 2005-2006 Projects $406,560

ITAC Survey Responses

1. Academic Program Support

1. 1.1 Are software, hardware, and network resources appropriate in quantity and quality tomeet academic program needs? *We always strive to improve our software, hardware, and network resources to keep them up to date and as new needs are identified. For example, we are currently updating the equipment closets and wiring of the data networks in the Sánchez Building. We also have software update needs.*
2. 1.2 Are such resources regularly updated to meet current and emerging academicprogram needs? *No, we are not updating as much as we would like. For example, we have only very recently replaced clamshell iBook laptops in our Model Technology Classroom that have been outdated for about two years. Some facilities are aging and need new systems.*

1.3 Are available scholarly resources provided in electronic form where appropriate, arethey selected through an organized planning process, guided by written policies and procedures that include collaboration among users and library and computing personnel? *The College has electronic reserves and provides assistance to students and faculty to publish their research or materials in electronic form. We have equipment to burn large numbers of CDs and DVDs.*

1. 1.4 Are support and training provided to help faculty and students learn to use andeffectively apply such resources? *Yes. We provide a wide range of training and support services, including training workshops on a variety of topics and desktop technical support.*
2. 1.5 Are procedures and incentives in place to encourage faculty to make appropriateand innovative use of electronic information resources to improve the academic program, and to encourage student use? *Yes. The Vision Awards, which began in 20022003 with ITAC funding, provide faculty who submit approved proposals with the funding and technology-savvy student labor to produce technology-based projects to enhance their classroom teaching. These awards have been very successful in their first two years and now receive funding from the COE Dean's Office.*

1. 1.6 Does the institution, consistent with its size and mission, utilize the national andinternational information infrastructure to extend educational and academic opportunities to non-local and non-traditional students to make appropriate information available on the network as well as accessing it elsewhere? *We have some courses that use the College's Distance Learning Classroom in conjunction with the UT TeleCampus. There have been other initiatives, however much remains to be done.*
2. 1.7 Are the campuswide computing and telecommunications centers, librarytechnological infrastructure, and computing laboratories appropriate for the academic programs and nature of the institution? *Yes.*

2. Administrative Support

2.1 Are administrative information resources provided electronically so as to increase theeffectiveness and efficiency of the institution? *Yes. The College uses TeachNet, an e-mail, conferencing, and chat system based on the FirstClass software. The UT and College Web sites are also used for this purpose.*

1. 2.2 Are access privileges to administrative information resources assigned to

individualscommensurate with their scope of responsibility and need for such information to do their jobs effectively? *Yes.*

2. 2.3 Are software, hardware, and network resources appropriate in quantity and quality tomeet the needs of institutional management and operations? *Yes.*

3. 2.4 Are such resources regularly updated to meet current and emerging administrativeand operations needs? *Yes.*

4. 2.5 Are incentives and procedures in place to encourage administrators and staff tomake appropriate and innovative uses of electronic information resources to improve the operation, management, and decision-making of the institution? *No.*

5. 2.6 Are support and training provided to help administrators and staff learn to use andeffectively apply such resources? *Yes.*

3. Access

1. 3.1 Is there ready electronic access to information resources such as bulletin boards,information repositories, and colleagues on campus and elsewhere, with sufficient capacity to supply high volume data where appropriate, and with local support for establishing such resources on campus for access by others? *Yes. We have TeachNet and an up-to-date, well-designed COE Web site.*

2. 3.2 Does on-campus access to information technologies and services includeclassrooms, offices, residence halls, kiosks, and other public facilities that are convenient and appropriate to faculty, staff, students, and visitors? *Yes. We have computer labs and classrooms, and wireless public network access in the Sánchez Building.*

3. 3.3 Is there equitable access to electronic information resources for the institutionalcommunity, with access facilities provided for those who do not have their own equipment? *Yes, we have computer labs and multimedia production equipment available for checkout to all College faculty, students, and staff.*

4. 3.4 Is there appropriate access to external electronic information resource for faculty,students, and staff? *Yes.*

3.5 Have the needs of persons with disabilities been taken into account in providingaccess to internal and external electronic information resources? *Yes accessibility is taken into account in the design of the College's computer facilities and Web sites. We have an auditorium and two technology facilities equipped for the hard-of-hearing. There is also a computer lab that has been modified to accommodate the needs of a professor in a wheelchair.*

4. Extended Boundaries

1. 4.1 Do students and faculty have adequate and convenient access to electronicinformation resources from off-campus locations? *Yes.*

2. 4.2 Where off-campus electronic information resources are used as part of theinstitution's programs, are students and faculty provided convenient and appropriate access to these resources? *Yes.*

5. Institutionwide Planning.

5.1 Does the institution's mission and vision statement articulate the role and degree ofimportance information resources play in its academic and administrative programs? *Yes.*

1. 5.2 Is there a campuswide plan for information resources that not only addresses thecommunication paths such as voice, video, and data communications, but addresses as

well the information content that travels over these paths? *NA*

2. 5.3 Is the planning for information resources incorporated into the institutionwidestrategic planning process? *Yes, in the Vision Plan process.*

3. 5.4 Does the planning process include participation of user communities, and are usersor potential users of administrative applications meaningfully involved when such applications are developed or reengineered? *NA*

4. 5.5 Are administrators responsible for information resources management included inexecutive-level strategic planning and direction-setting for these resources? *Yes, the Director of the Learning Technology Center is involved in the College's management.*

5. 5.6 Does campus space/facilities planning incorporate the needs and standards forelectronic information resources? *Yes. The major renovations of computer labs has taken this planning into account.*

6. 5.7 Is there adequate and stable funding to support the institution's continuingcommitments to electronic information resources, including capital replacement funding and annual budget allocations for upgrading and maintenance? *No, the impact of providing technical support for the College's Laptop Initiative for Future Educators (LIFE) has strained other technology budgets. A new fee to support LIFE is needed.*

7. 5.8 Where information is valuable to the institution over time, are there procedures andplanning for backup, migration and refreshing technology upgrades, and long-term information integrity and archiving? *The College has backup of its servers and its e-mail system (TeachNet), but not of individual computers.*

8. 5.9 Is there institutionwide coordination of the process of evaluating and acquiringemerging technologies? *LTC staff evaluates technologies for use in College.*

5.10 Are mission-critical information systems regularly evaluated to ensure that theycontinue to meet the changing needs of the institution, in light of opportunities presented by emerging technologies? *Yes. The College works to continually improve its network resources, lab facilities, and checkout equipment.*

1. 5.11 Are the acquisitions and gifts of software, hardware, and other electronicinformation resources consistent with articulated academic and administrative program directions and needs *Yes. The Learning Technology Center has strict budgeting guidelines and procedures. The Vision Plan process also provides direction.*

2. 5.12 If the institution relies on the computing resources of other institutions ororganizations, does it have a well-conceptualized rationale specifying the roles of both on- and off-campus computing resources? *The College uses campuswide UT resources.*

6. Advisory and Policy Structure

1. 6.1 Do written policies and procedures exist regarding appropriate and authorized use ofcomputing resources and network access, such as a rights and responsibilities statement? *Yes. The College recently developed and promulgated network use and security policies.*

2. 6.2 Do policies and procedures exist to ensure the integrity and security of informationused by faculty, staff, and students? *Yes. The College's network security policies do this.*

3. 6.3 Do the institution's access and delivery systems have appropriate measures in placeto assure data integrity, security, and access control, including the fulfillment of legal requirements (including copyright), regulations, and commercial agreements? *Yes.*

4. 6.4 Do policies and procedures exist that encourage the legal and ethical uses ofelectronic information resources by all members of the institutional community, and, where sanctions are applied, are principles of due process followed? *Yes. The College's network security policies do this.*

5. 6.5 Do rules and procedures regarding access and use of data strike an appropriatebalance among an individual's right to privacy, the institution's imperative to operate efficiently, and, in the case of public institutions, the rights of citizens to information about their government? *Yes.*
6. 6.6 Are the written policies and procedures for the acquisition of hardware, software, andother electronic information resources kept current and are they widely circulated among academic and administrative departments? *Yes.*
7. 6.7 Are procedures for gaining or granting access to information clearly stated andconsistently and equitably applied? *Yes.*
8. 6.8 Are information technology standards in place and are members of the campuscommunity aware of these so that they can make an informed choice when making technology purchases? *Yes. The LIFE programs has specifications for the required laptop that are well publicized.*

7. Staffing

1. 7.1 Are sufficient resources (staff, equipment, and facilities) available for networkplanning, operation, and ongoing support? *No, we need more resources for technical support.*
2. 7.2 Are there sufficient staff and funding for the identification of scholarly informationresources, for their being made *available, and for the assistance of students and faculty in locating and using them?* NA

1. 7.3 Do students, faculty, and staff have adequate support services (training,consultation, documentation, development, maintenance, help systems, and so forth) to meet their academic and administrative program needs? *We provide desktop technical support to the faculty and staff. Faculty and students may request orientations and other basic assistance. Those in the LIFE program have a Laptop Help Desk, an Application Support Center, and receive training specific to their laptops and the needs of their academic program. However, more support for the College is needed.*
2. 7.4 Is there an ongoing, comprehensive training program in the use of electronicinformation resources for faculty, staff, and students, including those in continuing education and off-campus programs? *We offer occasional workshops based on demand. There is a support facility to help faculty incorporate technology into their teaching and research (Learning Technology Center's IDEA Studio). We do not provide semester-long training programs.*
3. 7.5. Do training programs address differing skill levels of users, and are there strategiesfor providing online help and support services? *Training and other orientations can range from beginning to advanced, depending on the demand. We do not have an in-house online help system, but all faculty and staff of the College have access to Atomic Learning (students pay a reduced rate fee.) We also provide a desktop help system, based on sending messages to the support staff, but it is not "online".*