

College of Communication
Technology Vision Plan
Academic Year 2008-09

SUMMARY OF REQUESTS

<i>Student Lobby Proctors</i>	\$40,000
<i>Classroom Maintenance</i>	\$30,000
<i>Student Software Maintenance</i>	\$40,000
<i>Network Infrastructure</i>	\$10,000
<i>Digital Audio and Video Acquisition</i>	\$100,000
<i>Student Lab Upgrades</i>	\$209,000
<i>Automated Instructional Video, Podcasting and Blogging</i>	\$80,000
<i>Student "Portfolio" Management</i>	\$55,000
<i>Just-in-time Classroom Technology Integration</i>	\$55,000
Total	\$619,000

OVERVIEW OF CURRENT IT PROGRAMS AND INFRASTRUCTURE

The mission of the College of Communication, according to Dean Roderick Hart, is four-fold:

As the most comprehensive academic unit of its kind in the United States, the College of Communication is too large and too complicated to have but one mission. Instead, its mission is four-fold:

An intellectual mission: (1) to ensure that the traditional arts and sciences remain central to the study of human communication, (2) to collaborate with faculty members in the arts, humanities, and social sciences across campus to address the most pressing issues of the day, and (3) to make communication training central to the educations of all University of Texas undergraduates regardless of major.

An entrepreneurial mission: The world is being made smaller by the Communication Revolution and the College must work to understand what that means by (1) building close ties to the communication professions, (2) vigorously pursuing interdisciplinary activities, (3) staying current with new interactive and aesthetic technologies, and (4) pursuing an increasingly international agenda.

A pedagogical mission: Here is our future: We live in an era of media convergence where once-separate industries - radio, television, advertising, newspapers - are being folded into vast media conglomerates. The College must prepare its students in multiple ways as a result, helping them reach across the various communication disciplines for new insights, new skills, new forms of expression, and new kinds of employment.

A social mission: The mass media are implicated in all that happens today. Political campaigns are heavily determined by media perquisites; enlightened health care depends on savvy information campaigns; the nation's youth are being inundated with popular culture; the world has become unknowable without a discerning press. This collection of facts makes communication training both a practical matter and a moral one as well.

The University of Texas is devoted to generating intellectual excitement in its students, transforming their lives, and turning them into leaders. That is the College of Communication's business as well.

IT Programs

The Dean's Office operates Business and Technology Services (BATS). The Technology Services group represents the bulk of technology support available in the College. We support every department,

research unit and program in the College. Our web site is <http://communication.utexas.edu/technology/>. Along with other Dean's Office units, we receive administrative support from Business Services. Currently, Technology Services consists of twenty-one full-time employees and typically around half that many part-time student workers. Skills and duties revolve around three primary areas: Customer Support, Engineering and Instructional Design/Web Development. We also have a dedicated datacenter and network administrator.

Customer Support provides direct patron support. Our Help Desk solves technology problems for College owned computers, audiovisual systems in classrooms, and provides limited support for personally owned student or faculty systems (liability limits the extent to which we can help). Media Services manages the Media Center and related facilities to provide checkout equipment, media duplication, a media library and playback facilities. Finally, Lab Operations maintains College and departmental computer labs and provides assistance for faculty, staff and students using our labs.

The Instructional Design and Web Group helps faculty and staff to develop and implement instructional technologies, and supports the development of both our academic and administrative web presence.

The Engineering team is responsible for long-term projects, large-scale "roll-outs" of technology equipment, providing purchasing specifications, and maintaining our inventory of computers for rapid deployment. Engineering's primary focus is to free up time-consuming and complex logistical tasks from the other units, so that they may provide more efficient and effective service to our patrons.

Technology Infrastructure

We maintain technology equipment in five buildings (CMA, CMB, LAC, UA9 and WWH). We have over 1000 College-owned computer systems, 300 printers and over 60 servers. All of these are connected by one of the more advanced networks on campus. We employ multiple Gigabit and 10-Gigabit connections to the campus network, and now provide Gigabit connections to every student computer lab desktop.

Our Help Desk maintains the standard security practices on campus, ranging from the deployment of anti-virus and firewall software provided by University site license, to advanced software deployment and desktop management systems (see Best Practices below). In addition to email or voicemail methods of contact, we have a direct phone line and two physical help desk locations in close proximity to our patrons and facilities.

Today, 31 classrooms (College, departmental and General Purpose) and a few conference rooms are outfitted with instructional media systems. These consist of a digital projector, an audio system, audio and video sources (VCRs, DVDs, etc.) and laptop connections. Most of these rooms include built-in computers and high quality document cameras. These rooms largely conform to the standard classroom control system deployed throughout the campus, through a cooperative effort with many colleges, under the guidance of the Technology Classrooms Committee (TCC), wherein the College is represented. We have deployed over sixty wireless access points throughout our buildings to provide Internet access for our increasingly mobile, "always connected" population.

Individual departments within the College also maintain technology support infrastructures. Communication Sciences and Disorders and Journalism each employ technical support staff to maintain their clinical and broadcast television equipment, respectively. Radio-TV-Film staff work closely with students during the various production and postproduction phases, and are called upon to match

hardware and software capabilities to aesthetic vision. Advertising and Communication Studies employ Graduate Assistants to support their labs. Departments are primarily responsible for determining the nature and scope of activities within their facilities. Technology Services works with the departmental staff to help facilitate their needs.

Because many Communication courses are not taught within the Jesse H. Jones Communication Complex, our faculty cannot always depend upon their classes being scheduled in University classrooms that meet their technological requirements. It is critical that the colleges continue to improve the University's classroom technology capabilities, through the combined efforts of the Tech Deans & Directors Group and TCC.

Technology Funding

For FY2007-08, the College of Communication received \$448,726 from the University-wide Information Technology Advisory Committee fund. We also generate \$1,488,935 from the College's Information Technology Fee (ITF) allocation. Other instruction-related projects, many of which involve a great deal of IT resources, are funded through a \$833,444 Communication Learning Equipment Fee (CLEF). This allocation was greatly impacted by the 2% budget cut imposed upon the College this year, as it formerly totaled almost \$1 million.

A portion of the ITAC Fee allocation goes towards supporting the CMA Lobby, a facility open to all University students. It follows an open plan akin to those of the Flawn Academic Center and the Fine Arts Library, to facilitate student collaboration, study and interaction. The space supports individuals and groups, providing power and data circuits for laptop computers. As in FAC and FAL, laptop computers are available for 24-hour checkout. However, technical infrastructure is not the main focus of the space.

The principal use of the ITF is to support professional and temporary staff, as outlined above. Additional projects are funded to support Technology Services initiatives, as described in the next section.

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 submitted after discussions with department chairs. Technology Services uses these proposals to anticipate and plan infrastructure upgrades. Note that only a portion of this fee represents IT expenditures, as many other learning needs are served by this funding source.

Other sources of funds for technology equipment include a Special Equipment Fund allocation to each department, and various state and federal grants. Some of this goes to support research activities, or are used to support other maintenance needs, such as "refreshing" computers for non-faculty appointments (instructors, clinical staff, etc.). Finally, Computer Life Cycle and Faculty Computing Initiative funds provide for initial or refresh computing purchases for faculty, augmented with funds from endowed professorships, chairs and the like. In each case, Technology Services provides purchasing support in the form of quote generation and specification.

Best Practices

The College has invested heavily in support of technology. Investments include help request tracking software, desktop and security management systems, server and storage virtualization infrastructure,

resource management and scheduling software and advanced video recording and playback systems. We also maintain classroom media control systems common with much of the campus. We are leveraging the University's purchase of the Web Content Management system to improve our overall web capabilities. At every opportunity, we seek a balance between innovation and the benefits obtained through standardized solutions and practices.

We use the Web Help Desk (<http://www.webhelpdesk.com/>) request tracking system to keep track of patron requests for support, and to provide a two-way communication link to keep all parties abreast of any activity related to their request. Similarly, we use an online system (<http://www.onshored.com/>) to keep track of equipment checkout and media library requests. Our Help Desk is located in the CMA building, improving our providing fast and easy patron access. These practices improve efficiency and improve patron experiences.

We deploy a suite of software solutions to help protect University computing resources. Among these are antivirus suites, firewall management systems and Virtual Private Network (VPN) solutions provided through University site licenses (<http://www.utexas.edu/its/sds/products/antivirus.html>). We also utilize systems to improve the deployment of new, repaired or repurposed computers (Ghost, NetRestore, etc.). We have also led the charge to deploy the LANDesk desktop management solution (<http://landesk.com/Products/LDMS/>), which provides us with the ability to remotely deploy complete operating systems, individual software packages and security patches. It also provides excellent asset reporting capabilities, so we can determine just exactly what is out there and target the oldest or least capable systems for replacement. Finally, it provides remote control capabilities that let us provide over-the-phone support for our users, saving valuable time and effort. As an example, we can now deploy a lab of twenty computers in under fifteen minutes, down from 3 hours using the previous method.

We continue to use our always-ready video recording and streaming systems in classrooms. We have eight rooms with a video camera trained on the instructor or student presenter, microphones covering the entire room and audio and video connections to the media presentation system in the room. With this, we can record both the interactions of presenters and audiences and whatever they are presenting via the projector and audio system in the room. This is meant to facilitate both the regular and ad hoc capture of classroom activities, from lectures to guest presentations to student presentations. An innovative extension of this project is the increasing use of digital video capturing for the Speech and Hearing Clinic. Hundreds of hours of clinical sessions are recorded, while new ideas for using the system in our research labs are being explored.

We use the University's Web Content Management System (<https://webcms.utexas.edu/cms/index.html>). This system allows us to implement modern web design and development practices, but keep content providers in control of their content. The WebCMS allows those who care most about what is found on our web sites to contribute, edit and update content, without the need for technical staff involvement. This vastly improves the time-to-publish, which results in more timely and professional updates to web content.

We have incorporated touch-screen control systems in every College and General Purpose classroom, as well as a number of departmental and College conference rooms (<http://communication.utexas.edu/technology/facilities/classrooms/soles/>). This brings them into very close alignment with the standard classroom consoles found throughout the campus, as they were co-developed with the College of Liberal Arts staff and their contract designers. Several rooms also

have furniture with built-in network and power connections, to further improve the mobile computing experience.

Last year, we began a collaborative effort with the College of Fine Arts (COFA) to share information system infrastructure. Over the last two years, we have deployed a VMware server virtualization and storage system in order to rationalize our increasing server deployments. While we used to maintain over thirty physical servers, we now maintain fewer than ten, but these provide many dozen distinct "virtual" servers, deployed to meet the various needs of the College. COFA needed to build a similar subset of capabilities, but rather than building their own solution, they partnered with us to increase the combined capacity. Our system administrator provides support for the infrastructure, while COFA staff manage their own virtual resources. By collaborating, we save the considerable initial expense of deploying multiple base infrastructures. COFA's needs are met by merely adding to the existing system, at a much reduced capital and maintenance cost.

This virtual server and storage solution supports classroom activities primarily. However, this system allows us to use excess capacity to provide secure, highly available storage to College instructors, researchers and administrators. This is largely an effort to meet the increasing demands to secure data and meet University and System's information security policies (<http://www.utexas.edu/its/policies/>). We encourage patrons to store sensitive data on our system, rather than on their own desktop or laptop computers. This allows us to keep a closer watch on such data, as well as provide data replication capability for disaster recovery purposes. We collaborated with the College of Engineering by sharing space within our respective datacenters in order to locate redundant storage and server systems. Data is therefore redundant across facilities. In this way, any loss of utility within either facility can be recovered quickly and reliably.

Finally, we have a regular system for maintaining the state of IT infrastructure within the College. This includes the funding model described above, as well as a disciplined approach to targeting those areas in greatest need of refresh. For example, we license standard software packages that support activities across our departments at a cost substantially less than if the departments were to purchase them separately. Working with the departments, we are able to appropriately fund IT while maintaining a largely static budget.

USE OF PREVIOUS ACADEMIC YEAR ALLOCATIONS

ITAC allocations for FY2007-08 were \$154,119 for infrastructure, \$78,274 to maintain the CMA Lobby, and \$216,333 as a one-time project allocation.

Infrastructure

Student Lobby Proctors

The CMA lobby is now a wonderfully popular destination for students, supporting both individual and group study. We maintain a checkout desk in the space where many wireless equipped laptops are available to any UT patron. Student workers are stationed here 80 hours per week. These students also act as primary help for students with technology issues, directing them to our Help Desk, the ITS Help Desk and other support personnel as necessary. We used ITAC funding to hire, train and supply these students.

Network and Server Infrastructure Upgrades

Our virtualized storage system continues to see increasing demands, spurred in large part by our efforts to move essential business documents onto our network storage system, and by increasing use of network video delivery systems in our clinical and instructional spaces. Our system was designed for expansion, and we used funding to add additional computation and storage capacity to meet demands.

Videoconferencing Equipment

While our faculty does not participate much in the traditional “distance learning” use of video teleconferencing, they increasingly use the technology to bring guest lecturers into the classroom and to collaborate with colleagues across the world in committee and research group activities. We are outfitting a mobile conferencing system that supports High Definition video and high quality audio for these purposes. Our existing Standard Definition system will be put to use in our Communication Career Center, where both undergraduate and graduate students will be able to interview for jobs and internships without the expense and delay of travel.

One-time Projects

Digital Media Lab and High Definition Upgrades

We upgraded our Digital Media Lab (DML) and college classrooms to provide a basic level of High Definition video (HD-DV) playback and editing capability. The DML now allows for easier format conversion between HD and standard-definition formats and for more advanced color correction. Additionally, the audio recording suites were upgraded to allow for faster and easier recording of interviews and narration directly to tape-less formats for inclusion in podcasts, broadcasts and films.

Classroom AV Upgrades

Teaching spaces throughout CMA and CMB are being upgraded with additional media capabilities required of our changing curricula. In particular, multi-channel audio reproduction (i.e. “5.1 surround”) and HDV playback are now possible in several rooms (versus just three in the past). We are also adding computers to our smallest seminar rooms and every room will have auxiliary inputs capable of handling High Definition signals produced by newer media players, as well as gaming consoles.

Student Computer Lab and Classroom Computer Upgrades

As Apple transitioned its entire line to Intel-manufactured CPUs, the College took a “wait and see” approach. Doing so allowed us to avoid any unexpected difficulties, but with a consequence of rendering most of our fleet of Macintosh systems quite obsolete by this year. This year, we replaced all PowerPC-based Mac lab computers with identical 24" iMac Intel-based computers. This uniformity has the side effect of providing a seamless user experience and ubiquitous software installations.

Student Software Maintenance

The College centralizes most student lab software purchases, in order to achieve the best possible quantity discounts and to facilitate wide availability. Because of this, students in any discipline generally have access to software available to any of our other majors. This is increasingly important as technology methods and practices trend towards targeting more common, “Internet-friendly” venues. This year, our lab software budget was subject to enormous demands simply because the multi-year

contracts came for renewal at the same time. The upside is that the two- and three-year cycles are not expected to coincide for another six years.

Campus Cable Upgrades

Information Technology Services asked us to fund the portion of a campus cable system upgrade that serves our building complex. They are scheduled to deploy a Hybrid Fiber-Coax system during this year. This should improve campus cable TV quality within our buildings.

NEEDS AND PROPOSED USE OF FUNDS

Infrastructure

Student Lobby Proctors (\$40,000)

We seek ongoing funding to maintain the CMA Lobby activities described above in the section reporting this year's expenditures.

Classroom Maintenance (\$30,000)

We maintain over 30 classrooms (both General Purpose and Departmental) in CMA and CMB, and as there is little to no funding available for maintenance of the facilities, we must fund repairs, replacement equipment and supplies (projector bulbs, office supplies, etc.) internally. Additionally, we must pay annual costs for providing security systems and telephones in classrooms. We seek ongoing funding to attend to these needs.

Student Software Maintenance (\$40,000)

We request ongoing funds to purchase software used in student computer labs. As mentioned above, our need for 2008-09 is significantly reduced from 2007-08.

Network Infrastructure (\$10,000)

There are recurring charges to maintain our connections to the campus network. We seek funding to continue this very reliable, high performance service. We do not anticipate major infrastructure investments beyond this.

One-time Projects

Digital Audio and Video Acquisition (\$100,000)

In the last few years, we have seen a surge in media creation across all disciplines. The popularity and market impact of "Web 2.0" phenomena such as YouTube and Facebook have our faculty calling for the increased use of audio, video and animation within projects that, in the past, were strictly limited to a single medium. This is truly the era of "multimedia." In order to manage this explosion, we are developing "all digital" methods of audiovisual acquisition. We plan to eliminate any remaining vestiges of analog or tape- and optical-media recording, instead using devices and processes that deal strictly with digital media files. The benefits include lower operating costs (there's no need to keep investing in the old model of tape decks and specialized workstations), significantly more efficient

workflow, improved production value and reduced student cost for media. Equally important in today's "instant access" environment, this project enables faster "time-to-live" (so our storytellers can "scoop the news" as is often the advantage enjoyed by the "blogosphere"). Finally, as digital files take up less space and require reduced effort and time to reuse or repurpose, this media lends itself to archiving what would otherwise be discarded. One recent example of this is the impact that our U.S. Latino and Latina World War II Oral History Project had on national debate surrounding a prominent PBS documentary's handling of minority involvement in the war.

We request funding to provide nearly 100 digital audio and video recording devices for student use. These will be maintained by our checkout facilities. Additionally, we will add direct-to-digital recording capability to a handful of production spaces within CMA and CMB to support on-demand student podcasting (see project below).

Student Lab Upgrades (\$209,000)

Much effort was spent this year to replace Macintosh systems. Many Windows systems are now sufficiently aged and call for replacement. We request funding to refit these student computer labs with current systems.

Innovative Support of Student Learning

Automated Instructional Video, Podcasting and Blogging (\$80,000, or \$0 if Joint Proposal is funded)

A major influence the "Web 2.0" phenomenon has had upon communication is the shift from discreet, routine messaging (e.g. "News at 11") to an environment of "always on" and pervasive communication. Online, a good deal of this communication takes the form of "blogs" (web logs) and "podcasts." Increasingly, communication professionals are called upon to participate through these media formats. Our faculty has witnessed this trend and is calling for a rapid expansion of our capabilities. Particularly, students need automated methods to publish audio, video, animations, text and graphics (i.e. "multimedia") online, for public consumption. Today, this is done by a limited number of students, through largely manual and cumbersome methods.

We seek funding to create the services infrastructure required to support our student podcasting and blogging efforts. There is a Tech Deans and Directors Group Joint Proposal titled "Automated Instructional Video, Podcasting and Blogging" that appropriately addresses these needs for a large part of the campus, including our own. If this joint project is not funded, however, Communication will still need to make an investment towards this effort.

Student "Portfolio" Management (\$55,000)

We have developed preliminary designs for a student work submission system that accommodates various media formats (audio, video, animation, still images, etc.) and provides for student and outside reviewer commentary, rating and interactivity (as with Flickr.com or Amazon.com). Such conditional access could be to specific invited guests or even the general online public (traditional privacy issues will be considered, such as "anonymizing" content). Current "courseware" systems such as Blackboard lack support for diverse formats and by design, exclude public access to student work assignments. Additionally, the tool solve traditionally cumbersome workflow needs, such as exporting the "best of breed" student work to an external, publicly available "gallery" web site. Students will also be able to submit blog or podcast entries created through the system mentioned above.

This submission system will be used for specific classrooms, but can also be used for other processes that require the submission of student work for evaluation. This includes admission to specific programs, internships or even career counseling. As such, materials created during the course of a student's enrollment will need to be kept. This will impact data storage requirements, but quotas and a predefined set of allowable media formats should make this manageable.

We seek funding to hire a software application developer for one year to deliver a working product and provide the system documentation and integration required. Ideally, this product will be delivered as a component of a more general Courseware Management System, such as Blackboard, Moodle or Sakai. Ease of which non-University persons can be incorporated into the "rating" workflow, and the extent to which student work can be retained across semesters will determine this.

Just-in-time Classroom Technology Integration (\$50,000)

The EDUCAUSE Center for Applied Research study *Students and Information Technology, 2007* reports "Research about student success concludes that when instructors use effective educational practices, students have a better academic experience. It follows that when instructors integrate IT into effective teaching practices, students would be more likely to perceive both that their instructors use IT well in courses and that the effect on their courses is positive." We spend a great deal of effort working on technology projects and integrating technology into classroom practices for those faculty members who already have a sense of the options available to them. What we lack is a ready ability to objectively evaluate instruction, interview the students, assistants and instructors, and analyze the ways in which technology can be better integrated into the curriculum. This is done to great success on campus in the College of Education, through their IDEA Studio, and we would hope to emulate this.

We seek funding to hire an instructional support specialist with a background in Curriculum and Instruction or similar discipline to assist our faculty in integrating technology into classroom instruction.

ADDENDUM - EMERGING TRENDS AND INNOVATIONS

This section describes IT trends as discussed with our department leaders. These trends reflect longer-term vision and often cannot be acted upon until new resources become available, such as the new BELO Center for New Media, which we expected to occupy in 2011.

We have seen a shift towards small group activities, as opposed to class or individual work. This requires either redesigning larger spaces to accommodate “break out” sessions for groups, or locating group support technology (laptop plugs, kiosks, shared displays, etc.) in “recovered” spaces. As examples, the CMA building lobby was redesigned to incorporate such spaces. Communication Sciences and Disorders clinic session rooms are used by student pairs for work on assignments after normal patient hours. While IT is not the focus of these spaces, access to “always available” IT resources is essential for modern communication and academic work, so we must continue to provide excellent access in these spaces throughout the campus.

Our departments have recognized the need for new facilities that facilitate the study and practice of group interaction within a focus group, organizational simulation or gaming scenario. Advertising and Communication Studies both seek the development of facilities to study both individual and group responses to various media. The facility could also support the scoring, review and analysis of one-to-one, offsite demographic interviews. Naturally, a wide variety of IT systems and online databases and tools would be available in this facility. This “idea room” concept could be shared with the above activities and open up the opportunity for interdepartmental collaboration.

Laptops will become a requirement for students in a number of programs over the next few years. Advertising and Journalism are beginning the process in their respective graduate programs. As increasing populations of students are required to bring laptop computers, it will be necessary to review our IT infrastructure to support them. We have maintained a very large wireless network and offer laptop power and data plugs in several rooms, but there remain a number of rooms that lack such accommodations. Additionally, it will be necessary to pursue affordable solutions for student software and hardware purchases through institutional licensing and purchasing arrangements. Capital expenditures for more generalized computer labs will likely be shifted towards providing in house support for these now mobile users.

Finally, we must tailor ubiquitous campus services to meet specific needs. We look to central campus IT providers to provide solid, extendable frameworks upon which we can build the unique and innovative applications of tomorrow. This is opposed to the current practice of deploying particular implementations and hoping they meet the needs of the entire campus. With a campus as large as ours, this is an inevitable improbability.

ADDENDUM - CHALLENGES

We have recognized a few challenges to continued success with our IT programs. One of these challenges is the need for departments to carry the message of information security that has received increasing attention at the University, System, state and federal levels. It is necessary for every level of the campus administration to maintain an open dialogue on this topic with all members of the community. We anticipate increasing requirements to report to various agencies and organizations on our information system practices and associated risk. We will not be successful without a clear mandate from the University administration, as well as willing cooperation from the faculty, staff and students.

A second challenge is a consequence of our increased use of online systems and largely ubiquitous network access. The faculty expects strategic systems such as Blackboard, WebSpace and our own file and application servers to remain available day and night. While occasional "downtime" is necessary, it is expected that these be relegated to nights and weekends, when classes are not being taught. This naturally pushes up the costs of providing such services. We look towards strategic technologies and practices to mitigate these costs.

Technical challenges exist with regard to audio and video formats in development. It is currently too early to commit towards particular High Definition video disk formats (HD-DVD or BluRay Disc). As such, the College is taking a "wait and see" approach. Until such time as a particular format becomes dominant in the market, we will not commit to large scale deployments of either. In fact, any new format may become entirely irrelevant as other means of transferring and acquiring HD digital content over networks may supplant the current model of plastic media distribution.

Traditional software licensing continues, yet is challenged by the services subscription model. This services oriented architecture approach is difficult to plan for in an academic environment. For example, courses in online gaming become difficult to manage, as individual users are often required to sign up for subscriptions in order to use the online service (Worlds of Warcraft is an example). The University could seek "site licenses" or partnership arrangements for useful subscription services (e.g. WebEx, Google Scholar, Learning Times), as we do for academic journals, periodicals and books.

A final challenge is not really an IT problem, but it affects IT planning. Currently, different academic activities compete for limited space in College computer labs, classrooms and studios. Expensive computer systems sit idle while traditional lectures are given in the space. High-end video editing workstations sit idle while students review clips from movies. At the same time, ad hoc and unscheduled activities are shut out of these facilities. It is our position that facilities be designed and managed such that they are limited to focused activities, rather than simply managed on a departmental basis. Lectures take place in traditional classrooms. Computer labs are limited to computing-intensive activities, and such labs are outfitted to accommodate specific tasks, such as photographic imagery, video and audio editing or animation and drafting. Studios are used exclusively for studio activities. All the while, every space is outfitted to accommodate laptop computers and a teaching console. Naturally, this challenge requires a tremendous change in departmental culture, but discussions with the departments have been largely positive around this concept. The reality is that space constraints preclude much movement on this, and until we are relieved somewhat by the construction of a new building, we can only make adjustments.