



Information & Educational Technology

QUARTERLY REPORT

June - September 2002

IET QUARTERLY REPORT

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As the yearly influx of new students and the construction of new buildings and facilities continue to change the face and shape of UC Davis, so too does the campus technology landscape evolve. To meet the needs of our growing campus and the campus community, Information and Educational Technology (IET) is regularly involved in a wide variety of computing and technology initiatives and projects. These include everything from the upgrading and maintenance of the campus technology services to the development of campus-wide technology policies. Working to fulfill its mission of service to the campus, IET intends to keep faculty, staff, and students informed of the latest developments.

The IET Quarterly Report is designed to provide the UC Davis community with brief updates and recent highlights on each of the many projects and initiatives in which IET has been involved.

The IET Quarterly Report is published three times each academic year (in September, January, and May) and covers a wide range of topics grouped into four major categories. These categories are:

- General Technology Highlights
- Infrastructure Highlights
- Educational Technology Highlights
- Administrative Computing Highlights

A condensed version of this report (<http://iet.ucdavis.edu/pubs/reports.html>) is also prepared for the UC-wide Joint Operations Group (JOG) (<http://ucop.ucdavis.edu/irc/jog/>), who meet quarterly to exchange technology news and information with other UC campuses.

To obtain a copy of the IET Quarterly Report, go to <http://iet.ucdavis.edu/pubs/reports.html>, where PDF versions of current and previous editions are available for download and printing. Feedback on this report is greatly encouraged and can be sent to ietpubs@ucdavis.edu.

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GENERAL TECHNOLOGY HIGHLIGHTS

This section focuses on the development and implementation of over-arching computing and technology initiatives and policies, which serve as a framework and roadmap for IET and the campus. Some examples of these initiatives and policies include the New Business Architecture (NBA), the MyUCDavis Web portal, and the UC Davis Electronic Communications Policy.

IT STRATEGIC PLANNING FOR UC DAVIS

John Bruno, Vice Provost for Information and Educational Technology, and John Meyer, Vice Chancellor for Resource Management and Planning, have initiated the development of an IT strategic plan for the UC Davis campus. The document will provide a frame of reference to guide campus decisions regarding information technology policy, planning, prioritization, development, deployment, and funding. A first draft document has been circulated among campus advisory groups (see <http://adc3.ucdavis.edu/>). It outlines a vision, priorities, goals, and sample initiatives designed to advance the mission of the university with regard to teaching, research, and outreach. This effort coincides with, and builds upon the development of a strategic plan for the campus.

FORMATION OF HIGH-SPEED NETWORKING COMMITTEE

The UC Davis campus, under Provost Hinshaw's leadership, is developing a multi-disciplinary public health initiative designed to "make a significant contribution to the state and the nation in support of efforts to combat infectious diseases and ensure the safety of the food supply—and to build centers of excellence that will carry its research and clinical training programs to new levels of excellence." The capabilities of local, metropolitan, regional, state, and national networks will be a key component of such initiatives, and awareness of the scope and capabilities of such networks will suggest and foster new interdisciplinary approaches in public health and safety. With this in mind, Provost Hinshaw has formed a small group of faculty and administrative leadership to advise her on the development, integration, and use of high-speed networking as it relates to the creation and multi-disciplinary research and educational initiatives such as the Public Health Initiative. Vice Provost Bruno and Tom Nesbitt, Assistant Dean, UCDCM will co-chair the new high-speed networking committee.

NEW BUSINESS ARCHITECTURE UPDATE

Since last June, IET has been actively involved in the New Business Architecture Initiative projects and planning activities. The following are highlights for that time period.

- **NBA Project Management Office.** The recruitment for the NBA Project Manager is nearing completion. Reviewing hundreds of applications and interviewing candidates for the position have kept the selection committee busy this summer. The committee expects to complete the recruitment process by early Fall. Funding for the project management office has been secured for the next three fiscal years. One-time funds will be provided by the Office of the Provost and members of the NBA Steering Committee.
- **Planning for an NBA Retreat.** The Implementation Workgroup has discussed scheduling a retreat to facilitate the development of NBA goals for UC Davis. The retreat won't be held until after the project manager is hired.
- **Completion of the NBA Project Team Structure.** The newly-formed Change Management and Business Process Teams are planning to hold their first meetings in early October. The formation of these two teams, along with the imminent appointment of a project manager, completes the core NBA team at UC Davis. This summer, co-chairs were appointed, members identified, and charge letters finalized for each team. The Business Process Team has initiated a review of the business process inventory developed by the NBA consultant last Fall. A listserv (nbachange@ucdavis.edu) has been established as a way for the campus community to communicate with the Change Management Team.

- **Technology Development Team Provides Input on Campus Projects.** In place since last November, the NBA Technology Development Team, has been discussing a number of campus technology projects, planned or underway, many of which are related to large administrative and information systems. Recent discussion items include:
 - The report from the Portal Reliability Advanced Technology Project Team (see MyUCDavis Update below)
 - The report from the Workflow Advanced Technology Project Team (see Workflow Project Update below)
 - The TP2 Java rewrite in DaFIS (the campus financial information system) and the integration of more FIS services in MyUCDavis
 - Technology changes in the baseline product for Banner (the campus student information system) that may make it more portal accessible
 - Implementation of the new library system and access to library services via MyUCDavis
 - Issues related to bringing up a new research system on campus for the Office of the Vice Chancellor for Research (OVCR)
 - Issues related to the integration of campus services into the MyUCDavis portal

In addition, the team continues to review and provide input on various security issues (including the possible removal of hard tokens). The team is co-chaired by Brian Alexander (IET) and Jeff Barrett (Office of Administration). For more information on the NBA and to read meeting minutes, see <http://nba.ucdavis.edu/>.

MYUCDAVIS PORTAL

- **Formation of Oversight Committee.** A new oversight committee has been formed to provide direction and leadership for the ongoing development and maintenance of MyUCDavis, the campus enterprise portal. Under the leadership of Professor Richard Plant, the new committee is charged with reviewing, prioritizing, and making decisions on portal-related issues (including proposed functionality, user feedback, communication issues, new projects, as well as budget and procedural issues, etc.). The committee will provide the IET portal development team with direction during the planning, development, and implementation stages of all projects.

To collect input on portal functionality and content, and to ensure MyUCDavis meets the campus' needs, the committee will consult with various user and constituent groups. Depending on the topics under consideration, the committee will engage such groups as the Administrative and Academic Computing Coordinating Councils (AdC3 and AC4, respectively), the Technology Infrastructure Forum (TIF), the various NBA teams, the Adman group, senior advisers, ASUCD, and other groups, as appropriate.

The Portal Oversight Committee is comprised of John Bruno (IET), Joseph Calger (University Relations), Richard Plant (faculty), Dave Shelby (IET), and Fred Wood (Dean, Letters and Science). The NBA project manager will join the committee when that person is hired, thereby providing an important connection to the NBA initiative.

For more information and to read the charge letter to the committee, see http://nba.ucdavis.edu/enterprise_portal.cfm.

- **New MyUCDavis Features and Functionality.** The MyUCDavis development team continues to develop new portal features and functionality. The following enhancements have been, or will soon be, implemented:
 - New browser requirements will be implemented by the end of October, 2002. Starting in late September, as users log in to the portal, the system will detect older browser versions and recommend upgrading to the latest versions of Netscape 6.x, Internet Explorer, or Mozilla (the open source browser). Beginning in October, Netscape 4.x and Internet Explorer 4.x will no longer be supported and users will be required to upgrade to the new browser versions before logging in. These new browser requirements are being implemented to take advantage of the improved performance in the latest browser versions. Notifications were sent to the technical community in advance of the modifications.

- A new proxy feature has been implemented in MyUCDavis. Users are now able to set others as “proxies”. This feature will be particularly helpful to support personnel who can now log in as a student or faculty member whom they may be assisting, thereby seeing exactly what the student or faculty user needs help with in the portal.
- Materiel Management services have been added to the portal. This new service makes it possible to search catalogs and place orders with the UC Davis Central Storehouse, and submit job requests for moving and delivery services. Information is available about the UC Davis Purchasing Card Program and its application process.
- Development on the Quiz Builder module is near completion. The module, integrated with other MyUCDavis course management tools, will allow instructors to create online or print quizzes and tests. The Quiz Builder offers various quiz types, including matching, fill in the blank, and essay questions. The module will connect directly with the Student Information System to retrieve real-time course and student data. Students will receive immediate feedback while taking quizzes as well as the final quiz results. Originally suggested by faculty members and by the Academic Computing Coordinating Council, the Quiz Builder module was designed and tested with the help of several faculty. It will be released this fall.

For more information on these and other MyUCDavis enhancements and to access tips on how to use the new features, log on to the portal at <http://my.ucdavis.edu> and check the MyUCDavis news channel.

IT POLICIES

Several new policies are being drafted to address specific elements of the new Electronic Communications Policy. Highlights follow:

- **UC Davis Electronic Communications Policy.** Adopted by the campus in March, 2002, this policy replaces the campus email policy and implements guidance from the Office of the President. The UC Davis policy has significant implications for the campus as it addresses all forms of communications that use an electronic medium. This includes email, instant messaging, telephone, the Web, and other electronic media. The campus policy includes additional provisions not included in the UC Electronic Communications Policy, such as the campus computer and network acceptable use policy provisions and a new policy section that outlines the roles and responsibilities of system administrators.

Recognizing that the new policy has broad implications for the campus, an IET workgroup has developed an inventory of those implications and identified areas where interpretive guidelines and procedures need to be drawn up. The workgroup members have completed their review and reported the policy implications to Vice Provost John Bruno. An implementation workgroup has been formed that includes members from IET, the UC Davis Technology Infrastructure Forum (TIF), and Public Communications. The workgroup is developing strategies for implementing the various parts of the policy and communicating these to the campus. The implementation workgroup has met once. To view the policy, go to <http://www.mrak.ucdavis.edu/web-mans/ppm/310/310-16.htm>.

- **World Wide Web Policy.** Public Communications, in collaboration with IET's Policy Analyst, is developing a policy to address specific issues and procedures for communications associated with the Web. The policy will address accessibility of Web pages, privacy of information collected through Web pages, and will define appropriate information to be posted on UC Davis Web pages. The policy is intended to provide guidance for official UC Davis Web pages and departmental Web pages. It also addresses the use of UC Davis computers and networks for personal and affiliated Web pages as well as the conditions for their presentation. The draft policy will be presented to the Academic Computing Coordinating Council (AC4) this fall.

- **Mass Messaging Policy.** A policy for mass electronic communications is being drafted that will address issues related to unsolicited email and provide guidelines for appropriate use of electronic resources for mass communication purposes. Both the UC-wide and UC Davis Electronic Communications Policies define spam as unsolicited and unwanted communication, and as an abuse of computer and network resources. The campus, however, has legitimate interests in being able to communicate with campus groups as well as the entire campus community. The policy will provide procedures and guidance in these areas. A draft policy has been presented to the Administrative Computing Coordinating Council (AdC3). The policy is being revised to reflect changes suggested by Council members.
- **Email Communications with Students.** The University Registrar, assisted by IET's Policy Analyst, has initiated discussions with the Academic Computing Coordinating Council (AC4) regarding the possible adoption of a new policy identifying email as an official communication medium for the University to reach students. This policy would produce economies of time, labor and materials. Departmental anecdotal experience shows email notices are actually more effective and timely than snail mail. No similar policy is anticipated for staff and faculty.
- **Wireless Network Policy.** Over the last few months, the draft wireless network policy has been circulated among campus advisory and constituent groups. The policy covers a number of wireless technology issues, including wireless access points, security, how to mitigate interference between wireless devices and how to prioritize the resolution of these conflicts, and suitable uses for wireless communications and interoperability between buildings. In late September, the final draft was completed that incorporates the comments obtained through the review process. The final policy will be submitted to the Chancellor's office for adoption in early October. It is expected to be adopted by early November. A workgroup will soon be formed to devise an implementation strategy.

INFRASTRUCTURE HIGHLIGHTS

This section discusses the extensive underlying technology services and structures that IET provides to the campus. These cover quite a wide range, including: campus network security; software licensing and support; campus telecommunications; wireless, voice, video and photography services; and communication news.

CAMPUS-WIDE INFRASTRUCTURE PROJECTS

- **Enterprise Directory Services.** The Enterprise Directory Services project, now focusing on building the Registry, had a very productive visit with the UCLA Directory Services team. UCLA toured the UC Davis team through the functional and technical architecture of their Registry, which they call 'University ID system'. The UCLA Registry team has fully converted their Student Information System and Payroll Personnel Services to use their centralized authoritative University ID. The UC Davis team expects to model its Registry on the UCLA system, including by engaging in ongoing interactions with business units responsible for person identity data. This fiscal year, the UC Davis team expects to complete a prototype of a converted Student Information System.
- **Document Management Project.** The Student Affairs Document Management Project was launched this spring, with the goal of identifying a system that will support the core business processes for the Office of the Registrar, Undergraduate Admissions, and the Financial Aid Office. The project team released a Request for Proposal in late August and is expecting to receive proposals by the end of September. Target applications for document management include, but are not limited to, verification of need for financial aid applicants, handling of applications for admission for Undergraduate Admissions, and management of transcripts and grades for the Office of the Registrar. IET provides co-management and technical support.
- **Workflow Engine.** An Advanced Technology Project focusing on investigating the implementation of a workflow infrastructure (engine) for campus systems, such as the MyUCDavis portal, DaFIS, and Banner, has been completed. In their report, the workgroup concluded that current UC Davis technologies lend themselves to the implementation of a workflow strategy and that there should be no integration issues if the workflow processes adopted by campus developers follow the standards developed for Web services. The workgroup recommended that a test implementation be developed using the vacation leave reporting process (see <http://vpiet.ucdavis.edu/advancedprojects/projects.html#wkfl>).
- **Campus Search Engine.** Following problems reported with the campus' Alta Vista search engine, a small team was assembled to identify possible alternatives. After consultation with various groups, including the Technology Infrastructure Forum, the team is developing a Request for Proposals (RFP), with the goal of identifying vendors who can comply with requirements for a new campus search engine. In the meantime, on May 21st, the campus temporarily transitioned from Alta Vista to using Google's free search engine (see <http://www.ucdavis.edu/search/>). Instructions on how to use Google to index Web pages were provided to the technology support community (see <http://ism.ucdavis.edu/googlesearch-howto.html>). The results of the RFP will be communicated later this fall.

SECURITY

- **Anti-virus Email Filtering.** In July, the campus implemented anti-virus filtering for all email processed by the campus central email servers. Under this new program, about 20 million email messages are inspected each month. Those messages with virus attachments are identified and deleted, and a deletion notification is returned to the apparent email originator. This notification is accompanied by a suggestion that the source computer be inspected to ensure it has not been infected by a computer virus.

Initial virus statistics revealed over 50,000 virus-infected emails identified during the implementation month of July and over 130,000 in August.

Starting in late August, IET extended email anti-virus services and software to campus units that operate independent

email servers. Campus units may also choose to independently acquire and install anti-virus software for unit email servers. Several campus units have taken this approach for some time.

- **UC Davis Security Symposium.** The IT Security Coordinator is exploring the possibility of sponsoring a security symposium for system administrators next spring or summer. In October, the Security Coordinator will be forming a small program committee to define and develop specific training objectives and content for the symposium. Participants will include members from the campus technology support community. Symposium enrollment will be extended to attendees from other UC campuses.
- **Intrusion Detection.** Last Fall, Dr. Bruno initiated an Advanced Technology Project (ATP) to develop recommendations for the role and functions of the computing and network intrusion detection technology and practices. Over the spring of 2002, the ATP team, which includes individuals from IET and campus units, met with a broad selection of groups and individuals with expert knowledge of some aspect of the intrusion detection field. Included were researchers from the UC Davis Computer Science Department Security Lab, the campus Associate Campus Counsel, various IDS vendors, and information technology staff at UC Davis and other UC campuses. The ATP team recently published its report. The report discusses network and host IDS operation and use, legal implications of IDS use and how other campuses have deployed IDS technology. The report outlines a recommended campus IDS strategy that includes the limited use of network IDS and more aggressive use of centrally managed host-based IDS. The final report is available at http://vpiet.ucdavis.edu/advancedprojects/IDS_ATP_Report.pdf.
- **One-Card System.** Several months ago, John Bruno (Vice Provost for Information and Educational Technology), Bob Franks (Interim Vice Chancellor for Student Affairs), and Janet Hamilton (Vice Chancellor for Administration) formed a committee to investigate the possibility of developing a one-card system to support the provision of services to faculty and staff. A one-card system already exists that provides students with controlled access to the residence halls, and the ability to pay for meals and bookstore purchases. The project team has identified a high level of interest on our campus for several other potential uses for a one-card system. In particular, the workgroup team recommends creating a new card for faculty and staff that provides photographic identification and developing card-based building access standards to address the need for controlling access to campus building. The one-card system feasibility assessment report was submitted to the Provost and Executive Vice Chancellor for consideration. An implementation decision is expected this fall.

SOFTWARE AND TECHNOLOGY SUPPORT

- **UC Davis Internet Software Toolkit.** The new version (v 7.0) of the UC Davis Internet Software Toolkit (Bovine Online) was made available to students, faculty and staff at the Bookstore Computer Shop on September 16. The software CD provides a Web browser (Mozilla, which works best with MyUCDavis), an email client (Eudora), SSH/Telnet applications, an FTP program for Windows, Norton anti-virus software, and an easy way to configure a UC Davis connection to the Internet. Users can create a new computing account from home and automatically configure dial-up, DHCP, and ResNet Internet connections. The CD also contains a booklet with installation directions, information about campus services, and links to online manuals and tutorials. For more information, see <http://online.ucdavis.edu/>.
- **Formation of Technology Training Workgroup.** Vice Provost Bruno has announced he is forming a small workgroup to develop a new curriculum for specialized technology training at UC Davis. Through collaboration and input from the campus technology community, the workgroup will investigate training needs and recommend solutions to improve the quality and increase the cost-effectiveness of technology training at UC Davis. The small team, which includes IET and campus individuals, will be asked to produce a high-quality, cost-effective information technology training program that is aligned with and can meet the specialized training needs of campus information technology (IT) professionals. The goal is to develop the new curriculum and resume training in a reasonably short order.

- **Software License Web Site.** Software License Coordination, working in conjunction with FastTrack, a group of application developers in IET, has developed a new Web site that will make software ordering easier for the campus. The site offers software organized by category and alphabetical order. The site also features a robust search engine and a clean, appealing interface. It will be possible for some products to be ordered directly from the site with the use of a campus billing ID. Accessible via the MyUCDavis portal, the site combines information from two disparate Web sites, <http://software.ucdavis.edu/> and <http://slc.ucdavis.edu/>. Users trying to access these old sites will be redirected to the MyUCDavis login screen and then directly into the software site within the portal. The site is planned to roll out sometime in the Fall.
- **Technology Support Program Survey.** Each year, the Technology Support Program (TSP) surveys the 400+ Technology Support Coordinators (TSCs--system administrators and other campus technology support personnel). This year, 146 TSCs (approximately 34 percent) responded to the survey. Preliminary results show that TSCs are satisfied with TSP services. Other findings indicate that there has been a decline in Macintosh support over the years (and increase in Windows/UNIX boxes). Most TSCs are system administrators and responsible for Web sites. On average, TSCs spend most of their time supporting students. For more information on the TSP, see <http://tsp.ucdavis.edu/>.

TELECOMMUNICATIONS HIGHLIGHTS

- **Campus and Wide Area Networking.** The following are highlights of activities related to networking and voice communications.
 - CENIC Sacramento Wide Area Networking Project (SWAN). The construction of the carrier hotel at 1107 9th Street in Sacramento has been completed and the facility is operational. Final paths for last mile connections have been selected and contract negotiations are underway. XO will provide connections directly from Charter Communications at Triangle Court in West Sacramento to the campus medical center. Surewest will be providing a diverse path to 1107 9th street and will splice into SMUD fibers, which will connect to the UC Davis Medical Center. XO will also be providing the ONI connections.
 - UCDNet2 Expansion Project. The UCDNet2 campus network expansion project was recently completed, on time and within budget. The project managers have closed out all tasks for the UCDNet2 project, which included transmitting the various test results and as-built drawings, and updating the appropriate databases with the UCDNet2 information. The UCDNet 2 project's goal was to extend network infrastructure to a number of campus locations outside the scope of Network 21 and to connect outlying campus areas such as Research Park (southeast of I-80) and west of Highway 113. The infrastructure of the UCDNet2 project is a combination of fiber optic cable, wireless and traditional copper wire.
 - Network 21 Replacement Project. The Network 21 Replacement Project team is working on network design and cutover sequencing. This project will replace the existing 3Com ATM network equipment (which has reached the end of its life cycle) with the UCDNet2 Foundry Gigabit Ethernet equipment. This project, initiated in August 2002 and expected to reach completion next May, affects the Area Distribution Facilities (ADFs), Building Distribution Facilities (BDFs) and Intermediate Distribution Facilities (IDFs).

For more information on campus network projects, see <http://cr.ucdavis.edu/projects/>.

- **Wireless Communications.** A number of activities are underway to offer broader, secure wireless technology coverage on campus.
 - Local Area Networking. The campus wireless networking policy is undergoing final review, and approval is expected in October (see IT Policies above). During this review process, IET-Communications Resources (CR) outlined implementation and information dissemination plans for the policy. The System Engineering & Design unit (SED) continues to investigate wireless gateway hardware for the management of campus public wireless LANs, and added more access points to its wireless network over the summer, including an 802.11a system for emergency services.

Wide Area Networking. AT&T Wireless Services has introduced General Packet Radio Service (GPRS) wireless data services to the greater Sacramento Area. An IET team is testing the service via PCMCIA cards for use in PDAs and laptops. This service could replace the current Cellular Digital Packet Data (CDPD) service, and move mobile computing to a new level for campus customers in remote areas.

Optics. IET's System Engineering & Design is investigating the use of free-space optic laser technology for quick deployment of full duplex computing from 1 Mbps to 1.25 Gbps over distances ranging from 1000 feet to 2.5 miles.

VoIP. The System Engineering & Design unit is testing a wireless VoIP product that transforms a PDA (with an 802.11b card) into a telephone and/or intercom system. Tests have been very successful and will continue in the coming months.

- **Voice Communications**

Infrastructure Planning and Engineering. Communications Resources (CR) completed installation of the first phase of the new Next Generation Digital Loop Carrier (NGDLC) voice system this month. This is the first significant application of NGDLC technology on campus for the delivery of voice services to our customers. The NGDLC systems will continue to be expanded over the next several months as new buildings are brought online. The majority of clients are unaware of the change in service because the transition was so smooth.

Caller ID. The Caller ID feature has been made available to campus faculty, staff, and students. As of mid-September, 8% of the students in campus residence halls who have subscribed for telephone service have also ordered Caller ID. During a promotional campaign in October, free installation of Caller ID will be offered to faculty and staff.

MyPhone. The third and final phase of the MyPhone project, the student telephone service online application program, is complete. This phase builds on existing student services by expanding use of the MyPhone system to two non-Student Housing residential facilities: the Colleges and Primero Grove. These complexes, which house year-round residents, use telephone service provided through Communications Resources. Starting in October, all student bills will be issued exclusively on the MyPhone Web site.

VIDEO AND PHOTOGRAPHY SERVICES

- **Video Services In Support of Teaching and Research.** In late August, the Video Services and Distribution Advanced Technology Project Team submitted their report to Vice Provost Bruno. The small team of specialists was assembled over a year ago to investigate the extent to which the current UC Davis video services and infrastructure could meet the campus' current and future video services needs in support of instruction and research. Over the last few months, the team carefully investigated these issues, compiled an extensive inventory of the video infrastructure in place on campus, identified needs and issues the campus will have to address, and provided options to ensure the reliable distribution of video services. The team's findings are summarized in their report (see <http://vpiet.ucdavis.edu/advancedprojects/projects.html#vsd>). Next steps include formulating a plan to ensure the development and implementation of appropriate video services in support of UC Davis instructional and research goals.
- **Video/Photo Virtual Reality Projects.** Mediaworks photographers are using a Nikon digital camera, a specialized panoramic tripod head, and computer software to create 180 degree and 360 degree digital images. The first panoramic project was a panoramic virtual reality tour of the UC Davis Medical Center's Birthing Center. The Video & Audio Group worked closely with the Art & Photography Group to produce QuickTime virtual reality and streaming movies, which are available. QuickTime virtual reality digital photography was also used to capture a full front-to-back interior view of construction progress of the Mondavi Center concert hall. Other potential locations for panoramic projects include The Quad, Shields Library, new construction sites, and athletic events.

- **Video Production at UC Davis Health System Press Conference.** The Mediaworks Video and Audio Group provided production and technical services for the UC Davis Health System's press conference on July 2, 2002 to announce the NCI designation for the UC Davis Cancer Center. Mediaworks recorded the event for the Medical Center and, hours later, provided streaming files for the Cancer Center's Web site. Special Guests for this press conference included Governor Grey Davis and Senator Barbara Boxer who appeared live via satellite.
- **Photo Documentation of Campus Construction Projects.** Photographic documentation of the construction of the Mondavi Center is nearly complete. During the past year, Mediaworks photographers have recorded construction progress (inside and outside) on a weekly schedule. The Department of Architects and Engineers is very pleased with the Mondavi Center photographs and is considering a similar arrangement for several new construction projects currently underway at UC Davis. In addition to these upcoming arrangements, photographers were recently asked by the School of Veterinary Medicine to photograph an architectural model of the construction projects scheduled at the Medical Science complex.
- **Mediaworks Integration of Digital Photography.** The transition process from film to digital continues for the Art & Photography Group. Nikon digital cameras are being used for approximately 80% of all studio and location assignments on campus and at Medical Illustrations. New digital services include image sizing for PowerPoint presentations from flat copy originals. These PowerPoint images are delivered to clients on a CD or placed on the Mediaworks FTP Server.

COMMUNICATION NEWS

- **IET Launches Dynamic News Site.** IET student employees and staff have recently developed and rolled out a news database that offers a centralized communication method for distributing news and announcements via the Web to external audiences. This approach will allow us to present IET, campus and industry news in a uniform way on many sites, saving time and speeding up the dissemination of important information.

The IET news database is already in use on several IET sites, including the IET News site (<http://iet.ucdavis.edu/whatsnew/>), the Student Computing Guide site (<http://scg.ucdavis.edu/>), and the UC Davis Security site (<http://security.ucdavis.edu/>).

EDUCATIONAL TECHNOLOGY HIGHLIGHTS

This section details the progress IET has made in improving the computing environment for UC Davis instructors and students. Often found within this section is the latest news from Mediaworks (which provides professional media services to instructors for their classes and research), information on the campus computer rooms, and details on IET's efforts to provide students with the computing information they'll need during their time at UC Davis.

MEDIAWORKS

- **Request for Permanent Funding.** In September, the Provost and Executive Vice Chancellor approved Mediaworks' request for permanent funding. Mediaworks was formed two summers ago as a new department of Information and Educational Technology dedicated to instructional technology support (see <http://mediaworks.ucdavis.edu/>). Funding had been allocated for the first two years. During those two years, the unit made a number of adjustments to enhance service delivery and strengthen support of instructional technology. Major accomplishments include the establishment of a proposal review process for educational technology grants, the identification of priorities and processes for resource allocation to faculty projects, the development of hybrid online courses to help deal with classroom overcrowding, the piloting of a new Educational Technology Partners Program to train faculty in the effective use of technology, and Mediaworks' close collaboration with key campus partners (Teaching Resources Center, Library, etc.).
- **Developing Online Course Components.** Mediaworks continues to produce a number of technology components for undergraduate courses:

American Studies:

An American Studies course on the material culture of the American home is designed to teach students to analyze artifacts as cultural documents. It requires a Mediaworks-created database and a set of interactive templates. The course should culminate with students becoming "curators" as they apply the skills they've acquired to their own exhibits. The projects will be submitted in Web form and select projects will be "exhibited" each quarter through a link to the AMS home page.

Chemistry 2C:

The Fall 2002 release of Chemistry 2C Laboratory Presentations is a fully-developed online program to support the Chemistry Department's pre-laboratory requirements and post-laboratory data entry for students. The pre-laboratory section includes nine presentations and quizzes to ensure that students are aware of all safety precautions and lab requirements before they enter the lab. The nine post-laboratory interactive sections validate that each laboratory experiment is conducted correctly, and the results are available for review by the student, the TA, the Lab Coordinator, and the Instructor.

ARE Courses:

The Department of Agricultural and Resource Economics launched the online course, ARE100A, this past summer to investigate the use of online courses to increase enrollment in impacted lower-level required courses for their college. The goal is to increase course availability and student attendance in courses that are currently limited by room availability. Under consideration are future launches of ARE100B and ARE150.

- **Educational Technology Partners Program.** Considered a success in its first year, the program designed to pair faculty with specially trained students is being evaluated for expansion and long-term implementation. The Fall 2002 proposal selection committee has selected ET Faculty Partners for this fall and is securing several partnership positions for faculty already applying for participation in Winter 2003. (Go to <http://mediaworks.ucdavis.edu/> and click on Educational Technology.)

- **Faculty Support Events**

- SITT. Information and Educational Technology staff provided support at the ninth annual Summer Institute on Technology in Teaching sponsored by the Teaching Resources Center.
- Presentations. This Fall, Mediaworks will offer a number of educational technology events, including seven Meet The Experts presentations, and five sessions on Teaching, Learning, and Technology.

COMPUTER CLASSROOM UPGRADES

- **Computers upgraded in computer classrooms and open access labs.** As part of a three-year equipment cycle, Computer Lab Management (CLM) purchased and installed 137 computers for use in various computing facilities used for instruction. The computers were also installed to meet new standards set by the group for on-campus computers. The group installed 59 Dell Optiplex towers and 78 Apple iMacs in four computer classrooms, one open access lab and one media facility. DVD-ROM drives became a standard component on iMac computers to support the campus' effort to move more instructional materials to DVDs. In addition, Dell computers with flat-panel screens were purchased as a new computer classroom standard. This standard was implemented to increase desk space and enhance interaction in the classroom, since the previously used standard monitors have hampered students' sightlines and occupied a large amount of desk space. The new iMac computer comes with a flat-panel screen as part of its all-in-one design.
- **Retired computers sold, resources used towards supporting instruction.** As part of an effort to take advantage of the life of computer equipment retired from computer labs, Computer Lab Management transferred or sold 155 computers and 16 peripherals between May and September of 2002. A majority of the equipment was processed for sale through the campus Bargain Barn, which sells items to other UC Davis departments and non-university organizations or individuals. The equipment is between four and five years old and has resided most of its life in highly utilized public computer rooms. In the interest of keeping technology current in its 15 computer classrooms, labs, and media rooms, Computer Lab Management typically retires equipment at the end of its third year. Proceeds from the sale of the equipment will be used towards supplies and/or equipment to support instruction.

STUDENT COMPUTING

- **IET Orients Incoming Students at Summer Advising.** This summer, for the fourth consecutive year, several Information and Educational Technology (IET) units worked together to provide incoming undergraduate students with the computing information they'll need during their time at UC Davis. Summer Advising, an annual summer orientation program for nearly all incoming students and their parents (approximately 5000 freshmen and transfers), ran from June 26th through August 16th. While at Summer Advising, these students set up their computing accounts, received a series of handouts, and listened to a brief presentation on key UC Davis student computing information. The brief presentation covered a number of student computing topics. These included getting a computer (the Computer Ownership Expectation), getting online (the campus computer rooms, ResNet, and Bovine Online), the benefits of a campus computing account (email, MyUCDavis, and MyPhone), campus computer security, and IET student job opportunities. Following Summer Advising, IET will be gearing up for several other campus events, including the Fall Quarter graduate student and teaching assistant orientations, Fall Welcome, Campus Preview Day, and Picnic Day.
- **Student Computing Publications Updated.** The 2002-2003 edition of the Student Computing Guide brochure has been distributed on campus. The brochure references the comprehensive companion Web site located at <http://scg.ucdavis.edu/>. In addition, a team of IET student writers is developing a series of weekly technology-related columns to be published in the *California Aggie*, the campus student newspaper.

ADMINISTRATIVE COMPUTING HIGHLIGHTS

This section covers the IET projects focused on improving the computing environment for UC Davis staff. Frequently included in this section is information on the latest upgrades to campus computing systems (i.e., BANNER, DAFIS), and IET partnerships with other campus departments to improve existing administrative systems.

STUDENT INFORMATION SYSTEM UPGRADE

The Student Information System was successfully upgraded to Banner 5.4 and Oracle 9iR2 over the weekend of September 7-8, 2002. The implementation was smooth and uneventful, and included some new database tuning strategies that should significantly improve system performance during peak load demand periods.

INVESTIGATING ELECTRONIC RESEARCH ADMINISTRATION SYSTEMS

In partnership with IET and the Office of Administration, the Office of Research recently announced a project to identify and implement an Electronic Research Administration (ERA) system. The system will provide researchers and campus departments with an online “cradle to grave” research proposal mechanism. To assist with this effort, IET is providing project management support and developing a set of infrastructural and functional criteria that will be used to evaluate major ERA systems currently on the market. The option of building a local version of an ERA software program is also under consideration. The proposal was presented to the Academic Computing Coordinating Council at the September meeting.