# IT TIMES

April 1998

http://it.ucdavis.edu/it.times/

## In This Issue

# Basketball Star Scores On and Off Court

*by Richard Darsie*

On March 21, the UC Davis community — indeed, all of Davis — watched and cheered as the Aggie basketball team capped its Cinderella season by winning the NCAA Division II National Championship. One of the architects of this stunning victory was 6'4" center Justis Durkee, whose rebounding skills were a key contribution to several of the playoff wins. "The championship was a dream come true," says Durkee. "It was surprising, especially since we had no previous tournament experience. We just went to Kentucky and played our normal game." But Durkee contributes to the UC Davis campus in other ways — in his less public role as a site attendant in the Olson Hall computer labs.

Durkee came to UC Davis as a freshman with little experience with, or interest in, computing, but quickly became very attracted to it. His first real exposure came through I.T. Express, where he went to get an operating system upgrade. Following this, he jumped right in, taking an introductory programming class from the Computer Science Department (and several others since then). What attracted him to computing? "I was amazed at how much and how fast computers have evolved, and at how the most complex tasks and graphics come down to just ones and zeros in the computer," says Durkee. His interest has grown to the point where he has considered getting a minor in Computer Science. And, last fall, it led him to IT's Lab Management, where he went through a competitive hiring process to become a site attendant.

## Helping Fellow Students

Much of the campus community may be unaware of the role or even the existence of computer lab site attendants. But the many students who use the labs know them as a knowledgeable group of peers who answer questions, troubleshoot problems, and generally make the computing experience easier.

Durkee found this responsibility a little challenging initially. "When you first start working [as a site attendant], you're kind of nervous that you're not going to know the answer to a question. But as you gain experience and confidence, with time you get used to answering questions."

Although each lab normally has only one attendant on duty (there may be two during peak hours), all the labs are linked by email and phone. When they encounter a difficult question, attendants can quickly contact all the other attendants on duty, one of whom is bound to have a solution.

To fulfill their responsibilities, site attendants need a diverse set of skills: familiarity with both the Macintosh and Windows 95 platforms, a knowledge of the UC Davis networking environment, and perhaps most important, the ability to communicate what they know.

## Communication is Key

Durkee feels that his communication skills extend even to his role as a center for the Aggies. "Communication is key in being a site attendant, and also on the basketball court. Learning to communicate in the site attendant environment enhances my overall communication skills," says Durkee.
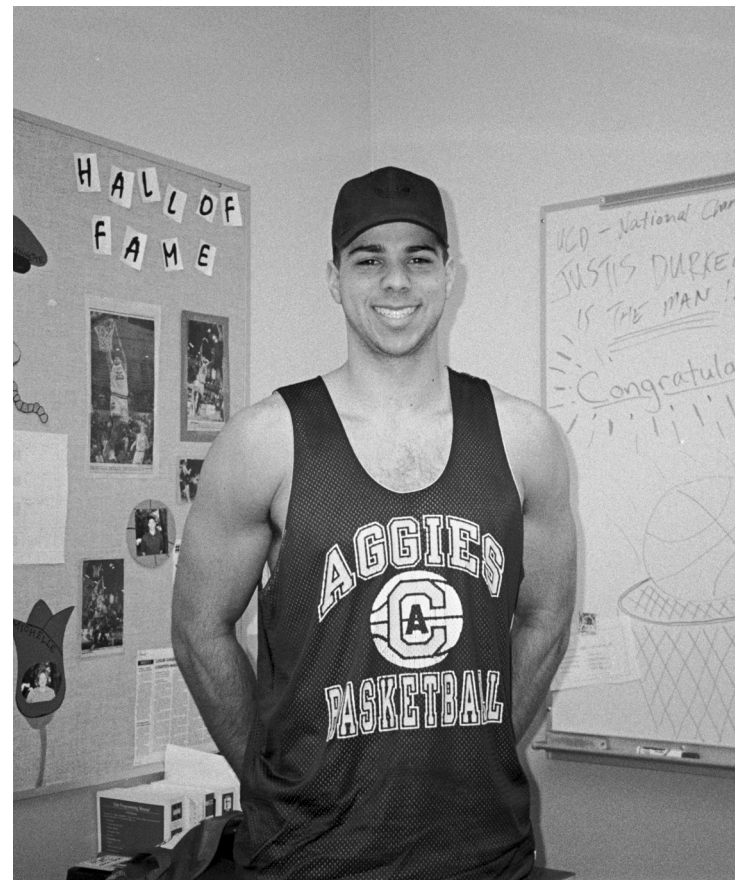


*Aggie basketball center Justis Durkee at home in the Olson Hall computer lab, by the Hall of Fame erected by his "other team."*

Teamwork and communication go hand in hand, both in the computer lab and on the basketball court, as Durkee has discovered. The Lab Management staff work as a team to ensure smooth operation of the computer labs, just as the five teammates on the court work together to score points. In addition to serving as an information resource for each other, the site attendants help each other in more basic ways, such as by covering for each other when one can't make a shift. Durkee's co-workers have always been willing to help out in any way they could. And they have supported his basketball career with encouragement and congratulations. "If you go to 15 Olson, you will see a collection of articles the other site attendants have posted about Justis and the basketball team. When Justis had to trade some hours away due to his basketball schedule, the other students picked up those hours," says Peter Blando, Computer Lab Manager. "I often refer to them as Justis' other team."

---

# Odyssey '98

*http://odyssey.ucdavis.edu/*

## MARK YOUR CALENDAR!

**Technology Showcase:** May 28, 10 a.m.-3 p.m., Freeborn Hall.
**Presentations:** May 26 - May 28.
Admission to all events is free and open to the entire Davis community.

technology at UC Davis
Odyssey '98
issues challenges rewards

# Computer Literacy: It's a Two-Way Street

*By John Stenzel*

PERSPECTIVE

I'm an English teacher who's also a computer professional. Wearing these two hats brings some odd connections. It's student-conference time, and as my colleagues and I go over drafts explaining our comments and grades, it seems as if our students (and many faculty) want us to provide quick fixes for poor writing. We quickly tire of our students' same old questions: "What is it that you want?" "So what you're saying is..." "How do I fix this paper?"

There comes a time when we're tempted to snap: "Well, write better! Defend a thesis, answer a question worth asking. Provide concrete evidence, and don't pretend that a half-hour of Web browsing constitutes sufficient 'research.' Have the verbal agility to work and re-work your prose instead of standing pat with the first and final draft. Write clearly, so that your ideas emerge *because of* your writing, not *in spite of* your writing. Get it? That's what'll earn the better grade!"

We refrain from glibly answering this way; nevertheless, too many people do tend to think of writing improvement as a fix-it job, somebody else's responsibility, another "just-in-time" task. "Take your paper to a tutor at the Learning Skills Center," they say, as if a once-over from anyone, even a professional editor, could magically transmute last-minute dross into A-grade gold.

But now listen carefully the next time those same writing instructors ask a computer question. "My @#*&! computer quit working. . . . Just make it work. . . Just fix it." In my three years as the Coordinator for the Computers in Composition program, I heard plenty of these comments directed at myself, and I directed my share at various computer professionals. Only recently, though, did it hit me . . . the common ground between flawed writing and inadequate computer skills. My colleagues use computers to do their jobs, but their understanding of computer technology is just as superficial as their students' knowledge of language or logic. One thing's sure: the much-ballyhooed "bridge to the 21st Century" won't get built until there's a much more solid foundation on both sides of the computer-technology canyon.

The vast majority of computer users treat technological literacy the same way students treat writing and critical thinking skills: intimidated by the complexity of the undertaking, and wary of admitting our ignorance, we divest ourselves of responsibility and entrust our computers to "the experts." The systems themselves have become complex enough to justify our reluctance, and it flatters our sense of importance to say "I'm too busy to learn to ask questions intelligently, to take even a little responsibility for the tools that I use in my job." Far easier to dump everything onto overworked tech support people, who are so busy solving problems and putting out fires that no time remains for long-range planning, intelligent spending, thoughtful training, and preventive maintenance.

Just hang around a help-desk for a while and you'll see what I mean. Faced with "My computer crashed and I need to print my paper!" a well-trained staffer will carefully walk the panicky user through a series of questions, establishing what programs were running, what system conflicts might have occurred, and whether a backup exists. But users who don't see any reason for this interrogation will become just as hostile as the student writer confronting a different kind of literacy gap. Sad to say, a poorly-trained, unimaginative, inarticulate, or simply exasperated employee will short-circuit the process, offering partial or nonsensical solutions based on inadequate evidence.

---

> **The much-ballyhooed "bridge to the 21st Century" won't get built until there's a much more solid foundation on both sides of the computer-technology canyon.**

---

We need to educate ourselves as consumers and shapers of this technology, but who will train faculty and staff to answer — and to ask — technical questions in a comprehensible way? As systems get more complex and more powerful, the interconnections get subtler and more difficult — but we have less and less time for real literacy training. Frequent upgrades and lack of backward compatibility guarantee that everyone is kept off-balance, and encourage a helpless "hands-off" attitude. We end up having to trust specialists who barely comprehend the basics of what we really do, let alone appreciate the combination of imagination and craft and application and creativity that comprise "quality" or "rigor" in our disciplines.

Many barriers block communication and stifle literacy. Some technically savvy folks would rather keep the convenient power relationships as they are rather than change the status quo and actually try to communicate with their clients. Overscheduled faculty resist training in the basics, and our Summer Institutes tend to emphasize the sexy high-end stuff rather than the gritty day-to-day realities. More perniciously, too many professors dismiss such expertise as beneath them or beyond them, much as they brag about not being able to program a VCR or jump-start their cars.

But no matter what we are told by Bill Gates or the vendor of the non-functioning system you just bought, we're still a long way from "plug and play" — it's much more a matter of "plug and pray." Like "early adopter" faculty who have committed to new technology and selectively forgotten its pitfalls, too many administrators and computer professionals tend to ignore the depth and consequences of the more global problem, and disdain their less-sophisticated colleagues' laziness or lack of commitment. Computer tools require more training, more resources, and more patience than our society seems willing to admit.

As in many other areas, these problems are not solvable simply by making more information conveniently available on the Web or throwing more undersupported computers into schools. Lack of information is not the issue: it's integration and application and evaluation; it's respect for rules, vocabulary, interconnections and interactions; it's learning the language of technology and speaking it fluently enough to make ourselves understood.

Designers and managers and technical support coordinators must understand their constituents' needs and situations at the deepest level. Administrators and decision-makers have to face a brutal reality, that technology training can't simply be an add-on, yet another item in a job description: no less than a change in institutional culture is required if we are to make full use of the tools available to us.

All around me I see people divesting themselves of responsibility, cutting themselves off from the hard work of integrating new tools and practices into their professional lives. As writing instructors, my colleagues want their students to appreciate and respect the complexity of the writing process, and we resent it when students or faculty see our task in terms of "just tell me what to fix."

I would argue that in the Information Age the knife cuts both ways: people on both sides of the technological divide have to take more responsibility for learning and teaching, for understanding complex chains of cause and effect, for troubleshooting and precise description, for accurate analysis and creative synthesis. Technical people cannot rest complacent in their superior knowledge, nor can consumers of technology remain blissfully ignorant waiting for someone else to "fix the problem," expecting the fixers to drop everything to help when things inevitably go wrong.

Most academics have mastered difficult disciplines, kept thousands of facts and theories and methods straight; making computers work for us is not beyond our abilities. Sure it's going to be hard for everyone, but I don't think we can continue to let the gulf between users and techies expand unabated. Until we meet each other at least halfway, we will continue to suffer the consequences of frustration, lost productivity, and ignorance. Like bad writing, this problem has no quick fix.

*John Stenzel is a lecturer in English.*

---

## AREA CODE CHANGE: REMINDER

The grace period for placing phone calls within the 530 and 916 area codes will end on May 16. For all calls to Sacramento, including the UC Davis Medical Center, Roseville, West Sacramento and other areas that will remain in the 916 area code, all phone calls made from campus will need to be dialed as 9 + 1 + 916 + the seven-digit phone number. A recorded message will instruct anyone who forgets to follow this model to dial 916.

On the evening of May 8, the campus telephone switch will be reprogrammed to prepare for the end of Pacific Bell's calling grace period. Be sure to double-check preprogrammed call forwarding settings, speed dial lists on your telephones, fax lists, and modem settings. Your campus correspondence, including stationary, email signatures and business cards should be updated to reflect the 530 area code.

If you use wireless communication devices, including pagers and cellular phones, you need to identify the area code from which your device is serviced. If your cellular or pager service company is based in the 916 area code, you will need to dial 9 + 1 + 530 + a seven-digit number to reach a campus number.

For questions on the area code switch, call Grazia Jaroff at (530) 752-5940.

For a list of the prefixes in the new 530 area code, go to *http://www.pacbell.com/about-pb/areacodes/areacodes-04b.html* or check your local Pacific Bell phone directory for a partial list.

# Tower of Youth Celebrates Teens' Creativity

*BY AVIVA LURIA*

The second annual Tower of Youth awards gave Sacramento Valley regional high school youth and teachers, as well as employees of UC Davis' New Media Centers, the opportunity to enjoy the fruits of their labor. The awards and showcase, held in March at the Veteran's Memorial Auditorium in Davis, were the culmination of the three-month long Teen Digital Reel Competition sponsored by a consortium of Sacramento area high schools, private interests, and public organizations and institutions. All work under the umbrella of Tower of Youth, otherwise known as TOY. Through this competition, TOY provides area youth with multimedia tools to enable them "to express themselves, modernize learning, create beauty, promote civic values, build partnerships in the media industry, and forge lifelong careers in telecommunications and the arts."

High-school teachers act as mentors to pairs of students, who take part in the competition by creating 10-second to three-minute digital films that address compelling societal and planetary topics. Students are provided with a diskette containing software and various image, sound and video files, which the entrants may or may not choose to use in their presentations. First, second, and third prizes are awarded in each category, and a Grand Prize is awarded for the best produced digital media creation.

"This is about youth taking charge, building their own network, their community, their future," said Margaret Byrne, coordinator of new media projects on campus. UC Davis is part of the New Media Centers Consortium, a national organization whose members host a range of outreach programs for high schools and high school students. "Our involvement with Tower of Youth is in keeping with UC Davis' own commitment to outreach," Byrne said.

This year, training sessions for competition participants took place in the multimedia lab in Meyer Hall. Byrne lectured on film editing techniques and storyboarding, a planning strategy for creating videos by which key frames are sketched in advance. Computer Resource Specialist Phuong Nguyen discussed the production process, and Arbor Faculty Consultant Joseph Coulombe provided focused training sessions on topics including image manipulation, video and audio editing, and 3-D imaging.

Training sessions provided participants with valuable hands-on experience. "There's a great variety of technical skills represented," said Coulombe. "Some kids have access to expensive equipment and others are struggling. They're all working at it — that's the point." Six to 20 students took part in each session, along with mentors and additional high-

## TOY Award Winner Explores Multimedia

*BY AVIVA LURIA*

First-year student Adam Breen knows Tower of Youth (TOY) first hand: he took part in last year's Teen Digital Reel Competition and came back a winner.

Then a senior at Rio Americano High School in Sacramento, Breen's photography teacher approached him and another student about participating in the TOY competition.

"I hadn't worked with multimedia software before. Mike, my partner for the competition, had limited experience. There were the usual organizational problems of a first-year event. We got the software late — the video was due 30 days later. It was an eye-opening experience. There are lots of interesting things out there, but we didn't really have the skills to use them."

Breen said the extended training provided this year was a great improvement. "Learning how to use the tools is definitely essential to putting together a good video," he said.

But entering the competition as a computer novice didn't get in the way of winning first place in the 'Perspectives on the Future' category. And as a prize winner, Breen was entitled to apply for various internships.

"I had a lot of fun. It made me want to pursue working with multimedia." He applied for a summer internship at the Arbor, an on-campus facility that assists instructors in the use of instructional technology. That internship has since turned into a part-time student position.

"I get to do different kinds of things — scanning images, making Web pages," he said. "The great thing is that I'm always learning something new — either a new application or a new facet of an application that I didn't know existed."

"Adam has worked out wonderfully," says Margaret Byrne, Manager of Information Resources' Academic Support Program (which includes the Arbor) and coordinator of new media projects. "The fact that he created a sample digital reel says a lot about his discipline, focus, and energy. It's much more meaningful to an employer than words on a resume. And it turns out that Adam is bright, talented, and a quick learner."

This year more students will have the opportunity to further their experience with multimedia applications. TOY has made available to competition partnerships 15 paid internships, at organizations from Tower Records to the Crocker Art Museum.

And what does the future hold? Breen is considering a major in Agricultural and Managerial Economics, but he's sure his experience in multimedia will pay off. "I don't think it matters what your major is. Knowledge of technology and multimedia is going to be useful to anyone in the real world. You can create slides for presentations, a Web page for your organization. It's important to be able to create things for yourself and not have to rely on other people to get you what you need."



*Former TOY award winner Adam Breen helps create storyboards for a UC Davis Web-based Spanish course.*

# DaFIS MATTERS

*BY LIA SCOTT*

Welcome to the first installment of a monthly column dedicated to the Davis Financial Information System (DaFIS). DaFIS is the campus-wide electronic financial system that was implemented on July 1, 1997.

This column will feature practical information aimed at improving efficiency and ease of use. In future installments you can expect to see hints and tips, answers to commonly asked questions, user profiles, and news about system upgrades.

Recently, a task force was assigned to assess the performance of DaFIS, and make recommendations for improvements. The need for more communication to the users was identified as one significant issue. Although there are many sources of information about DaFIS, surveys and feedback show that users are often unaware of these resources and what they offer. Profiled below are several resources that are important to DaFIS users.

## DaFIS Web Page

By far the bulk of DaFIS information is disseminated electronically. At the heart of this system is our Web site that includes both operational and informational services. When you visit our Web site, you will find information on:

- Classes: find out what classes we offer and check your training history;
- DaFIS Training documents. As the documents are revised, they are also updated on the Web. You can compare the revision letter (e.g., Rev A) of the document you currently have against the version available on the Web. If you do not have a copy of the Table of Contents for the training manual, you should definitely visit our site;
- Informational Documents, including handouts and questions and answers from all the DaFIS forums;
- Technical issues: software installation, system troubleshooting, current system status;
- The DaFIS Customer Advisory Team: a list of representatives and minutes from their meetings.

We will modify the Web site in the coming weeks to include:

- A "What's New" page detailing changes and upgrades to DaFIS;
- A Tip page with an indexed list of the tips sent daily to the *dafis@ucdavis.edu* list;
- More user friendly features and navigation aids.

Suggestions for improving the Web site are welcome (See Contact Information below).

## Email Lists

There are currently two email lists that provide information to DaFIS users. The original list, *dafis@ucdavis.edu*, is moderated and provides updates and tips to users. The traffic on this list is low, but the information is important. Announcements of system upgrades, database availability, and training schedules are all made on this list. Since March 23, subscribers have also been receiving daily tips ranging from system shortcuts to profiles of Decision Support queries.

The newer list, *dafis-share@ucdavis.edu*, is unmoderated. This list is intended as a source of information exchange. Users are encouraged to post questions and share personal tips. This list is still growing. The current subscribers are amazing in their willingness and ability to answer posted questions.

To subscribe to either list, send a message to *listproc@ucdavis.edu*. Leave the subject line blank, and turn off any active signature. In the body of the message type: **subscribe listname yourfirstname yourlastname**. (Example: subscribe dafis-share Lia Scott)

## Printed Resources

In an effort to reach everyone, we will be using this column and regular articles in Dateline to broadcast information about updates and changes.

I welcome your feedback and suggestions for topics and issues you would like to see discussed in this column.
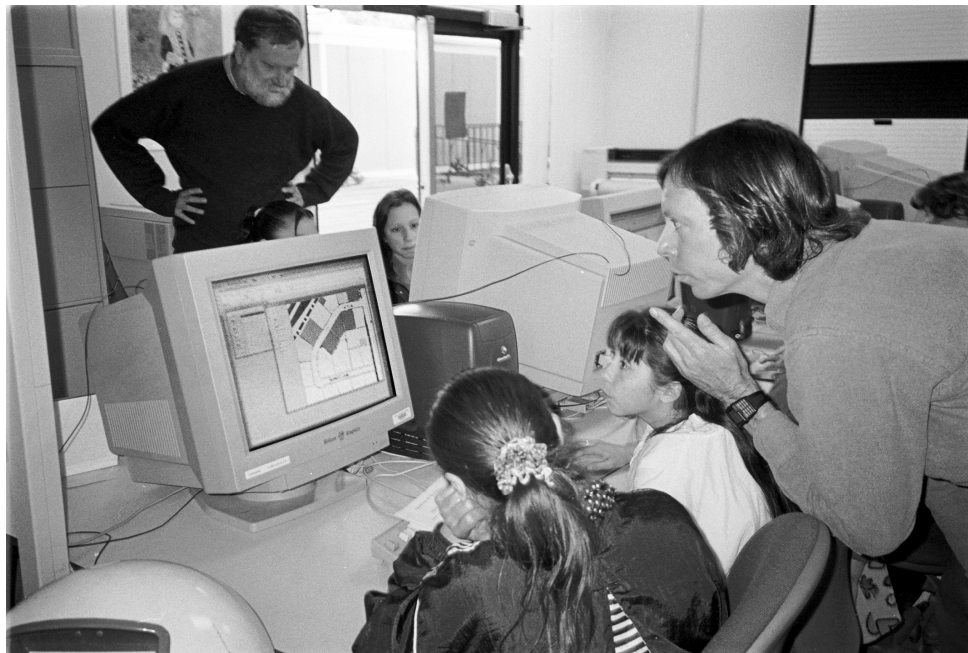
*Lia Scott, from Accounting and Financial Services, can be contacted by email at* liascott@ucdavis.edu.

## Contact Information for DaFIS

Email: *dafishelp@ucdavis.edu*
Phone: (530) 757-3355
Web: *http://accounting.ucdavis.edu/DaFIS/*

---

# Research Park Joins Main Phone System

*BY MATTHEW MATUSZAK*

The telephone and voice mail services used by more than 600 employees at the campus' four Research Park buildings will be completely integrated into the main UC Davis telephone and voice mail systems on April 25. The change involves creating approximately 300 new voice mail accounts. 630 telephone lines will be transferred from the old telephone switch at Research Park to a new, Year 2000 compliant machine that can be easily reprogrammed for the May 8 conversion to the 530 area code.

Twelve departments at the Research Park facility will benefit from the conversion, including University Extension, Accounting and Financial Services, Purchasing, the Center for Neurosciences, and the Medical School's Neurosciences Department. The change will remain virtually invisible to most campus departments, who can already call Research Park by dialing a five-digit number. Research Park callers can dial five digits to reach campus numbers, but following the conversion to the new systems on April 25, they will also be able to access their voice mail by dialing 2-8629.

If you work at Research Park and have any questions about the conversion to the new telephone and voice mail system, contact your departmental Area Telephone Representative or Management Service Officer.

## Resources

You may obtain the name of your Area Telephone Representative (ATR), by consulting the Web at *http://cr.ucdavis.edu/commsrv/voice/atrsearch/search.cfm/*.

*Matthew Matuszak is a technical writer with IT's Communications Resources.*



*Sixth graders from Anderson Elementary School in Dixon visited the Visualization Lab on April 1. The children learned about Geographic Information Systems using the ArcView program, which allows interactive graphical display of geographic data. As their main activity, the students explored a map of Dixon highlighting their favorite places in town.*

## TOY

school teachers who aimed to train students in their own schools. "I would take three or so people at a time and give them hands-on time," Coulombe said. "I would also work one-on-one with students. Everyone had sufficient time for experimentation and exploration of the software."

Coulombe, Nguyen, and Computer Resource Specialist Armando Arbizo traveled to Roseville's Success High School and Placer High School in Auburn to provide further training.

"We enjoyed the process of teaching things we know and the satisfaction of making a contribution to a larger concept, to the future," Coulombe said.

"Through this project, we are able to demonstrate our commitment to helping young adults achieve quality and excellence in digital technology," said Byrne.

## Resources

Tower of Youth Web site:
*http://www.towerofyouth.org*
UC Davis New Media Centers:
*http://nmc.ucdavis.edu*

# Desktop Systems Moves Closer to Clients

*BY DIEYANA RUZGANI*

Starting April 28, the Desktop Systems group will be more visible and accessible to all staff and faculty. After two years at Research Park, the group is moving to 1114 Academic Surge to be closer to clients and other Client Services units within the Division of Information Technology.

Desktop Systems, which operates on a recharge basis, provides in-depth technical support to individuals and departments. They are called upon to assist with a number of projects, including:

- Transitioning to the Windows NT operating system;
- Integrating multiple hardware platforms (e.g., Mac and PC);
- Installing Oracle products (e.g., SQLNet) on microcomputer platforms;
- Setting up a PC-based Web server;
- Or upgrading hardware (e.g., Network Interface Cards, memory, and hard drives).

"We provide technical support and general advising to departments from start to finish," explained Martha Cornejo, a Desktop Systems consultant. "When we were off campus, many people were unaware of our services. The move will improve our ability to serve our clients," she said.

### Everyone Benefits
The Desktop Systems group's strength and success lie in its ability to harness its intimate knowledge of the university's computing environment — which outside vendors often lack — and create solutions that can be integrated with existing (often administrative) systems, such as DaFIS, Banner and the Payroll Personnel System.

Desktop Systems has already served the campus in a number of important ways. For instance, the group assisted Banner programmers as they transitioned over to the GUI version of the Student Information System last December. "Basically, we contributed as Oracle [the software used with the Banner system] and LAN [local area networks] experts to the development of Banner," Cornejo said.

### Future Plans
At its new location, the group will continue to diversify and improve the quality of its services. Plans include providing walk-in consultations, and drawing on other Client Services staff to improve turn around time, take on more assignments, and assist more departments.

"The biggest benefit is that we will be more accessible to respond to emergency situations," said Charles Raley, Desktop Systems Manager.

Most of the staff are Microsoft certified, and thus trained with MS Windows NT, related desktop systems, and networking technologies. By the end of May, the group will function as a Microsoft Solution provider for the campus.

This summer, the group will pilot a mentoring program through the Technology Support Program (TSP). Technical staff from selected campus departments will be given hands-on training on broad-ranging technologies, including Oracle products, middleware, operating systems, LAN administration, and more. Cornejo explained that this type of hands-on technical training will help increase productivity.

### Meet the Team
An Open House will be held at 1114 Academic Surge on May 13, from 10 a.m. to 2 p.m. The group will introduce themselves, discuss the various services they offer, and provide general consulting to campus faculty and staff.

Anticipate one down-day (April 27) as the Desktop Systems team prepares for the move.

*UC Davis Senior Dieyana Ruzgani is a student assistant with Information Technology.*

### Resources:
Email: *dsg-help@ucdavis.edu*
Phone: 757-8907
Web site: *http://desktop.ucdavis.edu/.* Includes useful information about services as well as answers to frequently asked questions, product reviews, software and installation guides, documents on Year 2000 preparedness, and more.

## ERGONOMICALLY SPEAKING

*BY JANET FORD, PT, MS*

### *Repetitive Mouse Use*

How can we control repetitive mouse, or input device, use? Let's look at three easy ways: alternate hands, key commands, and programmability.

We often forget we have two hands and that shifting some activities to our non-dominant hand reduces repetition. I often recommend that right-handed individuals shift their input device to their left hand. Besides reducing right hand repetition, placing the input device to the left of the keyboard helps maintain a more optimal arm position by eliminating the need to reach past the number pad on the keyboard. This is a common solution for anyone who has been experiencing discomfort associated with right-handed mouse use. Some people have expressed concern that shifting the mouse to the left will result in similar symptoms on that side of the body. This has not been found to be the case in part because the position of the arm is improved when you use the mouse on the left. We tend to place our right and left hands differently on the input device, which may allow use in a less stressful way. For example, one client habitually performed a "death-grip" on the mouse when holding it with her right hand. When she shifted the mouse to her left, her grip was not as tight.

You can also reduce repetitive input device use by taking advantage of key commands. Shortcuts are available with several software products, such as Microsoft Word and Excel. Quick Tips on shortcuts will be available by the end of May at the I.T. Express drop-in location in Shields Library. In the meantime, check the manuals that came with your software. They often include a list of the keyboard shortcuts that the program supports.

Finally, try to take advantage of programmable features in your input device. Most multi-buttoned mice can be programmed to reduce repetition and save time for common functions. For example, you can program a button to double-click, which cuts repetition in half. Programming a button to perform a click-hold function will also reduce repetitive holding for spread sheet users.

### Resources:
Environmental Health & Safety Ergonomics Web Page: *http://ehs.ucdavis.edu/ergback/*

*Send questions about ergonomics to* ergonomics@ucdavis.edu. All correspondence will be kept confidential.

## What's NEW
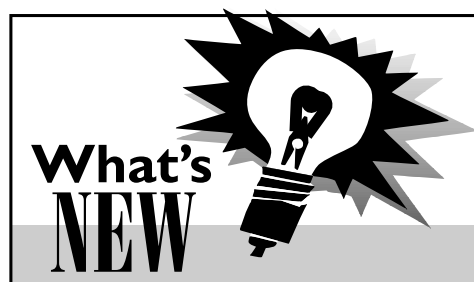
- A revised **University of California Electronic Mail Policy** was issued on March 23. Revised as a result of concerns raised by members of the Academic Council, the new policy supersedes the version issued in August 1996. To view the policy on the Web, go to *http://it.ucdavis.edu/policies.html*. Hard copies may be obtained at I.T. Express, 182 Shields Library, or by calling 752-4357.

- All tenure-track faculty and senior lecturers are invited to join the **Remote Access Pilot**, a project designed to facilitate access to the campus network for teaching and research purposes. This phase of the pilot will start on April 28. Check your campus mailbox and your email for further information. A presentation on this and other remote access projects is scheduled for April 21 (See Campus Presentations, page 8). For a description of the Remote Access Pilot, go to *http://cr.ucdavis.edu/ramp/ramp.html* or send email to *ramp@ucdavis.edu*.

- The **Banner Team** needs your feedback. A survey was sent electronically to all subscribers of the *banner-issues@ucdavis.edu* list. Responses to the questionnaire, along with comments and suggestions, will help assess your opinion of the services provided by the Banner Help Desk team and identify areas for improvement. If you use Banner and did not receive a survey, contact the Banner Help Desk by sending email to *banner-help@ucdavis.edu*.

- The results of the **bibliographic software survey** are in! The workgroup selected Endnote 3.0 by Niles and Associates for the Macintosh platform. A Windows resolution was not forthcoming due to the high quality of the top three products: Endnote 3.0, ProCite 4.0, and Reference Manager 8.0. For more information, visit the Web at *http://cait.ucdavis.edu/advtech/evals/biblio.html* or call 752-5711.

- You have until April 30 to send in your application for the fifth annual **Summer Institute on Technology in Teaching (SITT)** held on campus from July 13-17. SITT seeks to promote faculty expertise in the use of new technology for instruction at UC Davis. The program is sponsored by the Teaching Resources Center, in collaboration with the Office of the Provost and the Division of Information Technology. For more information, contact Winifred Anderson, from the Teaching Resources Center, at 752-6050 or *weanderson@ucdavis.edu*.

- You are invited to submit suggestions on how to use the network capabilities of **Internet 2, the next generation Internet**. Find out about Internet 2 by visiting *http://dcas.ucdavis.edu/i2*. The site includes a PowerPoint presentation on the status of the project and an overview of Internet 2 applications. Send suggestions to *i2apps@ucdavis.edu*.

# Access to Campus Internet Resources Expands

## New Authentication Service

*BY VICKI SUTER AND DOREEN MEYER*

There's good news if you use an Internet Service Provider (ISP) to access campus Web pages and newsgroups. With a new authentication service developed by Information Technology, all faculty, students, and staff can dial in to information resources restricted to campus affiliates from any off-campus location. This new service marks a substantial improvement over the previous authentication method, which allowed access only if the request came from a campus-based Internet Protocol (IP) address. (Internet Service Providers assign their own IP addresses.)

Access to campus Internet resources is controlled in order to protect copyright agreements, software licensing and distribution agreements, intellectual property, and student privacy rights. The Melvyl database, other specialized databases, class-related Web pages, site-licensed software, restricted departmental services, and UCD newsgroups are some examples of services that were previously inaccessible via a commercial Internet Service Provider.

### Authentication

Simply stated, authentication proves your identity, just as logging in to your campus computer account with your user name and password verifies your identity to a particular computer system. In this case, authentication refers to providing your identity to the campus Kerberos server. (Kerberos was conceived at Massachusetts Institute of Technology as a secure way to allow users and services to authenticate themselves to each other.) The name and password required in this case are your UCD LoginID (or "new-style" LoginID) and your UCD Kerberos password.

### Improved Security

The new distributed authentication service can support more restricted levels of access (which is particularly useful whenever security concerns are high) and can be tailored to departmental needs.

Web site managers on campus and at the UCD Medical Center may install the new authentication service on their local Web servers, configuring each server to restrict access to a specific set of files and directories.

This service takes advantage of elements of the distributed computing infrastructure already in place on campus, including:

• The certificate service on the campus' high security Web server, the AFS file server (used with the Banner and DaFIS administrative applications);

• The Kerberos server (used with WIRES, a secure mechanism for accessing student grades, account balances, and financial aid information); and

• The SSL (secure socket layer) encryption capabilities provided by modern Web browsers and servers.

With these elements in place, your name and password will not be transported in clear text across the network during the authentication process.

### Accessing Internet Resources

In order to read restricted Web pages or news services, you must first prove your association with the campus by entering your UCD LoginID and Kerberos password. (To find out about UCD LoginIDs and Kerberos passwords, see Resources at the end of this article.) Once you have proven your affiliation, you will be able to read any Web page secured within the *ucdavis.edu* domain for the duration of your browser session.

Improved services also include authenticated access to *news.ucdavis.edu*, the campus news server. To access newsgroups served by *news.ucdavis.edu* through a commercial ISP, point your Web browser to *http://www.ucdavis.edu/authentication/news.html* and follow the authentication steps.

### Further Pilots

Additional services are being tested, including access to the Melvyl database, *cbt at ucd* courses (computer-based training materials), and the On-Line Learning Resources for Physics 7.

If you are interested in participating in further pilots, check the Web resources below for more details. Or come to a special presentation on April 21 to learn more about the new distributed authentication service (see Campus Presentations, page 8).

---
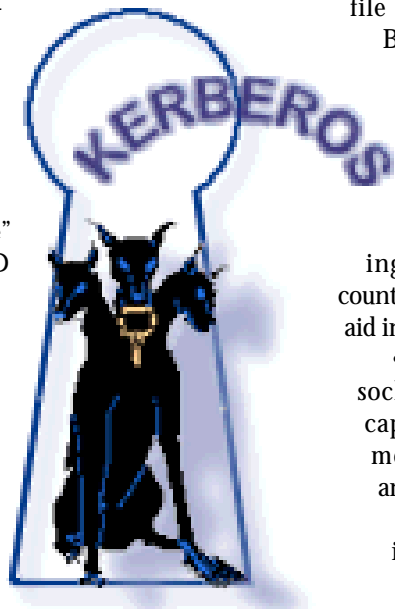
# IT Responds to Student Computer Survey

*BY AVIVA LURIA*

A survey of students who use computer classrooms has already inspired some major changes in computer availability on campus. The 1998 survey, which was sent in February to a random sampling of 1,000 computer room users, was the second of what will likely become an annual tradition for IT Lab Management. Both surveys were designed to assess the technology-related needs and concerns of UC Davis students.

### More Computer Rooms

Results from the survey have helped spur creation of three new computer rooms to open in the 1998-1999 academic year, including an open-access computer lounge in the MU East Conference Room that will house between 45 and 50 computers. Two other labs, doubling as computer classrooms, will open in Olson Hall and Surge IV. The East Conference Room project is a collaboration between ASUCD, Student Affairs, and Information Technology.

### Extended Hours

Concrete changes stemming from the 1997 and 1998 survey results were made as early as last quarter. In Fall 1997, TB 114 was opened as an open-access lab, where students don't have to compete with classes for computer time. For three weeks before last quarter's final exams, students had the option of working in TB 114 until 2 a.m. The lab opening and the extended hours were direct reflections of survey results from 1997 and 1998 respectively. When asked how they would improve overall computer access, a vast majority of survey respondents chose "large open-access computer room." Topping the list of most important ways to improve already-existing computer classrooms were "more computers," "more open use time," and "open later hours."

The actual hour of closing during last quarter's study period was also chosen with the help of the 1998 survey. Because nearly 32% of survey respondents said they'd use computer labs until midnight, and 33% said 2 a.m., the 2 a.m. closing time was chosen "to satisfy over 60% of students," said IT Lab Manager Tim Leamy. The experimental late closing was a success. "One of those nights had about 95% usage between midnight and 1 a.m.," said Leamy. "We'll most likely extend the hours again during next quarter's finals."

Extending lab hours for the entire quarter isn't likely, Leamy said, mainly for staffing reasons. "It's hard on the site attendants, especially if they have morning classes" he said.

"You don't want someone hurt academically because they're trying to do a good job."

### Printing

The survey has also provided IT Lab Management with insight into another issue: printing. IT currently spends roughly $50,000 per year on printing in labs, and during Fall quarter, over one million pages were printed.

"There's a huge amount of recycling," Leamy said. "Many people don't pick up their printing jobs, and that paper ends up getting thrown out. When something is free, people tend to waste it. We're now considering various ways to encourage more responsible usage."

In a question added since the 1997 survey, students were asked how they might address the printing issue. A per-page charge after a number of free pages ranked first by a large margin.

Lab Management is still researching the issue. "We don't want to implement a system that will drive up the charges for printing," he said. Other schools have card systems (similar to photocopying cards) or hire students to count pages and take money, said Leamy. "Both these options seem like resource sinks. We want a system that will be unobtrusive to users, won't be an administrative burden, and makes sense."

### Resources:

More information about the 1998 and previous computer lab surveys may be found at *http://lm.ucdavis.edu/pubs/survey/*

# iLmHiS#F

## Is Your Password Secure?

*BY LANETTE OLSEN*

*This article is available as a Quick Tip document entitled "Password Security: Selecting and Storing Your Passwords." Find it on the Web at http://it.ucdavis.edu/pubs/quicktips/ or get a copy at I.T. Express, in 182 Shields Library.*

**Security**: Measures adopted to guarantee freedom or secrecy of action, communication, or the like.

**Password**: A secret word or phrase that one uses to gain admittance or access to information.

Your password, your secret word or phrase, allows only you access to the University of California, Davis' computing resources. Like the key to your home's front door, it provides security, keeping out unwanted intruders. Would you ever be careless or cavalier with your house keys, leaving them lying around to be picked up by just anybody? And in this day and age, how many people hide them underneath the front door mat? Not many. So then, why are electronic passwords still scribbled on sticky notes on computer screens or stashed under keyboards or in the back of desk drawers?

Some analysts estimate that more than a million passwords have already been stolen. It is often surprisingly easy to guess or steal passwords. Hackers can launch a dictionary attack by comparing your password with every word in a dictionary, foreign as well as English in a matter of minutes. Or they can use "sniffers," programs that read every keystroke sent out from a machine, including passwords. But, as demonstrated by the questions above, a great deal of the responsibility for stolen passwords falls on users themselves. In addition to the old sticky note left on the computer screen, users willingly share passwords, send them via email or choose ones that are too predictable and easy to guess.

### Why is this important?
When someone guesses or steals a password, they can conceivably access files, email messages, funds and personal information. This access may allow them to change or destroy files or send email threats in someone else's name. And this chaos can extend beyond one account to affect others. Once intruders gain access into a system, they can monitor other machines and systems on the same network and even monitor the remote systems to which the local users connect. For example, this access may allow an unwanted intruder to gain access to confidential student or University financial information.

### What can you do to help?
Well, to start with, don't leave that password lying around. Passwords, like the keys to your front door, provide security only if handled properly. Network and systems administrators can enhance security through the use of advanced security features (such as firewalls, encryption and authentication), but ultimate responsibility comes back to you, the end user.

What to include in your password:
• Make your password easy for you to remember, but hard to guess. Use at least seven characters.
• Use punctuation marks or symbols within your password. Do not use a blank space!
• Always mix upper- and lowercase letters.
• Select a unique password, not one that you are using for some other purpose.

What not to do:
• Don't write down your password! That being said, if you find you must write it down, conceal it in some unrelated characters or in some kind of coding system.
• Don't send your password via email. Email is not secure. (Keys in the mail? Never!)
• Don't store your password in a file.
• Don't use dictionary or foreign words, names, doubled names or first/last names and initials.
• Stay away from simple transformations of words (e.g., 7eleven, seven11, etc.) or any alphabet or keyboard sequence (backwards or forwards).
• Don't even consider short words, single characters, phone numbers, birth dates or numbers substituted for letters (like a zero instead of the letter O).
• Be wary of programs unnecessarily requiring your password. Once you are logged in to a given computer system, it should not need to know your password again.

And remember to change your password if:
• You have had the same one for more than six months.
• You have told it to anyone (even Mom) or have written it down anywhere.
• You have logged onto a system from another city or campus.
• You are notified that it does not meet current standards.

### Strategies for choosing a good password
The following are only suggestions for developing a secure password. Please, please do not use these examples! Including them in this document compromises their security.
• **Lines from a favorite childhood verse**. Example: London Bridge Is Falling Down Password: LBif%Down
• **Expressions about a favorite geographical area**. Example: I left my heart in San Francisco Password: iLmHiS#F Example: Sunny California Password: suNIc*al!
• **Foods liked or disliked as a child**. Example: Fish on Fridays Password: FoFda! Example: Chocolate Pudding Password: cHO%dinG
You can also substitute antonyms or synonyms for your chosen words or interweave letters and characters from successive words.

Ultimately, any password you choose has to be known to you and you alone and must conform to local procedures for constructing passwords.

For further information on this and other security issues, visit the Web at *http://dcas.ucdavis.edu/security*. And remember, dump those sticky notes!

*Lanette Olsen is a technical writer. Doreen Meyer, from IT's Distributed Computing Analysis Support (DCAS), contributed to this article.*

# PROJECT UPDATES

Anixter/Bay Networking Team has been selected to participate in the Network 21 Confidence Test that will measure the proposed ATM network's performance in a real world networking environment. The test involves monitoring live traffic generated by five campus departments: Advanced Network and Scientific Applications (ANSA), Distributed Computing Analysis and Support (DCAS), two units in Information Resources, and Electrical and Computer Engineering. This test of Anixter's router equipment will last through April 24.

Actual cutover of departments and buildings to the ATM network is scheduled to begin in June and will last for six months.

The planning for the actual cutover dates for individual departments and buildings will be determined from survey information being gathered from each department. The information includes a review and confirmation of the Network Access Modules (NAMs) scheduled for cutover to the ATM network, and development of Virtual Local Area Networks (VLANs) for each department. The VLAN system will allow departments that are dispersed at two or more locations to connect all their users to one departmental network. This overcomes the constraint that is associated with Local Area Networks (LANs), which can only group together users who are located in the same geographical vicinity, such as a small building or one section of a building.

The completed Network 21 project will consist of a high-speed ATM network linked to 171 buildings on the core campus.

For additional information about Network 21, visit the Web at *http://net21.ucdavis.edu*. News briefs, or "status bytes," specific to the project are now available at *http://net21.ucdavis.edu/#bytes/*.

## Authentication
*from page 6*

**Resources:**
Email: *authentication@ucdavis.edu*
Web sites:
• Distributed Authentication Service
Information for the general campus community is available at *http://cr.ucdavis.edu/projects/distributed.htm*
Information for Technology Support Coordinators may be found at *http://dcas.ucdavis.edu/access/distauth*
• UCD LoginIDs and Kerberos Passwords *http://mothra.ucdavis.edu*

*Vicki Suter and Doreen Meyer are with IT's Distributed Computing Analysis and Support (DCAS).*

# CALENDAR

## April

**20** ⌘ **Fundamentals of Web Publishing**: 8:30 - 11:30 a.m., TB 134. (Two-part course offered 4/20 & 4/22)

❑ **Transitioning to Windows 95**: 11 a.m. - Noon, Silo Cabernet Room.

❑ **Get Started Searching Melvyl on the Web**: 3:10 - 4 p.m., Microcomputer Room, 163 Shields Library.

**21** ⌘ **Web Publishing: Working with Tables**: 1:30 - 4:30 p.m., TB 134.

◆ **Fundamentals of Word**: 8 a.m. - Noon, TB 134.

◆ **Designing an Access Database**: 1:30 - 4:30 p.m., TB 134. (Two-day course offered 4/21 & 4/23.)

**Remote Access Management Program Overview**: See Campus Presentations below.

**22** ❑ **The Medline Database on the Melvyl Web System**: 10 - 11:20 a.m., Carlson Health Sciences Library.

**23** ❑ **Melvyl: Special Features and Advanced Search Techniques**: 3:10 - 4 p.m., Microcomputer Room, 163 Shields Library.

☆ **Fundamentals of Netscape**: 5-8 p.m., TB 134.

**Kerberos on Campus**: See Campus Presentations below.

**27** ☆ **Fundamentals of Eudora**: 8:30 - Noon, TB 134.

◆ **Fundamentals of Excel**: 1-5 p.m., TB 134.

**Technology and Instruction**: See Campus Presentations below.

**28** ❑ **Get Started Searching Melvyl on the Web**: 3:10 - 4 p.m., Microcomputer Room, 163 Shields Library.

**Cold Fusion: The First Kiss**: See Campus Presentations below.

**Security Tools**: See Campus Presentations below.

**29** ◆ **Working in the Windows 95 Environment**: 8 a.m. - Noon, TB 135.

☆ **Fundamentals of Netscape**: 1:30 - 4:30 p.m., TB 134.

**30** **Endnote 3.0**: See Campus Presentations below.

## May

**4** ⌘ **Fundamentals of Web Publishing**: 5-8 p.m., TB 134. (Two-part course offered 5/4 & 5/6)

◆ **Fundamentals of Word**: 8 a.m. - Noon, TB 134.

**5** ◆ **Fundamentals of PageMaker**: 1-5 p.m., TB 134.

**6** ❑ **Melvyl: Special Features and Advanced Search Techniques**: 10-10:50 a.m., Microcomputer Room, 163 Shields Library.

❑ **InfoRelief 4**: See Campus Presentations below.

◆ **Working with Excel Charts**: 1:30 - 3:30 p.m., TB 134.

**7** ❑ **Get Started Searching the Melvyl System on the Web**: 2:10 - 3 p.m., Microcomputer Room, 163 Shields Library.

**11** ❑ **Find Information on the World Wide Web for Research**: 3:10 - 4 p.m., Microcomputer Room, 163 Shields Library.

**12** **Framework for using the Web**: See Campus Presentations below.

**13** ❑ **Get Started Searching the Melvyl System on the Web**: 3:10 - 4 p.m., Microcomputer Room, 163 Shields Library.

**18** ⌘ **Web Publishing: Creating Effective Web Pages**: 1:30 - 3:30 p.m., Founders Boardroom, Buehler Alumni Center.

**21** **Network 21 NAR Briefing**: See Campus Presentations below.

### Key to Classes & Seminars

⌘ **Information Provider Series:** Staff Development & Professional Services. Faculty and student registration: *learnit@ucdavis.edu* or 754-8091.

❑ **Library Instruction Programs:** *LibraryClass@ucdavis.edu* or 752-4381.

◆ **Staff Development & Professional Services** (SD&PS): Enroll online at *http://sdps.ucdavis.edu.* Call 752-1766 for an application or catalog.

☆ **Student/Faculty Series:** Information Technology; call 754-8091 or email *learnit@ucdavis.edu.*

❑ **Technology Intensive Seminars:** No registration required; call 752-1766 for more information.



# CAMPUS PRESENTATIONS
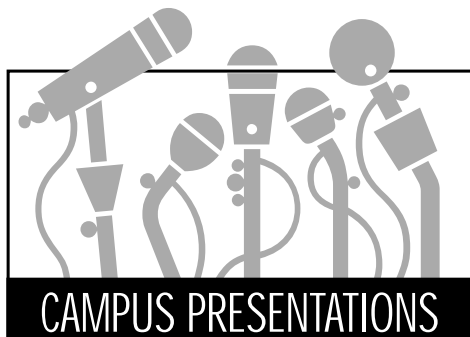
Mark your calendar! These special presentations will help you stay abreast of issues related to the information technology environment. For updates on special events, presentations, and professional development opportunities, visit *http://it.ucdavis.edu/itcalendar/*.

### April 21: Remote Access Management Program (RAMP): An Overview
Come learn about and discuss RAMP, the series of projects to improve access to the UC Davis network from off campus. Topics include the distributed authentication service (See Authentication, page 6) and the Remote Access Pilot (see What's New, page 5). Information on all RAMP projects may be found at *http://access.ucdavis.edu/*.

Time:2-3 p.m.
Location: East Conference Room, M.U.
Audience: All.

### April 23: Kerberos on Campus
Kerberos is an authentication method that provides secure transactions with remote access services. This talk will cover how Kerberos works and what campus systems are using it for authentication.

Time: 2-3 p.m.

Location: Center for Advanced Information Technology (CAIT), 165 Shields Library.
Audience: Intermediate to Advanced.

### April 27: Technology and Instruction: An Introduction
This is the final in a series of workshops on the interrelation between technology and learning. Those wishing to attend need not have been at the first three workshops, but it is first come, first served. Contact Dick Walters at *walters@cs.ucdavis.edu.*

Time: 3-5 p.m.
Location: Arbor, 174 AOB IV.
Audience: Faculty.

### April 28: Security Tools
This presentation will focus on how to secure confidential information on computers. Various security solutions will be presented, from individual file security to computer lockdown devices, from individual machines to small LANs.

Time: 10-11 a.m.
Location: CAIT, 165 Shields Library.
Audience: Beginner to Intermediate.

### April 28: Cold Fusion: The First Kiss
This introduction to Cold Fusion is intended for people interested in using a database with the Web for teaching and related activities. The presentation will include some how-to and some demonstrations.

Time: 3-5 p.m.
Location: Arbor, 174 AOB IV.
Audience: Faculty.

### April 30: Endnote 3.0
This demonstration is the first of three showcasing bibliographic reference managers. Endnote 3.0, from Niles and Associates, allows you to set up your own searchable databases of references, create "one-step" bibliographies in Microsoft Word and WordPerfect, and go directly to an on-line database like Melvyl to download references.

Time: 1-2 p.m.
Location: CAIT, 165 Shields Library.
Audience: All.

### May 6: InfoRelief 4
A personal digital assistant (PDA) is one of the tools that can be extremely helpful in the management of information. This brown bag will focus on the selection and use of PDAs.

Time: 12-1 p.m.
Location: Cabernet Room, Silo.
Audience: All.

### May 12: Framework for Using the Web
This seminar includes a presentation of a database for courses and a discussion of what is needed in such a database and how to achieve it. The Cold Fusion seminar (See April 28) would be a good introduction, but is not essential. The presentation will cover database basics and design details.

Time: 3-5 p.m.
Location: Arbor, 174 AOB IV.
Audience: Faculty.

### May 21: Network 21 NAR Briefing
Network 21 project managers will provide an update on the survey sent to campus departments and give an overview of the project's cutover phase.

Time: 11 a.m.-12 Noon
Location: Lower Freeborn Hall, Room 5.
Audience: Network Administrators.