START CLICKING

Those engaging little lecture devices enter the mainstream, *Page 3*

8 CHANGES YOU MIGHT WANT TO KNOW ABOUT

EndNote became free, classrooms saw serious upgrades, instructors got visual … catch up on the changes over summer, *Page 2*

IT TIMES

Information Technology News for the UC Davis Community

Fall 2006

TECH'S THE ENGINE, NOT THE DRIVER

THE NEW TOP EXEC OF CAMPUS TECH LIKES CLARITY, FINDING COMMON GOALS, MEASURING RESULTS—AND ENJOYS A GOOD HIKE ON HIS DAYS OFF

Soon after he arrived on campus, Pete Siegel sat down for this interview on subjects ranging from his goals as IET's new vice provost and his views on millennial students, to where UC Davis excels in technology and what he hopes to do for fun once he settles in. More of the interview is available at *ittimes.ucdavis.edu*.

Let's start with a broad question. What's the proper role of technology in university education in 2006?

Technology is enormously important, but should not be a driver for its own sake. It is a tool that enables people to do the other things they would like to do, and do them better.

Everyone believes technology is important. It is easy for people to focus on the idea that "this is just so cool, we've just got to have it." We have to look at it the other way, and say, "This is an exciting capability, how can it help our faculty and our students do their work better?" Can they collaborate better? Or does it distract them from collaborating?

Photo by Gabriel Urdia

Pete Siegel

How do you keep the right perspective? How do you keep technology from taking over the task you're trying to accomplish?

Part of it, for us technologists, is to be mindful of our job in terms of really working with the community. People in technology get asked, "What's your vision?" A big part of our vision is understanding what people are trying to do and converting it into technological terms.

We also have a job to go the other way, to take the technology developments we know are coming and translate them into the terms that are really relevant. "Here is something that will help you in teaching," not "here is a great new learning management system."

You have to get feedback from your community. You have to see whether they achieve the results. And you must have measures for whether you are successful.

Which university excels at using tech to serve its educational mission? What makes it succeed? Name a place, or at least the properties.

Some of the properties relate innovation in technology to the strategic goals of the campus.

Some campuses get out perhaps a little too far on the notion that really cool technology is a wonderful recruitment strategy. It's an important strategy—if you don't have a good technological base, it hinders the recruitment of good students. But you have to look at what can be delivered.

So, the campuses I like have a tenacious, pervasive strategy for grooming the technologies to have impact on a large number of students.

The most successful campuses don't just do innovative things in demo mode, but put them into production. They're places where you have an organization like IET that can work with the colleges to bring things out into the classrooms, into the research environments. And that kind of tenacity has to be a long-term goal of the campus to be successful.

The greatest opportunity for impact comes from campuses that have a long tradition of having faculty think about how they use technology.

I think what Davis will want to do is not look at those campuses that are seen in some aggregate or abridged form as the leaders, but to look at its own strengths, places where Davis could excel very, very quickly.

One area is the strong ties between the medical community and the campus scientific community in terms of biological sciences with connections to engineering, to agriculture, to Vet Med. With the relationships that have been built, we ought to be seen as one of the global stars in the use of technology to create cross connections, across the disciplines, in interdisciplinary research.

Davis is in a wonderful position to excel, because it's got these traditional strengths.

So you start where the university has been strong, and then apply the technology needed to support that mission?

The campus has a long history in the use of technology, and one element is figuring out the right investment. You can't just spend enormous amounts of money and get a good result.

I won't name names, but there are campuses that put an enormous investment in IT, substantially higher than ours, who are not ranked as highly as we are. You don't see close correlation between that overall investment. You do see a good correlation between focused investments.

ANCIENT TEXTS, MODERN DEVICES

You've talked previously about using educational technology back into the 1960s. I think of educational technology, in the sense we talk about it today, of being fairly new.

Many aspects of what we do, in terms of teaching and research, is the same it's always been. The difference is that we can get it to more people. We can have colleagues all over the world, and we have much richer media.

(Continued on Page 4)

SmartSite use triples

The SmartSite project—creating new places for people at UC Davis to teach, learn, and work together online—blossomed over the summer as more people signed on to use the system profiled extensively in the summer edition of the *IT Times*.

The newest users, who range from instructors and students to researchers and administrators, have begun incorporating SmartSite's chat rooms, message boards, and wikis into their classes and collaborative ventures.

As September began, 1,086 unique users had logged into the online course management system, resulting in the creation of 512 project sites and 168 course sites. That's up from 351 users, 159 project sites and 103 course sites at the end of May.

SmartSite, which uses open-source software, will continue as a pilot program through the 2006-07 academic year. Plans call for SmartSite to begin

> "SmartSite seems to be taking the campus by storm and we've only barely started seeding the clouds"

replacing the course management tools in the MyUCDavis Web portal in 2007-2008. The shutdown of the MyUCDavis course tools would begin in fall 2008.

"SmartSite seems to be taking the campus by storm and we've only barely started seeding the clouds," said program manager Kirk Alexander in mid-September. Based on early signs, he said, the system "will indeed be able to meet many needs on the campus and quickly grow in functionality, as hoped."

Liz Applegate, a senior lecturer in nutrition, is using SmartSite to post chapter quizzes, dietary guidelines, exam resources, frequently asked questions, podcasts of her lectures, and a "fun stuff" folder for students taking Nutrition 10.

The Campus Community Book

(Continued on Page 3)

A career in campus tech

NEW VICE PROVOST COMES FROM ILLINOIS, IOWA STATE, CORNELL

Pete Siegel must be used to long job titles by now. They come with the territory.

Siegel is the new vice provost for Information and Educational Technology (IET) and chief information officer for the University of California, Davis, a position he has held since moving here from the University of Illinois at Urbana-Champaign in mid-August.

As the campus executive in charge of UC Davis tech, Siegel oversees a department of 398 employees with a $35.7 million annual budget.

IET's job is to deliver technological services that support the campus missions of teaching, research and public service—a task that stretches from phone services and computer security to data centers, classroom technology and podcasts.

Siegel arrives in Davis with decades of experience and, well, occasionally lengthy titles. At the Illinois university he was chief information officer and associate provost, a position he had held since 2000. From 1998 to 2000 he was director for academic informational technology at Iowa State University of Science and Technology in Ames.

And he spent most of the 25 years before that at Cornell University in Ithaca, N.Y.—starting as a teaching assistant/instructor in its Department of Linguistics in September 1976 and rising to the post of director of network and computing systems for Cornell University Information Technologies.

At Davis, Siegel succeeds Dr. Peter Yellowlees, who was interim vice provost for IET for 16 months before returning to his appointments as a professor of psychiatry and director of academic information systems for the UC Davis Health System.

Siegel and his wife, Hope Stevens, have moved to Davis. They have a son and a daughter; each is studying physics in college.

Siegel also writes a blog; you can find it at petesiegel.blogspot.com. ■

(Interview, Continued from Page 1)

Some folks on campus would just as soon have nothing to do with new technology. They like the way they've worked.

There are areas where some faculty may decide they don't need to make significant use of technology. But they will have colleagues down the hall, and new faculty coming to their department, who will make critical use of this technology.

I once talked to a faculty member who was doing work on ancient languages, specifically cuneiform script. He had a journal article which was very traditional and very interesting. I asked, "How do you do your work, how do you understand these texts you're looking at, how do you figure out all the letters and the meaning of the text?"

He said, "I use all of these different laser lighting techniques to shine on the cut clay tablets, and then I put it all on the Internet. I can show you a CD which has my work on it, and I have a particular piece of software that I use … "

I'm tremendously impressed with how people in a variety of disciplines, whom one might think have nothing to do with these technologies, can take advantage of them.

LATE TO THE TECHNOWORLD?

An Educause survey said UC Davis, and the UCs in general, were late adopters of technology. Do you agree? Does it matter to be late?

Part of the answer is to look at the evidence, and to determine where it really does matter to the campus.

Innovative use of medical technologies is one area. I went to a meeting this afternoon about the use of high-performance clusters for research computing. The projects this campus is doing are world class. Some of the best people in the world are here. Maybe we need to look at the range of areas where we really want to be excellent, and if we are, then I'd say we're early adopters, in the sense that we're focusing on areas where we can really be excellent.

I don't want this comment to seem trivial, but sometimes some of this relates to public relations. It's always good to do good public relations, and to let people know what you're doing.

But Davis has some real strengths, and we ought to do two things. One is to make sure we're telling the story of where we are excellent. The other is to look at areas where we might invest that can have a multiplying effect, on both reputation and the reality.

One area might be looking at investments in lowering the barriers for faculty to use computing clusters. Another is to get wireless access far more pervasive on campus. My favorite example of use of wireless is students collecting in stairwells to work collaboratively on a project. And anything we can do to create that kind of effective use of technology, even in these sort of very low, very simple ways … some of these investments may be necessary.

But it's very important to go back to measures, because the public-relations version, as important as it is to campus reputation, has to have substance behind it.

EARLY GOALS: PARTNERSHIPS AND TRANSPARENCY

What are your goals for informational and educational technology at Davis? What would you like to accomplish first?

The most important one is interpersonal. The way for us collectively to be most successful is to take a very strong partnership view—of really working with the major stakeholders on campus—and making sure we know where we want to go together, and that we're really clear on the role technology can play in moving the campus forward.

The second goal is maybe more programmatic or financial: making sure that IET as an organization, but technology in general on this campus, is an open book. That we're as transparent as we can possibly be on our investments, on the value to the community. That way we can say to the community, "You know what we're doing in this area, and with this additional investment we can do the following things that will make your lives easier or improve your programs."

> "The millennials are very interesting, but what's most interesting is that all of us will come to view these things as normal. Not as a great new technology, but just as the things we use"

There are also some areas involving fundamental technology investments, in terms of co-location facilities for a data center that will support a wide variety of faculty systems, high-performance computing, other types of systems. Many people have talked about these things. They might spur the kind of innovation where faculty can focus more on what they'll do *on* the systems, rather than in finding space, power, and cooling to *run* those types of systems.

Some areas in there are likely to be important early foci and early investments. But we must look broadly so that we don't focus on just one or two areas, but ask what the growth areas are going to be in the next three, five, 10 years. So those investments stand the test of time.

Another area is to have a transparent strategy for telecommunications and have

everyone on the campus in a position to understand what investments we can make, which things they need to do.

Those are a couple of areas. I see some others naturally developing. One ties together classroom technologies and online learning, looking at how faculty teach. I love to understand the aspects of technology that outstanding teachers want to use, in the classroom and online.

TEACHING THE MILLENNIALS

Students typically use technology differently than faculty do. And this leads to something you wrote in your July blog about the millennials, today's university students who grew up using high technology and expect to keep using it when they get to college. You wrote, "the academic community needs to find ways to move past the newness factor, to bring technology into the basic life of the campus in substantive ways … not because it is cool or even because it's millennial-friendly, but because it provides us with tools that increase our reach and flexibility." How will this play out at UC Davis? Are conditions different here?

Davis has a history of work in this area. Plus you have these young students coming in with different expectations and comfort levels with use of technology; same with new faculty. So this world will continue to develop.

Students will come in not only with a consumerist view of technology, but also experience from high school, or maybe earlier grades, where they expect technology to be a key element in how they learn.

I'm reminded of a study done by a professor at Harvard, Chris Dede, who does innovative work with video and animation both in the Ivy League learning context but also for disadvantaged students in high schools. He worked on a project, on the MIT campus, that related to a problem about pollution. Students would have to evaluate where the problem was, they'd have to work in teams, you'd need specialists in environmental areas, engineering, hydraulics and other things, basically to identify the pollution.

At the end, the students would have a report to the presidents of the university saying what to do about the problem.

If I recall correctly, the high school students did the best, not the graduate students at MIT. They already knew that when you have a team of students, whether they're going to get pizza or they're working on a project in high school, they already knew how to divide up the work, how to make sure that each person was depended on for their strengths, so that the engineer wasn't asked to do the public relations. And they were used to doing it at a distance, using a variety of technologies.

Comfort and competence in using technology made them better learners.

I once heard a presenter say that much of what we test for assumes the old way we all used to learn. And I've become convinced—I don't say this as a technologist, but as someone who has learned the more traditional ways—that there are some advantages in a collaborative, problem-solving environment, the world we live in today. If you have complicated global warming, complicated problems, a need for more effective automobiles, you can't solve the problem by simply putting engineers in one room and the designers in a different room. You have to have this group working together.

We should not consider the millennials to be a monolithic group where "they all learn this way." But we're going to use this technology to allow for a wider variety of learning types, of collaboration types, so that people can collaborate more effectively. It's extremely important.

The millennials are very interesting, but what's most interesting is that all of us will come to view these things as normal. Not as a great new technology, but just as the things we use.

TWO KIDS IN PHYSICS—AND NO MORE TORNADOES

How do you like Central Valley life so far? Discovered any favorite places yet?

It's been great. I've spent a lot of time focused on getting settled, house-wise. The weather has been great. I really look forward to getting up onto some of the trails around here. I've talked to a number of folks about the wide variety of places to go.

My wife and I are thrilled that we're in a central location for getting to several interesting places. We both enjoy having trains around; the very good train service, and also some old railroads, and some history of that, is also fun. We've done a little bit of wandering around in Sacramento.

A lot of it must wait for us to have a little bit more spare time. Once we do, we know the weather's going to be great.

We can get a mean fog in February.

Driving in fog can be a challenge. I'm guessing it's not going to be as bad as waiting under your house for a tornado to go by.

Your daughter's in Boston, your son's in Berkeley?

She's an undergraduate in physics, and my son is a graduate student in physics. They're not in exactly the same field. She's more on the chemistry side, physical chemistry. I can't explain it, but they're very technologically oriented.

Both are examples of people who, no matter what their work is, spend a lot of their time collaborating with friends, including maintaining relationships with friends from high school. That's typical of students of this age; they maintain relationships far longer than any of us did.

What Web sites do you visit for fun? News sites, hobby sites?

News sites, I go to a variety of them, CNN, New York Times, and others. I go to a number of community sites in relation to the news. In terms of fun? Hiking, looking at winery sites, looking at reviews. Using the information in a practical way—finding out where the hiking sites are, and figuring out how to get there.

Leaving the Internet behind and getting out into nature is the goal. It's great to see a picture, but that only spurs me to go and see it in person.

When you go out there, do you leave the personal digital assistant behind?

I often have it with me. But I'm hoping the mountain will block the signals.

For more of his views, including his wireless preferences for UC Davis, what he learned from his initial conversations on campus, his adventures in blogging, and his advice to instructors who aren't interested in SmartSite, read more from this interview at ittimes.ucdavis.edu. ■

IT Times

technews.ucdavis.edu

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UC DAVIS INFORMATION & EDUCATIONAL TECHNOLOGY

WHILE YOU WERE AWAY: A SUMMER OF CHANGE

SHED SOME LIGHT ON ELLUMINATE

IET-Mediaworks is looking for UC Davis instructors to pilot Elluminate, an online communications and collaboration tool, in their courses this fall. Participants will receive a brief introduction, free training, and phone support. After the pilot they will be asked how well they think Elluminate would work in the classroom.

Tools such as Elluminate and Breeze Meeting offer many benefits to UC Davis students, staff, and researchers, and Mediaworks chose Breeze Meeting and Elluminate as the two systems most compatible with campus needs. Mediaworks has evaluated Breeze Meeting. The Elluminate pilot will help it compare the two systems.

Faculty and students can use Elluminate to work together in virtual meeting rooms or classrooms, whose features include:

- Streaming video
- Direct text messaging and chat
- Synchronized Web tours
- Multimedia playback
- Digital white board and drawing tools
- Remote sharing of applications and desktops
- Live, interactive audio and voice transmissions.

Elluminate presentations can be recorded and archived, and made available online. Elluminate can be used for:

- **Online office hours** — Meet over the Web.
- **Tutoring** — Instructors can remotely control a student's computer to help solve a problem.
- **Class collaborations** — Break students into online groups and let them meet from home.
- **Research collaborations** — Work together online by using the whiteboard tool, viewing research images/results, or by sharing an application such as Word or Mathcad.

"Online communications and collaboration tools can be used for many different purposes—instruction, research, and general business meetings," said Liz Gibson, the director of Mediaworks. "We have pilots using Breeze and Elluminate in all three of these areas, and would welcome more."

The time required by the tryout will vary depending on an instructor's needs, but one to five hours per week should suffice. To sign up, contact Mediaworks at 752-2133.

HOW IET SPENT ITS SUMMER

UC Davis moved forward in various areas of technology over the summer, as a glance at the June-September IET Report shows.

CHANGING OF THE GUARD

Photo by Gabriel Urda

Dr. Peter Yellowlees wrapped up his stint as interim vice provost of Information and Educational Technology in August, a transition celebrated during a general IET meeting July 24. Yellowlees, seen here enjoying a laugh with Assistant Vice Provost-IET Dave Shelby and IT Security Coordinator Bob Ono, was thanked for his accomplishments, and also kidded—his farewell gifts included a 1970s tape player and headphones duct-taped to running shoes, so he can enjoy music while jogging. ■

The report, issued by Information and Educational Technology three times a year to the general campus community, highlights work done since May in four major categories: campus technology, infrastructure, educational technology, and administrative computing.

Highlights in the latest report include new cyber-safety standards; planned improvements to the campus email system; the choice of a single brand of "clicker" or "personal response system" for use in UC Davis classrooms; free EndNote bibliographic software for home and campus use; the addition of high-definition video editing software to the Meyer Media Lab; the return of the Summer Institute for Teaching and Technology; and the disconnection of 3,500 residence hall phone lines due to low demand now that cell phones have become so common.

To read the report online or download the PDF, visit iet.ucdavis.edu.

COMPUTER ROOMS BOOST PRINTING CHARGE

The campus rate committee has approved higher printing charges in campus computer rooms. But the service is still free to faculty, staffers and students who print no more than 90 sheets per quarter. (One sheet can handle two pages if computer room clients use the printer's default setting, which prints both sides of the paper.)

Computer Lab Management, the IET unit that manages the computer rooms, started charging clients 6 cents per sheet as of Summer Session 1. The charge begins accruing at 61 sheets but isn't collected unless a client's volume exceeds 90 sheets in a given quarter. The old fee was 5 cents per sheet, set in 2001. Until June, the fee kicked in after 100 pages.

In spring quarter 2006, computer room clients printed slightly more than 1.6 million sheets. Sixty-five percent printed fewer than 100 sheets apiece. Individuals can find out how many pages they've printed by going to clm.ucdavis.edu/rooms/printing/pages.html.

CAMPUS BUYS LICENSE FOR ENDNOTE

University of California, Davis, signed a three-year agreement this summer that lets its students, instructors, and employees use EndNote, a popular bibliographic software made by Thompson ResearchSoft.

The license allows all current students, faculty, and staffers to install and use EndNote on computers at work and at home. Updates and support are included for the duration of the contract.

EndNote is used to search databases, and to organize and format references for academic and scholarly papers. It runs on Windows and Mac OS, and is compatible with recent versions of Microsoft Word.

The software is available as a free download from the campus software Web site, https://my.ucdavis.edu/software, and will be included on the 2006-07 Internet Tools CD available in a few weeks.

CLASSROOM TECHNOLOGY UPGRADES

Many general assignment and computer classrooms were revamped and upgraded with newer equipment and instructional technology over the summer. Here are the changes that kept IET Classroom Technology Services busy:

- New high-tech data projectors were installed in more than 40 general assignment classrooms.
- Another projector was added to Roessler 66 to accommodate "clickers" (see story, Page 3).
- TV monitors in nine classrooms were replaced with new, high-quality media cabinets and data projectors.
- New sound systems were placed in six lecture halls: Haring 2205, Kleiber 3, Young 198, Hunt 100, Wellman 2, and Storer 1322.
- Three School of Veterinary Medicine classrooms were converted to general instruction: 1309 Surge III, and 1227 and 2016 Haring.
- Digital recorders to record lectures for podcasts are now installed in eight lecture halls: 1100 Social Sciences, 179 and 194 Chemistry, 198 Young, 3 Kleiber, 6 Olson, 100 Hunt, and 2201 Haring Hall (see podcast.ucdavis.edu for more information about podcasting).
- A new computer room opened in 2060 Sciences Lab Building, thanks to a joint effort by IET-Computer Lab Management and the College of Biological Sciences. It will offer open access when not used for classes.
- Six computer stations in Meyer Media Lab were upgraded to support high-definition video editing. Upgrades include dual monitor setup, special keyboards, and additional video editing software.
- More than 90 computers have been upgraded in 73 and 93 Hutchinson and 163 Shields Library
- The computer room at 163 Shields Library was completely renovated, including better lighting, new furniture, and handicap accessibility.
- Print queue kiosk displays were added to select computer rooms. The kiosk displays the most recently printed jobs to help clients locate their printed work and reduce congestion around the printers.

To track additional classroom technology updates throughout the year, read TechNews at technews.ucdavis.edu.

BANNER UPGRADE POSTPONED UNTIL VETERANS DAY WEEKEND

The upgrade of the Student Information System to Banner 7 has been rescheduled for Veterans Day weekend. The system will be down from 5 p.m. Nov. 9 through 8 a.m. Nov. 13, the least disruptive rollout time for the campus available.

Leon Washington, the assistant vice chancellor for Student Affairs, and Dave Shelby, the assistant vice provost for Information and Educational Technology, announced on Aug. 31 that the upgrade—originally scheduled for Labor Day weekend—was being postponed.

Safeguarding students' data remains a top campus priority. So when test results with the updated software revealed some persistent problems, Washington and Shelby felt it was best for the campus to delay the upgrade. The extra time will let the core offices and Banner team keep testing the system and ensure that the campus has the best product possible.

Washington and Shelby said they appreciate the efforts of Banner users, technical support staff, and many others who have worked to prepare the campus community for the upgrade. Updates will be posted on the Banner Web site, sis.ucdavis.edu/banner.

Photo by Sam Woo

Bernadette Swanson, instruction librarian in Shields, confers during SITT

TECH, TEACHING MINGLE AT JULY INSTITUTE

Faculty got in touch with their technological side this July at the 11th Summer Institute on Teaching and Technology. For a week, the campus forum reviewed new tech tools for the classroom and recent research on teaching and learning.

More than 100 faculty members attended as SITT 2006 focused on five main themes: SmartSite, the new campus course management system; multimedia in the classroom; writing as a teaching tool; collaborative group work; and developments in pedagogy.

As a main attraction, SmartSite received a lot of attention. Professors D. Kern Holoman and Don Meisenheimer from the campus SmartSite pilot program shared their experiences and the various projects they created with SmartSite. SITT also scheduled hands-on workshops and tutorials for instructors to try the new Web tools firsthand.

Other tech presentations covered wikis (communal Web sites), blogs, "clickers" ("personal response devices"), and podcasting.

The institute invited two winners of the UC Davis Academic Federation Award for Excellence in Teaching to speak. Susan Keen, lecturer of evolution and ecology, emphasized the value of student interaction to break the monotony of lectures and keep the class engaged. University Writing Program lecturer John Stenzel talked extensively about the importance of using writing to teach.

To read the daily recaps filed on the campus TechNews site from July 24 to July 28, visit technews.ucdavis.edu.

The Teaching Resources Center has posted resource materials from SITT and audio recordings of many SITT sessions at trc.ucdavis.edu/trc/sitt/SITT06/.

VIRUSES ON SCREEN, OVER CHEESE

This year's SITT, deviating slightly from its regular agenda of presentations and workshops, asked Davis instructors to submit their best visual presentations for display and review over late-afternoon snacks.

On day four of SITT 2006, several dozen people made their way from campus lecture halls and computer labs to International House. Between sips of Italian soda and bites of fine cheese, attendees admired and critiqued exhibits in the building's high-ceilinged gallery.

One of SITT's goals is to improve teaching through technology. The small competition at I-House sought to recognize beautiful and effective visual presentations, which can invigorate a long lecture or clarify a complex topic. By showing what instructors have created, SITT hoped to encourage creativity and inspire other faculty to explore the visual medium.

Submissions included sociology diagrams, photos of Italian dictators, comics of Spider-man, and watercolor daffodils. Undergraduates, the intended audience, chose the winners.

These are not your garden variety PowerPoint slides.

Beth Post, a psychology lecturer, won for her graphic representation of random sampling methods. Mikaela Huntzinger of the Teaching Resources Center earned honors for the student journals from her trip to Kenya. R. Holland Cheng, professor of molecular and cellular biology, won first place. He used 3-D modeling to depict microscopic viruses in startling detail.

A PowerPoint file of the images is available through "The Art of Teaching: Visuals from the Classroom" link at trc.ucdavis.edu/trc/sitt/SITT06/calendar06/.

Admin move to 'Xeda' begins to get results

An effort to improve electronic campus communications, launched in late 2004, started paying off this summer when the Office of Administration moved its user system accounts and email to a centralized system nicknamed "Xeda."

The change sounds highly technical, but it's practical. Paul Drobny, manager of systems technology for Student Affairs—some units in his department have also made the switch—has seen an immediate gain for his area. Based on early indications, he said, "the workgroup functionality of the Exchange service is a much-welcomed office productivity boost."

In 2004, wanting to improve online collaboration and communication among the various departments and divisions of UC Davis, the Office of Administration (OOA) and Information and Educational Technology (IET) began working to centralize their Active Directory and Exchange services (the formal name for Xeda) for the management of individual network access, email, calendars, and file-sharing.

The switch to Xeda is intended to make it easier for participants to share online scheduling calendars and set up meetings among participants; simplify the management of systems and resources; and cut overhead costs. Users also gain access to their email and other online information from anyplace with an Internet connection.

Many users had previously used other software programs to accomplish those tasks. Even departments that already used Active Directory and Exchange had managed them independently, creating a complex infrastructure that was difficult to maintain. Moving to Xeda means switching from multiple tools to one integrated system that offers new ways to work together.

> **"Making such a big change wasn't easy for an organization our size, but the challenge itself helped to increase dialogue and strengthen relationships"**

Departments in the Office of Administration finished moving over to Xeda this summer. IET has begun to convert. Other campus offices that have switched include the Office of Research, the Office of Resource Management and Planning, and some units of Student Affairs.

More than 1,400 people in the Office of Administration now use Xeda.

"Making such a big change wasn't easy for an organization our size, but the challenge itself helped to increase dialogue and strengthen relationships—both among our own departments and between OOA and IET," said Jeff Barrett, technology director in the Office of the Vice Chancellor for Administration.

"Having a shared calendaring system has been a huge benefit for our scheduling staff," he said, "and the common computing infrastructure provides an excellent foundation for our technical staff to collaborate on future solutions."

"Xeda" is taken from Active Directory and Exchange, read backwards. The "Xe" is from Exchange, the "da" from directory and active.

The new system has redundancy built throughout, according to Microsoft Corporation, which created the software, and uses pre-eminent technology and best practices for implementation.

The Active Directory and Exchange services are currently designed for staff and student-staff interactions only. With interest growing, IET can now offer the services to other departments that hope to share the benefits.

For more information, please contact Paul Singh, administrator of Xeda services, at pasingh@ucdavis.edu, or Patrick Kelly, at pjkelly@ucdavis.edu. On the Web, visit xeda.ucdavis.edu. ■

SmartSite continued from *Page 1*

Project selection group is using the system's collaboration tools to post materials, archive meeting minutes, comment on book nominations, and distribute announcements. The annual book project sprang out of the aftermath of the 9/11 terrorist attacks to promote dialogue and build community at Davis.

And Drs. Kathryn and Michael McCarthy, two campus researchers, have begun using SmartSite in their lab groups to organize and supplement their research project. They're developing a lab-safety training module and checklist to prepare new lab researchers. Participants in the project site are asked to load their lab meeting PowerPoint presentations into SmartSite.

This fall, the SmartSite team will monitor the newest releases of Sakai, the software package that powers SmartSite (known as CERE, or "Collaborative Educational Research Environment," in the UC Davis School of Veterinary Medicine). Improvements are expected for both the Gradebook and the Quiz & Test tools, neither of which function well enough yet to meet campus needs.

Patches are expected that will allow the management of large courses with multiple sections; the more automated transfer of information between SmartSite and MyUCDavis; and complete integration with major campus information systems.

The campus plans to retire the MyUCDavis course tools because they have become increasingly difficult to extend and scale. SmartSite is designed to be easy to adapt, use, and enlarge.

SmartSite enters fall ready to enlist more faculty, students, researchers, and staffers. The system offers two basic types of sites: class sites, to organize classes and offer students new ways to work together, and project sites, which can be used by individuals, clubs, researchers or research groups, and other campus organizations not directly connected to a campus class.

Users are encouraged to experiment with the SmartSite tools and think critically about how the tools might save them time or provide unique ways to collaborate. Apply at smartsite.ucdavis.edu.

The development of the new learning management system is a collaboration of Information and Educational Technology, Veterinary Medicine, and the UC Davis School of Medicine. Various technical support resources and training opportunities are available at smartsite.ucdavis.edu. Questions? Send them to smartsite-info@ucdavis.edu. ■

Panel picks InterWrite clickers for 2006-07

A campus group has recommended that instructors use InterWrite when ordering "clickers"—small, handheld devices that students can use to answer questions in class, or that vigilant instructors can use to see who's awake.

The group, which included faculty from the School of Veterinary Medicine and other departments, plus employees from Classroom Technology Services, chose the InterWrite devices by consensus this summer after reviewing five vendors.

The group liked InterWrite's simplicity, low cost, and 10 years of experience in the industry. The devices are also used at UCLA.

The decision is only a recommendation at UC Davis. Instructors can use other systems if they wish, although there are advantages to using one common system.

InterWrite clickers will cost UC Davis students $44.90, but they can recoup half of that amount by selling the unit back to the Campus Bookstore after they no longer need it. InterWrite of Londonderry, N.H., has partnerships with major textbook publishers, and will offer a $20 rebate per clicker when the device is bundled with a new book.

On campus, clickers have gone through a pilot program. Introductory physics classes already use the devices. But the campus didn't have a standard for clickers or a common supplier until this summer.

Using just one clicker in various classrooms and instructional venues across campus will benefit students, said Jan Dickens, director for IET-Classroom Technology Services. A standardized approach will give the units resale value and remove the need for students to buy more than one kind of clicker.

Clickers, also known as "personal response systems," resemble pocket calculators. Each has a two-line display and an array of buttons for multiple-choice and true/false answers. The InterWrite system uses radio-frequency signals and can accommodate up to 2,000 students per central receiver.

Clickers provide a fast intermediary between students and teachers in large classrooms. For students in the back, shy and full of answers; for students in the middle, surrounded and drowned out; for students in the front, ignorant but conspicuous, clickers remove some barriers to classroom participation. For timid students, the discreet response eases the anxiety of answering wrong in public. That encourages participation.

Instructors, to gauge how well their lectures are going, can flash a key question on screen and then use the answers to determine what topics need more lecture time or clarification.

The company led a general training session on campus Sept. 22. The Teaching Resources Center is expected to help discuss the best ways to teach with them.

To order a system for a course, instructors need to tell the Campus Bookstore how many students they expect to enroll in that class. Students can buy clickers at the bookstore; InterWrite will send the instructor a central receiver that connects to a laptop.

For more about clickers, go to cts.ucdavis.edu/prs/. Please direct ordering questions to textbooks@ucdavis.edu. ■