Bridging California's Education Gap

Susan Cort Johnson

Technology is proving to be a great equalizer when it comes to access to higher education at the 107 community colleges throughout California. Suddenly, barriers such as geography and transportation are crumbling. "We look to technology, and in particular videoconferencing, to help us bring together the diverse population of faculty and administrators, as well as students, across the system," said Jose Michel, coordinator of distance education for the California Community Colleges Chancellor's Technology Communications Office in Sacramento.

For the past two years, the community college system has been working to provide every college and district office with the necessary infrastructure for teleconferencing connections. Funding for the project was allocated by the state Legislature in the 1996-97 fiscal year budget. However, many colleges had already taken steps in this direction.

Mendocino College in Ukiah was one of the first institutions to use videoconferencing equipment to present regular curriculum and has been using the technology for about five years. The college has made it possible for students throughout the 4,000 square-mile district to take classes, even though the topography often prohibits commuting.

Videoconferencing units were established on the main campus and at remote centers in Willits and Lakeport. "This allowed students to take classes that would not otherwise be offered in those locations. There weren't sufficient students to justify

@ONE Technology Training Available
Using E-mail to Support Instruction

Catherine Ayers
@ONE Project Consultant

California Community Colleges now can integrate a quality @ONE training course into flex day schedules or ongoing campus technology training at no cost.

The @ONE project is a faculty driven community college consortium funded by the Chancellor's Office to provide a statewide technology training infrastructure. One of its main strategies is to develop training that can be delivered live at the campuses by existing training units.

The first training package, "Using E-mail to Support Instruction," is focused on how to integrate e-mail into classes to support instructional goals and benefit students. In this hands-on training, faculty will learn:

• what to do ahead of time to prepare for using e-mail with students

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@ONE Technical Training

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• student activities and assignments that ensure quality time on task

• methods of organization and time management

• effective techniques for group communication

• methods to encourage student collaboration

• instructional design guidelines and lesson crafting

This training was developed by faculty for faculty. The development team brought a wealth of practical experience to the table, as well as a history of working with faculty regarding applications of technology to instruction. The content experts were: Susan Adrian, English faculty, Mission College, Santa Clara; Lucy MacDonald, Developmental Studies faculty, Chemeketa Community College, Salem, Oregon; Dan Mitchell, Music faculty, De Anza College, Cupertino. The instructional designer and developer, Sandi Watkins, is now heading Foothill College's Computers on the Internet program.

@ONE provides training materials that can be reproduced for use with college faculty and staff without charge during 1998-99, including:

• trainers guide: hard copy and document file on disk

• formatted participant materials: hard copy and document file to customize

• evaluation tools: hard copy and online participant evaluation; @ONE conducts longitudinal follow-up evaluation.

The only requirement for colleges is a commitment to provide specific evaluation data to @ONE so that training products can be continuously improved and grant criteria can be met. @ONE can provide train-the-trainer consultation for an hourly fee, plus travel expenses.

Visit the @ONE web site (*http://one.fhda.edu*) for more information or to view online course materials.

@ONE BACKGROUND

The @ONE project was funded by the California Community Colleges Chancellor's Office to build a statewide training infrastructure with an electronic learning community as an integral support and connection for faculty throughout the state.

The @ONE project is a faculty driven community college consortium that is dedicated to providing resources to community college faculty and staff to support learning and students in the 21st century. The @ONE project team, comprised of one faculty member from each of ten community colleges (De Anza, Butte, Fresno, Las Positas, Los Angeles Trade-Tech, Marin, San Diego Miramar, Santa Ana, Santa Barbara, and Santa Monica) has given direction to and staffed the project work teams. An advisory committee, comprised of industry and education representatives, gives policy direction to the project and voice to relevant constituencies.

The fiscal agent for the project is De Anza College in Cupertino, California. Funding for @ONE is from the California Community Colleges Chancellor's Office Telecommunication and Technology Infrastructure Program (TTIP).

N O T I C E
Update your bookmarks for the @ONE web site
http://one.fhda.edu

California Virtual University Delegation Visits Asia

Rich Halberg
California Virtual University Design Team

Leaders of higher education in California and an official from Governor Pete Wilson's office recently visited Japan and China to promote collaboration between California universities and their Asian counterpart institutions.

"California is America's number one destination for international students," said Dr. Stanley Chodorow, Chief Executive Officer of the California Virtual University. "The development of the Internet provides new opportunities for faculty throughout the Pacific Rim to cooperate in educating students of every nation. Our goal is to lay the groundwork for close collaboration."

The eight-member California delegation had meetings with Japan's Ministry of International Trade and Investment (MITI), the National Institute of Multimedia Education, the University of Tokyo, Waseda University and government and education officials in Kyoto, Osaka, and Shizuoka to discuss such issues as development of interoperable course catalogs and joint research and development in new forms of distance education.

In addition to Dr. Chodorow, the CVU delegation included: Dr. Carol Tomlinson-Keasey, Chairman of the CVU Board of Directors and Vice Provost for Academic Initiatives, University of California; Dr. Jonathan A. Brown, President, Association of Independent California Colleges and Universities; Mr. Gene L. Dinielli, Chair, Academic Senate of the California State University; Dr. Andy Imada, Association Professor and International Liaison, Center for Scholarly Technology; Ms. Kim Jones, Vice President, Academic and Research Computing, Sun Microsystems; Ms. Marie Schmitt, Director, Oracle Academic Initiative, Oracle Corporation; and Joseph Rodota, Deputy Chief of Staff to the Governor.

Three members of the California delegation attended the Sixth International Conference on Computers in Education in Beijing, China, to present the vision and report on the progress of the California Virtual University.

The California Virtual University (CVU), a joint project of the University of California, the California State University, the California Community Colleges, and the Association of Independent California Colleges and Universities, ties together into a single Internet-based catalog the online and technology-mediated course offerings of California's accredited colleges and universities. The CVU extends access to the state's higher education system to people who are unable to take advantage of traditional on-campus instruction.

The California Virtual University Web site can be found on the Internet at *www.california.edu.* Currently, 95 California campuses link more than 1,700 courses and over 100 complete programs, from certificates through Ph.D, to the catalog.

TIPS on *Videoconferencing*

Anatomy of a Multimedia Classroom

Scott Roberts
Broadcast Communications Specialist, Butte College

Butte College has nearly completed installation of the District;s first videoconference classroom for distance learning. Located in the Butte College Library, it features a normal classroom for approximately 40 students, combined with a full feature broadcast studio.

Two remote controlled Parker Vision video cameras are located on the rear wall behind the student seating. These are used to silently follow the speaker as they move about the students, and are unobtrusive to the normal classroom experience.

Audio from the classroom is picked up by eight ceiling-mounted AKG C562CM button microphones, controlled by a Shure SCM810 automatic microphone mixer.

A specially equipped instructor's station has been set up at the front of the room. The station includes a desk with an Elmo document camera, telephone, fully networked computer (with wireless infrared keyboard), and desktop volume controls for local room audio from a wall mounted VCR and computer sound card. Sound comes through four ceiling-mounted speakers. All audio and video that can be displayed or heard in the classroom can also be simultaneously sent out via television or videoconference.

There is a ceiling-mounted InFocus RGB video projector that can display the Elmo, VCR, or the local computer screen in 800x600 mode. There are also four additional 27" wall-mounted monitors around the room for local class video display.

One important design aspect of this studio is the ability to control much of the room's equipment from a remote room. A student technician is deployed in the television master control room to operate the cameras and to watch audio and video levels for recording or live broadcast. If the room is not used for recording but simply as a lecture facility, technician intervention is not required. The instructor or speaker can use the room as a stand-alone audio-visual multimedia resource, with complete access to the Elmo, overhead RGB projector, computer, or VCR.

For videoconference applications, there is a PictureTel Venue2000 system in the front corner of the room. The PictureTel operates at 384K with 30 frames per second, and can accept all video sources within the classroom.

Another location for videoconferencing at Butte College is in the Administration Annex conference room (see Figure 2). This smaller room is for more traditional meeting needs. Built into cabinets at one end of the room is a PictureTel Venue2000, operating at 384K via ISDN. The local camera is remote controlled with the wireless keypad, and audio pickup is achieved with the PictureTel desktop microphone. There is also a VCR located within the cabinet.

> *"All audio and video that can be displayed or heard in the classroom can be simultaneously sent out via television or videoconference."*

N E X T   M O N T H
"Effective Meetings Using Videoconferencing"

VCR

Remote Keyboard

Document Camera

Telephone

Screen

Video Projector (Ceiling Mounted)

Graphics Monitor

Monitor & Camera

Speakers (Ceiling Mounted)

Acessory Camera

Multimedia Classroom

Document Camera

Monitor

Microphone

Telephone

Monitor & Camera

Control Keyboard

Whiteboard
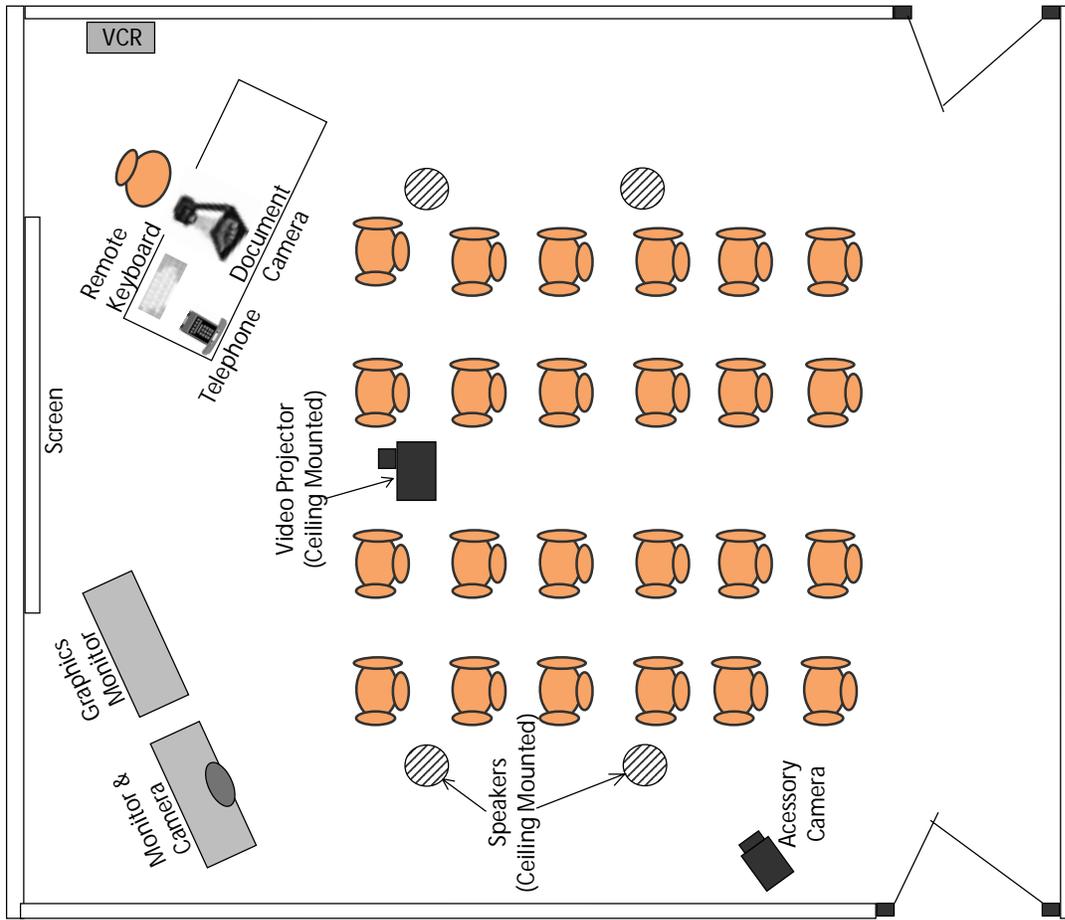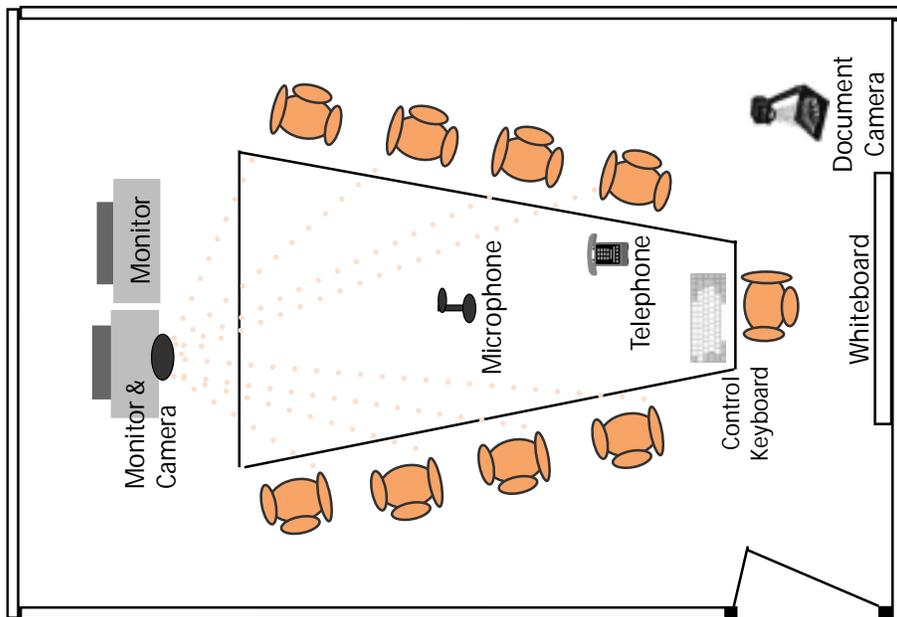
Administration Videoconference Meeting Room

Bridging the Gap

the cost," explained Philip Hartley, dean of instruction at Mendocino College.

Coastline Community College in Orange County was established in 1981 as a distance-learning college. Rather than adding new buildings to existing campuses to accommodate additional students, the district decided to use technology to deliver education off campus. One of its first projects was in partnership with California State University, Dominguez Hills. To help county residents obtain a four-year degree without driving 60 miles round trip, Coastline used videoconferencing to provide access to upper-division courses at the university while students were taking the lower-division courses at the community college.

"A significant amount of what we do is distance learning. We have about 16,000 students a year that go through our distance learning programs," said Ted Boehler, dean of instruction for distance learning at Coastline. The college also has a large contract with the U.S. Navy providing distance learning annually for about 4,000 sailors around the world.

NOT JUST ACADEMICS

Videoconferencing at West Valley College in Saratoga has provided enrichment activities for classes. "We have had multi-point conferences that involved a moderator and some panelists for students here in Saratoga. We were connected with student actors in Los Angeles and a Shakespearean stage director in Cornwall, England," said David Fishbaugh, dean of learning resources at West Valley (see TIPS, April

1998). The college has also used videoconferencing to host seminars. One program on breast health connected experts in the field of women's medicine with interested participants from Seattle to San Diego. Participants were not only able to listen to the experts but had interactive conversations with them as well. Administrators have also begun to use videoconferencing to participate in meetings rather than travel great distances or brave traffic jams to meet at one site.

A GOOD SOLUTION

Distance learning seems to be well-suited for the community college student. Many have jobs or a career and are trying to upgrade their skills or obtain an AA degree. Often these professionals need to polish their writing or management skills, so they enroll in a class. Personal responsibilities, commute difficulties, time and money plague these students.

Videoconferencing solves these problems. "We have technology that supports us in a much better fashion than we have ever had in the past. Videoconferencing in conjunction with a web site that provides wraparound support for students is a wonderful idea. The ability to use e-mail and functions we have never had before provide us with a real solution to educational needs," said Boehler, of Coastline College.

Problems such as ensuring the integrity of a test, are also being solved. Many instructors give open book quizzes and use proctors during exams. Training instructors in the use of the equipment has not been that

daunting either. It takes about 15 minutes, according to Hartley.

Stylistic issues, like teaching to a camera to a remote audience, are picked up readily by instructors who are already skilled communicators. If other media sources are added such as computers, auxiliary film sources or VCRs, a student from a television and film production class assists the instructors.

Currently, the Chancellor's Office is producing a training module that will be ready in spring 1999. A few remote areas of the state, such as Lassen College in Susanville, don't have ISDN service and are therefore unable to take part in the videoconferencing technology sweeping the community college system. "We're at the tail end of them (telecommunications companies) building a highway. We're right on their heels and will be connected as soon as they find solutions for us," said Michel.

Hartley added, "The information highway, and the technology to support these kinds of technologies, is very much an urban phenomenon. Some of the sites we would like to serve have no ISDN lines and there are no plans to provide that service."

For more information on videoconferencing resources within the California Community College system, contact Maureen Sullivan, account coordinator, O'Keeffe & Company, Two Bala Plaza, Ste. 300, BalaCynwyd, PA 19004, call 610-660-7798 or send e-mail to *sullivanm@okeeffeco.com.*

How Do You Start Training Staff To Use Videoconferencing?

Mary Schrader Lasica
Education Advocate, Pacific Bell

Videoconferencing is now available at almost every community college in the state of California. This valuable resource can:

- allow your students access to instructors and specialists in many locations
- offer your staff opportunities for training not available at all campuses
- give staff the ability to attend meetings and cut traveling time and expense

If you would like your campus staff to receive a free four-hour session on the "Fundamentals of Videoconferencing," Pacific Bell has a team of Education Advocates located throughout the state that can help. Call now to schedule a session for January 1999

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COMMON QUESTIONS

The first step to using videoconferencing is to learn the basics of the technology. Below are some common questions regarding videoconferencing, along with a resource to assist in answering those questions.

How does videoconferencing work?
http://www.kn.pacbell.com/wired/vidconf/description.html#what

How do you place a call?
Contact your campus videoconference support staff. Different campuses may follow different procedures.

How do you receive a call?
Most videoconferencing systems are left on throughout the day, and are configured to answer a call automatically. Contact your campus videoconference support staff to see if your system is configured in this manner.

Can I connect to more than one location?
http://www.kn.pacbell.com/wired/vidconf/multipoint.html#what

What are some of the features of the system I should know about?
http://www.kn.pacbell.com/wired/vidconf/equipment.html

How do I find other people with videoconferencing?
http://www.kn.pacbell.com/wired/vidconf/directory.html

http://www.ccco.edu/esed

How could I use this for Distance Learning?
http://www.kn.pacbell.com/wired/vidconf/classroom.html

How would I use this for meetings?
The next issue of TIPS will feature an article titled, "Effective Meetings Using Videoconferencing."

New Chief Deputy Chancellor for California Community Colleges

Kyle Orr
College Relations, CCCCO

Glee Johnson has been named as the new Chief Deputy Chancellor for the California Community Colleges system. Johnson, a former undersecretary for the Governor's Office of Child Development and Education, began her service at the state Chancellor's Office during the week of November 9.

Among Johnson's duties at the office that oversees the 106 colleges in the system are internal office management, responsibility for supervising strategic initiatives, and assisting Chancellor Thomas J. Nussbaum in collaborating with control agencies and other constituencies.

"Glee's extensive knowledge of education and her vast experience in state government fills a valuable need that will bolster our system office and benefit our colleges," said Chancellor Nussbaum.

In October 1996, Johnson was appointed undersecretary for the Governor's Office of Child Development and Education, with responsibility for policy development, enactment, and implementation of education initiatives sponsored by the Governor. Her duties also included analysis and advice to the Governor and his staff regarding education initiatives proposed by others.

She previously served the Administration as chief deputy legislative secretary and as deputy legislative secretary from 1992 to 1996, providing analysis and advice to the Governor regarding education policies proposed by agencies within the Administrative and Legislative branches of government. Johnson's professional experience also includes serving as assistant program budget manager for the Department of Finance from 1991 to 1992, supervising staff in the development, enactment and administration of budgets.

Johnson earned bachelor's degrees in mathematics and psychology from Purdue University in 1969 and a master's degree in business administration from California State University, Sacramento in 1979. She and her husband, Greg Geeting, and their children Travis (12) and Meredith (10) live in Sacramento.