# TIPS

Technology in Education

Telecommunications Infrastructure Project Statewide

Volume 2

Issue 5

video.4c.net/TIPS

May 1998

## **@ONE: Supporting the Integration of Technology In Instruction**

Ann Koda
@ONE Project Director
Catherine Ayers
@ONE Project Consultant

he California Community Colleges (CCC) are taking on the challenge of effectively integrating technology into instruction and services, and striving toward the goals of increased student access and improved student outcomes.

In order to leverage technology to reach these goals, the Center for California Community Colleges at Outcomes Network for Educators (@ONE) project has been funded by the California Community Colleges Chancellor's Office to assess faculty training needs, build a statewide training infrastructure with an electronic learning community as an integral support and connection for faculty throughout the state, and identify institutional impediments that need to be addressed.

A needs assessment has been completed and the data is being analyzed to develop plans for live regional training and distance delivery. The needs assesment process entailed three steps: working with virtual focus groups, interviews at institutions known for effective practices, and a statewide survey

of faculty. The resulting training program will be built around existing resources. It will be characterized by a focus on instructional pedagogy and follow-up support.

Training will also be cosponsored with other organizations, the first of which are the CCC Academic Senate (see "1998 Technology Training In-

(continued on back page)

## Cooperative Purchase Decision for PC's

Larry Toy
Director of System Advancement and Resource Development, CCCCO

he California Community Colleges Chancellor's Office is very pleased to announce that the cooperative purchase for desktop and laptop computers was approved on April 22, 1998. The vendor selected was IBM, and Vanstar will act as their third party representative. Information on prices, specifications, etc., are available online at <a href="http://www.vanstargov.com/ca">http://www.vanstargov.com/ca</a>.

Colleges may order any number of computers, monitors, and peripheral equipment. All computers and laptop computers will be assembled and tested by Vanstar prior to shipment. Vanstar may choose the best combinations of processor, hard drive, memory, and components to meet the requirements of the colleges while building under IBM directions

(continued on page7)

## · In This Issue ·

- CCCCO Wins Award......2
  - -"Organizational Excellence"
- NETg Training Update.....2
  - -license period extended. sign up now!
- Using Compressed Video for Learning.....3
- -instructional strategies, planning, and guidelines (Part Two of Two)
- Education First Advocates.....4
  - -customized staff development -Advocate profiles
- 1998 Technology Training Institute.....5
  - -variety of hands-on training
- Videoconferencing Training..7
   -northern California libraries





#### California Community Colleges Telecommunications Infrastructure Project Statewide (TIPS)

Editor, Layout, Design, and Webmaster: Chris Palmarini 530-895-2988 PalmariniCh@butte.cc.ca.us

Subscriptions: Bonnie Roberts 530-895-2341 RobertsBo@butte.cc.ca.us

Technical Support: Scott Roberts
530-895-2362
RobertsSc@butte.cc.ca.us

Project Coordinator: Robert Ellsworth 530-895-2344 EllsworthRo@butte.cc.ca.us

Project Administrator: **Dr. Fred Sherman 530-895-2433** 

ShermanFr@butte.cc.ca.us

CCCCO Coordinator: Charles Mawson

916-327-5902

cmawson@cc1.cccco.edu

- TIPS is a monthly publication sponsored by the California Community College system and is dedicated to sharing information related to state-funded projects, statewide meetings, educational innovation, individual recognition, and future opportunities for applying technology in education. TIPS is distributed statewide to all community colleges, the State of California Legislature, and to other interested groups and individuals.
- TIPS is produced at the Butte-Glenn Community College District Offices located in Oroville, California under a grant funded by the California Community Colleges.

#### Address all inquiries to:

Chris Palmarini
TIPS Editor
Butte-Glenn Community College District
3536 Butte Campus Drive
Oroville, Ca 95965
ph: 530-895-2988 e-mail: video@4c.net

- •Articles for publications must be submitted by the 15th of each month. Distribution and mailing is on the 25th of each month. *TIPS* reserves the right to make minor changes in any material submitted for publication as required to meet copy requirements. To be placed on the mailing list, call 530-895-2341 or send e-mail to: video@4c.net.
- •Articles appearing in this newsletter plus other relevant news may also be accessed on the World Wide Web at:

<http://video.4c.net/TIPS>.

## Chancellor's Office Receives USDLA Award

The California Community Colleges Chancellor's Office (CCCCO) recently received the United States Distance Learning Association's (USDLA) award for Organizational Excellence for work on the Telecommunications Technology Infrastructure Program.

According to the USDLA:

The purpose of this award is to recognize an organization or institution that has used distance learning to greatly improve the quality of its educational environment. The recipient must demonstrate evidence of organizational leadership in the introduction and acceptance of distance learning, as well as a planned, structured program for the use of distance learning within the organization. The recipient must demonstrate success in changing the organization.

Recipients were honored at the Seventh Annual TelCon East/IDLCON Awards Dinner on April 16, 1998, in Washington, D.C.

## **NETg Training**

The California Community Colleges Chancellor's Office (CCCCO) has selected NETg to provide computer-based training software for staff development (see *TIPS* March 1998, page 3). Most colleges are in the process of purchasing a site license for this software.

NETg has agreed to extend the first license period to May 31, 1999. Anyone signing up before the end of May will have more than one year to use the license; those signing up after May 31, 1998, will only have use until May 31, 1999.

To help install and implement the training, the CCCCO held four regional workshops in May at several colleges. Assistance was provided by the @ONE project at DeAnza College through Ann Koda.

Two concurrent tracks were available at each session. One track was for staff development officers and covered how to use and manage the SkillBuilder Courseware. The second session was for technical support staff and covered installation and management of the software on workstations and networks.

### REMINDERS:

## Ordering Additional PictureTel Systems

•The special pricing of \$24,500 for the PictureTel Venue 2000 system is good only through June 30, 1998. The systems can be ordered from Robert Stevens of PacBell Network Integration at 916/684-6007.

### Video Maintenance Agreement

• Don't forget to budget for the second year of PacBell maintenance on your PictureTel systems. Only one year was covered in the original purchase. The cost is approximately \$2,200.

## **Using Compressed Video for Distance Learning**

Jodi Reed, M.A.
Pacific Bell Education First Fellow
Merry Woodruff, M.A.
Consultant

(Part One included an introduction to using videoconferencing, advantages of the medium, working with technological constraints, and working with human factors)

#### **Instructional Strategies**

#### **Set Expectations**

A simple way to challenge the television preconception issue is to communicate expectations to the learner prior to instruction. A simple letter or a few comments at the beginning of a lesson can go a long way toward helping learners understand differences between broadcast television and two-way compressed video. Consider explaining the difference in audio/visual quality along with a few suggestions to optimize that quality. One might, for example, encourage learners to keep background noise and motion to a minimum and explain ways to deal with the audio delay. A teacher should also prepare learners for an active experience. Assign a pre-session activity or begin the lesson with a discussion. Actively involve learners early and often, using small group or hands-on activity, reading, writing, discussion, and questions to get them out of the passive "viewing" mode.

#### **Engage Students with Variety and Interaction**

Incorporate variety into instruction to keep interest and motivation high. Use relevant visuals or sounds to illustrate points, and, if possible, bring in a guest speaker to share a different perspective, answer questions, or provide real-world feedback on student projects. Even with thrilling visuals and instructors, nobody wants to watch a talking head for hours, so make sure learners have an opportunity to focus attention away from the screen. Assign small group activities with a task that can be discussed later. Tag a break onto an activity to give students a chance to stretch and talk. Highly motivated learners in a tightly focused lesson can tolerate lengthy lectures, but as a rule of thumb, don't lecture for more than 15 minutes at one time. Instead, alternate lectures with activities or discussions.

#### **Reduce Distractions**

Since variety is so engaging, reduce the potential dis-

Part Two of Two

(Reprinted with permission from Magma Publications and Distance Education Report. Call 1-800-433-0499 for more information)

traction of the screen by posting a still image or slate during a class activity. Don't be afraid to use silence. Though we expect a "busy" screen, music or chatter can distract students from learning.

#### **Encourage Dialog**

Asking a question can be daunting for students, especially if it means they must get the attention of a remote teacher and talk to a TV screen. Teachers can help by noting the body language of remote students and taking the time to guery when students seem puzzled or disinterested. Eye contact and use of names both help make students feel more comfortable. These people skills are obvious and natural in a "live" classroom, but may seem awkward in a distance learning situation. "Eye contact" means looking at the camera and the monitor rather than local students, and teachers might have to make a special effort to attend to remote learners. To help out introverted students, consider alternative modes for questions and comments. Make a fax machine available or solicit e-mail for questions and comments. Consider holding videoconference office hours or paying a visit to the remote site. Use resources creatively to establish rapport and help all learners participate.

#### **Planning a Lesson**

When creating a lesson for two-way video, it's important to plan with the above strategies in mind. Consider

LEARNER OUTCOMES	METHODS AND ACTIVITIES	Materials	Тіме	EQUIPMENT CUES	Notes
What do you expect your learners to accom- plish?	How will you convey the topic (lecture, discussion, hands-on activity)?	What audio/ visual aids, handouts, etc. will you use to support your instruction?	About how much time will it take?	Do you need to show an instructional "slate" with the document camera or play an audio clip?	Do you need to prepare a visual or get handouts to remote learners?

using a lesson plan matrix that includes:

After you've completed your lesson plan, review it with the following questions in mind:

•How much total time is spent in lecture? (keep it less than 50% -- 30% is better)

(continued on page 6)

## **Customized Staff Development: Coming to a Campus Near You**

Jackie Siminitus
Stakeholder Relations and Communications, Pacific Bell Education First

In February 1994, Pacific Bell quietly announced its \$100 million Education First Initiative for California schools, libraries, and community colleges. While the bulk of the Pacific Bell Education First commitment went to providing up to five high-speed digital lines per school, library, and community college for free for a year for Internet access and/or interactive videoconferencing, the initiative also provided staff development and more. (see "Pacific Bell Education First Into the Future," <a href="http://www.kn.pacbell.com/edfirst/edfirstfuture.html">http://www.kn.pacbell.com/edfirstfuture.html</a>).

Each of Pacific Bell's four Education First Advocates (see "Education First Advocate Profiles" below), high-energy teachers recruited by Pacific Bell to give customized workshops, have favorite or popular programs within his or her geographic region.

For example, Beth Bustamante is bilingual, and word has spread in the Los Angeles area about her Spanish resources workshops. Beth often brings in San Diego State University Education First Fellow Linda Woods Hyman via interactive videoconferencing because Linda is also bilingual and has developed a popular web site,

"Algunas Lugares en Espanol" (http:// www.kn.pacbell.com/wired/Algunas/ algunas.html).

Tom Holland has worked with the San Diego Zoo's education outreach team using interactive videoconferencing so animal experts can reach out to students in classrooms.

Mary Lasica and all the Advocates give videoconferencing workshops, often connecting with San Diego State University Education First Fellow Jodi Reed, who specializes in community college educational technology tools and applications, especially interactive videoconferencing for distance learning.

All Education First Advocates enjoy working with a lead educator, librarian, distance education coordinator, or other representative from a school to plan and co-host a workshop that will be most meaningful.

## "EDUCATION FIRST" ADVOCATE PROFILES

#### Mary Schrader Lasica

Mary Schrader Lasica is a classroom teacher with ten years experience teaching in Sacramento area schools. Six years ago, she was exposed to the Internet during her graduate studies, and has been wired ever since. For the past five years, Mary has been working with educators around the state developing and demonstrating effective uses of technology in education.

Lately, the focus of these technologies has been use of web-based resources and communication tools on the Internet and videoconferencing for learning.

Some of Mary's most popular workshops:

- Educational Resources on the World Wide Web
- Creating Web-based Activities with Filamentality
- What Does It Mean to Be Digital?

#### Linda Uhrenholt

Linda Uhrenholt taught in the Livermore Valley Joint Unified School District for 20 years before joining the Pacific Bell Education First team. Her teaching assignments have included Science, English, and Physical Education. Linda is a graduate of Ohio State University in Columbus, Ohio. She also holds an administrative credential from California State University at Hayward.

Serving as a California Mentor Teacher for five years, she developed an expertise in staff development, specifically in the integration of technology into the curriculum. She was the first educator in her district to use the Internet in the classroom. As an Education Advocate, Linda presents at all types of educational conferences including the 1998 "National Library and Computer," the 1997 "National League of High Schools," and "California Computer Using Educators."

Some of Linda's most popular (and unusual) workshops include:
• Math, Baseball and the San

Francisco Giants

(continued on page 5)

## 1998 Technology Training Institute

The Academic Senate for California Community Colleges and @ONE Consortium for Technology Training are pleased to sponsor the 1998 Technology Training Institute at CSU Monterey Bay in Monterey, California on June 15-19, 1998. The goal of the Institute is to provide faculty with an opportunity to learn technology skills from peers.

**Description:** The Technology Institute will provide hands-on technology training opportunities for faculty. Participants can spend either three days or five days learning to use hardware and software for developing instructional materials. Training in web page development, image processing (e.g., digital cameras, scanners), and course authoring tools will be offered. There is something for every level from beginner to advanced!

**Participants:** The Institute will be limited to 75 participants.

**Location:** The Institute will be held at CSU Monterey Bay in Monterey, California. The registration fee covers technology usage, dormitory room, and three meals per day. Transportation is not included.

#### **Costs:**

Five day registration: Single: \$600/Double: \$500 Three day registration: Single: \$360/Double: \$300

Registration only: \$290

**Contact:** For further information, please contact the Academic Senate

Office at (916) 445-4753 or e-mail to asccc@ix.netcom.com

## Listserv for Videoconferencing in Education

The *ed1vidconf* mailing list is set up to help educators and librarians use ISDN videoconferencing for learning.

This is an appropriate list for seeking subject-area experts or classroom collaborations, for posting questions, and for sharing successes or lessons learned.

There are also archives available for browsing past messages.

To subscribe to the mailing list, go to:

http://www.kn.pacbell.com/ wired/vidconf/ed1vidconf.html

#### (continued from page 4)

- Keeping Kids Safe in the Age of Technology
- CyberSleuthing
- Videoconferencing Fundamentals
- •Instant Websites -- Just a Spin Away

#### Tom Holland

Tom taught in the Poway Unified School District for 21 years before joining the Education First Team in 1996. During his tenure in Poway, he developed and taught several programs in the Industrial Arts Department. Tom was one the co-creators of the R.E.A.L.World program, an interdisciplinary English, science, and technology program for students atrisk of performing below their poten-

tial. In this successful program students worked collaboratively and used technological tools to solve realworld problems.

As an Education Advocate, Tom presents at educational conferences and conducts staff development workshops for educators.

Some of Tom's most popular workshops:

- · Videoconferencing Fundamentals
- WWW Resources for Educators
- Searching Not Lurching

#### Beth Bustamante

Beth Bustamante is a third-grade, bilingual Spanish teacher on leave from the Montebello Unified School District. She has a Multiple Subjects teaching credential and an M.A. in Computer Education.

She is also a Los Angeles County Office of Education (LACOE) Technology Teacher Leader.

Some of Beth's most popular workshops:

- •Hot Internet Sites, !En Español!
- •Internet Jump-Start
- Videoconferencing and Collabora tive Learning
- Creating Web-based Activities with Filamentality

Further details on Pacific Bell's Education First Advocates can be found at: http://www.kn.pacbell.com/edfirst/ advocates.html

#### Compressed

#### (continued from page 3)

- •How much time is spent lecturing at any given time? (Keep it less than 20 minutes.)
- •Are breaks included?
- Can a remote facilitator or guest lecturer facilitate some of the lesson?
- •Is rapport established with remote learners?
- •Do learners know what to expect?
- •Can any of the lesson be done prior to the video connection (via print, e-mail, World Wide Web, or with the remote facilitator)?
- •What support is needed to make the lesson a success?
- •Is evaluation time included?

#### **Guidelines for Audio/Visual Aides**

As in any instructional setting, effective use of audiovisual aids can greatly enhance distance learning. You can use images, objects, and audio or video clips much as you would in a normal class with a few caveats to guide you:

Pay attention to the screen's aspect ratio. A TV monitor has a different shape than 8.5 X 11 paper or overhead transparencies, so make sure printed visuals fit within a 3 X 4 ratio.

Use large, bold text for instructional "slates." Remote viewers will thank you if they don't have to squint to see text. They'll also appreciate simple fonts and concise, bulleted information.

Use colors in the middle of the color spectrum. Next time the television news is on, pay attention to the colors chosen for graphics. You won't see a lot of black on white, because it just doesn't look good on a screen. Yellow on blue is common, however, because it presents a clear, readable image. For most people, color printing is not feasible, so black print on pastel paper should be adequate. For on-the-fly writing, use a bold color ink pen on pastel paper.

Use video carefully. Many videoconferencing systems allow transmission of video from an auxiliary source such as a VCR or camcorder, but transmitted video is likely to appear jerky or fuzzy to remote viewers. In general, it's best to keep video segments brief. To show a lengthy segment, send a videotape to the remote facilitator.

Obtain written authorization before you use copyrighted materials. Use of copyrighted material in a distance learning situation requires permission, so obtain clearance before broadcasting audio-visuals.

#### **Evaluation**

When the lesson is over, review it to help make future

telelearning more effective. Consider videotaping the session and viewing it later, or jot down some notes when the session is completed. Here are some questions to ask yourself, learners, and support staff:

- •What were the intended outcomes of the lesson? Were they achieved?
- •Were expectations clear prior to the lesson?
- •Was the lesson technically effective? What did you like/dislike about using the technology?
- •What would have improved the lesson?
- •What should be done differently next time?
- •How did the experience compare to a more typical classroom experience?

#### **Conclusion**

There is no doubt that two-way compressed video can provide exciting and valuable experiences for learners. By allowing access to and interaction with resources that might have otherwise been too inconvenient or expensive, two-way compressed video opens a world of new opportunities. Instructors may need to plan and prepare more than usual to take advantage of this medium, but strategies that work best with this medium are likely to improve motivation and learning, and the payoff should be more than enough to compensate for the extra effort necessary for an effective telelearning experience.

#### **REFERENCES:**

Acker, S.R. & McCain, T.A. (1993)" Two-way videoconferencing for K-12 populations: A research synthesis and action agenda." <u>International Teleconferencing Association Yearbook</u>, pp. 47-54.

Strom, J.L. (December 1994)" Bringing People Together: Distance Learning Now." <u>School and College</u>, pp. 11-14.

Ostendorf, V.A. (1989) <u>Teaching Through Interactive Television: a practical introduction to business television and distance education</u>. Virginia A. Ostendorf, Inc. Littleton, CO.

Ostendorf, V.A. (1994) <u>The Two-Way Video Classroom</u>. Virginia A. Ostendorf, Inc. Littleton, CO.

## TIPS Online

All issues of TIPS News are published electronically on the TIPS Online website at <a href="http://video.4c.net/TIPS">http://video.4c.net/TIPS</a>

You can find all past articles, late-breaking news from the Chancellor's Office, and a growing list of resources on education, distance learning, videoconferencing, technology, and more!

http://video.4c.net/TIPS

## Videoconferencing Training in Northern California

Mary Shrader Lasica Education Advocate, Pacific Bell Education First

arch 27 was the kickoff for training for the NorCal Video Link, a consortium comprised of 11 library sites from the Mountain Valley Library System and the North State Cooperative Library System. Libraries are located in Yreka (Siskiyou), Willows (Glenn), Quincy (Plumas), Redding (Shasta), Auburn (Placer), Placerville (El Dorado), Nevada City (Nevada), Yuba City (Sutter), West Sacramento (Yolo), Chico (Butte), and Sacramento (Sacramento).

Participants from the southern half of the consortium gathered at The Sacramento Public Library, Main Branch for a three-hour session introducing both technical and communication aspects of videoconferencing. Participants learned basic operation of a PictureTel Live 200 desktop videoconference system by placing calls to a like system in either Sacramento or Fairfield. Tools such a whiteboard and file transfer were explored.

The second half of the session looked at effective uses of the technology, focusing on the writings of the Pacific Bell Education First Fellows at San Deigo State University. This information, found on Pacific Bell's Knowledge Network Explorer (http://www.kn.pacbell.com/vidconf), outlines ways to communicate most effectively in both point-to-point and multi-point videoconferences.

Training for the northern sector of the consortium took place on

Wednesday, April 22 at Shasta College in Redding with approximately 15 participants attending; this session duplicated the Sacramento training. The final training session will link the north and south to discuss how this technology can be introduced and integrated into each community.

The consortium is a recipient of an LSTA (Federal Library Services & Technology Act) grant from the California State Library that provides equipment and operating expenses to allow exploration of the ways videoconferencing can benefit participating communities.

For more information, contact Dan Theobald at 415-431-0329 or dtheobald@earthlink.net.

## **Cooperative Purchases**

(continued from page 1)

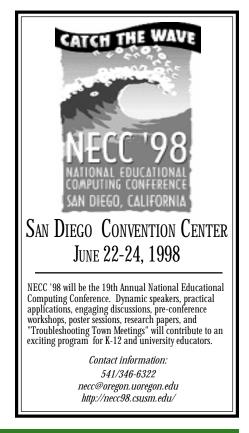
and quality assurance.

Along with the quality and reliability of IBM, we believe that the prices are exceptional. The purchase fully qualifies as competitively bid through Yuba Community College. Ordering by districts will be through a dedicated fax line. The price includes delivery and installation.

Faculty, staff, and students may purchase computers for their personal use, using a major credit card at the same price (including delivery but not installation), using mail, or by calling 1-800-535-2563 (see the Vanstar website at http://www.vanstargov.com/ca for more information.

California community colleges are being challenged to upgrade campus computers and equipment. As newer technology advancements are made, this contract will afford the Colleges the most current computer technology.

For questions regarding eligibility requirements and general contract terms and conditions, please contact: Ms. Carol Thompson at 530-741-6801 or thompson@yuba.cc.ca.us, or Dan Estrada at 916-324-8901 or destrada@cc1.ccco.edu.



#### @ONE

#### (continued from page 1)

stitute," page 5) and NETg (see "NETg Training," page 2).

The first stage of the learning community, focused on supporting the 106 community colleges' staff development professionals California, is now online at http:// one.fhda.edu. This Web site is dynamic, and serves as an infrastructure to facilitate the dissemination and collection of information. It will provide online database resources to faculty and staff regarding professional development opportunities and strategies, technology planning, service providers, and relevant news. The plan is for a highly interactive bulletin board system, Frequently Asked Questions (FAQ), and a suite of chat rooms that will address individual knowledge needs, allow interaction and collaboration across the

system and educational segments.

The @ONE project team, comprised of one faculty member from each of ten community colleges (De Anza, Butte, Fresno, Las Positas, Los Trade-Tech, **Angeles** Marin, Miramar, Santa Ana, Santa Barbara and Santa Monica) has given direction to and staffed the project work teams. An Advisory Committee, comprised of high-level industry and education representatives, give policy direction to the project, voice to relevant constituencies and play a key role in identifying resources for continued funding of the project.

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).

## Contribute to TIPS News

TIPS News focuses on projects funded by the California Community Colleges Chancellor's Office involving technology in education, as well as other issues concerning distance education in California, including videoconferencing and online learning.

If you have an article suitable for publication in *TIPS News*, or if you are interested in writing material, contact:

Chris Palmarini 530-895-2988 *video@4c.net* 

Oroville, CA 95965 Permit No. 45

HIBST CLASS MAIL AUTO U.S. POSTAGE PAID Butte Community College 3536 Butte Campus Drive Oroville, CA 95965

California Community Colleges Chancellor's Office

SdIT