

BUILDING BRIDGES

Videoconferencing Connects Students and Educators Over Distance

By Kavita Rao and Andrew Kerr

Classroom teachers tasked with developing students' understanding of and respect for cultural diversity have a tremendous resource available to them through the *Pacific Voices* project. A partnership between the Pacific Regional Technology in Education Consortium (PR*TEC) and the University of Hawai'i's University Center on Excellence, *Pacific Voices* connects classrooms in different island states through videoconferencing, making it possible for students as far afield as Saipan, American Samoa, and Hawai'i to share cultural activities over long distances in an up close and personal way.

The goal of these classroom connections is to build meaningful exchanges between students. In preparing for these virtual meetings, teachers meet beforehand by email or videoconference to discuss learning objectives and outcomes. The students' activities during videoconferences are framed by these objectives. Teachers choose major themes such as culture and the environment for students to explore with counterparts on other islands. Comparing and contrasting the environmental challenges faced by island people and sharing information about cultures and traditions provide rich learning contexts.

In one *Pacific Voices* project during the 2001-2002 school year, 8th graders on O'ahu and in American Samoa "met" via videoconference. In their first session, students from Anuenue School, a Hawaiian immersion school, and Matafao School in American Samoa got to know each other, asking questions about what it is like to be a teenager. They discovered that although they live on islands 3,000 miles apart, as 13-year-

olds they have experiences in common. Students also shared traditional chants and dances and short videos they had produced themselves about their islands. By the end of the school year, students had made unique connections by watching, talking, and listening to counterparts far away.

Another interesting videoconference-based learning experience took place between students at Anuenue School and San Antonio School in Saipan. The students at San Antonio School had learned to make crafts from a Chamorro master weaver who had visited their school a few months earlier. The teacher in Saipan thought it would be a good experience for the students to share their knowledge. They presented a step-by-step lesson to the students in Hawai'i. The Hawai'i students came to the videoconference with palm fronds, as directed, and left with the crafts they had woven at the instruction of students 4,000 miles away. It was fun for students on both ends as they negotiated the challenges of instructing and learning such a hands-on activity through a TV screen.

These types of exchanges make for rich learning experiences, opening windows to classrooms far away and broadening students' worlds. They are a product of long-term efforts by the PEACESAT and the PRELSTAR Distance Learning programs to develop telecommunications infrastructure and use in the U.S.-affiliated Pacific.



Photo: Kavita Rao

▷Through videoconferencing, students can share learning experiences over great distances.

Connecting people in this region is a daunting task. There are 10 political island states and territories scattered across 4.9 million miles of ocean. This is an area larger than the continental U.S.

How It Works

While complex technology is necessary to connect remote sites across expanses of ocean, supervising a videoconference session for a class of students is comparatively easy. For the end user, videoconferencing is as simple as people meeting and talking through a television screen.

Videoconferencing works by sending audio and video signals to a remote site. This is achieved via a camera sitting atop a television monitor and a microphone in front of the participants. The audio and video signals travel by satellite to the PEACESAT office in Honolulu. PEACESAT acts as the "bridge," sending the signals to the

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DEVELOPING DIGITAL LITERACY

MS ITT Students Serve as Pacific Role Models



Photo: Katherine Kautzer

▷ With careful planning, Pacific technology can support Pacific values. From left to right: Bernice Elechuus, Mark Savares, and Monroe Davis.

By Katherine Kautzer

Access to the World Wide Web can transform the classroom, creating a problem-oriented, student-centered environment that supports both collaborative and individualized learning. However, the Web can also create a dilemma for Pacific educators, because it largely promotes Western values. How can Pacific Islanders ensure that their children develop 21st century digital literacy skills without diminishing traditional languages and cultures?

Technology and Tradition

The Web has irreversibly changed how people talk, meet, and work. These changes are not always welcome. For cultures that value traditional ways and face-to-face communication, technology-based interaction may seem threatening.

For example, the Web provides direct access to uncensored sources of information, services, and goods. While some societies value the unrestricted flow of information and commerce, others con-

sider it disruptive because it introduces community members to influences outside the traditional social structure.

Preservation of language and culture is another concern. The majority of Web-based content is published in English, making language a major barrier to Web use in non-English speaking countries. For many indigenous groups, preservation of their home languages is a top priority.

Technology itself is not neutral. While values and priorities vary from culture to culture, design occurs within specific cultural contexts. Technology that reflects the values of one culture may undermine the values of another.

While these are important concerns, there are also benefits associated with Web use and the development of digital literacy.

- The Web provides access to disaster warnings, public health research, news reports, and income earning opportunities via e-commerce.
- Distance learning courses provide unprecedented opportunities for Pacific Islanders to continue their education without leaving their homes.
- The Web provides teachers with access to a wide variety of classroom

resources, some of which would otherwise be unavailable.

- Technology eases the processes of documentation and archiving, enabling Pacific Islanders to preserve and share their language and traditions.

Managing Development

Those who fear the impact of Web use on traditional cultures have valid concerns. Through conscientious management, however, technology can meet Pacific Islanders' needs while supporting Pacific ways of life. One example is the Master of Science degree program in Instructional Technology and Telecommunications (MS ITT). The MS ITT is a 35-semester hour graduate program developed through collaboration between PREL and Western Illinois University (WIU). Delivered primarily via the Web through the support of PRELSTAR, the MS ITT is designed for Pacific teachers, principals, technology coordinators, and administrators who wish to develop their ability to use technology as part of the educational process. Specifically tailored to serve the unique needs of the Pacific region, the educational objectives for the MS ITT are based upon teacher competencies identified by the International Society for Technology in Education. The program prepares Pacific educators to:

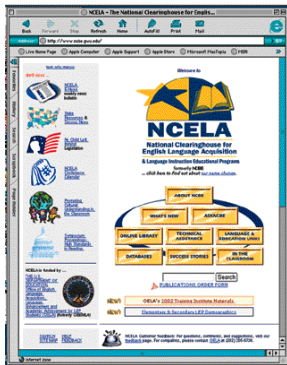
- develop expertise in the application of technology to teaching and learning in ways that honor Pacific culture rather than diminish it;
- serve as visible role models of successful technology adoption and integration;
- support appropriate use of technology to promote and disseminate Pacific languages and cultures;
- serve as advisors to and resources for others seeking to integrate technology and Pacific education.

One goal for the MS ITT is to develop a cadre of Pacific educators to demonstrate

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>finditonline

Links to Helpful Education Resources



NATIONAL CLEARINGHOUSE FOR ENGLISH LANGUAGE ACQUISITION & LANGUAGE INSTRUCTION EDUCATIONAL PROGRAMS (NCELA)

www.ncbe.gwu.edu

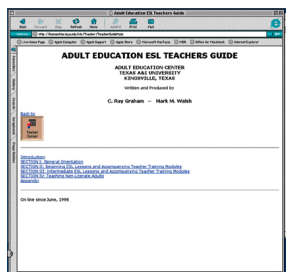
This NCELA website provides information on issues relating to the education of linguistically and culturally diverse (LCD) students in the U.S., as well as links to exemplary practices for and research on educating LCD students. Teachers will find links to bilingual and ESL lesson plans and activities at “Lesson Plans on the Web” (www.ncbe.gwu.edu/classroom/lessons.htm) and a weekly news bulletin at “NCELA E-News” (www.ncbe.gwu.edu/newsline/index.htm). NCELA was formerly known as NCBE, the National Clearinghouse for Bilingual Education.



ASIAN-PACIFIC ISLAND RESOURCES

www.usc.edu/dept/education/CMMR/cmmrhomepage.html

To locate this resource, click on “Asian-Pacific Island Resources” in the site index located at the bottom of the University of Southern California’s Center for Multilingual Multicultural Research (CMMR) homepage. The page lists links to Asian and Pacific island resources. A wide range of subject matter is available, including full-text articles, cultural profiles, and Asian and Pacific children’s literature.



ADULT EDUCATION ESL TEACHERS GUIDE

humanities.byu.edu/elc/Teacher/TeacherGuideMain

The Adult Education Center at Texas A&I University has made this complete English as a Second Language (ESL) guide for teachers available online at this website. The guide, written and produced by C. Ray Graham and Mark M. Walsh, provides lesson plans and teacher training modules for beginning and intermediate ESL students, as well as information on teaching non-literate adults.

techtips

PREVENT DAMAGE AND COMPUTER RELATED ACCIDENTS

By following these helpful tips, you can extend the life of your computer and ensure user safety.

ELECTRICITY

Like all electrical appliances, computers should be used with caution. While injuries resulting from electric shock from computers are rare, they are not impossible.

1. Use twist ties or special cable ties (available at most hardware and electronics stores) to keep computer cords out of the way and prevent accidents.
2. Avoid using extension cords. But if you must, tape them against walls or fixed furniture to increase safety.
3. Do not overburden electrical outlets. Plugging in too many items may blow fuses or circuit breakers, damage equipment, or cause a fire.
4. Keep computers off the floor to prevent damage from flooding. Using blocks to lift computers a few inches off the floor can mean the difference between inconvenience and disaster. Where roofs may leak, use tarps or plastic sheeting to cover computers during storms and over weekends and vacation breaks.

COMPUTERS

Besides keeping food away from computers, you can follow these rules to avoid other problems.

1. Cover computers with a light cloth (such as a lavalava) when they are not in use. This will not only brighten the classroom, but also prolong the life of the computer by keeping dust out of the system. Avoid tight-fitting plastic covers that may prevent moisture from evaporating and cause circuits to corrode.
2. Keep classroom aquariums and appliances like coffee makers and hotpots away from computers. A tipped aquarium can damage, or even destroy, a table full of computers.
3. Do not place computers in the middle of the room. Keep them against walls or fixed furniture to reduce the risk of accidental bumps and students getting caught in the cords.
4. Protect floppy disks! Inexpensive hard plastic cases for floppy disks can save you the time and trouble of retyping term papers or final grades.
5. It is important to maintain temperature control in hot, humid areas. However, running the air conditioner part of the day can cause stress and damage. Once the computers are cool and the air conditioning is shut off, the heat and humidity cause condensation both on and in the computers. It is actually better not to use air conditioning if it is usually turned off.

Tech Tips provides information on the use and maintenance of computers. PREL provides no guarantee against any loss that may occur to your computer system(s) as a result of following the advice provided above. Professional assistance should be obtained as appropriate.

An earlier version of this article first appeared in *Hawaiian Hard Drive* (June 2002).

MORE ON CLUB DRUGS

Ecstasy and GHB

By Harvey Lee

An empty warehouse has cases of empty water bottles stacked at the back door. Yes, there was a rave here last night. Why the stacks of empty water bottles? Because drugs like ecstasy are widely used at raves to heighten sensory effects.

Ecstasy increases body temperatures to as much as 110°F. Dehydration is common, and attempts to reverse the drug's effect can be lethal. Recent research suggests that ecstasy's damaging effects on memory may be long term.

Another common drug found at raves is GHB. This depressant affects the central nervous system, intoxicating those who take it and putting them to sleep. GHB is odorless, colorless, and tasteless. It's easy to slip GHB into a drink without being noticed. For these reasons, GHB is known as the "date rape" drug.

By learning about teen culture and sharing information about the possible consequences of risky behavior, parents can help protect their teens. Take a moment to read this column with your son or daughter and then visit any of the following URLs.

For More Information

- Center for Substance Abuse Prevention. (2001, April 6). Ecstasy [1]: ER and mortality rates surge. *CSAP Prevention Alert 4(7)*. Available at www.health.org/govpubs/prevalert/v4/7.htm
- O'Connell, T., Kaye, L., Pharm, D., & Plosay, J. J. (2000, December 1). Gamma-Hydroxybutyrate (GHB): A newer drug of abuse. *American Family Physician 62(11)*, 2478-2484. Available at www.aafp.org/afp/20001201/2478.html
- Office of National Drug Control Policy. (2002, May 17). Club drugs. Available at www.whitehousedrugpolicy.gov/drugfact/club/club_b.html

For more information or classroom presentations, contact Harvey Lee, Program Specialist for the Pacific Center, at (808) 441-1300 or at leh@prel.org. ★

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[continued from page 15] receiving sites. Videoconferencing is not limited to two sites – several different locations can participate.

PRELSTAR has spent several years installing videoconferencing systems and training educators in all 10 entities to use them. The result is a network of facilities through which educators and health officials conference with individuals anywhere in the U.S.-affiliated Pacific for no cost. Other sites around the world can also participate at minimal cost. In the last few years, the videoconferencing system has been used for staff development workshops, meetings, classes, and other programming. Videoconferencing has proved to be a very cost-effective way to bring people together, eliminating travel costs and phone charges. In addition, the videoconference network delivers services to schools and hospitals that would otherwise be cost prohibitive.

Projects such as *Pacific Voices* will continue to foster teacher and student exchanges. PREL staff and local state education agencies will also continue to expand the uses of the system for planning and training so that videoconferencing's lasting legacy will continue to serve the U.S.-affiliated Pacific in ways previously thought impossible.

For questions about classroom uses of the videoconferencing system, please contact Kavita Rao (raok@prel.org) or Andy Kerr (kerra@prel.org). For technical questions about the videoconferencing system, please contact Jim Bannan (bannanj@prel.org).

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[continued from page 16] that technology adds value to their communities without diminishing culture. Web use in the Pacific will not only assist students in developing 21st century skills; it will contribute to increased participation by Pacific Islanders in the global economy and will extend and enhance the Information Superhighway through the addition of Pacific voices.

Further Reading

- Bazar, B., & Boalch, G. (1997). *A preliminary model of Internet diffusion within developing countries*. Retrieved June 21, 2002, from ausweb.scu.edu.au/proceedings/boalch/paper.html
- CEO Forum on Education and Technology. (2001). *The CEO Forum school technology and readiness report: Key building blocks for student achievement in the 21st century*. Retrieved June 21, 2002, from www.ceoforum.org/downloads/report4.pdf
- Primo, H. (2001, March). Digital oceania: The Internet, distance learning, & sustainable human development in the Pacific islands. *Ed at a Distance Magazine and Ed Journal*, 15(3). Retrieved June 21, 2002, from www.usdla.org/html/journal/MAR01_Issue/article02.html
- Wahl, E. (2000). *Discord or harmony: Culture and technology*. Education Development Center, Inc. Retrieved June 21, 2002, from www2.edc.org/CCT/cctweb/public/include/pdf/abd_doh.pdf

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