

HPWREN LIVE

Live Interactive Virtual Explorations

**Exploration and understanding
of hard-to-reach science sites**

**Preparation for fieldtrips
to such sites**

2002-present

Kimberly Mann Bruch

2002

Pala Learning Center: HPWREN Multicast Class

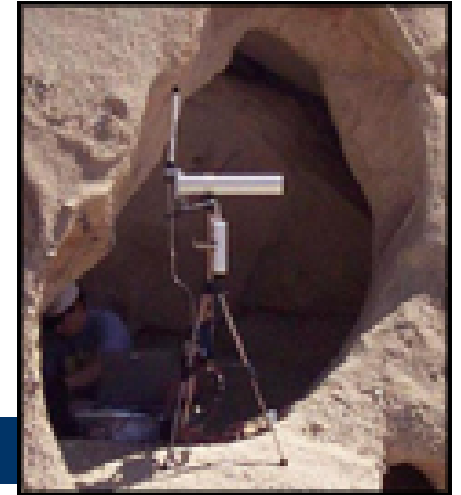


HPWREN, Palomar College, and Tribal Digital Village Network offer a Computer Science and Information Systems course at the Pala Learning Center for Pala, La Jolla, Rincon, and San Pasqual Native Americans.

Experiments with vic (multicast tool) and rat (audio tool) were also utilized for occasional remote classroom sessions via HPWREN.

2003

Anza Borrego Desert: Remote Teacher Tour



Teachers attending the National Teacher Training Institute Conference in Irvine participated in an underwater tour of Crystal Cove State Park and examined fossilized oyster beds in nearby Fish Creek

(The remote Fish Creek is approximately 100 miles from Irvine.)

2006

Tests Resume: CA Wolf Center, Cabrillo National Monument, and CA Science Center



Experiments at California Wolf Center test Skype with PDA and then laptop. The team discovers that a backpack equipped with a laptop running Skype (and transmitting images via DV camera) produce the best results.

Backpack system replicated and used for experiment between Cabrillo and California Science Center. Also experimented with Remotely Operated Underwater Vehicle (ROV).

2007

Pala Even Start Tours Palomar Observatory and Santa Margarita Ecological Reserve via HPWREN LIVE



Pala Little Feathers and Adult Education (Even Start) students participated in a LIVE activity between the Admin Building and Santa Margarita Ecological Reserve as well as the Palomar Observatory.

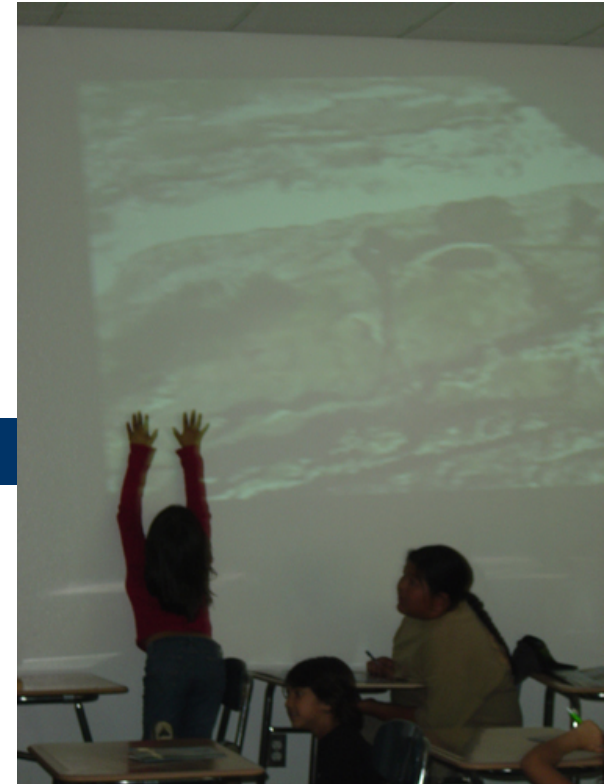
Additional HPWREN LIVE activities included demos at the NSF booth during the AAAS meeting as well as demos at a San Diego Youth Science Fair.

2008

HPWREN LIVE Pilot Activities

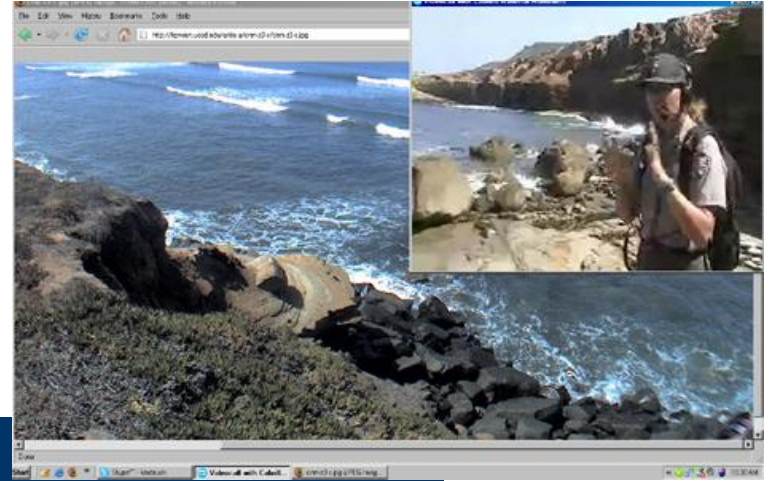
HPWREN conducted two LIVE activities between Pala Even Start programs and Cabrillo tidepools. Activities included on-site geologist and hands-on activities with southern California shells.

Reuben H. Fleet Science Center's Astronomy Day 2008 included an HPWREN LIVE demo - featuring the telescopes at Palomar Observatory.



2008

HPWREN LIVE Pilot Activities



Recent activities include:

- Women in Science Summer Camp at Reuben H Fleet Science Center (Cabrillo LIVE)
- National Geographic Bioblitz Species Inventory (Santa Monica Mountains)
- Experiments with Off-Shore ROVE, Rural Science Class, and SDSC Building Dedication Demos
- National Park Service Workshop at Cabrillo for 35 Rangers from USA Parks

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