

## Teachers converge on Pollock Pines to learn about solar energy [Solar Schoolhouse Summer Institute 2004]

source: Jonathan Schwarzberg Mountain Democrat 2004.7.2

SLY PARK - A group of teachers from across California traveled to Pollock Pines last week to learn skills that will shed light on solar energy for their students.

Sixteen teachers from as far south as El Centro visited the [Sly Park Environmental Education Center](#) to learn about solar education using a hands-on approach. They built a permanent fountain for the campground, fountains for their classes, solar-powered toy cars and models of efficient homes. All these are projects they can take back to their classrooms.



HAL ARONSON ADJUSTS a solar-powered fountain designed by Staci Bynum, standing in the background. Teachers traveled from all over the state to attend a week-long solar education seminar sponsored by the Rachus Institute at the Sly Park Environmental Education Center. Democrat photo by Jennifer Dronkers

"The best part about this is that we can immediately use what we learn in the classroom," said Staci Bynum, a high school teacher for a charter school in Clovis.

[The Rachus Institute](#), a Martinez-based educational research organization, held the Solar Schoolhouse Summer Institute at the Sly Park Environmental Education Center last week. The teachers attended with sponsorships from their local utilities.

Tor Allen, president of the Rachus Institute, said the class was designed to enable teachers to bring useful information about solar energy to their students.

"Teachers are hungry for energy education that is relevant to their own lives," Allen said.

He said the teachers find inspiration that they can pass to their students.

Bynum said that one of her favorite parts of the class is that the teachers got a chance to build a fountain that will stay at the campground. She said that one of her school's emphases is on doing community projects. This was a good opportunity to show the kids that teachers need to help the community, too.

"The coolest thing is that we built a fountain for the campground," Bynum said. "I just think it's good for the hearts and minds."



Summer Institute participants celebrate the solar fountain designed and built at Sly Park during the weeklong session. Goldminer pans were used (Right) to create the unique waterfall. Future students visiting Sly Park will be able to interact with the solar panel, experiencing the effects of shading, orientation and tilt angle.

Allen said the hands-on experience also helps teachers with other aspects of life. He said many of the teachers have never welded before or used a lot of the tools necessary for building projects.

"It's just a lot of trying out skills and using tools. ... We do have a lot of book learning," Allen said. "This is a nice compliment."

He said most teachers attend the class and experience two "wow" moments. The first is when they realize it is possible to cook using only sunlight. Some of their solar ovens reach over 400 degrees.



Solar cookers made of cardboard, foil, and plastic window reaches 300F[left]. Teachers ready their solar cars for takeoff. [right]

The second moment is when the teacher find that a lot of electricity can come directly from the sunlight. Allen said it is impressive to be able to see the direct effects that sunlight can have on a piece of machinery that the teachers have put together.

But the desired end result of the program is getting kids involved and interested in solar energy. Scott Lewis teaches elementary school in Stockton. He said the projects will cause the students to be interested in the way things work.

"You're going to mystify them," Lewis said.

And Bynum's school is a charter school that focuses on practical academics. She said her classroom has three teachers, focusing on English, chemistry and the environment.

"Energy is a great way to teach all those things," Bynum said.

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