



Students get hands-on science lesson as Goldstone celebrates 50

January 9, 2009 - 4:21 PM

[By EUNICE LEE, staff writer](#)

FORT IRWIN • Fourth grade teacher Kristen Scarberry created her own version of the Magic School Bus for her students on Friday. The Tiefert View Intermediate School teacher's classroom transformed into a mini-NASA mission control operation center for two hours, and students became space scientists who controlled the movement of an actual antenna at the Goldstone Deep Space Communications Complex, which will celebrate its 50th anniversary on Tuesday.

About 40 students operated the antenna and scanned planets, studying the temperature and movement of planets like Jupiter and Uranus.

For Scarberry's students, the scanning session took hands-on learning to a new level.

"They were very very excited," said Scarberry. "Every time they find a peak, they yell 'peak!' super loud," she said. Friday's scanning session was the first of what Scarberry plans to be a monthly part of her science curriculum. In between, she said her class will do projects to prepare for the scanning sessions.

Tiefert View Intermediate School at Fort Irwin worked through the Goldstone Apple Valley Radio Telescope program at the Lewis Center for Educational Research to train teachers for the program.

Scarberry said she and fourth grade teacher, Tim Foster, received special training at the Lewis Center in October, and expects that other teachers at Tiefert View will also get trained soon.

Scarberry also said she hopes to take students on a field-trip out to the Goldstone antenna site in March.

Students were able to control the movements of an antenna by logging onto a mission control center website. The data that students collected will be added to the scientific body of research of scientists at the Jet Propulsion Laboratory in Pasadena.

While 9- and 10-year-old hands may have hijacked the control board for a Goldstone antenna for a few hours, Kim Bunnell, manager of educational projects at the Lewis

Center, said professional controllers were always on hand, ready to take over if anything went wrong.

It helped that students were in constant communication with the professional mission control operators during their Friday session.

The classroom was set up with two large screen projections — one showing the antenna's scans of the planets, and the other a live video feed of the control center in Apple Valley. Scarberry's students took turns talking to the control center operators by telephone about the data from their scans.

Scarberry's students aren't the first one to take advantage of the fact that the famed Goldstone antennas are in their backyard. In the past, Hinkley School and Barstow Intermediate Schools also certified teachers for lessons using the Goldstone antennas.

"They loved it," said Mary Lynn Gibbon, sixth grade teacher at Barstow Intermediate School whose students got to use the Goldstone antenna while she taught at Hinkley in 2002 to 2004.

"It wasn't just a textbook thing," said Gibbon. "They felt like they were doing something relevant to help society," she said.

As part of celebrating the Goldstone complex's 50th anniversary, NASA is inviting scientists, politicians and other officials on a special tour of the facility's antenna's and museum on Tuesday. Free tours are available to the public by reservation Tuesdays through Fridays, at 9 a.m. and 1 p.m.

The Goldstone complex is the first and largest in a three-antenna global deep space network that tracks spacecrafts and gathers information. The other two antenna's are located in Spain and Australia.

Contact the writer:

(760) 256-4122 or elee@desertdispatch.com

Used with permission by Freedom Communications, 2009