

EarthScope National Meeting, March 2007 Evaluation Summary

• Using EarthScope Data in the Classroom (for Teachers)

Teachers from around the country participated in a four-hour workshop given at the EarthScope National Meeting. Teachers learned about EarthScope, explored the Earth Structure through a hands on activity (shown: Ricardo Flores from Antelope Valley High School), discussed fault creep by using the earthquake machine, investigated the relationship between plate boundaries, volcano locations, and earthquake locations and explored episodic tremor and slip in the Pacific Northwest using GPS data. UNAVCO's Data for Educator's site was introduced and demonstrated.

An end-of-course evaluation was administered which included 8 questions rated on a scale of 1 to 5 (from strongly disagree, disagree, undecided, agree, strongly agree) and two open ended questions. Demographic information about the participants, their teaching, and their schools was collected. Thirteen of the participants in the workshop completed the evaluation form.

All participants who responded to the survey Strongly agreed that the workshop was well organized and facilitated.

All participants but two responded with strong agreement or agreement that they can easily apply the information/skills learned in this workshop to their teaching with limited modification [46% SA, 38% A, 15% U; 4.31 avg, 0.75 stdv]

11 out of thirteen participants found the relative time devoted to the various workshop activities to be appropriate [54%SA, 31% A, 8% U, 8% SD; 4.23 avg, 1.19 stdv]

All of the participants strongly agreed or agreed (with strongly agree as the median rating) that:

- the workshop included a variety of effective instructional strategies (active engagement, use of prior knowledge, working in teams, real world applications, choice of activities) [77% SA, 23% A, 4.77 avg, 0.44 stdv],
- as a result of workshop, they felt their preparedness to instruct about Plate tectonics and Earthquakes had increased [77% SA, 23% A, 4.77 avg, 0.44 stdv],
- as a result of this workshop, they will definitely implement some additional and plate tectonic science content to my teaching [54% SA, 46% A, 4.54 avg, 0.52 stdv],
- this workshop provided them with new and challenging content for using GPS data that was not overwhelming [92% SA, 8% A, 4.92 avg, 0.28 stdv], and
- Overall, this workshop was a valuable use of their time [92% SA, 8% A, 4.92 avg, .29 stdv]

From the demographics portion of the evaluation, participants self-identified that they belong to following groups:

- 1 response: Black or African American
- 1 response: Hispanic or Latino
- 9 responses: White (excluding Hispanic/Latino)

Over half of the 11 participant responses indicated that over 21% of students in their school are currently enrolled in the Free and Reduced Lunch Program (FRLP):

- 4 participants indicating 81 – 100% students are enrolled in FRLP
- 1 participant indicating 61 – 80%
- 1 participant indicating 21 - 40%

Participants also identified the ethnic groups that compose more than ~10% of their school's student population:

- 3 responses: Black or African American
- 3 responses: American Indian or Alaska Native
- 6 responses: White (excluding Hispanic/Latino)
- 2 responses: Asian
- 4 responses: Hispanic or Latino
- 1 response: Other (Leosnia)

- **Bringing EarthScope Research into the Undergraduate Classroom**

During this session, more than 75 college instructors shared their experiences—ranging from tried-and-true exercises to fresh, untested new ideas—on the use of EarthScope-related data and results into the undergraduate science classroom.