



Earth Science Outdoors! Bringing The Classroom Into Nature

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Concept

Richard Louv, the author of *Last Child In The Woods: Saving Our Children from Nature Deficit Disorder*, wrote that “[a]n environment-based education movement-at all levels of education-will help students realize that school isn't supposed to be a polite form of incarceration, but a portal to the wider world.” University City High School is located across the street from Rose Canyon Open Space Park, which contains rare Southern California habitats such as coastal sage scrub, chaparral, and a sycamore-dominated riparian zone. Rose Canyon also teems with wildlife such as rabbits, coyotes, hawks, and raccoons. We utilized the proximity of the school to this exceptional urban park to create a series of Rose Canyon-based activities for two 9th grade Earth Science classrooms. Our goal was to make Earth Science relevant to processes occurring in students’ own environments, introduce students to scientific observation, and to bring the wonder and complexity of the natural world into the classroom.

The Four Spheres

Goal: Introduce students to four major earth systems: atmosphere, lithosphere, hydrosphere, and biosphere.

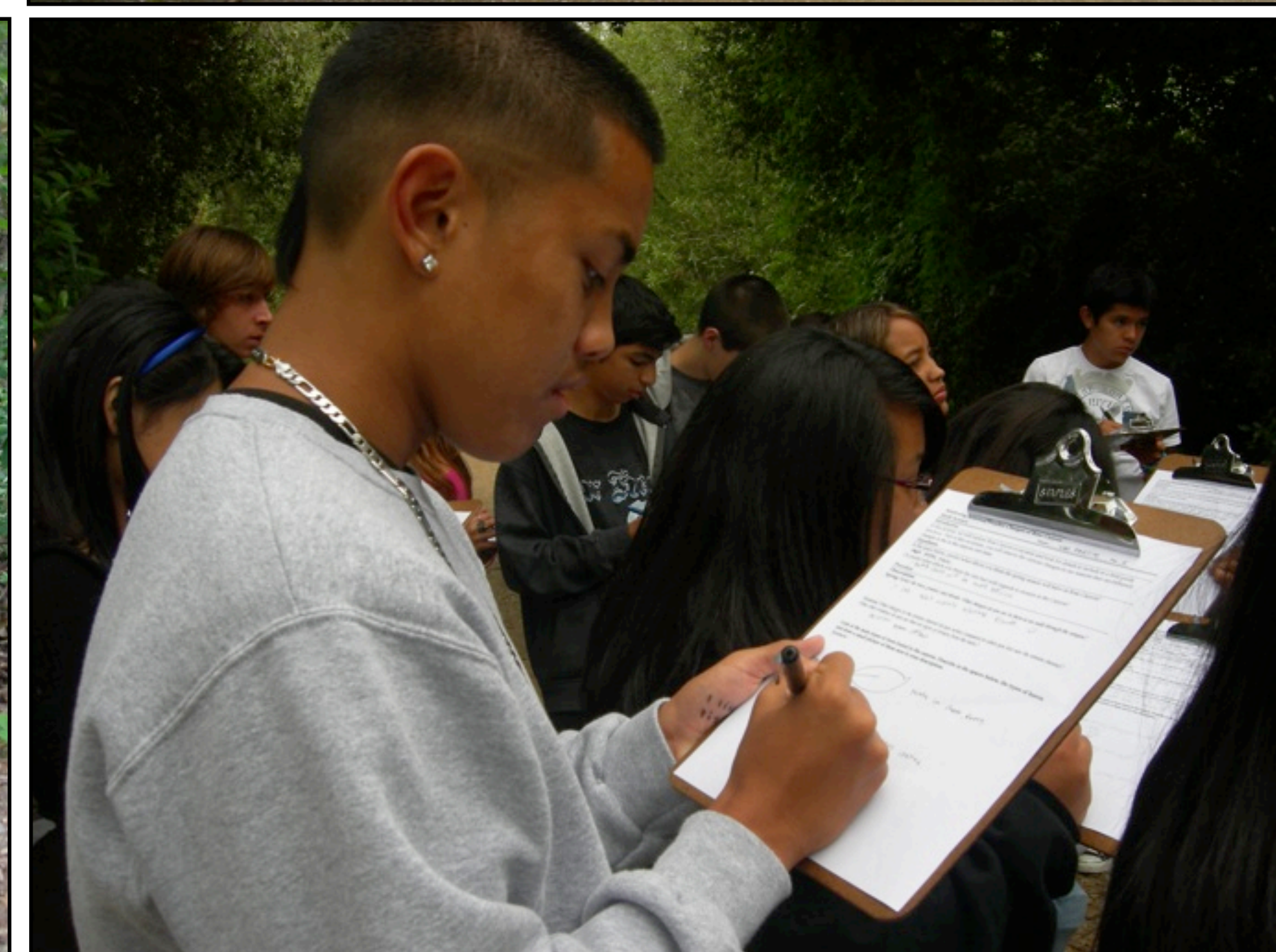
Activity: Students mapped spheres on campus and in Rose Canyon, and identified sphere interactions.



Seasonal Changes

Goal: Observe effects of climate, weather, and biogeochemical cycles in natural ecosystem

Activity: Students worked in small groups to monitor seasonal changes in animals, plants, and weather over several canyon visits. They made posters of their findings and reported to the rest of the class.

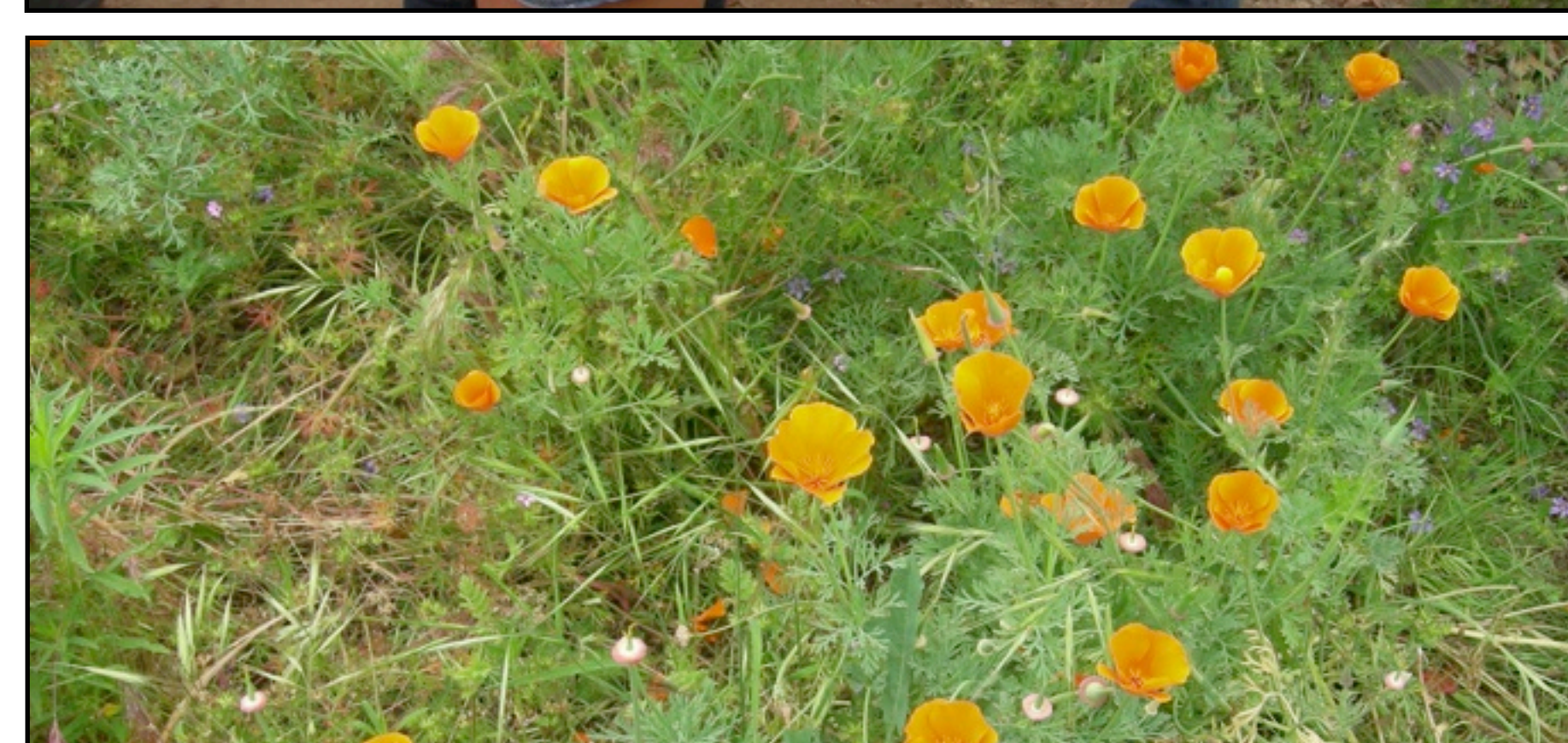


Erosion and Weathering

Goals:

- 1) Understand how key Earth Science processes influence Rose Canyon.
- 2) Make predictions based on observations.

Activity: Students visited Rose Canyon before and after a major erosion event. By observing the changes in the canyon, students could predict what effects deforestation and restoration might have on the canyon.



Results

- ★ Increased interest and decreased fear of natural ecosystems
- ★ Students observed Earth Science in action (e.g., erosion, El Niño) through Rose Canyon visits over the school year.
- ★ Engaged students with tactile and experiential learning styles
- ★ Lots of fun!