



artwork by Valle Verde second grade-students

PREVENTING NATURE DEFICIT DISORDER

Despite the current emphasis in education on testing (and yes, sometimes teaching to the test), some teachers are still making time to take their students outside the classroom to learn about the real world. With the emphasis upon a “standards”-based education, many find it difficult to fit in the required hours for reading, language arts, and mathematics. The importance of creating time for experiences in nature has proven invaluable for second-grade students, as well as teachers, at my school.

After a classroom study of rocks and soils, the unit came to life when our classes headed up to Mount Diablo and experienced firsthand what we had read about. During a Diablo Nature Adventures field trip, the students discovered through a multisensory approach, not only the geology, but also the cultural and natural history of the area. Putting on a play simulating volcanoes erupting thousands of miles off shore and mountain peaks emerging goes a long way to help students understand how Mount Diablo was created. The sense of discovery and adventure is ever present as the students find fossils in the rocks and view incredible sandstone formations. Walking through the oak woodland community identifying the native trees and plants helps the students to understand a little

more about the life of the earliest Californians who lived there. Their ways of living, which so clearly valued the importance of nature, are shared and used to inspire the students to be stewards of the land.

The days spent out of doors in nature provide so much material for the students to work with back in the classroom. Writing comes to life when they have so much to share. Whether it is journaling, reporting, or writing poetry, the standards for writing can be addressed in a meaningful way. Art also provides a natural way to further share the learning that occurred. After seeing and identifying the plants and animals in their natural habitat, students are eager to capture their memories on paper. The wonderful art and writing that follow a class field trip help to immortalize these experiences and always leave students asking for more. Together with a day in nature, our rocks and soil units touched upon the standards of reading, writing, science, history, and art. Throw in the intrinsic value of a great self-esteem builder, and who could ask for a better way to meet the education standards of today?

Jan Knecht teaches second grade at Valle Verde Elementary School in Walnut Creek

THE STRAW PROJECT

The STRAW Project coordinates and sustains a network of teachers, students, restoration specialists, and other community members as they plan and implement watershed studies and restoration projects in Marin, Sonoma, and Napa counties. STRAW provides teachers and students with the scientific, educational, and technical resources to prepare them for hands-on, outdoor watershed studies, including ecological restoration of riparian corridors. Since 1998, more than 8,000 students have participated in 110 STRAW restorations on rural and urban creeks, planting close to 9,000 native plants and restoring approximately 27,000 linear feet of creek banks, or almost 22 acres.

Watershed studies and restoration emphasize the interconnections between natural and human communities. Schools, landowners, public agencies, nonprofits, and restoration specialists are united by their concern for the land and its inhabitants. Children learn about interdependence directly from their interactions with natural systems and from contact with adults whose lives focus on land and resource management and protection. Ranchers also are leaders in STRAW, teaching and learning along with the students. Students develop collaborative skills as they work on restoration projects, watershed studies, and other activities that bring them in contact with environmental issues of vital importance to the community.

The STRAW network consists of many committed, long-term partners, including the Marin County Stormwater Pollution Prevention Program (MCS-TOPPP), Prunuske Chatham, Inc. (a restoration firm), PRBO Conservation Science, the Marin and Southern Sonoma County Resource Conservation Districts, River of Words, Marin Conservation Corps, and more.

Contact: *Laurette Rogers, Watershed Education Director, The Bay Institute* www.bay.org

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OBSERVATIONS ON A ROTTING LOG

Ants spiders termites pincher bugs
live on this one log - their own habitat
the trunk is moldy, the termite is eating the wood,
and ants are coming out of the log
It's extraordinary how all four competitors can
live together
without one of the dominant bugs taking over the
log and moving the other bugs out
They are living together with no problem

This poem was written by a young man with great sensitivity in a special class at one of Oakland's middle schools following a botany lesson. Spelling and phrasing adjustments have been made so the reader can appreciate the depth of ecological thought involved.

"Growing things seems natural, a distinctly human act, part of our desire to reflect, build, and create. But nurturing seems out of place in our fast-paced, high-tech information age. Gardens foster connections based on slow timelines, much like learning.

I've often thought all students and teachers should be required to grow something, to understand the patience required and the long learning curves of development. We all could benefit from planting seeds with patience to see the flowers bloom.

I sometimes fantasize: What if all professions required that you know how to garden? Could we be better off if businesspeople, lawyers, doctors, and politicians had to first pass a gardening test? Humility might be fostered alongside some humbling harvests."

David Mas Masumoto, Letters to the Valley

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