



Nature!Tech Collaborative

Establishing a Western U.S. IVM Research Network: Initial Report, Engaging an Environmentally Ready Generation, and Lessons Learned



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Chapter 1 : Why is Sonoma State Involved?

The Benefits of Real-World Projects





Center for Environmental Inquiry

The Biggest Environmental Challenges In History



Environmentally-Ready Society

All sectors skilled at working together with the knowledge and motivation to address evolving challenges



Are We Ready?

Motivated?



63 hrs/wk

digital media use
by 12-18 year
olds

Knowledgeable?



86%

US population
environmentally
illiterate

Communicators?



58%

executives can't find
college grads with
communication skills

All Sectors?



few

university degrees
requiring environmental
component



21st Century Education

- ▶ Real World Projects
- ▶ Outdoor Learning
- ▶ All Disciplines



Source: <http://www.pnas.org/content/111/23/8410.full>

Real World Projects



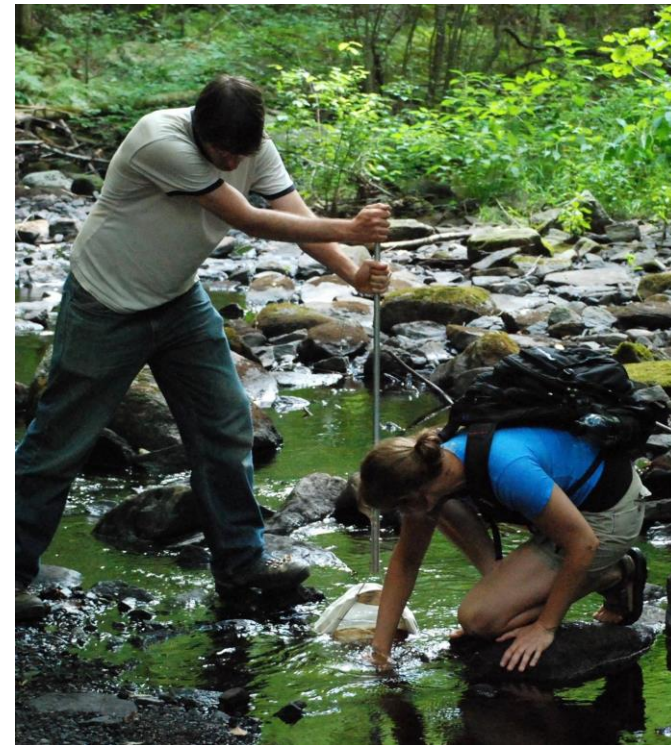
Learning Outdoors



Benefits of Learning Outdoors

Intellectual, emotional, social, spiritual,
physical (Kellert, Bell and Dymont, Morris &
Zidenberg-Cherr, American Academy of
Ophthalmology, Burdette and Whitaker, Wells
and Evans)

Academic performance, creativity,
problem-solving, cognitive abilities
(American Institutes for Research, Bell and
Dymont, Kellert, Wells, Taylor, Kuo and Sullivan)



A Pivotal Role





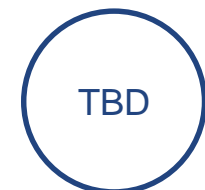
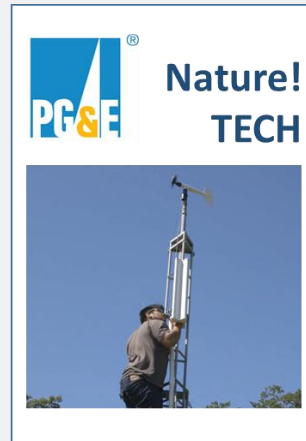
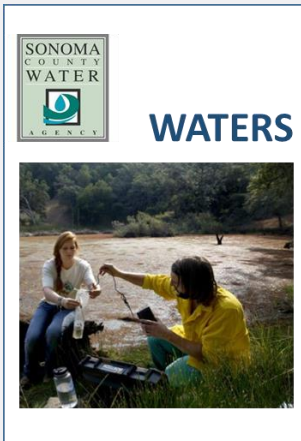
Community
Prepared and Motivated

Career

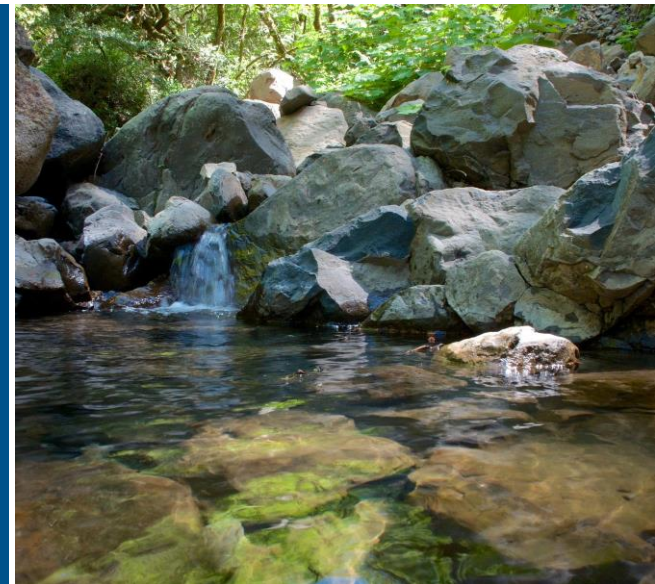
College

High School

Nature! Collaborative Programs

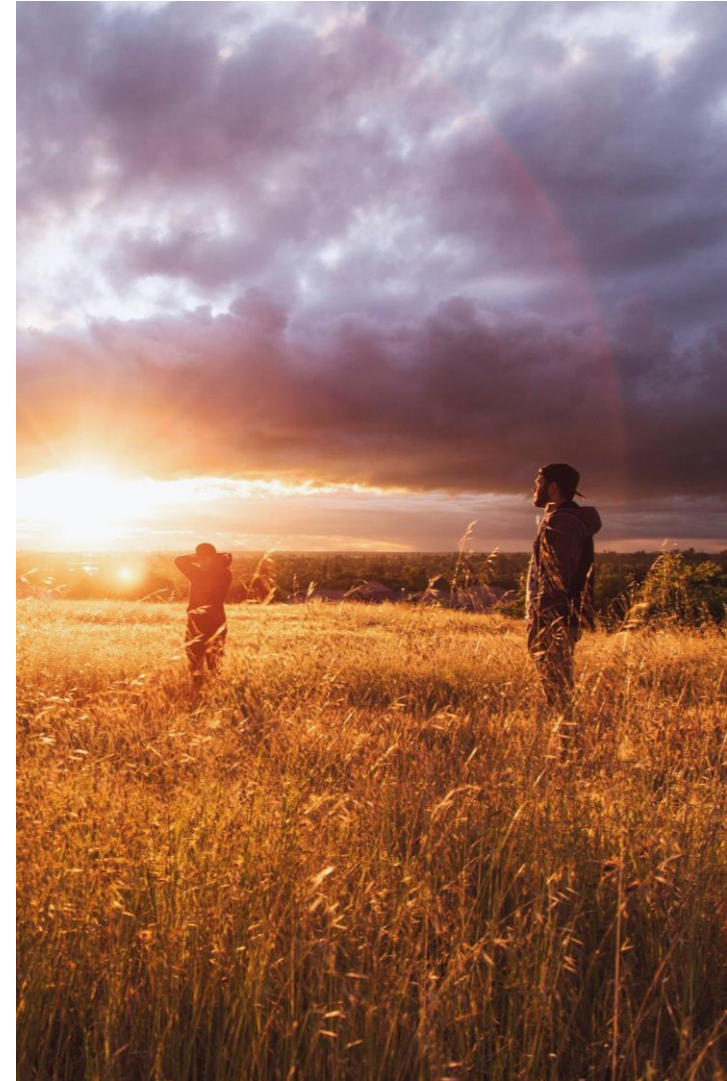


Lands and Facilities



A Successful Approach

- ▶ Participation is up 8x
- ▶ 1700 students/yr in outdoor learning
- ▶ 500 students/yr in real-world projects
- ▶ All 5 schools and 75+ faculty involved
- ▶ Partnerships with 58+ regional organizations



Engaged



Reuben Sanchez

“I ended up learning significantly more from my internship than I have in the classroom... There’s nothing at the university like it.”

Motivated

“It was the funnest and most fulfilling two units I’ve ever taken... this internship brought out a desire for learning in me that I didn't think I had.”



Kelly Grieve

Skilled



Lauren James

“A lot of the skills I learned at Fairfield Osborn Preserve have been helpful in my professional career.”

And Ready to Improve The World

“This new perspective makes me want to teach others about what I know and excite them about restoring our environment.”



Megan Gaitan

Success Stories



Rafael Diaz, Engineering Science
Visicon Tech

The image processing work helped me land the job. Thank you for teaching and guiding me through the internship.



Ana Torres, Environmental Studies
California Department Fish and Wildlife

The program gave me a new perspective on science and helped steer me toward my future career goals

Environmentally Ready Generation Initiative

- ▶ Reach all students at SSU
- ▶ Spread model to other universities

Field Campus for Environmental Readiness





Galbreath Field Station Masterplan

July 5, 2016



Spread the Model

- Environmentally Ready CSU

