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Chapter 1: Why is Sonoma State Involved?

The Benefits of Real-World Projects
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

Supports multiple development areas—intellectually, emotionally, socially, spiritually and physically (Kellert)

Supports creativity and problem solving. (Bell and Dyment, Kellert)

Enhances cognitive abilities. (Wells)

Improves eyesight. (American Academy of Ophthalmology)

Improves social relations (Burdette and Whitaker)

Improves self-discipline. (Taylor, Kuo and Sullivan)

Reduces stress. (Wells and Evans)

Improves academic performance. (American Institutes for Research)

Reduces Attention Deficit Disorder (ADD) symptoms. (Kuo and Taylor)

Increases physical activity. (Bell and Dyment)

Improves nutrition. (Morris & Zidenberg-Cherr)
Benefits of Learning Outdoors

Intellectual, emotional, social, spiritual, physical (Kellert, Bell and Dyment, 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 Dyment, Kellert, Wells, Taylor, Kuo and Sullivan)
A Pivotal Role

Faculty and Students

Real Environmental Problems
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

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

Reuben Sanchez
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

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

Lauren James
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
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
Spread the Model

- Environmentally Ready CSU

29 CSU sites
39 UC sites