WISE Watersheds Inspiring Student Education

2017 STATISTICS

58
Galileo Academy of Science and Technology students completed 50 hours or more of field study

25
Biweekly field trips to the Golden Gate National Parks

98%
of students reported increased appreciation of the value that parks bring to their community, after participating in Project WISE

95%
of students reported increased understanding of the impact that human behavior has on the environment, after participating in Project WISE

200+
People attended the annual Project WISE symposium

PROGRAM DESCRIPTION

Now in its 17th year, Project WISE engages students from Advanced Placement Environmental Science classes at Galileo Academy of Science and Technology, a public high school in San Francisco. In this year-long, place-based, student-centered program, participants learn environmental science concepts and utilize scientific practice to better understand their parks and communities.

Much of the learning during Project WISE occurs outside, as classroom concepts are applied to sites in national parks and San Francisco neighborhoods. For instance, water quality lessons are reinforced by an intensive study of Lobos Creek in the Presidio. The Crissy Field Marsh is used as a case study of wetlands, and air quality is investigated through comparison of pollution levels across San Francisco.

During the spring semester, Project WISE students conduct their own scientific explorations and present their findings at an annual symposium to peers, park officials, school district administrators, and members of the community.

Overnight excursions to national parks engender formative experiences, making environmental topics relevant and subject matter tangible. Gazing at granite monoliths while discussing geologic formations reinforces students' understanding of how these structures are created. These settings also expand their understanding of public lands: who visits them, who does not, and what barriers exist—all of which contribute to their own values and connections to the environment.

WISE hires several interns each year. During the semester, they collaborate on trip coordination, outreach, and curriculum planning and development. Leading substantial portions of trip programming, interns are the peer-to-peer connection between curriculum and students. Young people are on equal footing with the interns in charge, offering greater vulnerability and opportunities to grow during activities that build community.

PARTICIPANT STORY | HIGHLIGHTS

During the annual 10-day trip to Point Reyes National Seashore, students take part in authentic scientific research. Spending one week at the Historic Lifeboat Station, youth work with staff from the Point Reyes National Seashore Association and the National Park Service conducting hands-on research on ecological projects.

The takeaway is real scientific work being conducted by individuals from all walks of life. Crissy Field Center staff usher young people through doors of opportunity youth might be unaware of. By contributing to data used by working professionals, students expand their appreciation for scientific careers—and are empowered to pursue academics and professions that may lack representation from people of color.

Walking waist-deep in water to collect data (while laughing with their peers!) delivers perspective and impact that a textbook cannot provide. These opportunities supplement coursework through real-world examples and on-the-job shadowing.

> Doing all the experiments out in the field is fun. It opened my eyes to different things you can do in environmental careers and I want to major in environmental sciences. The trip made me understand this is something I really love. I want to go there and facilitate activities and organize people to get out and perform in-the-field experiments and studies. I'm keeping my eyes open for internship opportunities.
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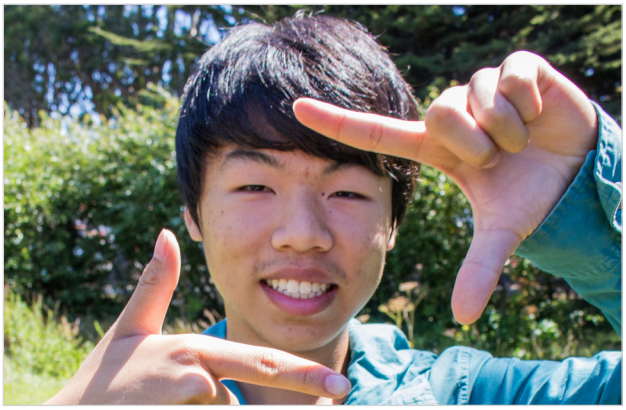
> *–Ben Lam, Project WISE Academic Intern*



TRENDS | LEARNING | FUTURE PLANS

PATHWAYS FOR THE FUTURE

Project WISE helps students in future academic and career paths. Through mentorship and professional development, staff guide interns to develop skills like public speaking, critical thinking, scientific investigation, and report writing.

> I was definitely really challenged this semester because I worked, went to school, and did the internship at the same time. My supervisor Lan worked with me on basic professional skills, communication, and all those things that you need to be in a workforce. She was always telling me to meet or get to know people, and try new things.
>
> *–Kevin Tan, Project WISE intern*

KEY PARTNERS

SFUSD

Galileo Academy of Science & Technology

POINT REYES NATIONAL SEASHORE ASSOCIATION

SPECIAL THANKS
to the Tri-Agency Natural Resources teams