



P.O.Box 880474 • San Diego, CA 92168 • Phone: (619) 599-8205

## **GREEN FOOTPRINTS PROGRAM**

### **OVERVIEW**

Growing knowledge on environmental footprints – the ways humans rely on natural resources – was the inspiration behind the creation of a Green Footprints Program within Excel Youth Zone. Instead of depletion of natural resources, youth engage in the community to regenerate and conserve environmental assets which will lead to a “greening” impact in nature.

Excel Youth Zone’s Green Footprints Program supports environmental service-learning projects for K-12<sup>th</sup> grade youth. At least 80% of these youth come from Title I schools where a high percentage of the youth qualify for free or reduced lunch. Many of the schools our youth attend have limited science curriculum, materials and/or hands-on opportunities. Excel Youth Zone has found, in some of the schools our youth attend, almost 40% of the students scored below basic competencies in 8<sup>th</sup> grade science. Our youth primarily live in areas where pollution and neglected urban habitats are considered the norm for the community and the responsibility for environmental care is sometimes seen as a low priority.

### **PAST PROJECTS**

Excel Youth Zone (XYZ) is contributing to a new generation of environmentally aware and action oriented youth. The Green Footprints program is central for youth K-12<sup>th</sup> grade to research and develop innovative projects and collaborative efforts to address the issues which impact the youth where they live and beyond. For example, 90 kindergartens primarily from low-income, recent immigrant families studied earth science, planned and participated in a school beautification project by planting jacaranda trees to provide shade for students. The shade trees will help cut energy costs for their school which relies heavily on numerous portable fans to keep students cool. XYZ is pairing students and teachers with experts in the field who will teach, ongoing, the importance of trees, green classrooms and the longevity of the impact of their project on their low-income school.

Environmental projects are a favorite of all Excel Youth Zone youth participants. Projects in the past include: the hosting of a Clean Air Fair, the removal of invasive plant species, restoring natural habitats with Aquatic Adventures, educating the community on the impact of storm drain pollution and Reuse, Reduce, Recycle Campaigns just to name a few. Our middle school youth are currently discussing their desires to focus on service projects around our waterways and oceans. A favorite activity has been to help the YMCA at Camp Surf. In the past, a project to help endangered frogs and learn how to alleviate non-source pollution, ended with youth being treated to an overnight retreat at Camp Surf. YMCA instructors gave access to their educational resources, as well as, instruction in surfing, archery and boogie boarding. Although most of our youth live within 5 miles of the coast, almost 70% reported they had no memory of going to the beach.



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## YOSEMITE NATIONAL PARK SERVICE-LEARNING

The highlight of our environmental service-learning projects launched June 2008 when Excel Youth Zone facilitated 36 high school youth to Yosemite National Park for 4 days to learn and work side-by-side with environmental experts and National Park Rangers in field science research. A diverse group of youth attended Yosemite: 70% Latino, 22% Asian Pacific Islander and 8% from other racial/ethnic groups.

Our youth in Yosemite participate in stream monitoring and collect samples to detect the presence or absence of certain insects and other small invertebrates. They analyze their samples to determine the health of streams. Yosemite National Park scientists utilize the students' information. The second project youth conduct in Yosemite is to take measurements of designated trees to monitor their growth rate and compare data to information collected in the 1930s. Youths' measurements help create long-term management plans for the giant sequoia forest.

### OUTCOMES

Post-survey results of youth from the Yosemite trip found: 100% stated they now understood the relevance of their science classes to real-life, 100% could identify a new science/environmental career or profession and 100% have returned to San Diego County to recruit other youth to work on a locally related environmental service-learning projects. Youth-led environmental projects, as a result of their National Park experience, included local habitat restorations, revitalization of sustainable food community garden and water conservation. Each XYZ youth stated a renewed connection to the outdoors and environmental settings. For 100% of the youth participants, this was their first experience at a National Park.

Excel Youth Zone selected Yosemite Institute because it has provided award-winning, residential outdoor education programs in Yosemite National Park for K-12 school groups since 1971. Excel Youth Zone saw the opportunity for high quality service-learning through this notable landmark. While youth benefitted Yosemite National Park through the service-learning projects, Yosemite National Park provided youth experiential and inquiry-based learning and created memorable and rewarding life experiences for the youth. Yosemite Institute's programs are aligned with state education standards. Benefits include:

- Increased engagement in learning;
- Enhanced comprehension of environmental issues;
- Improved group dynamics;
- Renewed curiosity about home communities and the world at large.

In a study of teachers and students attending field programs at Yosemite Institute and its sister campuses, researchers from Stanford University's School of Education found that:



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- 77% of field science programs contained some elements of inquiry
- 100% all programs addressed at least 3 out of 8 intelligences (e.g. verbal-linguistic, bodily-kinesthetic, and visual-spatial)
- 93% of students actively communicated during activities
- 90% of students were engaged with program
- The number of times girls spoke during programming was virtually equal to the number of times boys spoke; thereby leveling the field of science interest of the two genders

The American Institutes for Research determined that California students attending outdoor education programs:

- Raised their science scores by 27%
- Had increased motivation to learn
- Showed substantial improvements in cooperation, self-esteem, conflict resolution, peer interaction and classroom behavior

### **CONCLUSION**

Excel Youth Zone's environmental service-learning projects promote youth development, teamwork, leadership, stewardship and a love for learning and science. A grant from the Cox Kids Foundation helped launch the Green Footprints Program in 2009. Excel Youth Zone is excited about other opportunities to financial and programmatically sustain and expand this program for youth to be able to impact their local communities and national environment for a lifetime.