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Arnold Schwarzenegger
Governor

Dear After School Provider:

We would like to help educate your students about a major environmental and public health issue now facing California: polluted runoff. The pollution is created when trash and everything else left on ground is washed or thrown into stormdrains. Unlike the sewer system, where contaminated water flows through treatment plants, stormwater runoff is carried untreated by stormdrains directly into local creeks, rivers, and the ocean. The stormwater pollution is creating unhealthy waterways and growing environmental problems for local communities.

The California Water Boards, local agencies, and others are working hard to reduce polluted runoff and its harmful effects. Public education is one important way to reach that goal, along with cleaning up problem sites, and requiring public and private entities – including after school programs – to become involved in reducing polluted stormwater runoff. To this end, we are asking after school providers and their students to become involved in helping to restore and protect California's water quality.

The Water Boards are comprised of the State Water Resources Control Board in Sacramento and nine regional water boards throughout the state. The boards serve collectively as the state agency responsible for ensuring the quality of California's water. Toward this end, the Water Boards have developed the enclosed water quality units of study specifically for upper elementary/middle school grade levels. These instructional tools use the educational process known as "service learning," integrating inquiry-based learning with real-world, hands-on experiences. The lessons aim to improve the water running off of school/facility locations and from adjacent communities. Called the Water Quality Detectives After School Program, the activities were designed to increase students' awareness of polluted runoff and how it impacts local waterways and the environment.

Additionally, the Water Boards created the Water Quality Service Learning Program, a school-based water quality program, specifically for 4th – 6th grade levels, and a Web-based learning tool, featuring an online mentor. Log onto www.waterlessons.org for additional resources and support.

It is our goal to offer every after school program student in California the opportunity to learn about local environmental science issues and, more importantly, to take an active role in improving local waterways. We believe our Water Quality Detectives After School Program – an unprecedented effort in California – can help achieve that. It is with this hope that we offer you this guide. With your involvement, we can help youth become environmental stewards and ensure cleaner and healthier California waterways for years to come.

Sincerely,

Tam M. Doduc, Chair

California Environmental Protection Agency



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INTRODUCTION

WHAT IS SERVICE LEARNING?

Service learning, as defined by the National Service Learning Partnership, “is a teaching method that engages young people in solving problems within their schools and communities as part of their academic studies or other types of intentional learning activities. Service learning helps students master important curriculum content by making meaningful connections between what they are studying and its many applications. Service learning also helps young people develop a range of service skills, from acts of kindness and caring, to community stewardship, to civic action.”

Service learning differs from community service in that service learning includes a learning component and is student-driven, rather than project-driven by an adult organizer. Examples of service learning:

- Students create a trash reduction campaign after studying the cause of trash and its effect on the water quality of a local body of water and the water cycle.
- Students present posters and presentations to younger students after discovering the impact water runoff at their facility has on living organisms.

The Water Quality Detectives After School Program incorporates key elements of quality service learning, including: integrated learning, service to the community, collaboration, student voice, civic responsibility, reflection, and evaluation.



KEY ELEMENTS OF QUALITY SERVICE LEARNING

Ideally, when developing a quality service learning project, all of the following key elements should be included:

1. INTEGRATED LEARNING

Service learning projects support the learning objectives of the after school program and vice versa.

2. SERVICE TO THE COMMUNITY

Service learning projects bring together students, program providers, and community partners to provide meaningful service that meets community needs.

3. COLLABORATION

A quality service learning project incorporates many partners (“stakeholders”) in its design and implementation, including students, parents, community-based organizations, program providers, and service recipients. All partners benefit from the project and contribute to its planning and implementation.

4. STUDENT VOICE

Students participate actively in every step of the project, including identifying community needs and issues, choosing and planning the project, reflecting on it at each stage, evaluating it, and, most importantly, celebrating its success to reinforce a “job well done.”

5. CIVIC RESPONSIBILITY

By participating in a service learning project, young people learn that they can have a positive effect on their community and that their voice counts.

6. REFLECTION

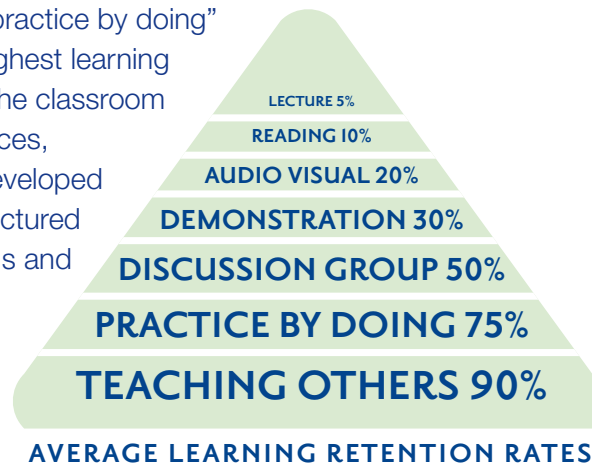
Service learning incorporates important reflection time before, during, and after the project to draw links between the social and personal aspects of the project.

7. EVALUATION

Evaluation conducted by all partners, including the students, program providers, and communities, measures progress towards the learning and service goals of the project.

WHY IS SERVICE LEARNING MORE EFFECTIVE?

Service learning primarily uses the methods of “practice by doing” and “teaching others,” both of which yield the highest learning retention rates. By integrating what’s learned in the classroom with outside-the-classroom community experiences, students retain more. “The Learning Pyramid” developed by the NTL Institute of Alexandria, Virginia and pictured here, shows various curriculum teaching methods and the learning retention rates resulting from each method.



STUDIES SHOW THAT SERVICE LEARNING AND AFTER SCHOOL PROGRAMS ARE A WINNING COMBINATION

Reports have shown that compared to youth across California, youth involved in after school programs with service learning components reported higher levels of cooperation, teamwork, respect for others, and conflict resolution. Some after school programs were able to measure academic improvement, including increased grade point averages and higher test scores.

The reports were conducted by Youth Service California (YSCal), funded through a grant from the Governor’s Office on Service and Volunteerism (GO SERV) and the Corporation for National and Community Service. YSCal established seven after school programs distributed throughout California. Called the California After School Service Learning Initiative, they demonstrated that service learning can contribute significantly to the achievement of youth in after school programs.

THE TIME TO ACT IS NOW

It is against the backdrop of these promising service learning studies that the California Water Boards decided to bring integrated environmental learning to after school providers in California. We believe that this will not only result in higher student achievement, but also result in cleaner, healthier California waterways in the future. The time to act is now.