

Aluminum Can Drive A Hayward Service-Learning Project

Contact Information

Submitted by: Moira Chapman mchapman@acoe.k12.ca.us

Alameda County Office of Education

Darci Johnson darcijohnson78@yahoo.com

Hayward Unified School District

Burbank Elementary School

393 B St

Hayward, CA 94540

(510) 293-8568

(510) 528-7142 (fax)

Lesson Plan

Introduction and Description of the Lesson

Burbank Elementary resides in downtown Hayward on the east side of the San Francisco Bay. Students come from low socio-economic backgrounds. This provides a challenge, due to many students' parents working two jobs or commuting over an hour to work each day. Burbank is ethnically diverse, with a majority of the population Latino and African American. Also represented, in order of prevalence, are Caucasian, Asian, Vietnamese, Chinese, and Pacific Asian Islander communities.

The previous two school years, a core group of teachers participated in a service-learning waste reduction grant program sponsored by our local county office of education. Each teacher worked with the concepts of the 4 R's (Recycle, Reduce, Reuse and Rot). This lesson teaches students to clean up their campus, homes, and streets by recycling cans; as well as addressing the Math, Language Arts, and Social Science standards. It also proved to be a good culminating activity, bringing students together school-wide and fostering waste reduction on campus with a competition to see who could bring in the most aluminum cans.

Instructional Process

Preparation

Students in the 2nd grade walked around the playground in the morning, before the first recess when the school is cleanest, and after lunch. They kept track of the trash they found in the area as they walked. A class discussion evoked students' understanding and motivation. The students formed a clean-up committee to discuss what to do with the garbage. They decided that, to reduce the trash in the dumpsters and landfill, the school should recycle and reuse what it could.

Before beginning the project, the teacher located school collection bins for recyclables and confirmed a system for picking up the recyclables. The teacher researched what could be recycled and the collection procedures for the school. To avoid health issues, the teacher

provided gloves and trash bags to the students and held a class discussion on proper collection procedures.

An Alameda County Office of Education employee on the Service-Learning/Waste-Reduction Team came to the school to help the kids take a closer look at how the school could reduce its' waste and prevent recyclables from winding up in the dumpster. The teacher extended this activity by collecting samples from other class' waste cans and asking students to figure out what could be recycled.

Through teacher demonstrations, examples, and discussions, the students understood and followed through with project expectations. They learned to act for the greater community and societal good when making decisions affecting their environment and how to help others while helping themselves. Class discussions and brainstorming, including a KWL chart (what a student Knows, Wants to know, and Learned from the lesson), accessed and augmented students' prior knowledge about recycling and waste identification.

California State Academic Content Standards

2nd Grade Mathematics

Statistics, Data Analysis, and Probability 1.0, 1.4

2nd Grade Language Arts

Writing 1.0

Written and Oral English Language Conventions 1.0, 1.1

Listening and Speaking 1.0, 1.5, 1.6, 2.0, 2.1

2nd Grade History/Social Science

People Who Make A Difference 2.4

Action

Students participated in a needs assessment of the campus. While participating in the clean-up activity and can collection, students reflected on questions posed by the teacher and volunteers to ensure that students understood the meaning and validity of the activity.

Students collected data on the number of cans collected to analyze and draw meaningful hypotheses related to the mathematics standards. They also wrote and presented a recycling rationale, related to the social studies and language arts speaking standards, describing the important for others to recycle.

Each session of the service-learning project began with a discussion about the civic, social and personal responsibility outcomes that students encountered during our lessons. Students identified the components of each throughout the process of the lesson.

Students collected aluminum cans from their homes, neighbors, and relatives on a daily basis. They counted and recorded the cans on a chart including the daily amount as well as the running total. They worked in teams of 3-5 to present the data to other classes on why they should participate in the can drive. All classes decided to participate in the can drive. They competed for an ice cream party for the class that brought in the most cans.

Reflection

Students discussed why it was so important to recycle and reuse objects. They also wrote reflective essays and gave oral presentations about the aluminum can drive and why it was important to recycle.

Student Assessment

The teacher assessed students on their ability to collect and interpret numerical data on aluminum can collection, as well as on their English Language content in their essays and oral presentations. The teacher informally assessed the students on the Social Science content and civic responsibility outcomes during class discussions concerning the environment and the recycling project.

Project Evaluation and Expansion

The students evaluated the quality of the service project by the results of the can drive and the success of their education efforts of their peers. They discussed and reflected on the positive areas and those needing improvement.

Celebration / Public Recognition

The school celebrated the service with an announcement made over the loudspeaker announcing the 1st through 3rd place winners of the can drive. They also displayed the cans collected in the schoolyard for the students to see and gain perspective of their success.

Materials and Staff Development Needs

Material needs for the lesson included grocery bags for collecting cans; paper, crayons, markers and paint for posters; calendars for recording number of cans collected; journals; and chart paper for KWLs, brainstorming, and graphing.

Staff participating in the project met during lunch to discuss the needs of the students, the project, and preparations and daily results of the drive. The Alameda County Office of Education, a community partner for the service-learning grant, held meetings for all involved.

Funding and Resource Support / Sustainability

Individual teachers donated their time and vehicles to transport the cans to a recycling center. The Alameda County Office of Education awarded the school a grant for this and other related waste reduction projects. The activity may be sustained through a school-wide, year-long can drive to raise funds monthly for the school.

Lesson Plan Profile

Contact Information

Submitted by: Moira Chapman mchapman@acoe.k12.ca.us
Alameda County Office of Education

Darci Johnson darcijohnson78@yahoo.com
Hayward Unified School District
Burbank Elementary School
393 B St
Hayward, CA 94540
(510) 293-8568
(510) 528-7142 (fax)

Superintendent Region: 4
CDS School code: 01 61192 6000905

Abstract

Burbank Elementary resides in downtown Hayward on the east side of the San Francisco Bay. The students come from low socio-economic backgrounds. This provides a challenge, due to many students' parents working two jobs or commuting over an hour to work each day. Burbank is ethnically diverse, with a majority of the population Latino and African American. Also represented, in order of prevalence, are Caucasian, Asian, Vietnamese, Chinese, and Pacific Asian Islander communities.

During the previous two school years, a core group of teachers participated in a service-learning waste reduction grant sponsored by our local County Office of Education. Each teacher worked with the concepts of the 4 R's (Recycle, Reduce, Reuse and Rot). This lesson taught students in the 2nd grade to clean up their campus, homes, and streets by recycling cans. It also proved to be a good culminating activity, bringing students together school-wide and fostering waste reduction on campus with a competition to see who could bring in the most aluminum cans.

Degree of Complexity for Implementation

Medium

Educational Setting and Participant Information

Educational Institution

Public

Comprehensive Schools

K-6

Alternative Settings

Whole Class
Cross-age
Multi grade
Traditional 9 month

Kinds of Service Provided

Overview of Service

Indirect Service

Service Issue Areas

Education

Duration of Service Activity

Short Term

Specific Service Activity Areas

Educational

Environmental

Lesson Content

Subject Areas

Mathematics
Language Arts
Social Studies

California State Academic Content Standards

2nd Grade Mathematics

Statistics, Data Analysis, and Probability 1.0, 1.4

2nd Grade Language Arts

Writing 1.0

Written and Oral English Language Conventions 1.0, 1.1

Listening and Speaking 1.0, 1.5, 1.6, 2.0, 2.1

2nd Grade History/Social Science
People Who Make A Difference 2.4

Civic Responsibility Outcomes

Students will act for the greater community/societal good when making decisions that will affect their environment. Students will learn to help others while helping themselves.

Collaborating Partners

Educational Institutions

Preschool
Elementary
County Office of Education

Individual Partners

Parents
Grandparents

Reflection

Journals
Pictorial presentation
Oral presentation