

California Native Plant Coloring Book

Contact Information

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Introduction and Description

The 7th and 8th grade students at Monte Vista Middle School created the California Native Plant garden in a waste area behind some classrooms. The students wanted to share the garden with the younger students and create a guide that not only informed them of the plants in the garden but a variety of plants native to California. The students wanted to create something that they could use as a fund raiser to help buy supplies for the garden and help keep it self sufficient.

The students decided to make a coloring book that would describe all of the plants in the garden and help others become aware of other plants native to California. The students also decided to make extra copies to sell to parents and community members to raise funds for the garden. They also wanted to give away copies to the lower grades to help spark interest in California Native Plants.

Preparation

Before this service learning activity the students need to have an understanding of plant cell structure, basic botany, and California plant history. Before the project began we studied different types of plants and researched and listed ones that are native to California.

Students loved the garden but realized that no one knew the plants in the garden. They wanted other students to be able to enjoy the garden but they didn't want to "bore students with lousy lectures." The students brainstormed as a group and presented various ways of teaching other students about California Native Plants and help others identify the plants in the garden. The students determined the "funnest" way to teach about the garden and native plants was to create a coloring book.

Before they started the book the students brought in different types of coloring books that varied from very simple (Disney Characters) to very complex books (Anatomy Coloring Book). The students needed to decide the audience the book was intended for and decide on the format of the coloring book. The students complete the discussions in small groups and decide on the preferences. The students present their groups choices to the class. The class then decides on an overall format for the book.

One item that is discussed with the class is the importance of listing the sources of information and giving proper credit to the original authors if any material was used. The

students also need to know effective ways to conduct research and the use of different sources for information. Too many students rely exclusively on the internet for information and need to learn how to use the library

California State Academic Content Standards

7th Grade Science

5a, 5b, 5f, 7a, 7b, 7d, and 7e

8th Grade Science

6a, 6b

8th Grade Language Arts

Writing 1.0

Listening and Speaking 2.0

Action

To ensure that the service will be high quality, it was necessary to prepare the students for the actual activity. The students researched different types of field guides and coloring books to decide on a format that would best suit the intended audience. The students used note taking skills, book and internet research, diagrams of plants, and created drawings based on the real plants in the garden.

The students would sketch outlines of the plant in detail (Complete plant and a leaf or branch of the plant). The students researched the scientific name of the plant, the common name, the general flowering pattern for the plants, the native area of the plant, and the general uses for the plant. Students also researched plants that were not in our garden but were native to California to add to the coloring and help promote awareness to native California plants.

Students participated in the activity individually and in groups. Students took on different roles within the project: all researched in some capacity; a group of students volunteered to be the typists and created a page template on the computer; Most of the work on the Field Guide took place during the science class (about 45 minutes each day). Some students were so enthused about the project that they came in to work on the Coloring Book during lunch and break. Some students also volunteered to stay after school to continue working on the Guide.

When all information was gathered from the different groups, the students helped organize all of the materials into book format, created an index, table of contents, typed up an introduction to the field guide/coloring book, and created a cover. When the book was organized into the correct order and format, it was taken to the copy shop to be printed and bound. The first copy was proofed and corrections made and sent back to the copy center for final printing. The students then created fliers to advertise their creation and promote the sale of the coloring books to benefit the California Native Plant Garden.

Reflection

In the beginning, the students had to reflect on their school community. They had to really think about how they, as young students, could impact their school. They also reflected on what the school was providing them. Once they agreed upon a need, then they had to reflect on how it might affect the school and garden. When that was established, the students were able to begin their project.

We as a class decided to create a rubric. Having a rubric gave the students a focus and clarity. While the students were busily working on their books, they had to keep reflecting on their progress, the quality of their drawings, the facts gathered, etc. The students were continually reflecting on their pages throughout the process. Reflection was kept in their composition books that were purchased out of the class budget. Once the project was completed and the books printed and bound, the students reflected on the entire experience.

We had a huge discussion about the impact they made on their community and what they learned from this service-learning project. We discussed what was fun for them, what was difficult, if they would like to do another service-learning project again, etc.

The teacher asked some of the following journal writing questions throughout the project:

- What do you think of when you hear the word nature?
- Would you like to be involved in creating and developing a book?
- Tell me about how the group works together. Is everybody contributing? Do things need to change?
- What is the most surprising thing you learned while working on the project?
- How have your drawing skills improved while performing this project?
- Why is important to preserve native species?

Student Assessment

Students will be assessed through informal and formal observations during class time. Informal observations consist of teacher circulating, observing, and asking questions during class time. Students will also be assessed based on the quality and accurateness of their field notes, research notes, and final product. Group effort and cooperation will also be assessed. The written reflections and project logs were the secondary assessment tools. Students completed self-evaluations halfway through the project and again at the end.

Project Evaluation and Expansion

Immediate evaluation will be based on the accuracy of the facts contained in the coloring book. The book will also be evaluated on the quality and precision of the drawings used on the coloring book pages. The overall quality of the service-learning activity will be evaluated by the students themselves, parents, and classrooms that use the coloring book. Their feedback would serve as the primary basis for evaluation, as well as for future improvements to the book. Evaluation of this project cannot be immediate; others must

use the coloring book over a sustained period of time in order for the authors to know and understand its impact.

Celebration/Public Recognition

This success of this service was celebrated in several ways, some of which involved public recognition of both the service and the accompanying learning. These included: Presentations and guided tours during open house, presenting a coloring book to each staff member during the staff meeting, an article in the local newspaper showing the accomplishments of the class, and recognition during the curriculum council during the school board meeting.

Materials and Staff Development Needs

Students required the use of paper, fine line black drawing pens, internet access and research books, sample field guides and coloring books, and colored pencils/crayons. The staff was not required to contribute, except for the supervising teacher to help the kids stay on track.

Funding and Resource Support/Sustainability

Start up funding for paper, printing, supplies came from the general classroom budget, etc. Continued funding came from the sale of coloring books and the sale of compost from an ongoing service learning project in another class.

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A Service Learning Project

Lesson Plan Profile

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Abstract

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Degree of Complexity for Implementation

Low/medium

Educational Setting

Educational Institution

Public

Comprehensive Schools

6-8

Alternative Settings

Resource classes, Special Day Classes

School Schedule

Traditional 9 month

Service Provided

Overview of Service

Level of Service

Indirect Service

Service Issue Area

Education

Science

Social Needs

Duration of Service Activity

Long Term (18 sessions)

Specific Service Activity Areas

Educational

Teaching Activities

Diversity Education

Social Needs

Environmental Protection

Lesson Content

Subject Area(s)

Science

California State Academic Content Standards

7th Grade Science 5a, 5b, 5f, 7a, 7b, 7d, and 7e

8th Grade Science 6a, 6b

8th Grade Language Arts Writing 1.0 Listening and Speaking 2.0

Collaborating Partners

Educational Institutions

Elementary Schools

Individual Partners

Friends

Parents

Reflection

Journals

Artistic presentation

Oral presentation

Coloring Books