

# Xeriscaping In Your Community

## Summary

Students participate in a service-learning project to design landscaping that maximizes water use and utilizes indigenous plant species.

## Time Frame

10 class periods of 45 minutes each

## Group Size

Small Groups

## Life Skills

Thinking & Reasoning, Communication, Social & Civic Responsibility

## Materials

Internet access

Paper and markers to make brochures, posters, advertisements, etc. (for optional presentation)

Video recorder or digital recorder and taping supplies (for optional presentation)

Computer Presentation Software (for optional presentation)

## Background for Teachers

Xeriscaping is landscaping which requires little or no water for maintenance. It utilizes native species in order to withstand conditions in a particular area.

The Web Sites listed under Instructional Procedures have some excellent information on designing, selecting plants, and caring for a xeriscape garden.

## Student Prior Knowledge

Water use and gardening practices of family and community members.

## Intended Learning Outcomes

Students will utilize water more efficiently, work cooperatively in a group, understand the components of soil, interpret garden related data, and persuasively convey a message to the intended audience.

## Instructional Procedures

Have the class plan and implement a xeriscape garden. This could be a portion of the school grounds or a parking strip at a neighboring home. Students must prepare the soil; decided which plants to use; plan an attractive arrangement of the plants; and consider the height, growing aggressiveness, shade and water needs, etc., of the plants.

After the plants are in place, have the students monitor temperature, precipitation (including sprinklers, if used), soil condition, hours of sunlight, and plant growth or health. If the plants are not doing well, they can use the data they have collected to help determine the problem: Are the plants getting too much water? not enough sun? too much traffic (compacted soil)? etc.

Have the students plan to advertise and present their xeriscape garden at a school function such as SEP Conferences, Family Reading Night, Book Fair, PTA Meeting, etc. They can make posters, write a paragraph for the school newspaper, send out fliers, or send email to families who wish to communicate via email. To present their garden students could provide a booth in the hallway, show

pictures, slides, a computer slide show, or a class-made movie. Students need to show the process of planning, implementing, and monitoring their garden. They need to emphasize the value of the project. They need to relate what they have learned through their involvement in this project.

### Strategies for Diverse Learners

Students with talents, such as artistic ability, verbal skills, or leadership skills, can be assigned to work with groups that are lacking in that ability.

Peer Tutoring: English Language Learners can be assigned to work with groups that have bilingual students or accepting and helpful students.

Students who have difficulty working with other students could be assigned to help the teacher prepare materials, monitor and record weather conditions in the garden, or assist students in preparing computer presentations.

### Extensions

Compare data gathered from the garden with other classrooms who are doing the project at a different school, via email.

### Assessment Plan

This project is an multifaceted process. Several rubrics have been attached to this lesson to give options in evaluating this project.

### Rubrics

[Cooperaaative Group Participation](#)

[Oral Presentation Rubric](#)

[Science Lab Report Rubric](#)

[Science Writing Rubric](#)

### Bibliography

### Authors

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