



SREB/High Schools That Work

Enhanced CT

Project Unit Template

Project Title: Reap What You Sow

Essential Question: How are students going to promote learning to younger students at Willie Chavez Park in Belen, New Mexico?

Technical Content Standards:

Science, Technology, Engineering & Mathematics Career Cluster™ (ST)

1. Develop a safety plan for younger students.
2. Discuss the area/demographics, include history and expectations of what they will need to do.
3. Research the area. Describe what you see and envision for the area in the future and present.
4. Discuss what kind of plant life exists. Talk about invasive and natural plants, trees, shrubs.
5. Generate an amount of how many seeds are needed. Use statistics regarding longevity of plants, trees and shrubs.

The Project Description

Step One: Project Description Outline:

You are classroom teacher.

You are faced with informing and encouraging younger students from a chosen elementary school in the community about creating a new park where the class will plant seeds of various plants for growth. You are also required to educate new students to the school to better understand the area and be part of the development and planning.

You must (what must be done technically and academically to solve the problem): brainstorm ideas, sketch selected idea, model of the park. Also, you need insight from your peers on the ideas while incorporating a list of safety aspects for the elementary students. Students will also need to choose an area for the best place for elementary students to plant.

Technical:

Use concepts and processes to solve problems involving design and/or production.

Display and communicate safety information.

Apply the elements of the design process.

Research, Read and Write:

CCSS.ELA-Literacy.CCRA.R.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

CCSS.ELA-Literacy.CCRA.R.5 Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.

CCSS.ELA-Literacy.CCRA.R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

CCSS.ELA-Literacy.CCRA.R.10 Read and comprehend complex literary and informational texts independently and proficiently.

CCSS.ELA-Literacy.CCRA.W.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.

Math:

CCSS.Math.Practice.MP1 Make sense of problems and persevere in solving them.

CCSS.Math.Practice.MP3 Construct viable arguments and critique the reasoning of others.

CCSS.Math.Practice.MP5 Use appropriate tools strategically.

CCSS.Math.Practice.MP6 Attend to precision.

Career Pathway:

Apply principles of design in plant systems to enhance an environment (e.g., floral, forest, landscape and farm).

Once you are decided upon a course of action, you will make a formal presentation to the city's park and recreation department outlining your safety plan. Your students are also to be a part of the presentation where they will present the design for the park. They will also speak to the parks' staff about what they have learned by participating in the project. You are seeking the staff's approval for the new park in order to receive city council approval.

Step Two: Project Description

Each student will take the role as a teacher. They will be assigned to at least three elementary students. You will need to discuss and explain to the elementary students where they are going and what's important to think about while they are at the park.

How are students going to promote learning to younger students at Willie Chavez Park in Belen, New Mexico? After reading safety manuals and city code requirements about city park safety practices and participating in enabling learning activities intended to assist you in designing, building and testing, write a safety proposal in which you describe measures to be taken for safety in the new city park you propose. Support your discussion with evidence from your research and from conclusions you draw from participation in enabling learning activities

The students who are acting as the teacher will need create a safety plan and discuss with the elementary students what's important to know about the park and safety requirements. Students will also need to create a draft of where the elementary students will be planting and how it will look.

After students have explained the safety requirements, students will teach/inform the elementary students of the history and science of the areas. Students will gather information from text books and collect examples of trees, shrubs and plants to present to the elementary students. The students will discuss with elementary students what invasive and natural plant life exists in the area. Part of the presentation will include a cost analysis to remove or add features to the park. Students will sketch a design to incorporate what they think the park should look like in the future.

When students have voted and determined the best design they will finalize where the elementary students will plant what kind of plants, where and how. Students will have the opportunity to teach the students at the park on a Friday and ultimately plant a seed for change/growth.

Workforce Readiness Standards:

- Act as a responsible and contributing citizen and employee.
- Apply appropriate academic and technical skills.
- Communicate clearly and effectively and with reason.
- Consider the environmental, social and economic impacts of decisions.
- Demonstrate creativity and innovation.
- Employ valid and reliable research strategies.
- Utilize critical thinking to make sense of problems and persevere in solving them.
- Model integrity, ethical leadership and effective management.
- Use technology to enhance productivity.
- Work productively in teams while using cultural global competence.

