

# Conservation Conversations

## Application of Conservation Methods

### COURSE

Exploration of Agriscience  
Unit: Natural Resources  
Total Time: 60 minutes  
Materials: Paper, pencils, whiteboard, markers

### AFNR\* STANDARDS

8.0 Apply knowledge and skills in natural resources

- 8.01 Identify methods or practices of the conservation of natural resources
- 8.02 Demonstrate a method or practice of conservation

### ESSENTIAL QUESTION

How can we practice conservation of resources at our camp?

Alternative: How can we practice conservation of resources (specific context)?

### OBJECTIVES

1. Create a conservation strategy plan.
2. Describe potential solutions to conserve natural resources in a specific setting.

### ACTIVATING STRATEGY

(~5 min) Review - Ask students, “What does the word conservation mean?”

- Explain - Take responses from 2-3 students. Then, explain that conservation is preventing wasteful use of a resource.

Activate/Question - Ask students, “Why do you think conservation is important?”

- Explain - Take responses from 3-5 students. Ask for clarification or probe as needed. Then, explain that conservation is important for many reasons. It helps protect wildlife, promotes biodiversity, and prevents the overexploitation of resources. Caring for our resources ensures that they can sustain and benefit current and future populations.

Context - Today, we will be contextualizing the idea of conservation through efforts at camp.

- Alternative: Contextualize the idea of conservation through efforts at school (or setting of instructors choosing).

\*AFNR stands for Agriculture, Food & Natural Resources. The lesson plan content aligns with Florida AFNR pathway standards.

## LEARNIG APPROACH 1

### Lecture with Discussion - (~10 min)

- Present method and practices of the conservation of natural resources (not a fully comprehensive list)
  - Recycle
    - Reusable products
  - Renewable energy
  - Conserve water
  - Plant trees and native species of plants
  - Establish protected areas
    - Protect biodiversity
  - Sustainable practices
- Ask you go through each bullet, ask students - "What is an action you can do to demonstrate a practice of conservation for \_\_\_?" Take 1-2 students responses.
  - Alternative variations:
    - Which practice do you believe makes the biggest difference in conservation?
    - Can you share a time when you practiced one of these methods of conservation?

## RECOMMENDATIONS

### For extending learning opportunities within the lesson

- Display various multi-use (recyclable) and single-use products. Have students sort the items. Discuss why students placed each item in each category
  - Ex: plastic cutlery, plastic bags, coffee Keurig pods, cotton swabs, plastic straws, Tupperware, metal straws, glassware, etc.
- This or That activity: Have students discuss how to categorize examples for each method/practice
  - Display examples of renewable versus nonrenewable energy sources on the front board for everyone to view. Facilitate discussion about why they categorized each example that way.
  - Display examples of sustainable versus unsustainable practices on the board. Facilitate discussion.

## LEARNING APPROACH 2

### Problem-based learning - (~40 min)

- (~2 min) Problem = Do we think there are ways the Ocala Outdoor Adventure Camp can waste less resources? Today, we will evaluate camp operations and brainstorm 3 potential conservation strategies that can be implemented to be more eco-friendly. We will use a conservation strategy framework to guide our discussion and create a brief proposal to present to the Camp Director detailing our methods and practices of conservation.
  - Alternative: Do we think there are ways (specific context – ex: our school) can waste less resources? Today, we will evaluate (specific context – ex: campus) operations and brainstorm 3 potential conservation strategies that can be implemented to be more eco-friendly. We will use a conservation strategy framework to guide our discussion and create a brief proposal to present to (specific context – ex: the principal) detailing our methods and practices of conservation.

- (~8 min) Discuss parts of a strategic plan
  - Generate vision & mission statements
    - The vision describes what you are wanting to achieve.
    - The mission describes how you plan to achieve the vision.
  - Identify objectives
    - Objectives are the specific goals you want to achieve.
    - Think – What type of natural resources do we want to target with our objectives?
      - Ex: Energy, water, paper, land, air
  - Develop strategies
    - Strategies discuss the methods or practices to achieve the objectives set out in the proposal.
    - Have students refer to ideas generated in Learning Approach 1 or generate new ideas.
  - Discuss approach
    - How will these strategies be implemented?
    - Why should these policies be put into effect?
    - What is the goal?
  - (~30 min) Create and Present
    - Have students work in small groups of 3-4 to create their conservation plan including at least three potential solution strategies. Have small groups present their work to the entire group.
      - Alternative: Facilitate discussion and idea generation in a whole group format. Map out class ideas and information on a whiteboard at the front of the class or in a format where everyone can see.

#### SUMMARIZING STRATEGY

- Reflection -(5 min)
  - Reflective discussion: Are there ways you could modify these strategies to incorporate them into your everyday lives at home?
    - Alternative: How successful do you think implementation of your conservation strategy plan would be? What may be some challenges for implementation?
      - Discuss noncompliance and lack of motivation as barriers to eco-friendly practices

## RECOMMENDATIONS

- **For extending learning strategies after the lesson**
  - Demonstrating methods or practices of conservation
    - Beautification project
      - Have students plan, design, and implement a native pollinator garden
      - [https://xerces.org/sites/default/files/publications/22-019\\_01\\_NPPBI-Florida\\_web.pdf](https://xerces.org/sites/default/files/publications/22-019_01_NPPBI-Florida_web.pdf)
    - Create a compost bin for your facility
    - Make homemade seed paper
      - <https://climatekids.nasa.gov/seed-paper/>
    - Campus cleanup
      - Take a ~30-minute walk around your facility and have students collect litter. Throw away waste but keep any plastics for students to start an Eco-brick. Students can add to their brick over several weeks or create multiple bricks over the course of the year.
      - <https://www.ecobricks.org/en/what.php>