



The Trail of a Snack Food

Summary: Students will choose a favorite snack or food and identify the impact its production, from cultivation of main ingredients to disposal of packaging, has on the environment.

Background Information:

Agriculture is essential for the production of foods that we require to survive. In agriculture there are necessary resources: soil, water, biological diversity of organisms and energy. The use and conservation of these resources is problematic with the practices of conventional agriculture. Agricultural practices supported by large food corporations can include the extensive use of fertilizers and pesticides. Large areas of soil are dedicated to one crop and require irrigation and fossil fuels are used to maintain the crop. There are various negative consequences of conventional agricultural practices. The quality of the soil is degraded by contamination and excessive use of water. The biological controls are eliminated and replaced by chemical substitutes that are toxic. The fossil fuels used to operate the machinery required in a large operation are toxic to the air and soil. Conventional agriculture is linked to other phenomena such as biopiracy of seeds, hybridization and genetically engineered foods. Alternative agriculture looks for ways to minimize the use of chemical substances. Sustainable agriculture practices look to maintain the integrity of the soil and water resources.

Grade Level: This is intended for 9-12 third year Spanish class.

Goal: Students will be aware of the effect of food production on the environment.

Key Concepts:

Use of resources to produce food goods. Environmental impact of agricultural products.

Objectives: Upon completion of this lesson, students will:

- 1) identify resources needed to produce a food product
- 2) explain impact of food production on the environment
- 3) offer alternatives to present practice in an effort to lessen impact on environment and use of energy

Teaching Location:

This lesson will take place in the classroom.

Lesson Time: The duration of this lesson is two 46 class periods

Subject Areas for

Infusion: Environmental Education, Family and Consumer Education (Food production)

Materials:

- Worksheets to record the trail of the product
- Pen or pencil
- Colored pencils for drawings

Set-Up:

A day or two in advance, ask the students to choose the product they wish to examine

Procedure:

Introduction: Discuss the production of food products and how it has changed over the years. Very few people obtain their food products from their own farms.

Standards:

Environmental
Education
B.12.9
B.12.11
C.12.1

Foreign Language
Standards

B.3 Reading
(Transitioning)

C.5 Writing
(Transitioning)

D.3 Beliefs and
Attitudes

(Transitioning)

Activity 1. (Day 1)

Instruct each student to think about their chosen food product and to fill in the worksheet provided. Monitor and offer suggestions if they are stumped.

Activity 2. (Day 2)

Students should examine the impact of the production of the product on the environment and the resources of soil and water.

Activity 3.

Students will brainstorm ways that the agricultural practices could be changed to lessen the impact on the resources and the environment

Conclusion.

Summarize as a class the suggestions made and answer any remaining questions.

Assessment. Students will verbalize findings and can also draw pictures of positive agricultural practices.

Adaptations: Some of the steps in the process can be combined into one step to shorten the worksheet. Pictures can be used exclusively for younger learners and those with special needs.

References:

Integración de la Educación Ambiental K-6to, Guía Curricular para los Maestros de Puerto Rico, 2003