Transplanting Workshop

Adapted from the TeachingChannel.com

Grade Levels

Grade 4-7

Curriculum Objectives

Grade 4

Investigate the interdependence of plants and animals within specific habitats and communities; (Science and Technology: Understanding Life Systems – Overall Expectation 2)

Demonstrate an understanding of habitats and communities and the relationships among the plants and animals that live in them. (Science and Technology: Understanding Life Systems – Overall Expectation 3)

Demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers (plants) and then to consumers (animals). (Science and Technology: Understanding Life Systems – Specific Expectation 3.2)

Classify organisms, including humans, according to their role in a food chain (e.g., producer, consumer, decomposer) (Science and Technology: Understanding Life Systems – Specific Expectation 3.5)

Grade 6

Investigate the characteristics of living things, and classify diverse organisms according to specific characteristics; (Science and Technology: Understanding Life Systems – Overall Expectation 2)

Demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans. (Science and Technology: Understanding Life Systems – Overall Expectation 3)

Investigate the organisms found in a specific habitat and classify them according to a classification system (Science and Technology: Understanding Life Systems – Specific Expectation 2.2)

Demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them (Science and Technology: Understanding Life Systems – Specific Expectation 3.2)

Describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities (Science and Technology: Understanding Life Systems – Specific Expectation 3.4)

Describe interrelationships within species, between species and between species and their environment, and explain how these interrelationships sustain biodiversity (Science and Technology: Understanding Life Systems – Specific Expectation 3.5)

Grade 7

Identify biotic and abiotic elements in an ecosystem, and describe the interactions between them (Science and Technology: Understanding Life Systems – Specific Expectation 3.2)

Describe the roles and interactions of producers, consumers, and decomposers within an ecosystem (Science and Technology: Understanding Life Systems – Specific Expectation 3.3)

Describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain (Science and Technology: Understanding Life Systems – Specific Expectation 3.4)

Describe ways in which human activities and technologies alter balances and interactions in the environment (Science and Technology: Understanding Life Systems – Specific Expectation 3.8)

Materials:

- Seedlings to transplant
- Garden Connection Circle worksheets (one per student)
- Small spades
- Clipboards + Pencils
- Popsicle sticks and paint markers

Activity

Introduction:

Review important concepts with students before getting started: ecosystem, consumers, producers and decomposers, biotic and abiotic (Grade 7), Review some of the connections already discussed between companion plants in the previous workshops and explain that this workshop will seek to uncover even more connections between living things and between living and nonliving things in the garden.

Explain the stations and divide the students in two groups. Allow 20 minutes per station.

Station One: Garden Connections

Invite the students to walk around the garden and observe it. In their journal have students record as many abiotic (nonliving) and biotic (living) elements as they can identify in the garden area. Beside each biotic (living) element, record whether it is a producer, consumer or decomposer. Using the connection circle print-outs, choose 7 abiotic and biotic elements at play in the garden and record one component per line around the circle. Students then draw a line between all the connections the can find between these elements of the garden ecosystem and label how the components are interconnected.

Station two: Transplanting Seedlings and Planting Seeds

Depending on the time of year, distribute seedlings and seeds to students and have them follow the garden map(from planning workshop) to transplant into the garden using the spades. Transplants and seeds should both be watered. Each students should identify their plant using popsicle sticks and paint markers. If students finish before the allocated time, invite them to help out with other gardening tasks: weeding, watering, and cleaning up the area.

Connnections in the Garden