



YCS Farm to School Committee

School Garden Curriculum

Exploring Our Food System

Overview

The food system is a complex network that is deeply connected to health, society, and the environment. This lesson lays the groundwork for understanding food through an integrated, systems-thinking lens.

Grade Level

9 - 12

Subjects:

Social Studies, Health, Science

Objective

Follow the journey of a food item through the supply chain.

Explore relationships among food, health, society, and the environment.

Explain why studying the food system is important.

Time

55 minutes

Materials

- Ball of string
- Presentation slides
- [FoodSpan Infographic](#)
- [Food System Connection Cards](#)

Source Acknowledgment

Adapted from Johns Hopkins *FoodSpan Curriculum*

https://www.foodspan.org/_pdf/lesson-plan/unit1/lessona-food-system-lessonplan.pdf

Background Information

Procedure

Warm Up Activity: Farm to Table (20 mins)

1. Ask a volunteer to name a meal they ate recently. Hint: Something simple like pizza or hamburgers is good for this exercise.
2. Ask the class to list out all the ingredients from that meal. Call a student to write answers on board. Prompt students to figure out the origin of ingredients (e.g. if they say ketchup or pizza sauce, ask what it's made from)
3. Ask the class: *What activities are involved in getting these ingredients to our plates? For example, how are the raw ingredients transformed into something we could eat? Who are the people involved at each step?*
4. Help your student volunteer list students' responses on the board in order from field to plate.
5. Think Pair Share: *Who is involved at each step? What resources are needed? What kind of impact does this have on people and our environment?*
6. Have a representative from a few groups share their responses. Add responses to the board in order from field to plate (or invite students to do so), adding lines or arrows between related concepts. Tell students they have created their first depictions of the food system, which includes the people, activities, resources, and impacts involved in feeding people.

Food System Infographic (10 mins)

1. Pass out the FoodSpan Infographic and/or display the FoodSpan Infographic slide. Ask volunteers to briefly explain each part of the infographic.
2. Have students refer to the diagram on the board from the warm-up. Ask:
 - a. *Is there anything you would add to or change about our diagram(s)?*
 - b. *Is there anything you would add to or change about the FoodSpan Infographic?*
 - c. *Are any parts of the infographic surprising?*
 - d. *Why is it important to look at every part of the food system?*
 - e. *What part are you most interested in learning more about?*

Exploring Connections in the Food System (20 mins)

1. Students will explore relationships among food, health, society, and the environment. Distribute the Food System Connection Cards. Each card lists a part of the food system (on the front) and some of its relationships to other parts (on the back).
2. Give students a minute to read their cards. If there are more students than cards, students can work in pairs or groups of three.
3. Have students stand up, form a circle, and hold their cards up so the fronts are visible.
4. Give one student a ball of string. Ask the student to state the part of the food system on their card and then toss the ball of string to another person while holding onto the end of the string.
5. As they throw the ball, they should explain how the two parts are connected, for example: "I am a cow. I am connected to water because I drink it, it irrigates my feed crops, and my manure sometimes contaminates it."
6. Continue until students have created a tangled web of connections. Students can throw to the same person more than once if there are multiple points of connection.

7. Once the web is complete, introduce events into the food system. For example, if a drought occurs, water should tug on their strings. Students who felt the tug should explain how they might be affected, then tug on their strings. Students who felt the second tug should explain how they might be affected, and so on. Students should see that stresses to one part of the system may have cascading consequences throughout the system.
8. Discuss:
 - a. *What did this activity show you about the food system?*
 - b. *What connections stood out to you?*
 - c. *What connections do you want to learn more about?*

Evaluation

Have students write a journal entry in response to the prompts: *How does the food system affect me? Why does the food system matter to me? Which part(s) of the FoodSpan Infographic do I relate to the most?* Optional: Have students share their responses.

Extension Activity/Adaptations

Create Your Own Food System Infographic:

Students will work in groups to create their own food system infographics using a variety of artistic media. Ask: *What is the most effective way to represent the interconnected parts of the food system?* Students may consider creating 3D diagrams, making a permanent version of the string web, or writing a short story or play.

Tracing Your Meal from Field to Plate:

Students will research the supply chain of an entire meal. They will map the origins of every ingredient and note the people, activities, and resources involved in getting it from field to plate. Students can present their findings through posters, oral presentations, or videos.