Food Roots and Routes

Overview: Students explore the journey of produce from farm to table and chew on the idea of eating close to home.

Standards:
SS5E1 The student will use the basic economic concepts of trade, opportunity cost, specialization, voluntary exchange, productivity, and price incentives to illustrate historical events.

b. Explain how price incentives affect people's behavior and choices (such as decisions to participate in cattle trails because of increased beef prices).

Laying the Groundwork

- Assign students to keep track of all the foods they eat on one day. (Have young students work with parents to create the food list.) Back in class, ask them to try to list where they think each item came from. Finally, as a class, discuss students' ideas on food origins. They might suggest that a particular food came from a grocery store, cafeteria, restaurant, market, garden, or other source.

- Ask students to identify the fruits and vegetables on their lists. Spark discussion with questions such as, *Did you eat each item by itself* (e.g., *an apple or carrot*) *or as part of a dish* (e.g., *soup or pizza*)? *Were your fruits and vegetables fresh, canned, frozen, or dried? Did you help choose or grow any of the fresh ones, clean them, or cook them?*

- Tell students you'd like to focus on the fruits and vegetables on their lists that started out fresh. Have them combine items on a class list. Ask, *Where do you think these foods came from before they got to the grocery store or market?* If it doesn't come up, prompt students' thinking about geography. *Do you think they come from somewhere local, a nearby state, a distant part of the United States, or another country? How could we find out where the food on our plates was grown?*

- Document students' responses and give them a chance to pursue some of their ideas, or suggest the following approach.

Exploration: Grocery Detectives

If feasible, plan a class trip to a local grocery store or produce market. If not, write a letter to parents or guardians explaining the activity and asking them to complete step two with their youngsters.

1. Have the class generate a list of favorite fruits and vegetables or use the lists they developed in step one, above. If you plan to go to the store as a class, ask each small group of students, along with an adult, to select a few items to explore. The assignment: Figure out where the fruits and vegetables we eat were grown.

Before the trip, ask, *What do you think we should look for at the store that might reveal where foods came from?* This might include signs near particular items or labels or stickers on boxes, crates, or fruits. If students don't suggest asking the produce manager, consider adding that idea to the list. Once you've called to set up a meeting, prepare for it by having students brainstorm questions they might ask.

2. Assign each group of students (or youngsters with a family member) to search the produce department, with clipboards or notebooks in hand, and document what they discover about food origins. In addition to scouting for items on their lists, students should look for any clues that reveal the origins of produce. (If they find some unusual food items, bring samples back to taste in class.)

Making Connections: Mapping Food's Travels

- Back in class, create a chart to document what students uncovered. Note items they'll need to research further. Ask, *What do you notice about our findings? How would you summarize them?*

- Bring in a world map or find one online and have students try to locate and mark the origin of each item. If students have the math skills, challenge them to calculate the approximate distances each food traveled to get to their plates. Post these types of questions to spark discussion:
    - *Does anything surprise you? Why?*
    - *Where did most of the food come from?*
    - *Which food came from farthest away?*
    - *Which grew closest to home?*
    - *Do you think we'd find the same results if we did this activity during another season? Why or why not?*
    - *What do you think are the pluses and minuses of eating foods grown locally versus those grown far away?*

  Prompt students' thinking about the last question by asking, *What steps do you think a tomato or pepper grown in another country has to go through in order to make it to your table? How about one grown close to home? Who might benefit in each case?* Chart responses and urge students to discuss their ideas. Note questions that arise and use them to inspire investigations.

- Food Travels Math Challenge- Researchers have asserted that the average distance ingredients in an American meal travel from farm to plate is 1500 miles. The exact number has been debated, but the reality is that loads of fossil fuels are used to deliver foods great distances. If you have older students, consider discussing this idea. Let them know that most food comes by truck and most trucks use diesel fuel. Next, ask students to

assume that these trucks get about 6.5 miles per gallon. Challenge them to calculate the cost of transporting different food items. They will need to use or measure the approximate distances from farm to table of the items they examined. They'll also need to check the current local or average price of diesel fuel.

Digging Deeper: Making Fresh Connections

- Ask, "Have you ever visited a local farm, farmers' market, farm stand, or other place that sells fruits or vegetables grown in this area? What do you remember about the visit, the people you met, or the food?" As students share their experiences, highlight and discuss some of the factors that made the experiences memorable.

- Tell students that many people use the motto, "Eat locally." Ask, *What do you think they mean by this and why do they think it's a good idea? What do you think about the idea? How could we discover why people promote the concept?*

- Try to locate a farmer or produce manager of a health food store, farm stand, market, or restaurant who buys or promotes locally grown foods. Invite the person to the classroom or take students on a field trip so they can conduct an interview. To prepare your young interviewers, have them brainstorm the kinds of questions they might ask. For instance, *Why do your customers want food grown locally? Why do you think it's a good idea? How are local foods different from those that come from far away*? Discuss what it takes to be a good interviewer; for instance, you have to ask questions that require more than a yes or no answer.

- Once the sessions are complete, challenge students to organize and creatively present what they've uncovered about why eating local foods may be a good thing. They should draw on their own ideas and the interview responses as they create a booklet, video, skit, or presentation using computer software. Find a way to share these with other students, families, and other community members!