How does my food get from the field to the store?

MY OWN FOOD CHAIN PROGRAM (K-2)

Alternative Marketing

(ILS 15A, 6C)

Overview

This curriculum explores the relationship between people and the food they eat. It aims to give children in grades K-2 a basic understanding of the flow of energy through the food chain, and the place of people in the food chain. If teachers complete the entire curriculum, their classes will explore food chains in nature, focusing on its individual links and looking at the flow of energy as a whole. Students will then look at the place of people in the food chain, and discover how people have appropriated nature's systems in agricultural practices – making the food chain our own. Classes will compare traditional and sustainable agricultural practices.

Sustainable Agriculture, for the purpose of this curriculum, shall be defined as "a system of food production, supported by consumers, where farming operations, practices and technologies work in harmony with the natural systems that sustain life on earth."

Suggested Grade Level

This curriculum is designed for kindergarten through second grade levels. The topics covered can be built upon in complexity throughout that age range.

Approximate Time

Session 1 requires about 45 minutes; session 2 requires about 1 hour; session 3 requires after school market time (time based on necessity). This lesson must be completed shortly after the harvest.

Objectives

1. The students will understand how food travels from traditional farm fields to the grocery store.
2. The students will learn why this path increases food prices and has a negative environmental impact.
3. The students will design and implement an alternative market for their garden crops, selling to their friends and family.

Activity Abstract

In this lesson, students will trace the path of a crop from the fields to the market. They will discuss this path, its costs and benefits. Students will create a store to sell the produce from their own garden and sell it after school.

Background Information

In the past century, the way that America produces and purchases its food has changed dramatically. Between 1910 and 1990, the percentage of each dollar spent on crops that goes into the hands of the farmer dropped from 41% to 9%, (Smith, 1991, as cited by Bachmann, 2001). The other 32 cents now goes to suppliers, shippers, distributors, processors and marketing efforts. Basically, this means that for a farmer to make money, s/he needs to farm more acres. Farming more acres means less sustainable family farms and more mega farms, 1000 acres for instance.

Generally speaking, these big agribusinesses cannot or do not use sustainable farming methods – there costs are more in terms of equipment and materials, and therefore result in lower profit per acre. This forces them to farm huge expanses of land growing a single crop. To manage a large expanse monoculture crops requires the use of new technologies, equipment and materials that have detrimental effects on the environment. In addition to being hard on the environment, the social and societal implications of the loss of the family farm are great. (Magdoff, et al., eds, 2000)

How, then, can family farms, which typically are 150 acres or less, continue to exist if they can't make money on the small acreage? The answer lies in alternative marketing practices. "Alternative marketing" emphasizes a personal relationship between producers and consumers. It emphasizes farmers' organizations and consumers' organizations mutually supporting each other. Under alternative marketing systems, farmers own the market and set their own prices for their products, usually coordinating with consumers to set fair prices. In addition, alternative marketing emphasizes the use of natural, biodegradable and recyclable packaging." -- Eisses, 2003

There are many methods of alternative marketing. These can include direct marketing, or selling directly to the customer and eliminating the middle man; farmers markets; niche marketing, which capitalizes on special needs of certain consumers that aren't being met by mainstream marketers; the internet and CSA (Community Supported Agriculture), (Gregner, 1999). Each of the methods involves fewer links between producers and consumers – meaning the farmer gets more money and the customer pays less money. Everyone is happy but the truck driver! And his fumes are not polluting the air any more!

Materials

- One container of strawberries, raspberries or similar (that can be grown locally in season), purchased from the grocery store and labeled with a place of origin in California, Florida, or equally far away.
- US map.
- Produce tally sheet. (sample in appendix A)
- Paper, crayons, other art supplies if desired.
- String to bundle produce.
- Tables for sale.
- Cash for change.

Set-up (optional)

This section details any set-up or prep that the teacher needs to do before teaching the lesson to students.

Procedure (Session 1)

1. **Tap Prior Knowledge.** Ask students where their parents get most of the food they eat. Ask them, does the food really come from the grocery store, or does it have to come there from somewhere else? Where?
2. **Introduce Scientific Principle.** Pull out store-bought fruit. Explain that you got it from the grocery store, but if we read carefully, we can figure out where it came from before that. Have students read label to discover place of origin (if the students are capable) or read it to them.
3. Display map. Find your town, and find the produce's origin on the map. Mark them.
4. With older students, use the map legend to figure out how far the distance is between the two marks.
5. Using the board to draw pictures, trace the fruit's journey to the store. Ask the students how it began (as a seed/plant); the farmer grew and picked it. He sold it to a distributor who packaged it. It was loaded onto a truck. It was driven all the way across the country to some distribution center. It was loaded onto a different truck and shipped to the individual store. It was unloaded and placed on the produce shelf. You bought it.
6. Have class generate a list of all the people involved in this process – farmer, distributor, plastic maker, packer, truck driver, warehouse people, second driver, produce person at store, checkout person at store, maybe a bagger, and you.
7. Explain that each of these people makes a salary – earns money for the part they play in getting the fruit to the store. Ask students, do you think this affects the price of the fruit? How and why?
8. With older students, use simple numbers to illustrate this. For example, the farmer sells the fruit for 9 cents, the distributor sells them for 25 cents (making 16 cents) and pays the drivers 10 cents each. The grocery store buys them for 50 cents, pays the produce person, the checkout person and the bagger 10 cents each, and sells the food for one dollar, making 20 cents profit. (These numbers are made-up, but based on the true fact that farmers receive 9 cents for every dollar ab buyer spends on food! See background.)
9. Explain that transporting the fruit such a long way also causes a lot of air pollution? Why? (Trucks driving so many miles).
10. Ask students, can (name of fruit) be grown in Illinois? (Yes, part of the year)
11. Let's draw a new picture. If we buy the fruit from a farmer down the street, who sells it at the farmers' market. The farmer plants/grows/picks the food. He puts it in a box, drives a short way and sells it at a stand.
12. List the people involved. The farmer, and you.
13. Ask if any air pollution is created (yes). Is it as much as in the other picture? (No). If you figured out the distance the food traveled in the first picture, figure out how much farther the food traveled then that in the current scenario.
14. Discuss prices. The farmer does more work (he's now the packer and the grocer) so he sells the fruit for – using the made-up numbers from the earlier example -- 80 cents. You save 20 cents and he makes 60 cents more.

15. Ask, who is this good for? (You, the farmer in IL, anyone who breathes, the environment.)
16. Ask, who is it bad for? (The farmer in CA, the grocery store, the distributors/drivers.)
17. Explain that marketing illustrated in the second situation is very important to small family farmer because they need to make enough money to stay in business. Our class is going to have our own farmers market to sell the vegetables that we've grown in our garden.

PROCEDURE: Session 2

1. **Hands-on Activity.** Explain that today the class will set up their own farm stand.
2. First, they need to inventory the food, that means count it to see how much there is. Explain the produce tally sheet.
3. Have students work in groups to count the vegetables and fill in the tally sheet. Write final counts on the board.
4. Have class decide how to bundle the items (most people don't want to buy one radish, so they should probably be bunched, but make sure you have enough for all the parents to buy things!).
5. Have the class price the items. Older students should take into account the costs that went into growing the food – how much did the class spend on seeds? Soil? Shovels? What is their time worth, if anything? Older students may also want to compare grocery store prices for similar items. Younger students may just price-compare or make up their prices with teacher input.
6. Using crayons and other art supplies, have students create signs that tell what is being sold and for how much. Assign tasks so that different students make signs for different items.
7. Decide when the sale will be held (with or without student input). It can be after school, or at a special function, such as parents' night or a school concert.
8. Have students create invitations to the sale to give to their parents.
9. Have class decide what to do with the proceeds of the sale. They can donate it to charity, use the money to finance a new garden, or plan a class event such as a pizza party. If the class decided to donate the money, make signs that tell buyers they are donating to the good cause!
10. Create a task list and decide who will do what – students will need to bundle the produce, lay it out with the signs, man the booth, and clean up.

PROCEDURE: Session 3

1. HOLD THE SALE! Use the task list.
2. **Conclusion.** Follow through by counting proceeds and using them to do whatever the class decided. .

Extensions (optional)

Visit a local farmers' market and a local grocery store. Compare prices of like items. Why are they higher or lower?

Set up a visit to a local farmers' market and arrange for the class to be able to interview one or some of the farmers selling there. Have children generate questions about why they sell at the farmers market, where else and how else they sell their produce, etc.

References

Bachmann, J. (8/2001). "Adding Value to Farm Products: An Overview." http://attra.ncat.org/attra-pub/PDF/valueovr.pdf

Eisses, R. (7/2003). Small Farm Newsletter, "Sustainable (Organic) Agriculture and Alternative Marketing as Alternatives to Globalization." http://www.organicagcentre.ca/DOCs/issues_alt_global.pdf

Gregner, L. (6/1999). "Alternative Marketing of Pork." http://attra.ncat.org/attra-pub/altpork.html#alternative

Magdoff, F., Foster, J.B., and Buttell, F.H. (eds). (2000). Hungry for Profit: The Agribusiness Threat to Farmers, Food and the Environment. ISBN: 1-58367-016-5

Appendix A: Produce Tally Sheet.

The types of crops can be written in by the teacher or the students.

Farmers' Market Inventory

Crop	Number
Sample: radishes	Sample: 56