Lesson Plan: Garden to Give

Overview: Growing your own fruits and vegetables is a great way to add fresh, local produce to your diet. Planting just a little bit more than you need also offers opportunities for you to help address hunger issues and to make a difference in your community.

Grade Level/Range: All ages

Objective: Students will learn that:
- Planting a vegetable garden provides access to healthy and nutritious foods.
- In spite of the wealth in our country, there are many Americans who are food insecure and do not always have access to healthy foods, especially fresh fruits and vegetables.
- Donating a portion of your vegetable harvest to a local food pantry or other food distribution agency provides an opportunity to help those in need in your community.

Time: Lesson: 1 hour
Growing a Garden to Give: 1+ growing seasons

Materials:
- Internet access
- Space and soil for a vegetable garden (containers, raised beds or in-ground)
- Vegetable seeds

Background Information:
Fresh fruits and vegetables are an important part of our diet, offering a wide variety of important vitamins and nutrients. Unfortunately, not all people have access to an adequate supply of fruits and vegetables. Based on 2016 data, the USDA estimates that 41 million Americans live in food insecure households, which they define as “households that were uncertain of having, or unable to acquire, enough food to meet the needs of all their members because they had insufficient money or other resources for food.” In addition to lack of funds, this number represents households that are located in what are known as “food deserts.” Food deserts are areas that are not within close proximity to a grocery store, which means that residents do not always have easy access to fresh, perishable food items.

Before modern day food systems that allowed for perishable foods to travel longer distances, home and community gardens were an important source of fresh fruits and vegetables. Often referred to as kitchen gardens, these small-scale gardens were designed with utility in mind, producing horticultural food crops such as fruits, vegetables, herbs and edible flowers. They are traditionally located close to the kitchen (and thus the name) to make it easier to harvest them and to enjoy their fresh flavors.
as easy as opening the refrigerator or pantry to access fresh supplies needed for preparing a meal.

Successful kitchen gardens were vital for the survival of early American settlers. Kitchen gardens provided fresh fruits and vegetables with essential vitamins and nutrients that were not always available from other sources. Without refrigerated transportation, most fruits and vegetables were too fragile to travel long distances, so local harvest was key. Additionally, most people had very limited surplus funds and producing food was much less expensive than buying it. For more information about the history of kitchen gardens, check out Harvest of Freedom: the History of Kitchen Gardens in America from Mann Library at Cornell University (http://exhibits.mannlib.cornell.edu/kitchengardens/index.htm).

In the early 1900's, as our society became more urban and as technology advanced to expand food transportation and enhance preservation techniques, kitchen gardens began to fade. All types of foods, including fruits and vegetables, became more available, and the cost of purchasing food became more economical in terms of the time it took to produce one's own. However, kitchen gardens experienced a renewed popularity during World War I and War World II when food supplies became tight. Known as Liberty Gardens (WWI) and Victory Gardens (WWII), kitchen gardens once again became an important source of sustenance and were promoted as a way to help win the war by freeing up farm production for soldiers. In 1917 alone, the National War Garden Commission (http://history.nd.gov/exhibits/gardening/militaryevents7.html) estimated that home gardeners raised 350 million dollars of crops in yards and vacant lots in 1917 and 525 million dollars in 1918. (Wow! If in a food crunch today, would we find the same success with home gardens?)

Since then, our farming roots have grown even more distance. We have adopted diets even more reliant on cheaper, processed and prepackaged foods and we have centered much of our fruit and vegetable production in pockets around the country such as California, Texas and Florida.

Planting fruit and vegetable gardens are a wonderful tool to reintroduce today's youth to the importance of locally grown foods. Growing their own food:

- strengthens their understanding of food origins and production
- increases enthusiasm and appreciation for fresh fruits and vegetables through the pride and ownership of growing their own
- provides the produce needed for hands-on cooking and tasting activities
- gives them the knowledge and skills to supplement their own food supply
- provides them with opportunities to share extra produce with their community

Renewed efforts to use home and community gardens to help decrease food insecurity began in 1995 with the Garden Writers Association’s program Plant a Row for the Hungry Program (http://www.gardenwriters.org/par/). The program encouraged gardeners to plant an extra ‘row’ of produce and then donate it to a local food pantry, shelter, or soup kitchen. In 2018, Gardener's Supply Company launched their Garden to Give Program to continue to encourage gardeners to donate their extra harvest to those in need. (https://www.gardeners.com/how-to/garden-to-give/gardenToGive.html)
Laying the Groundwork:
Use the following questions to get students to begin thinking about the benefits of growing your own fruits and vegetables and the opportunities for your garden efforts to benefit your community:

- Why is it important to eat fruits and vegetables every day? (They contain important nutrients to maintain health.)
- Does everybody eat enough fruits and vegetables every day? (No.) If no, why not? (Some people do not know what they should eat, others do not have access to the right foods because of their location or lack of money.)
- Could we use our garden to provide fruits and vegetables for us and for people who do not have enough? (Yes.)
- How would donating part of our harvest contribute to our community? (It would help members of the community secure a more nutritious diet.)

Exploration:
1. Begin by researching the changes in food production at home over the years. The USDA has compiled data on the amount of money spent on food consumed at home since 1869, including the amount of money spent on food purchased at stores and the value of food grown at home. You can find a table with this information on the The ERS Food Expenditure Series Webpage at https://www.ers.usda.gov/data-products/food-expenditures.aspx. Download Table 2: “Food at home: Total expenditures.”

2. Give each student a copy of the Food Grown at Home table. Ask them to discuss their observations about the data in the table. They should notice that the amount of money spent on food has increased greatly since 1869. Ask them why they think it has increased. (Possible answers: inflation, increase in population.)

3. Ask them to look at the differences between growth of sales from food stores and value of home production. Is looking at the actual dollars the best way to compare the changes over time? Ask them to think of other ways to compare the numbers. For example, they could determine the percentage of the grand total comprised of the total food sales and home production and then compare the two. (In 1869 food sales represented 65% of the grand total and home food production 35%; in 2014 food sales represented 97% and home food production 3%.) More advanced students may want to discuss inflation and calculate adjustments. Check out MeasuringWorth.com (https://www.measuringworth.com/calculators/inflation/) for more information and calculators.

4. How has our food system changed over the years? Based on this table, ask students to predict what they think will happen in the future.

5. Introduce your class to the Plant a Row for the Hungry Program (http://www.gardenwriters.org/par/) and Garden To Give (https://www.gardeners.com/how-to/garden-to-give/gardenToGive.html). Discuss the benefits and challenges of using home and community gardens like their school garden to address food security issues in their community.

6. Find a local food bank or food pantry that accepts donations of garden produce. Check out KidsGardening is a nonprofit educational organization. Support provided by sponsors and donors is critical to our ability to provide free garden-based resources for parents and educators. All gifts are tax-deductible.
AmpleHarvest.org (http://ampleharvest.org/) for leads. If possible, ask a representative from your local food bank or another hunger-relief agency to come and speak to the class about what they do, who they serve and why their work is important. Give your students time to ask questions about how they could help. Ask the representative for a list of vegetables they accept to distribute to their clients. If a classroom visit is not possible, as a class come up with a list of questions and either email them to the agency or see if you can conduct a phone interview.

7. If resources allow, use this information to plan your school garden by including space to grow produce specifically designated to donate. If planting a donation garden at your school is not possible due to time, space, school policy or financial restrictions, you can brainstorm other ways to support donation gardening efforts, such as promoting the program or recruiting local gardeners to participate.

**Making Connections:**
Here are some questions you may want to explore for further discussion:

- How has home food production changed?
- How much of your food is grown locally?
- Should we be concerned about the fact that most of our food is not grown locally?
- Is our current food system sustainable? How important is an inexpensive fuel oil supply to our food system? What will happen as the population grows?
- Debate this statement: The sovereignty of our nation depends on our ability to produce food.

**Branching Out:**
**English:** Ask each student to write an opinion paper discussing the benefits and drawbacks of home food production and whether or not they think it is a good way to address community food insecurity issues.

**English:** Create a recipe book for the fruits and vegetables grown in your school garden. Include instructions for growing each highlighted fruit or vegetable. Your books can be distributed at the food pantry where you donate your produce and/or also sent home with the youth.

**Social Studies:** The USDA has also compiled information about the amount of money spent on food consumed outside of the home (also available at: https://www.ers.usda.gov/data-products/food-expenditures.aspx, Table 3: Food away from home: Total expenditures). How has this trend changed over the years? What does this mean for our society? How important of a role do restaurants and other food service organizations play in our diets and in the overall health of our population?

**Math:** Many times food pantries equate weight of food with a dollar value to quantify the donation. Weigh your harvest before donating it and keep track of your donations.
Throughout the season. Share the value of your donation with your gardeners, other classes, administrators and parents so they can see the impact of the efforts. For additional math practice, use different techniques to express the weight and volume of your donation. Conversion charts can be found at PickYourOwn.org.