How-to: Teaching History in the Garden

There are many traditional tools to help you bring history lessons to life for your students, such as primary documents, historical documentaries and field trips. But what could be better than experiencing history through the hands-on activity of cultivating a garden?

Plants are the sustaining force of life on this planet. Early humans relied on the bounty of nature as hunters and gatherers. As more complex civilizations evolved, agriculture emerged (or, arguably, civilizations grew because agricultural practices evolved). Agriculture is the science and practice of raising crops, also known as farming. Growing plants both for survival and for profit is a shared experience across history. Most humans in most parts of the world were directly involved in some aspect of agriculture right up until the Industrial Revolution.

As technology advanced during the Industrial Revolution, and continues to advance up to the present day, the amount of food farmers can produce from their fields has increased, so that a smaller percentage of the population must be directly involved in the production of food crops. One positive result of this shift has been time dedicated to the development of other technologies, as well as the cultivation of other pursuits (art, music, literature, etc). However, one of the drawbacks is a lack of understanding of how our food is produced, and a decreasing appreciation for the interwoven cycles of nature. School gardens give students the opportunity to participate in an important historical activity, and to experience the emotions of success and failure of growing their own crops on a small scale.

There are many ways to integrate history lessons into your school garden. In this article we present some ways to use the garden as a tool to:

- discuss a particular era in history.
- introduce life in a different culture.
- explore an event.
- research the historical value and travels of a particular plant.
- study important people in history.

Discuss an Era

Gardens and farms evolved throughout history as people adopted new practices and grew different crops to match needs and available resources. Due to this evolution, agricultural practices can serve as a way to define different eras by exploring their unique planting patterns. Here are a few examples of time periods you could study using a garden:

The Age of Discovery

The 15th and 16th centuries were times of world exploration. European sailors set sail to find new trade routes to the Far

East in hopes of finding precious metals and spices such as pepper, cinnamon, nutmeg, ginger and cloves. During this time, explorers found several plant crops, including potatoes, beans, peppers, tomatoes and squash, that they later brought back to Europe. Grow some of these crops in your school garden, to bring their explorations to life. Research the many ways new food options changed our diets.

World War II
During World War II, there was a strain on the food supply. The United States was faced with shipping large quantities of food overseas to feed the troops, while at the same time many farmers and farm workers were part of the military deployment, decreasing the country's food production. As a way to increase the availability of fresh produce, the government encouraged citizens to cultivate food gardens, dubbed Victory Gardens. Growing food at home meant that more farm-produced food could be sent overseas to support the troops. It was publicized as fulfilling your patriotic duty to help win the war. Plant your own school Victory Garden as a way to explore this important era in our nation's history.

Colonial Times
Gardens were very important to the survival of new colonists in the Americas, and not only for the food they provided. Many colonists also brought favorite plants with them from their homes overseas, and the familiarity of these plants offered comfort during difficult times. Learning how to adapt to American soils and climates was often a challenge for early colonists, but over time they developed skills and identified crops for consumption and for trade. Research the crops grown by American colonists and discuss the importance of having successful gardens to their health and survival.

Introduce a Culture

In addition to changes in gardening and farming over time, each culture also developed unique agricultural practices and traditional crops. By learning about the common plants and foods of a culture, students begin to increase their understanding and appreciation for the culture as a whole. Students can grow traditional crops of the culture being studied ,and then harvest, prepare and enjoy special cultural meals.

Three Sister Garden
Many Native American cultures planted corn, beans and squash (referred to as the "three sisters") in mounds. The growth habitat and nutritional content of these three plants complemented each other, creating a successful garden design. Click here (https://kidsgardening.org/lesson-plans-three-sisters-garden/) to learn how to create your own Three Sisters Garden.

Aztec Floating Gardens
The Aztecs of Central America had the challenge of growing crops in poorly drained, swamp-like land. They overcame this agricultural disadvantage by creating gardens that floated on the water. Studying their unique gardens is a great way to launch into your own exploration of hydroponic garden systems.

Bonsai
Bonsai is an ancient art form originating in the Orient. It involves careful and diligent pruning of a tree's roots and stems to mimic its natural growth habit, resulting in a miniature tree that resembles its full-size counterpart. The practice is associated with

expressions of nature, religion and meditation, with many symbolic aspects reflecting culturally significant ideals. Bonsai is an interesting blend of art and science; check to see if there is a bonsai society in your area and ask a local expert to come share his or her work.

Explore an Event

There are many famous events throughout history in which plants were a major player. Cultivating these plants helps the event come alive to students. Some examples include:

Tulipmania
Tulips were a spotlight in an early consumer economic craze in Holland known as Tulipmania. The popularity and scarcity of the tulip bulb led to a frenzy of speculative trading. At the peak, people were paying the modern day equivalent of $76,000 for one tulip bulb. Eventually the market crashed, devastating the economy.

Lewis and Clark Expedition
Commissioned by Thomas Jefferson in 1803, the Lewis and Clark Expedition gathered important information about the western United States, including the collection and identification of hundreds of native plants. Introduce your students to this important mission by planting some of their finds, or practice collecting and cataloging plant material in your school garden.

Irish Potato Famine
Potatoes originated in Peru, but became an important source of food in Europe because they are easy to grow and high in nutrients. In fact, people became too dependent on the potato, resulting in the devastating Irish Potato Famine. Beginning in 1845, the potatoes in Ireland were destroyed by a blight caused by an imported fungus. The loss of the potato as a food source led to a multi-year famine resulting in widespread death by starvation, mass migration to other countries and financial ruin. This event in history not only highlights the importance of diversified agricultural practices, but also demonstrates the potential devastation of foreign diseases on plant species.

Research History, Uses and Travels of a Plant

Just like people, every plant has its own story: its unique parts, growth habit and growing requirements; country of origin; list of uses by different cultures (the study of the uses of plants is called ethnobotany); and a log of travels as it was moved to different areas of the world. Texas A&M offers a fascinating publication from National Geographic called "Our Vegetable Travelers" that offers engaging historical commentary on many of our most common vegetable plants:
http://aggie-horticulture.tamu.edu/plantanswers/publications/vegetabletravelers/

Study Important Historical Figures

Many famous historical figures have contributed to the body of knowledge related to plants. Some examples include:

Thomas Jefferson
In addition to his great contributions in the founding of the United States and as the third President, Thomas Jefferson

was also a farmer and avid collector of plants. Research continues today through The Thomas Jefferson Center for Historical Plants (https://www.monticello.org/site/house-and-gardens/thomas-jefferson-center-historic-plants).

George Washington Carver
George Washington Carver focused his research on sustainable agricultural practices to help benefit small-scale Southern farmers. In addition to providing information on growing vegetables, he also created recipes for preparing nutritious and economical meals. Learn about some of his early research related to soil conservation and compare it to our current sustainable agricultural practices.

Dr. Norman Borlaug
Dr. Norman Borlaug directed research at the Cooperative Wheat Research and Production Program in Mexico. His focus was to develop more efficient farming practices and to introduce improved varieties of crops through plant breeding experiments with the goal of increasing food production around the world. His work resulted in the development of a wheat variety that was shorter, produced a higher yield and was more disease resistant than traditional varieties. The new seed varieties were planted around the world to help increase food availability for an increasing world population. In 1970, Dr. Borlaug received the Nobel Peace Prize for his work to decrease world hunger through the development of new plant varieties. He is credited with saving millions of lives by increasing food production in Third World Countries.

We hope these ideas will inspire you to begin thinking about how to incorporate history lessons into your garden program. The more ties you can make between your school garden and your curriculum, the stronger your garden program will be in terms of sustainability and impact.