

GROWING LITTLE FARMERS

By Cassandra Smiley

WHY IS IT IMPORTANT?

Gardening teaches children to understand where their food comes from, to make healthy eating fun and gives them a sense of accomplishment. In addition, it encourages independence, and fosters a love of the outdoors. I spoke with Christina Bard and Eva Barinas of one such organization in our area called Grow Pittsburgh to gain their insights.

Grow Pittsburgh's mission in the schools focuses not only on nutrition and education, but on the well-being of children through the creation of edible gardens on-site as part of their School Garden Program. These Learning Gardens, now installed in five Pittsburgh Public Schools and planned for install at 13 more schools by the end of 2017, are raised beds that integrate learning in a way that is difficult to recreate in the classroom. Students learn how drainage, weather, and soil are interconnected. They learn problem-solving and they are more invested in trying a variety of foods.

Parents will tell Garden Educators that their child refuses to eat vegetables. And yet, the gentle encouragement of these invested educators and their peers changes many a heart and palate through their initiatives. It also helps when you have guest chefs from some of the area's finest restaurants, including Big Burrito, Avenue B, and the Porch at Schenley, and winter cooking classes that encourage the students to try cuisine from all over the globe.

The schools also grow herbs and flowers for pollination. One of the most popular at Dilworth Traditional Academy is the

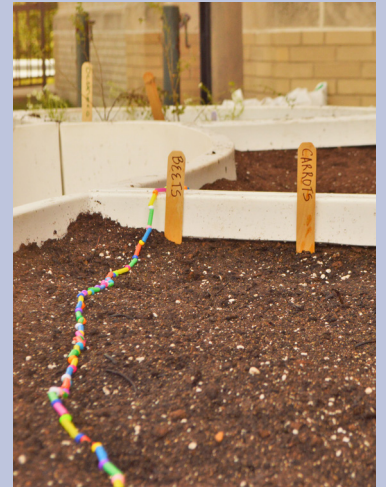
border of raspberries. During the summer, they have families volunteer to water and care for the garden and the raspberries are a huge incentive for all involved.

Bard became involved with the organization through her own son, who was a student at Pittsburgh Montessori. She was inspired by his excitement. He loved his relationship with his Garden Educator and when they set up a little farmer's market, his enthusiasm really grew. They were given recipes to try at home and that's when they became hooked. You can access their lesson plans and recipes and many more resources on their website:
www.EdibleSchoolYardPittsburgh.org.

Grow Pittsburgh offers garden education programs for Pre-K students through adults. As students mature, they are taught the business components of farming, and they are mentored by professionals. After 11 years, the organization can now boast graduates of their programs who have gone on to form careers based upon their experiences.

Have a patch of land that needs to be tilled? Want to learn more about pest prevention? Want to join a community garden? Looking for some seedlings to plant? The Garden Resource Center can help you with all of this and more. And if you are not in the area? Look online. There are so many organizations nationwide that connect you and your little ones to your food source in a meaningful, rewarding and delicious way! For more information about Grow Pittsburgh's programs and the Garden Resource Center application, visit www.GrowPittsburgh.org.

The value of a garden is much deeper than the topsoil. Children learn lessons applicable to the classroom, the life cycle, and themselves. Read how gardens are changing schools and how you can teach valuable lessons to your own kids through a backyard garden.



THE PROCESS OF SELF-DISCOVERY

- Patience:** Some plants take months from seed to fruit.
- Responsibility:** From caring for plants.
- Understanding:** As they learn about cause and effect (for example, plants die without water, weeds compete with plants).
- Self-Confidence:** From achieving their goals and enjoying the food they have grown.
- Love of Nature:** A chance to learn about the outdoor environment in a safe and pleasant place.
- Reasoning and Discovery:** Learning about the science of plants, animals, weather, the environment, nutrition and simple construction.
- Physical Activity:** Doing something fun and productive.
- Courage:** From having to interact with insects who are often beneficial to plants.
- Cooperation:** Including shared play activity and teamwork.
- Creativity:** Finding new and exciting ways to grow food.
- Nutrition:** Learning about where fresh food comes from.
- Pride:** From sharing their harvest with neighbors, teachers and friends.



A COLLABORATIVE, BUT INDEPENDENT EFFORT

Children obviously need help in planning the garden and with the preparation. However, a sense of independence is critical. There is a tendency to overplant or to choose the wrong varieties. It is a delicate balance between providing guidance and overshadowing or possibly extinguishing their enthusiasm.

At Grow Pittsburgh, the students are never forced to taste anything. However, simply through involvement, and witnessing the enthusiasm of those around them, almost every child will at least sample the food. The whole process from soil to seedling to plant to kitchen is behind the curiosity factor in sampling the food. That level of investment takes time and attention, which is the focal point of the organization and the purpose for anyone who wants to start a backyard garden with their kids.

PREPPING FOR SUCCESS

Pest Control: Fencing is your friend. You can even dig under a trench a foot deep and bury a portion to protect against rabbits and groundhogs. You'll want a high fence, container gardens or even a fence over the top of a small garden if you have deer to contend with.

Preparing the Soil: Compost is a great companion to gardening and helps to reduce household waste. You can, however, purchase mushroom manure to provide nutrients to your soil.

Tools: Have the right tools for the job with small spades and sturdy hand shovels meant for smaller hands. Gloves can be good for when there is a lot of digging, but expect kids to put their bare hands in the dirt.

Skip the Pesticide: Instead use easy-to-grow veggies (squash, lettuce) and flowers (nasturtium, zinnias). For fun, you can even try a theme like a "pizza garden" of tomatoes, peppers, and basil or a "rainbow garden" with flowers of each color in the spectrum.

SKILLS TO BE LEARNED FROM GARDENING

Classification: Simple observation will result in comparing and contrasting plants and insects.

Directions: Planting in the right soil, sunlight, and noting the predicted germination will help enhance the experience.

Scientific Process: Theorize how plants will do and note the actual outcome distinctions. Add additional observations like the temperatures and rainfall to encourage the learning process.

Math: Measuring the growth of plants like beanstalks can be fun as well as educational. Sorting plants by shapes and number of leaves can provide a broader understanding of plants as well as teaching basic math skills.



WHEN THINGS GO WRONG

One important thing to remember especially with the older elementary school child and beyond, is that failure is one of the best teachers. Resilience to this and the determination to try again is a skill that will serve them well for years to come.

Instead of offering ready opinions or criticism (even if it's an obvious observation), ask the child what factors could have come into play. Perhaps the plant wasn't watered, or maybe there were factors out of your control. Follow up by asking what can be done next time and allowing the child to experiment teaches them more than you could ever convey with words.

Grow Pittsburgh has used the common mishaps as a lesson in adaptability. Have groundhogs or insects taken bites of the beets? Then cook up the beet greens. The same can be done with sweet potatoes. Their educators encourage students to problem-solve for preventative measures in the future as well. The garden bed is a perennial resource and integrated learning environment. The tactile nature, the collaboration and the variables make it ripe for all manner of creative solutions. Ask any lifelong gardener, and they will tell you that is all part of the appeal.

At Freedom Farms, we encourage kids to be present at our Farmers Market in Butler and at our traveling markets, because there's nothing like asking the person who grew your food to tell you all about it. But there is nothing like being the farmer yourself. And if you can grow even a "postage stamp" garden with your kids or container vegetables, the rewards can last a lifetime. 🌱