



If They Grow It, They'll Eat It
7 Tips for Pre-School Edible Gardens

If they GROW it, they'll EAT it:

"The children love to harvest the fruit and vegetables they have grown. They make a new sign for our family style salad bar each day, highlighting which parts of the green salad came from our garden – complete with a hand drawn picture of the vegetable or edible flower." – **Simone Taylor, Redwood Community Action Agency**

If you ask a young child where food comes from, the most common answer is the grocery store. Understanding where food comes from and how fruits and vegetables are harvested is essential to understanding better nutritional values and practices. The more exposure and understanding of this, the better chance a child has at eating healthier and avoiding bad food habits. The key here is introducing more fruits and vegetables to a child's diet. What better way to start the process early in a child's life than by introducing a school garden program where kids are growing their own fruits and vegetables.

The children feel a sense of pride in their school gardening efforts. Being interested in what is grown in the garden compels the children to be more willing to try the fruits of their labor. Eating fruits and vegetables may be a struggle at home, but with school gardening activities it connects them to the food.

"The children eat the food they grow and share it with their families. They also enjoyed discovering how much things had grown ... They are much more interested in eating their veggies now!"

– **Karna Allen, The Salvation Army Harbor House Childcare Center**

California preschools from across the state have experienced results in exposing young children to better eating habits by implementing a school garden program. The entire gardening process is a journey of discovery for these young children. What better place to expose a better diet for their futures than by planting, growing, harvesting and eating their own food.

"The grant package helped us to sustain our garden in a numerous amount of ways, but the most noticeable ways were probably the variety of fruits and vegetables in our garden this year, as well as supplying us with new tools for the garden. The array of vegetables this year got the children open to trying new things. They learned that they really liked squash, but also learned that many of them didn't like beets. Getting children to try new food is always a plus, so you could imagine how excited I was when my whole class tried all the fruits and vegetables from the garden. The tools were also a big thing that the grant helped out with. Since we were able to supply the children with new gardening tools, the children got more of a chance to help out with the whole gardening process. They loved getting the shovels and turning the dirt. They also loved raking the dirt into rows for the garden."

– **Danielle Roberts, Family Matters Child Care Center**

This guide has been written to help preschools develop a garden program of their own.

Findings in a recent study by the Center for Disease Control for adolescence and school health provide more value in the cause for having a school garden:

- Healthy eating in childhood and adolescence is important for proper growth and development and can prevent health problems such as obesity, dental caries, iron deficiency, and osteoporosis.
- Schools are in a unique position to promote healthy eating and help ensure appropriate food and nutrient intake among students. Schools provide students with opportunities to consume an array of foods and beverages throughout the school day and enable students to learn about and practice healthy eating behaviors.
- Schools should ensure that only nutritious and appealing foods and beverages are provided in school cafeterias, vending machines, snack bars, school stores, and other venues that offer food and beverages to students. In addition, nutrition education should be part of a comprehensive school health education curriculum.

Source – CDC.com

School Garden Guide Checklist

1. **Western Growers Foundation Grant**

This is how you can fund your school garden. Money will be available to start your garden program. This will afford purchasing of supplies, garden boxes, tools, seeds, and learning materials. This can be accomplished on any campus with any amount of space available. If you're limited in space, raised garden boxes can be built to house the garden.

2. **CSGN.org**

Our website will help guide and supplement the garden start-up with added information for the novice and advanced gardener. Stay connected with the California school garden movement here. Watch videos, read articles, and include your garden's story here.

3. **Garden Lessons**

Lessons can be incorporated for the entire school. From healthy eating habits, to practical growing and harvesting, to more advanced science lessons, the school garden will serve many different roles. See our 7-Tips section for ideas on how the garden becomes a lesson on its own.

4. **Added Value**

The school garden will be a place of discovery for young students. This is where they will learn about new foods and try new things. Students love watering the garden! The growing plants become fruit where food and healthy eating habits are introduced.

5. **Garden Time**

Having a garden means more time outside for the students. More time is spent outside working in the garden and the students will enjoy this break from the classroom. The students will be up and moving by taking part in the environment of the garden. Some students will want to work in the garden beyond the required time as they acquire a passion for it.

6. **Leadership**

Having staff leadership and direction will enhance the overall health of the garden. This will also create leadership within the students and ownership of the garden.

7. **Tips and Advice**

Strong volunteers and parent involvement can lead to a long lasting garden. With community support, the garden will reach heights that not all teachers have the time for because of already full schedules. The garden does take time but it doesn't feel like work!

8. **Garden Benefits**

Healthier eating habits will be introduced by knowing where the food they are eating comes from. This is a good thing! Eating more fruits and vegetables is the theme here.

9. **Wellness**

Learning about fruits and vegetables at an early age can carry on for a lifetime of healthier eating choices.

10. **Sustainability and Organic**

These buzz words are more than just words when a young student can actually define these by practicing these methods. The healthy teachings of this lifestyle can be learned by implementing a school garden program.

7 Tips for Preschool Edible Gardens

TIP #1

Patience – Learning about the plant life cycle

School gardens allow the students to experience the plant life cycle, which takes time and patience. The young students see how the farming and growing process work. Patience practiced at the school garden often carries over to other areas.

The students learn about the different seeds of fruits and vegetables and how these are planted and cared for while the plants grow. The weather patterns and cycles are also great teaching moments for the students.

Rainy Days

“After a rainy day, one of the children told the teacher that the vegetables were not going to grow because there was no sun. The teacher explained that the rain was good for the garden and it would help things to grow which is why they watered the garden. Later that week the teacher asked the children what does a plant need to grow and the child responded, ‘sun and water, because it didn’t rain today.’” – **Danielle Triplett, Horizons**



Young students in a garden program will also value the importance of taking care of something. They learn very quickly that watering a plant is more than just pouring water into the ground after the plants begin to grow and come to life. As a plant is cared for, it begins to mature. This process is where patience is taught and valued. After time, the plants start showing fruit and this is where the ‘light bulb’ will come on for most students. They can see their hard work pay off and actual see the teachings of the plant life cycle happening in their school garden.

“Children were able to have hands-on experience with preparing the soil, planting, watering, and watching the veggies grow. Along with the Science curriculum, we were able to dissect everything about planting from soil, seeds, roots, to the growing vegetables. We talked about different herbs and how they are different in smell. We also talked about vegetables in season. We had a great season of organic veggies that we turned in to cooking activities in each classroom. We had vegetable soup and pickles, parents took herbs home to cook with children. In addition, we also used the soil and insects that lived in it to explain to children the cycle of life. So many topics... it was an endless year with lots of fun and information for children (and parents).”

– **Namyong Lisa Kim, KYCC Children’s Center**

TIP #2

Trash – What Trash?



Sustainability might be too big of a word for pre-school students, but the idea is one that can be taught.. Here’s an example of how kids can see the value of waste in a new way:

“A moment that comes to me is showing the cycle of life to a group of kindergarteners by cutting down the garlic braid we had made in the summer and using it as seed bulb for our fall sowing. The children actively participated in fertilizing the earth with recycled organic matter, planting it with stock that they had earlier harvested and grown on the same site. They were intricately involved in the rhythms of nature, the seasons, and the cycles of life and you could see it in their eyes.”

– Tara Blaine, **Beginners Inc.**

TIP #3

Creatures Are Great

Once a garden starts to mature, the creatures will start appearing and find a home of their own. This can be great fun for the kids and little scary for others. The bugs of the garden are a great teaching lesson in what bugs need to survive and how bugs feed off the garden. This relationship is essential for the garden's success and teaches the children the function of bugs. From worms to bees to butterflies, there's a lot going on in a garden that the kids get to experience up close. What better place to see bees and worms hard at work?

Bugs Are Good

“We focused on plant lifespan and which plants are considered fruits, vegetables and/or herbs. We adapted these topics by adding things like the lifespan of a butterfly. We raised butterflies in the classroom and then released them in our garden. Children made butterflies of their own. Later we noticed that caterpillars were forming in our garden as well. The children were very explorative about the new additions we hadn't added ourselves. To expand as the weeks past the children did activities on bugs and how they affect our garden. Children made bugs out of rocks. Some took them home and some placed them in our garden. Curriculum in the garden at times emerged and child-centered as they became the leaders of their interest much of the time as well.”

– LaMonica Hopkins, **Board of Trustees of the Glide Foundation**

A Bug Story – Operation Relocation

“I have this one child in my class who is completely fascinated by insects and other bugs. She tends to get the class into them as well. Well one week she noticed these big ‘green caterpillars’ on the tomato plants. She was extremely fascinated by them, and took one and showed everyone else. I had no idea what it was, so I gave myself homework for that night and researched them. Come to find out they were actually pest. They weren't going to turn into beautiful butterflies, but instead a Five-Spotted Hawkmoth. So the next day we discussed the hornworms. Once they found out they were going to eat our tomatoes we had to figure out what we were going to do about them. Some of the suggestions included ‘let them stay...kill them; and taking them off.’ We decided on Operation Relocation. Operation Relocation was us picking off the hornworms putting them in a box with a small tomato plant we pulled up (so they wouldn't starve) and taking them to a park. That one child's love of bugs took us on this wonderful adventure.”

– Danielle Roberts, **Family Matters Child Care Center**

The garden has several parts to enjoy. Some might enjoy farming. Some will enjoy the dirt. While others will enjoy the bugs!



TIP #4

Teamwork Grows Good Things

It takes a team of people to make a garden grow. From classroom teachers, to parents and community support, the more people involved the better chance the garden has for longevity.

Start Recruiting Volunteers Early

“To help establish the garden, we recruited parent volunteers to build the beds and fill them with soil. We were able to invite them to do this during our agency clean-up day. Once the garden beds were available to the classrooms, teachers added gardening to their daily routine and lesson plans. Each classroom has different ideas and plans on how to garden, however, the majority spend approximately 30 minutes per week in the garden. We also invited parent volunteers to help during the Family Literacy Event. Various activities involving literacy and healthy habits were available to children and families. The gardening activity was set up outside and children were given planting materials such as small pots, soil and seeds. Children decorated their pots, planted their seeds and took them home to harvest.” – Isabel Simard, Orange County Head Start Inc.

The school garden also promotes teamwork with the children. The students work in collaborative groups planting, growing, harvesting, cleaning, and maintaining the garden. This creates a social environment as well where communicating at an early age will carry over to other areas in the classroom and at home.

Here's an idea to insure each home knows about the school garden:

“We include children and their parents in the process. Each child, with their parents, plant a seed and took it home . . . When the seed began to grow they brought it back and we plant it in our garden bed. We asked for volunteers to help build our garden area and some parents and grandparents came to help.” – Maria Sifuentes, CDA The Parks

TIP #5

Nutrition – Half of our plates should be filled with fruits and vegetables

With all the facts and figures in the news regarding obesity, is there any better place to start bucking this trend than at schools and at an early age? The school garden program promotes this very idea of eating healthier by consuming more fruits and vegetables.

Facts & Figures

- 30% of all children are obese. (American Journal of Medicine)
- Half of US children are overweight. (American Journal of Medicine)
- Although half of our plates should be filled with fruits and vegetables, 5-9 servings per day, the majority of children go without eating even one serving of fruits and vegetables a day. (Center for Disease Control)
- This is the first generation of Americans at risk of having a lower life expectancy than their parents. (American Jour of Medicine)



The best medicine in the world can be found in your own garden.

Discovering a healthy treat

“I will always remember when a four year old ran up to me and asked, ‘Have you ever tried this?’ She was holding a stalk of broccoli that she had just picked and relishing the taste of something very fresh. We went on to discuss issues about taste, color, shape and related vegetables. Our gardens are considered outdoor classrooms where math, science and the language arts are taught.” – Byron Sigal, North Bay Children’s Center Inc.

Choose a veggie for a snack

The children loved to pick the fresh tomatoes. Serving it to them at the time they picked it (after washing it) helped them learning instantly how delicious a tomato can be. That a tomato doesn't have to be saved for a meal. It makes a delicious snack.

- Catherine Anderson, Alphabet Ranch Inc.

Promoting healthier eating is the core of the school garden program. Instead of vending machine snacks, student will begin looking at their own food they are growing as snacks and essential parts of their meals. What starts out as a project in the plants life cycle will turn into nutrition awareness resulting in better eating habits.

TIP #6

Everyone Learns

It's not a requirement to have years of farming or gardening under your belt to lead a school garden program. The tools and instructions are readily available for people of all ages. Have you seen broccoli grow to the point you can harvest it and cook it for yourself? Have you seen a strawberry plant produce fruit, pick it, wash it, and eat it right away? If not, then even as an adult you will learn just like the kids do in the garden.

"Being in the garden and sampling the plants is a regular part of the weekly curriculum. Often times when we are done watering and weeding the plants, we'll harvest a small vegetable, such as a cucumber, kale, or a squash, we'll sit at an outdoor table and teach a lesson. We count the seeds, feel the smooth and poky edges, and comment on the sweet or sour taste. One day, a friend at the preschool table was not making safe choices with his hands and had to take some time away from the group to relax and make better choices. When the teacher brought out the kale to share among the children, our friend away from the table started sobbing, 'I want some salad! I want some salad! I am soooooo sorry!' In my 15 years in education, I have never seen a group of children who are motivated so highly by gardening and fresh fruit and vegetables their classroom garden produced for them. In fact, I think we're hard pressed, any of us, to find another group of children who would weep over salad!"

- Terri Kurszczewski, The SLO Child Development Center

"We taught composting/recycling and how worms help us make soil out of cuttings from our kitchen or from weeding the garden. Math - measuring the plants and making graphs. Science - what the worms do to the soil, how a plant grows and what it needs to grow. Literacy - we read Compost Stew and then put our cuttings into the earth. We read Making Vegetable Soup and used our herbs and tomatoes to make soup and a salad."

- Leslie Gussin, CSUN Children's Center

"The topics are really endless; we taught math skills, everything from classification, measurement, predicting and weight to language and writing skills as the children learned new vocabulary and kept logs of the food items that we grew. The cooperation and the team work were great as well as the problem solving that they had to do as they worked out different roles in the garden."

- Susan Holley, CDA Spring Valley



TIP #7**Have Fun!**

We live in California, so being outside and working with the environment and nature is a great way to introduce gardening at an early age. Seeing the garden develop is fun for the students, especially for young children who are curious by nature. Other areas of the school's curriculum can also be incorporated into the garden program, which makes the garden fun for other areas of learning, like history, science, math, and language arts.

Gardening is Fun

"Many of our children come from an urban environment and have had little contact with dirt. When we first began talking about the garden and what the plans were, one child in-particular was really concerned about touching dirt and 'getting dirty.' The child refused to participate. The teachers had the child stand close to them so he could observe, but he really didn't even want to touch the dirt. Then,

the tomatoes started to grow. He was amazed to see the little fruits beginning to form. He then asked if he could 'touch one.' He touched it gently and then looked up, wide eyed, and exclaimed, 'hey, this is just like the ones we eat!' The teacher acknowledged his discovery, and then shared that ALL our food comes from the earth and soil in this way. The child was beyond himself, he didn't quite get it until this moment, we were growing food! He was so excited. Later that day, when his family came, he insisted on taking them out to the garden. His family had never seen tomatoes growing either! The child asked if his mom could touch the dirt, and when she did, he did, and from then forward, he was the first one to the garden every day. When he left for kindergarten in August, he had gone from a kid who had never touched dirt and had never seen food growing, to having his own little garden at home (a plastic bucket his mom filled with dirt and starts from our school garden). It was incredible to see his transformation. One of the last things his family shared with us before they left was that he now wants to grow 'everything' he finds at the supermarket. They never really bought fresh vegetables before, but now her son runs to the produce section and asks about everything he sees. For our staff, this is why we did this, and made it all worth it."

– Karna Allen, The Salvation Army Harbor House Childcare Center

Let your students get the most out of their early development by implementing a school garden today.



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17620 Fitch Street
Irvine, CA 92614
949-885-2392
www.westerngrowersfoundation.org