



## **CARVER-SCOTT MASTER GARDENER SCHOOL GARDEN PROGRAM** **HOW TO START A SCHOOL GARDEN**

Thank you for your interest in exploring a school garden for your school community, and for partnering with the Carver-Scott Extension Master Gardener School Garden Program.

Carver Scott Extension Master Gardener Volunteers can:

- Consult with school administrators and staff about starting a school garden
- Advise about funding resources
- Advise about garden site, design, tools, soil tests
- Provide horticulture curriculum ideas
- Teach staff and students about gardening
- Attend School Garden Planting Day
- Lead students through horticulture-based activities

Carver Scott Extension Master Gardeners trust the Schools to:

- Secure the garden site
- Fund and purchase materials
- Build the garden structures
- Maintain the garden

Below are step by step directions on getting started with your School Garden.

### **STEP 1 WHY SCHOOL GARDEN?**

Prepare and explain the importance  
Get school leadership support

### **STEP 2 VISION AND RESOURCES**

Plan and fund the school garden  
Explore grants and financial resources  
Recruit volunteers

### **STEP 3 BUILDING YOUR SCHOOL GARDEN**

Location selection  
Garden design



Build your garden and/or raised beds

#### **STEP 4 PLANTING AND MAINTAINING**

Crop Planning

Soil Preparation

Water and Irrigation Needs

#### **STEP 5 TEACHING IN THE GARDEN**

Science

Mathematics

History/Social Studies

English

Visual and Performing Arts

Health and Nutrition

Fun Activities for younger children

#### **STEP 6 HARVESTING AND EATING NUTRITIOUS FOOD**

When to Harvest

Eating your Harvest

Food Safety Tips

#### **STEP 7 CLEANING UP YOUR GARDEN FOR THE NEXT SEASON**

End of season clean-up

Recognize volunteer achievements

Program sustainability

#### **QUESTIONS OR COMMENTS?**

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## REFERENCES

University of Minnesota Extension

- School garden <https://extension.umn.edu/farm-school/school-gardens>
- Farm to school <https://extension.umn.edu/about-farm-school/farm-school-leadership-team>

All New Square foot gardening 3<sup>rd</sup> edition by Mel Bartholomew

[Steps to a School Garden](#) — California School Garden Network — Resources for each step of managing your school garden.

MN Department of Education – Farm to School

<https://education.mn.gov/mde/dse/fns/snp/gen/farm/>

Kids Gardening – Grant opportunities for school and youth gardening program -

<https://kidsgardening.org/grant-opportunities/>

SHIP – Statewide Health Improvement Program – A How to Manual for school professionals

[https://www.arboretum.umn.edu/UserFiles/File/2013%20Schoolyard%20Gardens%20Conference/EdibleSchoolyardsManual\\_optimized.pdf](https://www.arboretum.umn.edu/UserFiles/File/2013%20Schoolyard%20Gardens%20Conference/EdibleSchoolyardsManual_optimized.pdf)

For more information about the Carver-Scott Extension Master Gardener Program, please contact Program Coordinator, Kristy Mock at [klmock@umn.edu](mailto:klmock@umn.edu). Additional information about our program can be found at [www.carverscottmastergardeners.org](http://www.carverscottmastergardeners.org).

## STEP 1 WHY SCHOOL GARDEN?

Prepare and explain the importance – Benefits of school garden

### 1) Environmental Stewardship

A school garden is a powerful environmental education tool. Through gardening, students become responsible caretakers. They have an opportunity to engage in agricultural practices on a small scale, learning about the responsibilities and impacts of land cultivation. They explore the web of interactions among the living and non-living players that sustain life.

### 2) Community and Social Development

Community and social development lessons do not receive nearly enough attention of academic achievement, but they are as crucial to the survival of our country as reading and writing. Children learn how to take responsibility for their environment and develop a strong sense of community to ensure the continuation of our society.



### 3) A Healthy Lifestyle

Beyond academics, the garden provides broader life lessons including contributing to students' knowledge of how to maintain a healthy lifestyle. According to the MN department of health, childhood obesity is at an all time high at 10.4% - obesity in children and youth is a serious issue with health and social consequences that often continue into adulthood.

### 4) Academic Achievement

A school garden is a perfect tool to provide hands-on learning experiences for any academic subject. Science is the most common subject linked to gardens. Many teachers use the garden as a laboratory to introduce students to scientific methods through plant-related experiments. Additionally, a garden provides a place to study weather, insects, soil and other environmental topics. It is the ideal habitat model for studying ecosystems. The real-life experiences contribute greatly to students' comprehension and retention of new science knowledge, a fact supported by studies linking participation in a gardening program to increases in science achievement scores.

Here are the Carver-Scott County schools who already have a school garden:

East Union Elementary	Children of Tomorrow Learning Centers	Juvenile Alternative Facility
Bluff Creek Elementary	La Academia Immersion School	Raven Stream Elementary
Chanhassen High School	Jordan High School	Eagle Creek Elementary
Chanhassen Elementary	Jordan Middle School	Shakopee West Middle School
Victoria Elementary School	Jordan Elementary Schools	Watertown-Mayor Community Ed
Guardian Angels School	St Joseph Catholic School	Chatfield Elementary School
Oak Crest Elementary	River Valley YMCA Preschool	

### Getting school leadership support

Start with a team! Most successful school gardens across the state have one or more "garden champions" that help to keep the project rolling.

**Parent and community volunteers**, dedicated **teachers and administrators**, **paid garden coordinators**, and motivated **student groups** can all serve the role of "garden champions".

Including **food service staff** gives you the opportunity to explore taste testing and introducing new items to the cafeteria.

Including **maintenance staff** is important if you will need their assistance in building or maintaining the garden, or if you will need access to hoses, water or other tools that they oversee.

Don't forget to include your **school administrator** or **district superintendent** according your individual school approval guidelines.

A cross section of representation on the school garden team helps to:

- Promote project sustainability.
- Decrease the likelihood of vandalism because more people have a stake in the success of the garden.
- Provide critical personal connections for donations in the areas of labor, plants, supplies, and financial assistance.
- Develop interpersonal relationships amongst students, staff, other adults and community members.
- Bring needed expertise and fresh ideas to the project



## STEP 2 VISION AND RESOURCES

### Planning and funding your school garden

Minnesota has seen rapid growth of Farm to School activities. Farm to School implementation differs by location but always includes one or more of the following:

- Procurement: local foods are purchased, promoted and served in the cafeteria or as a snack or taste-test;
- Education: students participate in educational activities related to agriculture, food, health or nutrition; and,
- School gardens: students engage in hands-on learning through gardening.

Schools may:

- Serve local food at breakfast, lunch, or during snack time.
- Incorporate school gardens or food preparation within classroom lessons.
- Feature local foods in healthy school fundraisers.
- Engage students in trips to a farm or bring farmers to school to serve breakfast or lunch.
- Establish composting and waste management programs.



As you develop what that vision looks like for your school, pay attention to financial resources and physical resources needed.

### Grants and financial resources

#### **SHIP Program**

Statewide Health Improvement Program (SHIP)

Grant funding may be available

Contact your counties SHIP Coordinator

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## **MN Ag in the Classroom**

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**Youth Garden Grant** - Any nonprofit organization, public or private school, or youth program in the United States or US Territories planning a new garden program or expanding an established one that serves at least 15 youth between the ages of 3 and 18 is eligible to apply.

**Budding Botanist** - Open to Title 1 public and private schools in the US, the Budding Botanist grant will help our youngest citizens learn about plants, explore their world and inspire them to take care of the life they discover in their local ecosystems.

**Carton 2 Garden** - Open to public and private schools, contest winners will be selected based on their implementation of an innovative garden creation featuring creative and sustainable uses for repurposed milk and juice cartons.

**Gro More Good Grassroots Grant** - The Gro More Good Grassroots Grant presented by The Scotts Miracle-Gro Foundation and KidsGardening is designed to bring the life-enhancing benefits of gardens to communities across the United States. Grants will be awarded to schools and non-profit groups across the country for impactful, youth-focused garden projects.

Think about **local businesses, parent teacher association (PTA)** or school healthy **fundraisers** who could also donate funds for building your garden.

### Recruiting volunteers

You will need volunteers to physically help you:

Build your raise beds and grids

- Build your trellis and crop support systems
- Mix and fill your beds with growing medium
- Maintain the garden over the summer when school is not in session
- Clean up the garden after the season is over in preparation for the next growing season

These are wonderful community service opportunities for:

- Your local girl or boy scout groups
- Parent teacher association (PTA)
- Team building events for local businesses &/or your school faculty
- Local nursery owners
- Members of civic organizations such as the Lions or Legion.



## STEP 3 BUILDING YOUR SCHOOL GARDEN

### Location Selection

It is important to identify the specific location on the school grounds. **Building and grounds supervisors** and **maintenance staff** need to be involved in this process as they have knowledge of irrigation systems, high traffic areas, snow removal, and underground cables and pipes.

A site analysis is key and involves evaluating the environmental conditions of potential garden areas. Items to consider investigating include:

**Sun:** The location should have five to eight hours of full or direct sun.

**Water:** Identify natural water sources that can be used such as redirecting roof runoff into a rain barrel. In addition, identify the water sources that will be used for daily watering such as building spigots and sprinkling systems.

**Drainage:** Consider where the water naturally runs during a heavy rain because planting seeds in its path can cause the seeds to wash away or plants to die. This typically occurs in low-lying areas.

**Soil:** Test the soil at the identified garden location. The U of MN Soil Testing Laboratory on the St. Paul Campus will provide this service for a small fee. <http://soiltest.ctans.umn.edu>. Creating the optimal soil composition for the plants will greatly enhance the overall health of the plants and increase the harvest. A soil analysis typically tests the pH and nutrient content allowing for appropriate soil enhancements to be added. The soil can either be acidic or alkaline and usually a soil analysis ranging in the 6.5-7 % pH range is deemed normal and desirable.

**Access:** The location should be close enough to classrooms for daily observations of plant growth. In addition, make sure access to the gardens accommodates individuals with disabilities.

**Participation:** Determine how many classrooms or groups of individuals will be utilizing the garden and for what purpose. Identifying those aspects will dictate the distance between plots helping to determine the overall garden dimensions.

**Security and Safety:** Locate a site that is within view from the classrooms or in a secured area to decrease the likelihood of vandalism. Also, make sure that the garden is not situated in an emergency exit evacuation path or in a high traffic area.

After identifying a space for your school garden, measure the garden and stake it out. Walk around it and identify if there might be some natural challenges with the design and the location of the plots.



## Garden Design

After identifying the best location and the overall garden dimensions are calculated, the design process can begin.

**Garden beds:** Outdoor garden options include in-ground beds, raised beds, and container gardens. These gardens can come in all shapes and sizes but keep in mind if the beds are designed to be no more than eighteen inches wide, students can work from either side and still reach the middle without having to “step” into the dirt.

**Paths:** Paths help reduce the risk of plant damage and also will help accommodate wheelchairs and wheelbarrows.

**Outdoor Classroom Area:** There are many benefits to teaching outside in your edible schoolyard area. Therefore, planning ahead when designing the garden can prevent later reconstruction of it. Creating a shady spot will provide a more comfortable learning environment. A demonstration table surrounded by benches or picnic tables can enhance the outdoor learning environment as well.

**Storage Area:** It is important to place the storage area or tool shed near the edible schoolyard for easy access to tools. Take time to explore tool shed construction materials. Wood may require more maintenance, but it is heavier and withstands weather well. Plastic storage areas are quick to erect, highly portable, and less expensive, but may not fare as well in inclement weather. Depending on style, possible theft may also be a consideration.



## Building Your Raised Beds

The Square Foot Gardening (SFG) technique, developed by an engineer Mel Bartholomew, is a good space saving, low maintenance – high yield method of gardening used by many school gardens.



Boxes should be constructed no more than **4 feet in depth** so students can reach to the middle of the box from both sides. Box length can accommodate your gardening space needed.

1x1 feet grid divide up the bed and allows each student their own 1x1 square of growing space as well as only **6” of soil depth** is needed.

**Chapter 5** of your square foot gardening resource book will provide you with equipment list as well as building plans for your raised bed boxes and grids.

Fertilizer is also not needed in SFG using Mel’s soil mix, a more cost efficient long term endeavor.

These raised bed boxes can be set about **3 feet apart**.

Some vegetables will require support. If you choose to build a trellis, building plans can be found in **Chapter 6** of your square foot gardening resource book.

## STEP 4 PLANTING AND MAINTAINING

### Crop Planning

These are some vegetables that are **easy to grow** in our Minnesota climate and easy to harvest and eat for students.

Vegetables	Spacing	Sow outside	Days to Harvest
Beans (will need support)	1 plant / square	Mid May	65 days
*Broccoli	1 plant / square	Mid April	100 – 150 days
*Cabbage	1 plant / square	Early April	80 – 180 days
*Carrot	16 plants / square	Mid April	70 - 80 days
*Cauliflower	1 plant / square	Mid April	50 – 100 days
Cucumber (will need support)	2 plants / square	Early May	50 – 70 days
*Lettuce	4 plants / square	Mid April	30 days
Peas (will need support)	1 plant / square	Mid April	60 – 70 days
*Radish	16 plants / square	Mid April	20 – 30 days
Squash	1 plant / square	Mid May	50 - 65 days
Tomatoes (will need support)	1 plant / square	Mid May	50 – 80 days

\*These are all vegetables that can be planted again in the Fall if you plant it 5-10 weeks before frost.

This is only a starter list of plants – you can find a longer list of MN friendly plants on the Edible Schoolyard Manual –

[https://www.arboretum.umn.edu/UserFiles/File/2013%20Schoolyard%20Gardens%20Conference/EdibleSchoolyardsManual\\_optimized.pdf](https://www.arboretum.umn.edu/UserFiles/File/2013%20Schoolyard%20Gardens%20Conference/EdibleSchoolyardsManual_optimized.pdf)

On average, our last and first frost dates for Carver-Scott county is between **May 11 to September 27**. Frost will be detrimental to your plants, unless you have built yourself a hoop cover to extend the season by a few weeks. A season-extender hoop cover, or a greenhouse, might be a project you want to tackle in the 2nd or 3rd year of your school garden project.

**Map out your garden bed** and ensure that the taller plants will not be overshadowing the lower crops. A good rule of thumb is to ensure that the taller plants are at the **north end** of the planting bed. **Chapter 3, pages 53 to 55** of your square food gardening resource book has some sample garden designs that may aid you in planning your garden bed.

We recommend **starting small** – each student maybe paired up and assigned rotating responsibilities for planting and care of their plant. It is easier to maintain interests and attention span for the entire growing season when the school garden activities are manageable and not overwhelming.

## Soil

What soil should I use for my raised beds – there are plenty of variety to choose from. You can purchase ready **packaged raised bed mixes** or as a more cost effective alternative, you could mix your own. One such **mix-your-own soil mix** is Mel's mix:

- 1/3 garden compost
- 1/3 peat moss
- 1/3 coarse vermiculite

Mel's mix is efficient for school garden maintenance as it **requires no fertilization** and less watering. The compost supplies the fertilization needed all season long and the peat moss and vermiculite have wonderful water retentive properties. You would simply top up the compost as you prepare for the next growing season.

**Chapter 7, page 137** of your square foot gardening resource book will outline how much soil you will need, depending on the size of your raised bed.

## Water

Your square foot garden is only a fraction of the size of a tradition garden, and you are **watering only when a plant needs a drink**.

**Water at the base of the plant**, where the roots are located. Do not broadcast water over the entire plant. Mel's soil mix is formulated to absorb and retain moisture. The number 1 cause of plant failure is overwatering.

You can water with a watering can or a hose. This is an activity that students may have the desire to take on. **Ensure that you have a system for assigning gardening chores.**

If you are feeling adventurous, installing a drip irrigation system will eliminate the need for hand watering. **Chapter 9, page 172** will provide a material list and instructions that will help you.

Ensure that you have a system for **summer care** of the garden while school is out.

**No weeding** is necessary using the square foot technique of gardening.

## STEP 5 TEACHING IN THE GARDEN

Now that your garden is set up, planted and ready to go, don't miss the opportunity to learn from your garden. Activities will vary by age group - Preschool activities may include puppets, story time, songs, demonstrations; Elementary and Middle School activities will teach about horticulture and include math and science.

Here are some considerations:

- What educational activities and lessons will you incorporate into the garden?
- How can you use the garden for scientific and multi-disciplinary learning?
- How can you cultivate the students confidence and enthusiasm for learning?
- Can other educational goals be achieved through active participation in the garden?
- How will you meet the needs of students with disabilities or special learning issues?
- Do activities and lessons meeting the local, state, and national standards?
- What are your sources of expertise for training?



Here are some ideas to tie curriculum to gardening:

### Science

Key science concepts that can be explored in the garden include organisms, cycles, and basic requirements for life, plant anatomy, adaptations, food webs, decomposition, interdependence, ecological principles, pollination and diversity of life.

Below are a few ideas for life, physical, and earth science activities in the edible schoolyard:

#### Life Science:

- Observe the life cycles of plants using fast-growing plants in the classroom.
- Investigate the functions of different plant structures.
- Discuss how plants adapt for survival. Earth Science Create a garden weather station.
- Simulate soil erosion in the garden.

#### Physical Science:

- Simulate the water cycle in an indoor garden by covering it with a "dome" of clear plastic.

## Mathematics

The garden provides a plethora of opportunities to practice mathematical activities.

Here are a few math activity ideas:

- Measure the growth rates of plants and display results on different types of graphs.
- Create a calendar of desired harvest dates for each type of plant and then calculate planting dates.
- Explore possible variations in harvest dates.
- Measure your garden parameters and calculate the area.
- Count the number of seeds planted and the number of seeds that sprout along with calculation of germination rates.
- Measure the height of a group of plants and determine the mean, median, and mode

## History/Social Studies

Plants are an important role in world history. Not only as a base of all food chains and a supplier of oxygen, but also in the development of civilizations and influencing international economics.

Gardening activity ideas:

- Research and report on cultural or ethnic differences in food consumption and gardening practices.
- Study the contribution of Native American and other cultural foods on our history and diet.
- Complete a site analysis of the school garden and map it out noting features and including a Compass Rose.
- Create a block styled diagram (comic strip style) journaling the path of a fruit or vegetable from seed to table.

## English/Language Arts

Reading and writing are two very important classroom basics and mastery of these skills provides students with the power to succeed.

Activity ideas:

Keep daily garden journals documenting observations, weather conditions, and classroom activities.

- Research the growing characteristics of the edible schoolyard using the Internet and reference materials.

- Write thank you notes to volunteers and garden sponsors.
- Write step-by-step instructions for common garden activities.
- Write, illustrate, and publish a collection of garden stories and poems.
- Read poetry to a small audience in the garden area.
- Write a research paper on a favorite plant, including source citation.

## Visual and Performing Arts

A garden can inspire many works of art, dance, music and drama.

Activity ideas:

- Make a seed mosaic.
- Create a color wheel collage using pictures from seed catalogs.
- Make musical instruments from gourds, like an ocarina, and learn how to play them.
- Perform a drama or musical using the garden as the stage.

## Health and Nutrition

Although research continues to document the significant health benefits of consuming fruits and vegetables, most children do not eat the recommended daily amount. Growing fruits and vegetables in the edible schoolyard improves students' attitudes toward healthy foods and motivates picky eaters to try new foods.

Specific activity ideas:

- Discuss the difference in nutritional value of various plant parts.
- Study the nutritional value of the various crops/plants that are in the garden.
- Conduct a blindfolded taste test using school grown vegetables and supermarket purchased vegetables.
- Keep food journals that highlight how many fruits and vegetables are eaten and describe any new produce consumed.
- Have a registered dietitian visit classrooms to discuss healthy food choices.
- Invite a local chef or food service personnel to do a food demonstration teaching a variety of skills and ways for food preparation.
- Teach students about general knowledge of how to identify a "ripe" fruit or vegetable, the proper storage of fresh fruits and vegetables, a variety of preparation methods, and how to serve them.
- Create a classroom cookbook of favorite recipes using garden fruits and vegetables.

## ACTIVITY 1 - EGGHEADS

### WHAT YOU NEED

- Eggs—any kind of egg; bigger is better but any will do
- Quality potting soil—soiless potting mixture is available at garden centers. Don't use garden or topsoil as this is too dense and won't drain well.
- Cat grass seeds—any brand; you may find this at your local hardware store, pet store, online or anywhere you find a good seed selection.



### WHAT TO DO

1. Gently chip the top 1/3 to 1/2 off of the egg. Rinse well. With a needle, carefully poke a hole in the bottom of the shell for drainage.
2. With a Sharpie or other waterproof markers, draw a face or other decorations on the outside of the eggshell.
3. Fill the eggshell about  $\frac{3}{4}$  full with potting soil.
4. Scatter seeds and cover with additional soil. More seeds for more grass. Place in a sunny window.
5. Water well with a spray bottle. Keep soil moist.
6. Grass should germinate in 2-4 days and be full grown in a week.





## ACTIVITY 2 - PIZZA GARDEN

### WHAT YOU NEED

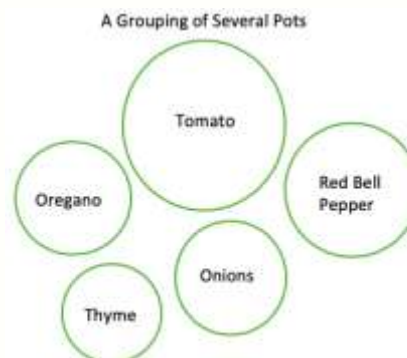
- Large pot or barrel- 24" diameter or larger and 18" deep, OR several smaller pots. The pot for the tomato needs to be 12-18" deep. Be sure your pots have drainage holes in the bottom.
- Quality potting soil –soiless potting mixture is available at garden centers. Don't use garden or topsoil as this is too dense and won't drain well.
- Plants of your choice. Your local garden center will have a variety to choose from. Here are a few suggestions.
- Tomato—choose a dwarf (also called "determinate") variety, if possible, so it doesn't overtake your pot
- Bell Peppers—any color you prefer
- Onion—bunch, spring or chives
- Eggplant—labeled "compact" or "for containers"
- Herbs—parsley, thyme, basil, oregano



### PUTTING IT ALL TOGETHER

1. Fill pot with potting soil to 3" from the top.
2. Gently remove plants from pots and nestle them in the soil. You will want the top of your plant's soil to sit approximately 1" below the rim of the pot.
3. Once you have your plants in place fill in around your plants with potting soil up to 1" below the rim of you pot.
4. Place pot in a sunny location, 6-8 hours of sun per day.
5. Water thoroughly.
6. Every other week fertilize with a liquid fertilizer.

### HERE ARE TWO IDEAS OF HOW TO LAY OUT YOUR PLANTS:



### ACTIVITY 3 - KIDS IN THE GARDEN - POTATOES IN A BUCKET

Family activity: Who can name the most ways to use potatoes?



Use a food grade bucket 5-gal or larger with drainage holes



Any brand potting soil or container soil



Seed potatoes can be found at most nurseries. Cut potatoes in sections. Each section must have an eye or two (sprout).



Potatoes must be "hilled"



Digging potatoes is like a treasure hunt!



## STEP 6 HARVESTING AND EATING NUTRITIOUS FOOD

### When to Harvest

Vegetables	When to Harvest
Beans (will need support)	Pick beans before you can see bean swelling in pod. Be sure to pick beans frequently (3-5 days) so the crop keeps producing. Can be eaten raw, steamed or boiled.
*Broccoli	Pick broccoli when heads form into tight, firm clusters. Cut off the head with 6 inches of stem attached. Can be eaten raw, steamed or boiled.
*Cabbage	Harvest cabbage heads when they have formed tight, firm heads. Eat raw, boiled, steamed, or pickled as sauerkraut
*Carrot	Harvest carrots at almost any time in the growth cycle Eat raw, boiled, steamed, baked, pureed, or pickled in vinegar
*Cauliflower	Ready to harvest when the flowerets are tightly formed and dense. Cut the head off the main stem. Eat raw, cooked, boiled, or pureed
Cucumber (will need support)	Cucumbers are tastiest when harvested young before the seeds fully develop. Eat raw or pickled
*Lettuce	Harvest outer leaves of leaf lettuce early to encourage growth. Head lettuce is ready to harvest when heads are firm and tight
Peas (will need support)	Harvest peas daily to encourage vines to keep producing.  Shelling Peas: Pick them when the pods are rounded and the peas have filled in pod, but before they grow tough. Pods are not edible.  Snap Peas: Pick when their edible pods begin to grow rounded, plump and juicy, but before they get tough.  Snow Peas: Pick them when the pods have grown to 2-3 inches but are still flat. Eat raw, boiled, steamed, or stir - fried.

*Radish	Pull radish roots when 1-2 inches in diameter. • Eat raw, stir-fried, or pickled in vinegar
Squash	Pick frequently when fruits are small. Skins should be tender enough to poke fingernail through. Eat raw, boiled, baked, roasted or in soups
Tomatoes (will need support)	Harvest when fruits are full color. • Eat raw, stuffed, stewed, boiled, baked, or pureed. Leaves are not edible. • Great crop to comparative taste fresh vs. store bought

### Eating your Harvest

Harvesting food straight from the garden is a powerful act. For many kids, the school garden is the only place they will experience eating “straight off the vine.” Students who harvest straight from the garden are often more adventurous and try food they might not sample otherwise. Use this time to explore the garden and show students what is good to harvest in the garden. Remember to follow safe hand and produce washing practices. If garden production is low consider supplementing the garden harvest with produce from the farmer’s market or store.

Research on the health benefits resulting from school garden programs has found:

- Students who plant and harvest their own fruits and vegetables are more likely to eat them.
- Students with garden experience who participated in a nutrition education program not only ate more fruits and vegetables to begin with, but also demonstrated an increase in consumption by the conclusion of the program.
- Studies show that students who have participated in a comprehensive food system program, like gardens, and who have demonstrated an overall increase in understanding ecological principles, also demonstrated a significant increase in the total number of fruit and vegetable servings/day that they consumed.
- Students who participated in an outdoor school garden learning opportunity develop healthy lifelong eating habits as adults



Here are some suggested harvesting activities:

- Eat straight off the vine – remember to wash your hands and the produce before consuming them.
- Comparative taste tests provide an engaging, multi-sensory opportunity to encourage young people to try new fruits and vegetables. By asking for students' opinions, we demonstrate interest in and respect for their preferences. Students, in return, will often become less reluctant to try something new when given the opportunity to weigh in with an opinion.
- Work with your cafeteria to incorporate your school garden produce into school lunches
- Host a flavor/vegetable of the month event to match your harvest period.

### Food Safety Tips

Check that the water used in your garden is **safe for drinking**.

Veggies and fruits always need to be washed with **running water**, meaning that water needs to freely flow off of the surface of the produce to remove germs and contaminants.

Do not use soaps to wash produce.

For root crops with dirt on the surface such as carrots, you can first **scrub and rub** the produce in a bucket or sink of standing water to remove the visible dirt. Then complete the last produce wash under running water.

If you don't have a sink, the run-off from produce washing efforts should be collected or channeled or you'll quickly end up with weedy, muddy patches in your garden.

Handwashing needs to be under running water. Children should not share standing water for any step in handwashing.

Use **biodegradable hand soap** so that handwashing water can be collected and used in the garden.

**Hand Sanitizer** is an effective alternative if clean running water is not available.

## STEP 7 CLEANING UP YOUR GARDEN FOR THE NEXT SEASON

### Cleaning up your raised beds

At the end of the season, dig up and remove all spent and dead plants, weeds and debris from the bed. Tidy it up and make it look good.

Top up the planting beds with fresh compost, rake it in, smooth and level it out so it will be all ready for spring planting.

Your 1x1 grid could be left in the bed or removed and packed away if you choose.

Mend any broken beds as needed.

Your garden is “put to bed” for next year’s growing seasons.

Take notes of what plants work for your school gardens and what does not for future gardens.

### Recognizing volunteers

Ideas for showing appreciation may include:

- Post a sign recognizing all garden contributors. Contact Master Gardeners we can often provide garden signs.
- Send garden newsletters or email updates on garden progress.
- Send personal thank-you notes.
- Donate some of the garden produce back to the contributors.

In order for the school garden to be sustained, it must tie closely to curriculum, be implemented into policy, maintain administrative approval, attract committee members and volunteers, and have a continued source of funding and support.

### Program sustainability

A common recurring question is, “How will we sustain the garden year after year?”

Maintaining a positive garden experience for all participants is key. Some powerful tools for sustainability include:

- Incorporate new elements to the garden each year providing new interests. For example, a water feature like a pond or waterfall to attract birds, a specialized garden like a butterfly garden, or adding newly created stepping stones and sculptures.
- Communicating the successes and positive impact on students beyond the school district and the school garden team.
- Promoting the school garden in the community establishes a solid reputation which not only provides validation to those participating in the creation of the garden, but also helps recruit parent or community member volunteers.
- It is important to clearly list the garden expectations, provide the information needed to complete assignments, and keep the lines of communication open.
- It is also important to show appreciation to all garden donors, community partners and volunteers through multiple methods. It helps create a sense of involvement in the program and more than likely the individual or group will want to contribute again in the future.
- Creating a logo and slogan to promote the mission of the garden.
- Developing an eye catchy garden icon linked to the home page on the school district's webpage.
- Adding supply items for the edible schoolyard to the "Back to School Supply List."
- Connecting with the local paper to create a "Garden Corner" column to provide monthly updates.