

Growing Your School Garden Program

April 2, 2015



To hear the webinar, dial: 888-566-1192
Passcode: 5894178





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Housekeeping

- To download handouts:



- To make a comment or ask a question:



- » Type your question or comment using the Q&A tab
 - » Ask your question or comment on the phone at the end of the webinar by pressing *1
- Please turn off your computer microphone, all audio will be through the phone.
 - The webinar will be recorded and available on the USDA Farm to School website: <http://www.fns.usda.gov/farmentoschool/webinars>

SNA Continuing Education Units



To Receive your SNA CEU certificate email Bob at:

Robert.gorman@fns.usda.gov

Just released!!!

Farm to School Grants 2016!

Be sure to check out our priority areas in summer and pre-k meals programs!



Visit the USDA Farm to School website for more information.



Poll:

**Who has served school
garden produce in the
cafeteria?**





Overview

- Introduction
- Perspectives on growing school gardens:
 - » School district run, education & NSLP marketing focus
 - » Non-profit run, education & community focus
 - » Nutrition services run, production for NSLP focus
- Resources
- Questions and Peer Sharing

Local Food



Food Education



THE
FARM *to* SCHOOL
PROGRAM

DISCOVERY
Garden
By: Jessica P.



THE FARM to SCHOOL PROGRAM

Schools Gardens & Farm to School

- Nutrition and agriculture education
 - » Experiential food education
- Outdoor classroom
- Connect food service to district
- Taste testing
- Supplementing school meal programs
- Summer feeding



Why School Gardens?

➤ Meal Participation

- Improving student attitudes towards fruits and vegetables
- Increasing consumption of fruits and vegetables

➤ Job satisfaction & staff retention

- Farm to school & school garden coordinators
- Cafeteria & classroom connection



➤ Produce Source

- providing quality, fresh product at competitive prices or no cost

PROCUREMENT

School Gardens: Procurement

1. Donation
2. NPSFS account investment
3. Interdepartmental Agreement
4. Informal Procurement



School Gardens & Food Safety

- “I’m so frustrated that I can’t serve my school garden produce in the cafeteria because of USDA requirements.”

Food Safety

USDA has no rules prohibiting school garden produce from being served in cafeterias. The same food safety rules apply for all produce procured and served in cafeterias.





Garden Food Safety: 4 Key Concepts

- 1) History of land use
- 2) Soil sampling/fertilizer use
 - Cooperative Extension
- 3) Water sources
- 4) Growing/harvesting practices
 - Animal control measures



Harford County Public Schools, MD



Karen Olsen

A close-up photograph of fresh green parsley leaves, showing their characteristic feathery texture and vibrant color. The leaves are densely packed and fill the entire frame, creating a lush, natural background.

Getting Started

**Karen Olsen RDN LD SNS
Harford County Public Schools
Dept of Food and Nutrition Services**

What does a “School Garden” look like in your mind?



Ask

- What is the **PURPOSE** –
 - education,
 - tasting
 - Cooking
 - project for students, etc
- Who should be project leader?
- What **SPACE** is available
- **INDOOR** or **OUTDOOR**?
- What should my role be?

Starting A Harvestable School Garden in HARFORD COUNTY PUBLIC SCHOOLS



Tips and Best Practices from
Around the County

School gardens are educational living laboratories. Produce from school gardens can be used with classroom and after-school lessons or served as part of school cafeteria menu. Research has shown when students are involved directly in growing and harvesting of healthy fruits and vegetables they are more likely to try those foods and incorporate them into their routine.

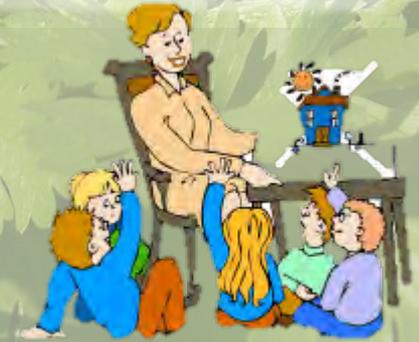


This brochure will assist you in starting a school garden program at your school.



Possible Partners or Garden Leaders

- Grade level class room teacher
- Student club leader
- Ag teacher
- Partner/secondary school Ag program
- Cooperative Extension Master gardeners
- Parks and Rec programs



CLUBS AND
ACTIVITIES



Must Do's...

- Get the Principal on board
- Know each person's role
- Think about placement for safety for students and plants
- Get the custodian on board
- Start small

Getting Started - Who and Where and How

Identify where the garden will be located, who will be involved and how lessons will be taught. Raised beds, mobile carts or containers are recommended.



At least two people should commit to overseeing the care of the garden, even over the summer months.

Contact the Food and Nutrition Services Department for assistance in using harvest in the school cafeteria.

See the "Starting An Outdoor Garden and Garden Safety Check List" for additional details and hints.

Building materials for garden beds, containers and stakes must be constructed using nontoxic and non-leaching materials.

Bagged soil and mulch should be used to ensure soil safety and traceability. Manure and raw compost should be not used. (Compost may be used in flower beds.)

Consider traffic flow (foot and car), security camera location, shelter from wind, adequacy of sunlight, ability to limit pests and pets, distance from bird feeders and septic field.

Locate beds so soiling during class can be maintained (with a wheelbarrow or similar) around the bed.

Planting and Growing and Learning

Water used must be potable. Run off from the roof should not be used.

Pesticides and herbicides should not be used in or near the garden.



Seeds and plants should be obtained from reliable sources to ensure safety.

Identify educational materials – lesson plans, journals.

Students are taught garden safety (use of tools, hand washing, allergy awareness etc).

Students or staff with diarrhea or vomiting should not work in the garden.

Students are taught not to taste or consume anything from the garden until approved by an adult.

Harvesting and Tasting

Gardeners should hand wash for at least 20 seconds with soap and running water.

All food grade harvesting tools (scissors, bowls etc – should be food grade and clean.



Foods should be immediately used or put into proper storage.

Harvested items must be washed properly before being tasted.

Foods to be used in the cafeteria are taken directly from the garden and handed to a person in the kitchen where the items are labeled, dated and properly stored until use.

Winding Down

Garden keepers should properly put the garden to rest when not in use.



MUST HAVE'S

- Non treated wood or approved plastic borders
- Bagged soil
- Seeds
- Willing partners



HARVESTING AND USE

- Safety Safety Safety Safety Safety
- Be a Safety RESOURCE (not a wet blanket!)

Harvestable School Garden!



Do Not Use Pesticides or Herbicides



PLANTING AND HARVESTING SAFETY TIPS

Consider these food safety reminders for planting and harvesting:

- Contact your local health department for guidelines before planting a school garden.
- Enclose the garden to keep animals out.
- Consider planting seeds in containers in the classroom.
- Avoid transferring dirt from the garden to another area.
- Wash hands
 - after manipulating the soil
 - after handling turtles, toads, or other of nature's creatures.
 - after using chemicals.
- Transport foods from the garden to the classroom in clean, sanitized containers.



CUTTING BOARDS

PREPARING GARDEN-FRESH FOODS IN THE CLASSROOM

Here are some classroom food safety tips for preparing garden-fresh foods:

- Wash hands before cutting, preparing, or eating fruits or vegetables.
- Use clean, sanitized, and dry cutting boards and utensils.
- Wash produce under running water.
- Do not allow sick children to prepare foods for other children.



How to clean cutting boards

Wash, rinse, and sanitize after each use. Scrape off all food and other debris before washing.

Wash in a mechanical dishwasher whenever possible. If a dishwasher is available, clean and sanitize in a two-compartment sink:

- In the first sink, wash with hot soapy water.
- In the second sink, rinse using clean water.
- In the third sink, immerse in a chemical sanitizing solution and use the required contact time for sanitizing.

Allow cutting boards to air dry. Follow state or local health department regulations.

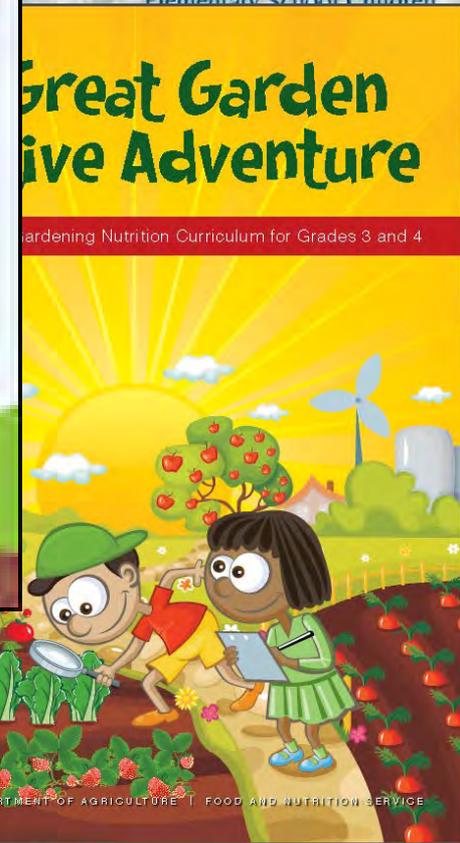
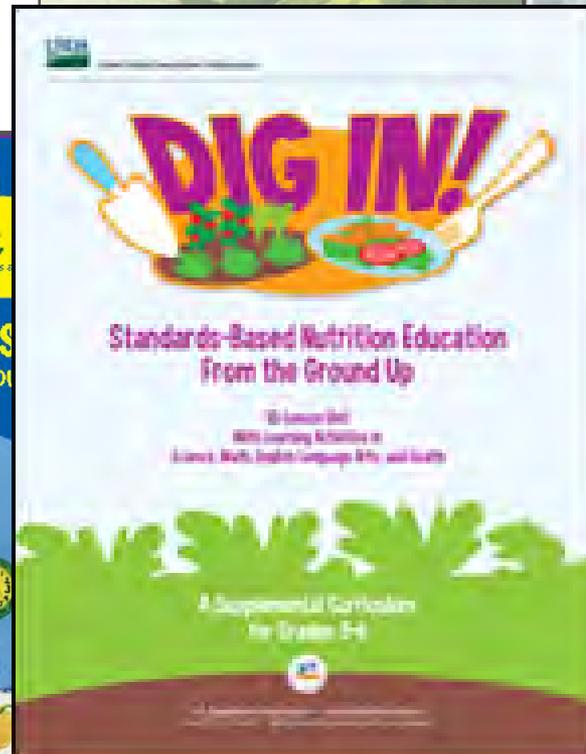
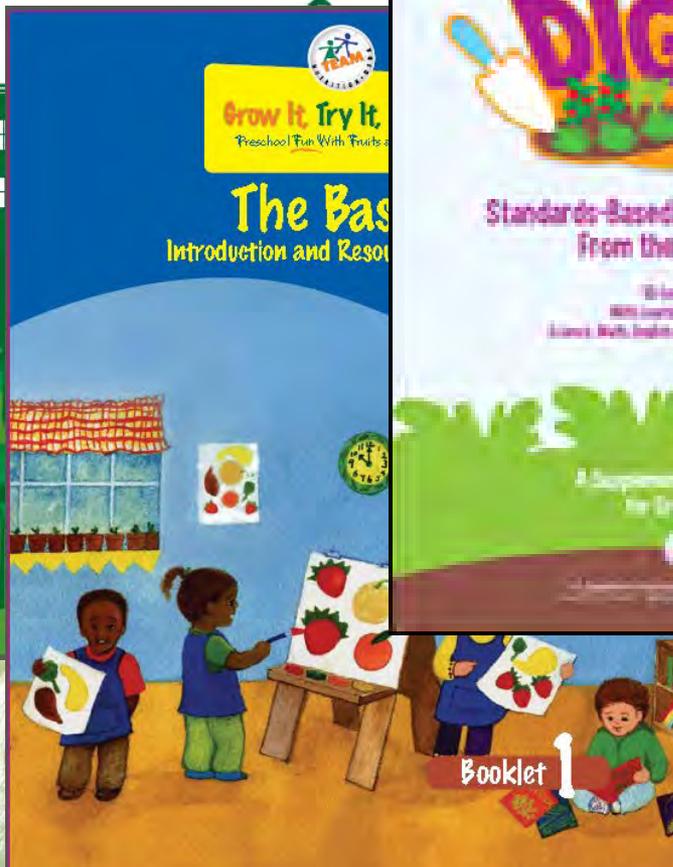


CLASSROOM CURRICULUM AND RESOURCES

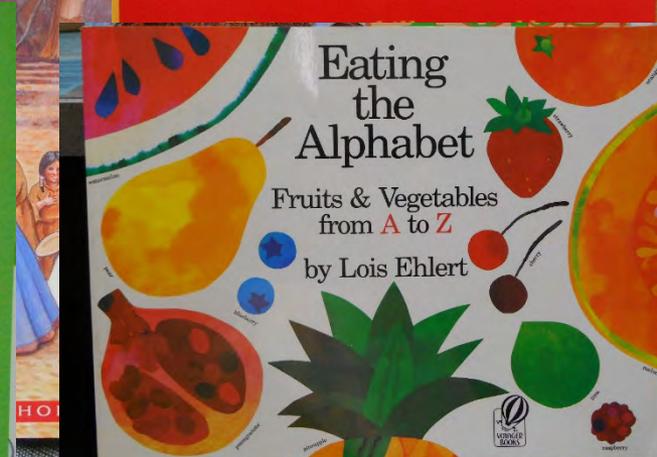
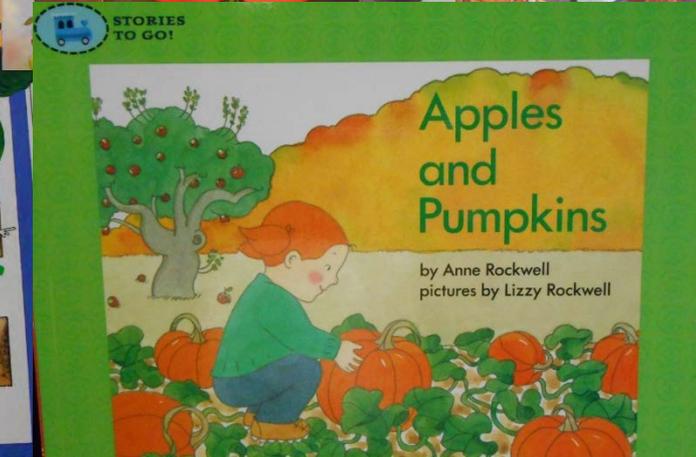
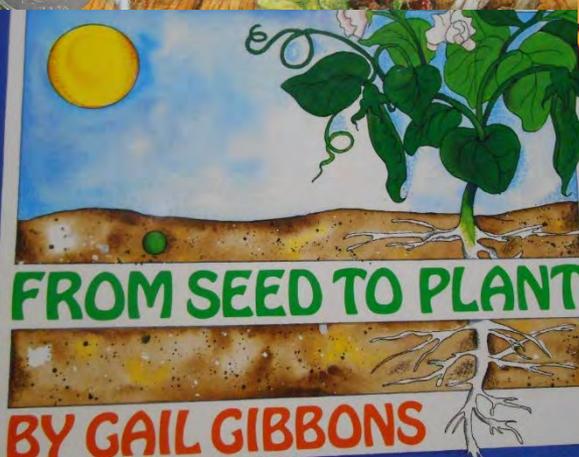
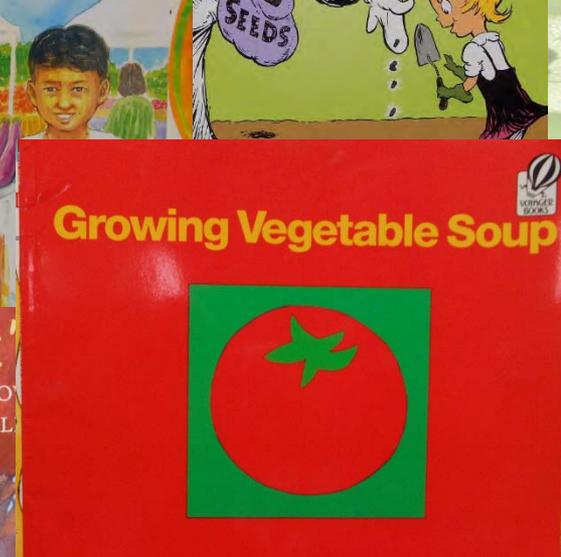
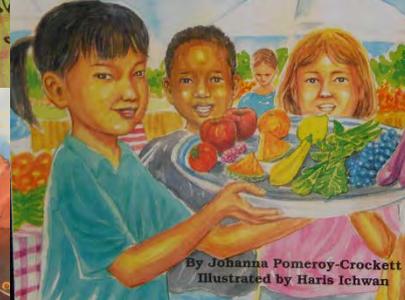
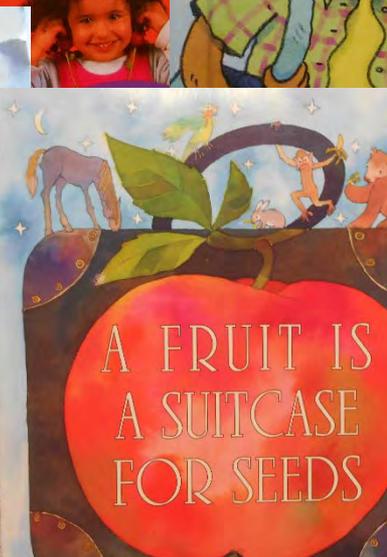
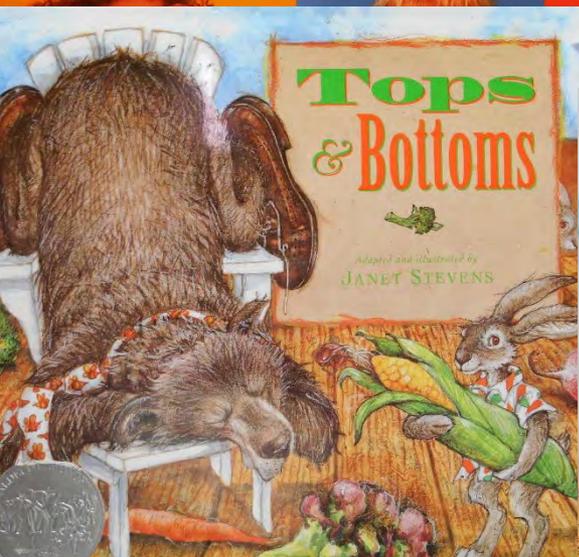
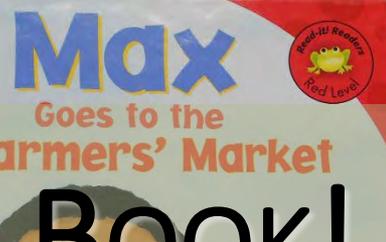
growing
healthy habits

NUTRITION TO GROW ON

A Garden-Enhanced Nutrition
Education Curriculum for Upper
Elementary School Children



FEATURE A BOOK!



SOME OF OUR GARDEN EXPERIENCES

- Dept of Food and Nutrition Services building



HIGH SCHOOL

School #1 - AP Environmental Science - indoor
(One leaf per salad)

School #2 - After school environmental club -
outdoor



ELEMENTARY SCHOOL

- Indoors
- 5th Grade class
- Participated in Refresh pilot program
- Also creating butterfly and bat “garden”
- Started inside with mobile carts
- Partnered with “Master Gardener” f education center

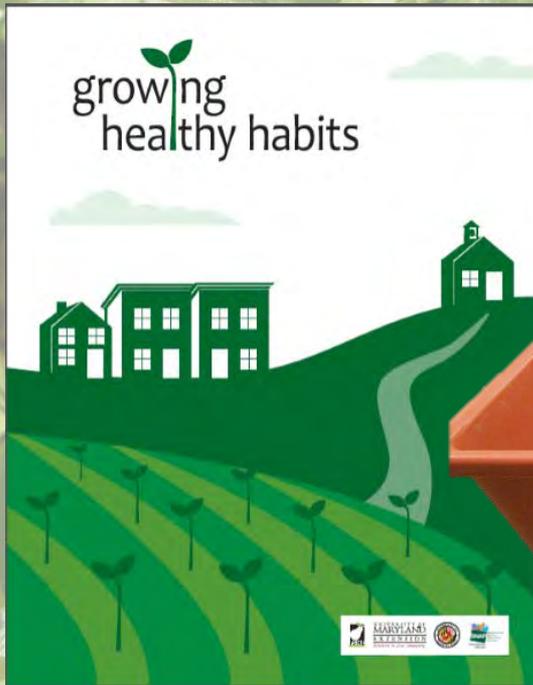


- Outdoor planting after last average frost



ELEMENTARY

Working with FSNE partners
(Food Supplemental Nutrition Education)



OUTDOOR EDUCATION CENTER

Outdoor Environmental Education center – field trips and 3 day/2 night 5th grade experience





**THANK
YOU!**

City Schoolyard Garden, Virginia



Jeanette Abi-Nader

City
Schoolyard Garden
Plant • Grow • Harvest



Virginia Farm to School

Our Mission

To cultivate academic achievement, health, environmental stewardship and community engagement through garden based, experiential learning.



Who we are

City Schoolyard Garden is a nonprofit organization dedicated to bringing project-based learning, health and nutritional awareness to city youth through the joy of being in the garden.





Core programs

- Buford Middle School Garden Program
- Elementary Garden Program
- Community Outreach & Partnerships

In Elementary Schools - FY15

- Grades Pre-K -4th
- Garden at each of 6 elementary schools
- Part-time Garden Coordinator - at each school
- Unique community characteristics/design
- 3 cross-districts lessons
- After-school clubs
- Teacher collaboration



Buford Middle School

- Full-time Garden Educator
- Life Science, Earth Science, Art, PE/Health, FACS, ESOL
- Integrate leadership development –garden aide, etc.
- Solarize hoop house
- Strengthen community –family connection
- Pilot evaluation data collection





Community Outreach

- Engaging Families
- 4,750 transplants for 12 partner organizations
- Golden Trowel Awards
- 80+ Businesses Engaged
- Building Partnerships



What we do

- 2,700 youth & their families
- 14,500 youth garden interactions
- 1,200+ hours of garden instruction
- Garden systems and features @ 7 schools
- 17 trainings/tours for teachers & community
- Partnership growth 180 total /71partners
- Framework for lessons



Why are we doing it?

- 77% of students engaged in environmental based education & school gardens scored higher on their standardized tests
- Nutrition programs linked to school gardens improved academics
- Kids are more likely to eat fruits and vegetables they have grown themselves



Lagniappe

- Deepened learning of subject material
- Promotion of nutrition and health
- Model environmental stewardship
- Cultivate leadership skills
- Teach resourcefulness
- Provide refuge and grounding

Our vision

Utilize garden based education as a food justice tool in our community with the long-term goal of greater equity and health.



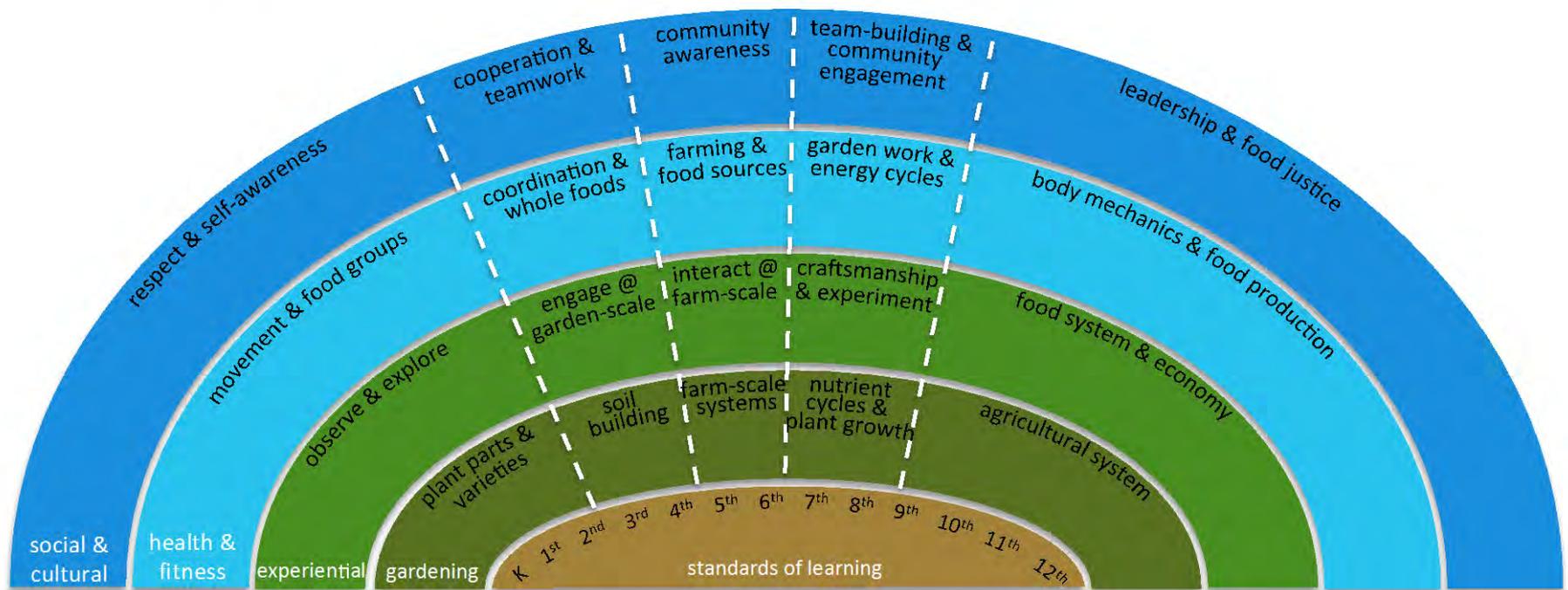


Garden Lessons and RootEd Frame

CSG Educational Roots Framework (RootEd)

The four core areas of the CSG RootEd Framework are intended to enhance academic learning in Charlottesville City Schools and include:

- cultivating gardening skills
- providing experiential learning opportunities
- promoting health and fitness
- nurturing social & cultural development



City Schoolyard Garden is an independent non-profit that cultivates academic achievement, health, environmental stewardship and community engagement through garden-based, experiential learning.

ARC OF LEARNING

GARDENING:

Observe and explore (K-2) – "Students understand they can use their senses to touch, feel, smell, taste, and see the plants and soil in the garden and how to work in the garden without causing harm to the plants and animals living there."

Engagement (3-4) – "Students interact with the environment, plant, care for, and harvest food."

Farm visits (5-6) – "Students visit examples of urban and rural farms."

Food system (7-12) – "Students ask broader questions about the food system, including where our food comes from, how it is produced, who grows it, who controls it, and who has access to it."

EXPERIENTIAL:

Sensory experience & observation (K-2) – "Students use their five senses, depict those senses in words and drawings, engage their curiosity, ask questions, explore."

Interaction & involvement (3-4) – "Students interact with the environment, plant, care for, and harvest food."

Implementation (5-6) ☑

Experimentation (7-12) – "Students test hypotheses and apply a variety of growing strategies."

HEALTH & FITNESS:

Movement & plant/soil characteristics (K-4) – "Students use their bodies to work in the garden, understand it takes energy to move, learn where plant nutrition comes from and their methods for storing energy."

Active lifestyle & plant/food growth strategies and preservation (7-8) – "Learn the value of living an active life (walking, biking, being on your feet) in addition to exercising, learn about pesticide, fungicide, herbicide, and fertilizer use, learn the use of preserves"

Body mechanics & food access (9-12) – "Learn to use your body effectively and examine access to healthy food."

SOCIAL & CULTURAL:

Respect & mindfulness (K-2) – "Students develop pride in their work, take care of themselves and their actions in the garden, learn respect for the garden space"

Team-building & cooperation (3-6) – "Students work together to accomplish tasks, ask for help, problem solve"

Service & leadership (7-12) – "Students take ownership of discrete tasks, think about the needs of others, and give time and energy in service of others and to group needs."



Gardening & Environmental Literacy





















Health & Fitness:

- Harvest of the Month
- Garden2Table

HARVEST *of the* MONTH

Seasonal snacks from garden to classroom

RADISH

— March, 2015 —



Harvest of the Month is a great way for youth and their families to explore, taste, and learn about seasonal vegetables and fruits - from the garden, in the classroom, on the plate.

FACTS & VARIETIES

Radishes are in the Brassica family, the same as last month's crop, Kale!

The most common edible part of the radish is the root. The botanical species name is *Raphanus Sativus*. Favorite varieties are French breakfast, Watermelon, and Easter Egg (which are multicolored).

If a radish stays in the ground too long in hot weather, it can get very spicy - but the spicy flavor protects it from pests like aphids, cucumber beetles, ants, and humans! If you bite into a spicy radish, you can say "That radish bit me back!"

HEALTH & NUTRITION

Radishes are one of the most nutritious root vegetables and provide an excellent source of:

- Vitamin C
- Phosphorous
- Potassium
- Zinc
- Fiber

The Radish improves your health by regulating your body's blood pressure, preventing respiratory problems, and easing digestion. The natural spices found in radishes is said to help eliminate excess mucus. Radishes are mostly made up of fiber and water, which help to cleanse and hydrate the body.

COOKING & EATING

Radishes can be eaten raw (alone or in salads, salsa, or tacos) or can be sautéed or roasted along with other root vegetables. Radishes are great for adding a bit of crunch and zest to any recipe.

RADISH TOPPINGS

Fresh radishes are delicious when eaten thinly sliced:

- with a pinch of salt or a thin slice of cheese
- dipped into a simple yogurt dressing: 1/2 cup yogurt, juice from 1/2 lemon, 2 Tbs of chopped dill
- on top of toast with a touch of butter

GROWING TIPS

Radishes are easy to sprout and grow. They only need 4 weeks to transform from a tiny seed to a round, juicy root bursting with flavor. Radishes grow best in the loose, sandy soil of raised beds or "bottomland" - that is, the fields around a river that have light, sandy soil and a high moisture content. Local Food Hub partner producers planted radishes in their high tunnels, or unheated greenhouses, this February so that we could have a March harvest.

CITYSCHOOLYARDGARDEN.ORG



Harvest of the Month is a program that highlights a locally available crop each month by providing a fresh, healthy snack in all six Charlottesville Elementary Schools. Students also learn about the crop in their schoolyard garden and classroom. Information on crop growing, nutrition, and preparation is shared with teachers and families. The goal of Harvest of the Month is to support healthy living skills that strengthen our youth and community.



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Garden to Table

Menu:

- Chara & Kale Chips
- Bean Hummus
- Salsa with Tomato & Pepper
- Roasted Carrots
- Pesto and Nasturtiums





**VOTE IN THE BUFORD
STUDENT VEG-OFF COMPETITION!**

**WINNER ANNOUNCED & SERVED AT THE 5TH ANNUAL
HARVEST FESTIVAL**
JOIN US FRIDAY, SEPTEMBER 26TH
5:30-7:30PM

















Leadership:
Buford Garden
Aides, ESOL,









WHOLE
FOODS
MARKET

READY, SET... SUMMER!

WINE
THROWDOWN!

Thursday,
July 17, @ 6 pm

Get
with



LET'S MATH WITH OUR VEGETABLES

EED UP!

SEED

PLANT

NUTRIENT



This vegetable is rich in

- Vitamin K
- Lutein
- Folate
- Vitamin A

Note: This food is green, leafy, & woody.

SEED

PLANT

NUTRIENT

This vegetable is rich in

- Carbohydrates
- Fiber

Note: This food is purple, leafy, & woody.





A hearty thank you to all of our 2014 business partners!



Bountiful Harvest \$20,000+



Deeper Roots \$15,000+



Deep Roots \$10,000+



Perry Foundation

Garden Plants \$5,000+



Seedlings \$2,500+



Our Partners





Our Staff

Garden Coordinators

Matt Darring
Eiley Patterson
Jennifer Esser
Rick Harden
Emily Anderson

Sam Taggart
AMI Fellow

Emily Axelbaum
Buford Garden Educator

Jeanette Abi-Nader
Executive Director



Thank you!





www.cityschoolyardgarden.org

Great Valley School District, PA



Kelsey Gartner

Food Service Department Garden



Kelsey Gartner, RD

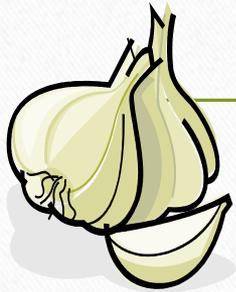
Nutrition and Garden Coordinator

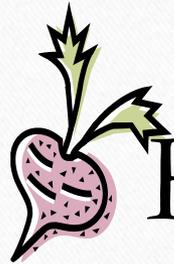
kgartner@gvsd.org

Large Garden at KD Markley Elementary School



Raised Bed Garden at Charlestown Elementary School





How We Got Our Start



Purchasing of Local Fruits
and Vegetables Has Long
Been a Food Service
Department Initiative
We were not successful in
obtaining locally grown
produce for our needs...so
we decided to grow it
ourselves!





Garden Funding

- Funded by grants
- Receive ~ \$15,000 from grants annually
- Funders are from the local community who are invested in creating healthy organizations through nutrition and health services, also Project PA (PA Dept. of Ed)





During the School Year







In the Cafeteria



In the Summer













Farmer's Market



Tasty Bites for Free!

Thank You!!

Great Valley School District
Food Service Department

Visit our website: www.gvsd.org

Kelsey Gartner- kgartner@gvsd.org

610-889-2125 x 52167



Resources

Wisconsin's Got Dirt Garden Guide

<http://healthymeals.nal.usda.gov/hsmrs/Wisconsin/gotdirt.pdf>

Garden Grants & Fundraising

<http://www.gardenabcs.com/grants.html>

Clearinghouse of all possible garden related grants

- Annie's Garden Crowd Funding/Center of Eco-literacy garden guide

NFSMI Food Safety & School Gardens guide

<http://www.nfsmi.org/documentlibraryfiles/PDF/20150210040033.pdf>

[School Garden Q&As: Memo SP 32-2009](#), from the USDA's Food and Nutrition Service – This memo clarifies, among other things, that funds from the nonprofit school food service account can be used to purchase seeds and other supplies for starting and maintaining school gardens

[Farm to School and School Garden Expenses](#) SP 06 -2015 – This memo clarifies the flexibility schools have in spending funds on school garden and farm to school efforts. Published November 12, 2014.



More Resources

The National Farm to School Network



farmtoschool.org

More Resources

The USDA's Farm to School Website



fns.usda.gov/farmentoschool/farm-school



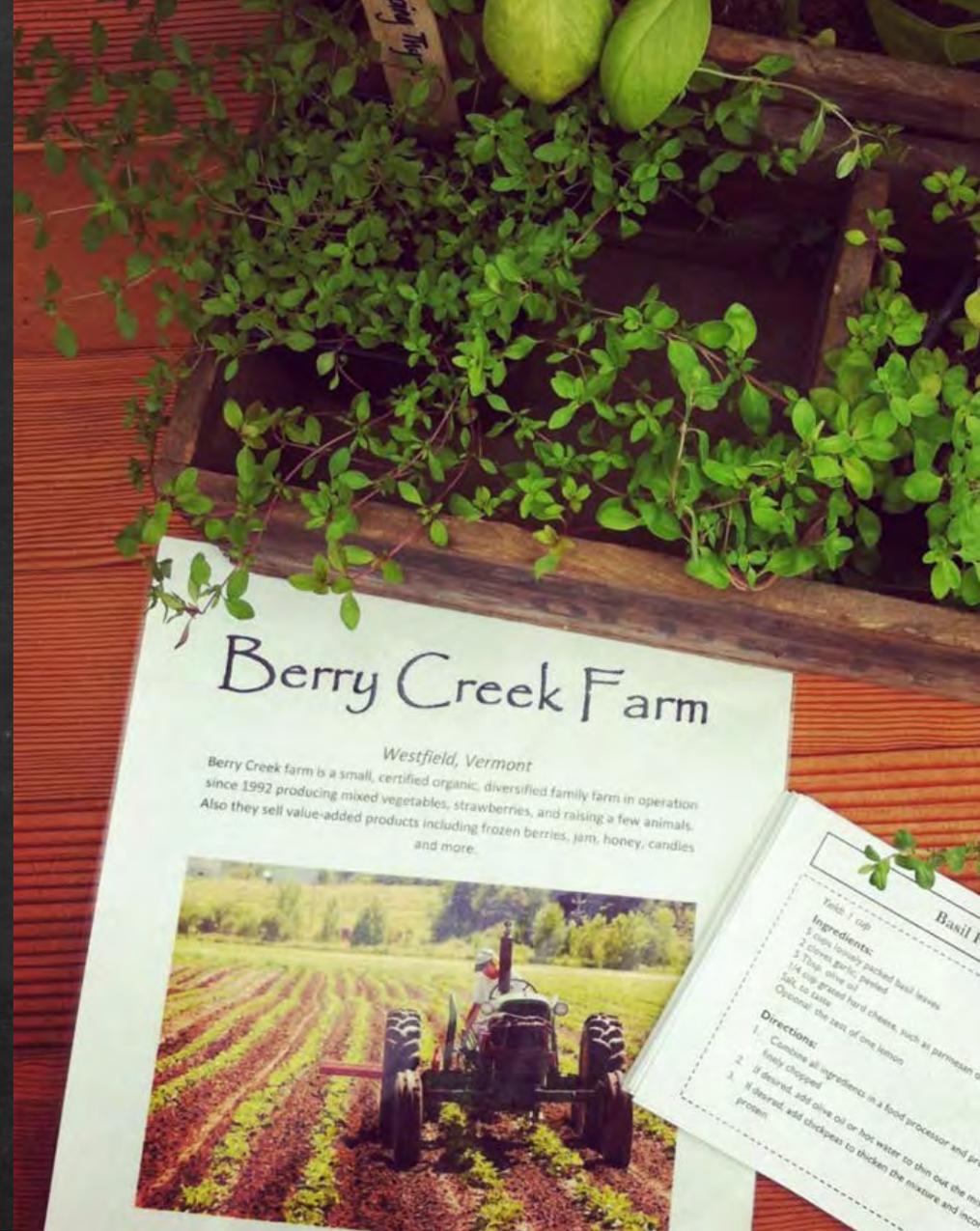
Upcoming Webinar on April 16th: Curriculum Integration



Thank You! Questions?

To Receive your SNA CEU
certificate email

Robert.gorman@fns.usda.gov



Berry Creek Farm

Westfield, Vermont

Berry Creek farm is a small, certified organic, diversified family farm in operation since 1992 producing mixed vegetables, strawberries, and raising a few animals. Also they sell value-added products including frozen berries, jam, honey, candies and more.



Yield: 1 cup

Ingredients:

- 2 cups loosely packed basil leaves
- 2 cloves garlic, peeled
- 1/4 cup olive oil
- 1/4 cup grated hard cheese, such as parmesan or pecorino
- Optional: the zest of one lemon

Directions:

1. Combine all ingredients in a food processor and process until finely chopped.
2. If desired, add olive oil or hot water to thin out the mixture.
3. If desired, add thickness to thicken the mixture and increase protein.

