WASHINGTON STATE UNIVERSITY EXTENSION

Master Gardener Program

So You Want to Start a School Garden?

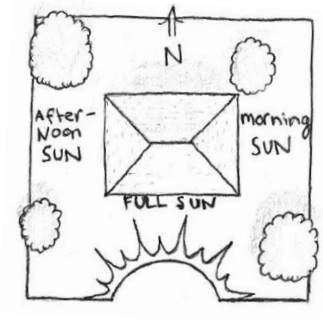
Determine Goals & What You Want to Accomplish with Your Garden

- What is the purpose of the garden?
- What ages or grades will use the garden?
- Consider integrating the garden into specific curriculum to encourage its continued use and benefit—curriculum is already developed; researching existing programs can save time.
- Start small and develop interest among teachers, students and parents to go further.
- Consider funding sources—short term grants can help with costs of building and establishing, but ongoing funding will be needed for yearly purchases, maintenance, water and tools.

Consider Timing: School Year vs. Gardening Season

- Summer harvested crops like tomatoes, beans and squash require intensive care when kids are typically out of school. Fall and winter harvested crops like pumpkins and kale require mid-summer planting when kids are typically out of school.
- Who will water, weed, plant in the summer? Consider clubs, summer programs, and similar opportunities to tend school gardens during breaks.

Getting Started: Site Selection



Sunlight:

- Find the sunniest portions of the property that are available for use as a garden.
- Consider various sides of buildings (even the north side), notice distance from large objects (building, hedge, trees).
- Also consider variations in summer and winter sun trajectory (sun lower in winter).

Access and Visibility:

Build the garden in a space where people will want to spend time in or that they pass by every day during their regular routine.

- **Out of sight = Out of mind**: If it is easy to see from a building or parking lot, participants can manage the garden better.
- **Easy to get to and easy to work in;** Level paths and access for equipment?

Make a Dedicated Space	Annual garden beds should be separate from other landscape elements. o Existing landscape plants will **out-compete the vegetables.** o Vegetable garden **soil** is managed intensively (yearly compost and fertilizer additions, higher water needs, cover cropping is desirable).
Grade:	**Avoid steeply sloped areas** if possible, or it might be necessary to add terraces to prevent erosion and to create space that is workable.
Access to Water:	When possible, building the garden **closer to a hose bib** or spigot will make watering easier. Make sure water is available during the summer when school is not in session. Consider a lock on the water source with a combination for garden users
Initial Soil Quality	A soil test is highly recommended. Check soil conditions to find the best existing soil. Most new garden locations will not have soil that is nutrient rich enough to begin gardening in without addition of new soil and compost. **Consider the potential of lead or other heavy metal contamination in urban areas.**
Site Clearing:	If there are multiple spaces to work with, **consider the work required to get the space ready for production.** Will the initial clearing become a roadblock or are you ready to re-purpose an overgrown or unused space? Consider early weed control for best success later. Beware of areas colonized by noxious weeds—complete control may not be possible.
Fencing:	Consider possible animal issues and build fences accordingly. o Common wildlife pests: deer, rabbits, voles, moles, birds. o Vandalism can be a concern.

Utilities—Locate Any & All to avoid costly damage, this includes septic and stormwater facilities, as well as electric, gas, cable and the like. Call 811 to arrange a locate.

Getting Started: The Garden Uses, Size & Configuration

How will Garden Products be used?

- Will the veggies be used in a cafeteria? Consult the Health Department for requirements and necessary approvals; student waivers with parental signatures may be required.
- Will produce be donated to food bank? Who will deliver?
- Will students be eating veggies or taking them home? If so, are waivers required for food safety?
- How much time can staff and/or students spend in the garden each week?

Garden Size Suggestions

- **30-100 square feet** is a great beginner garden size.
- **100-300 square feet** of space is **adequate for most households.**
- **300-600** for more serious gardeners wanting to cook frequently and preserve food for winter.
- **More than 600 square feet** can be a serious **"mini-farm"** supplying large quantities of food during the main growing season and through the winter.

Garden Design Elements

Bed Shape:

- **Rectangle:** easy to manage, easy to build, easy to work in.
- **Comb-shaped/Keyhole Garden:** to maximize growing space in tricky spaces.
- **Organic shapes:** curved edges to match the landscape or sense of aesthetics.

Dimensions:

- **Bed Width:** no more than 4 feet wide, 2 or 2.5 feet if access is only from one side.
- **Bed Length:** variable, 8'-12' is most common (standard lumber sizes reduce costs & cutting).
- **Bed Depth:** 12" at least, 18" or more is ideal especially if there is no access to subsoil.
- **Paths:** 2 feet wide, add a 3 or 4 foot main pathway when possible.

Garden Structure:

- **Wood-framed Beds:** dimensional lumber, or large timbers: cedar, fir, juniper.
- **Mounded Beds:** add stones or other border to control soil, improve drainage.
- **Terraced Beds:** timbers, stone, blocks.
- **Container Gardens:** clay, wood, plastic, self-watering. Containers that are small enough to take home for the summer may work well for some students and teachers.

Soil:

- **Start with a Soil Test:** identify pH and soil nutrient levels, any contamination. Determines starting point for what soil amendments to add in what quantities. Local lab tests at http://www.twisslabs.com/
- **Build Healthy soil:** goal is to improve soil quality over time. Add compost each season to replenish soil. (New garden: start with good, quality topsoil and mulch with organic compost.). Older gardens—use soil test results to determine if and when fertilizers are needed & in what quantity. Consider cover cropping.

Irrigation is necessary in our dry summers:

- Drip irrigation is recommended: **¼" tubing, ½" tubing, t-tape or soaker hoses.**
- Timers at spigot can help manage irrigation, saving time and water.

Other Features: sitting area, arbors, trellis & other plant supports, water feature, table, potting bench—are these sized for children? Consider constructed raised beds with easy to maintain paths for ease during routine school maintenance.

Other Considerations for Success

- Gather supporters from all parts of the community to publicize, finance, create and sustain the garden.
- Do you want to use organic or conventional methods at the garden?
- Tools—find quality tools appropriately sized for children & store them securely but with easy access from the garden area.

How WSU Kitsap Master Gardener Program Can Help You

- Come see what a demonstration garden or p-patch looks like! Visit our Master Gardener Learning Gardens in Kitsap for ideas on layout, types of plants grown, exposure, etc on a day when MGs will be there so that you can ask questions related to what you'd like to try yourself. Our Master Gardeners coordinate 4 learning gardens and two community gardens in Kitsap. See our website for locations and times MGs are at the gardens. http://county.wsu.edu/kitsap/gardening/Pages/LearningGardens.aspx
- Master Gardener volunteers are available to provide basic advice on setting up gardens, what to consider and where to find helpful resources. Contact Horticulture Educator for more information on arranging a visit.
- Each year our Master Gardeners offer a series of classes called: "Organic Vegetable Gardening: Gardens you can eat!" Usually held in late winter, classes are full days on 4 Saturdays and teach all the basics of where to start, what to grow and tips for success. Scholarships are available. Email kitsapvegclass@gmail.com , call our office contact below or see or website calendar more information.

Web & Print Resources to Learn More:

- **Kids Gardening Website:** http://www.kidsgardening.org/

A Resource of the National Gardening Association: Projects, Fundraising, planning & more.

- **Gardening with Children Website:** http://www.gardeningwithchildren.co.uk/

School gardening resources including ways to incorporate school gardens into curriculum.

- **USDA Healthy Meals Resource System website** http://healthymeals.nal.usda.gov/resource-library

National source of information for gardeners and community members.

- **WSU Snohomish School Gardens—Starting up-What does it Take?:** http://growinggroceries.wsu.edu/CommunityGarden/Starting.aspx.html
- **Setting up & Running a School Garden: A Manual for teachers, parents and communities:** ftp://ftp.fao.org/docrep/fao/012/a0218e/a0218e.pdf

Growing Vegetables West of the Cascades: the Complete Guide to Organic Gardening, 6th Edition, Steve Solomon, 2007. Sasquatch Books, 356 pages, 10" x 7", $21.95 (paper).

The Maritime Northwest Garden Guide: Planning Calendar for Year-Round Organic Gardening, Carl Elliot and Rob Peterson, 2000. Seattle Tilth, 77 pages, 8.5 x 11" (paper).

The Timber Press Guide to Vegetable Gardening in the Pacific Northwest. Lorene Edwards Forkner, 2013. Timber Press, 256 pages, 7.5 x 9", $19.95 (paper).

Colleen Miko
Horticulture Educator, WSU Kitsap Extension
345 6th Street Suite 550
Bremerton WA 98337-1874
360-307-4378 cmiko@co.kitsap.wa.us
website: http://kitsap.wsu.edu