HOW TO GROW A COMMUNITY GARDEN

People + Plants

HOW TO GROW A COMMUNITY GARDEN

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People+Plants is a multimedia series on how to build, maintain, and make the most of community gardens. For more titles and topics in the series, visit learningstore.uwex.edu.

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Youth Gardening

Children's gardening has seen an amazing resurgence. The movement, with deep roots in the American agricultural landscape and tradition, is by no means a new idea. In his 1909 book *The Nature Study Idea*, L.H. Bailey wrote about the benefits of outdoor learning:

> "…to open the child's mind to his natural existence, develop his sense of responsibility and of self dependence, train him to respect the resources of the earth…."

Since then, Bailey's vision for outdoor learning has taken different innovative and contemporary forms. From school children planting victory gardens during World War II to Girl Scouts planting native perennials to teens learning job skills as urban agriculturalists at Milwaukee's Growing Power, the complexion of outdoor learning has become incredibly diverse. And the benefits of youth gardening are just as diverse.

California schoolteacher Zilda M. Rogers wrote, "Since commencing the garden work, the children have become better companions and friends… it is our garden… We try to carry that spirit into our schoolroom" (Hayden-Smith 2013).

Health and nutrition benefits

Farm to school efforts, FoodCorps, and community school garden partnerships cultivate healthy eating and address the obesity epidemic by connecting youth to their natural food environments and getting them outdoors.

- Children are more physically active outdoors; when given the choice, they choose to play in natural spaces over man-made areas (Bell and Dyment 2007).
- Youth tend to enjoy fresh fruits and vegetables when they choose or discover them for themselves, whether in the garden or at the dinner table.

Social and emotional benefits

Beyond access to and consumption of fresh fruits and vegetables, school gardens provide many benefits to children's social and emotional development. Natural play areas promote cooperative play and civil behavior (Bell and Dyment 2007).

Dr. Cathann Kress of Cornell University (table) makes the connection between the foundational principles of positive youth development and the four essential elements of garden-based learning: belonging, power, mastery, and generosity.

Academic benefits

In an outdoor experiential learning environment, youth have the opportunity to excel and thrive in ways that are markedly different from those in traditional classroom experiences. All children enter an environment where they have an opportunity to discover and witness learning concepts "living" before their eyes, increasing their depth of understanding. In addition, sensory exploration and active scientific experimentation create a rich learning lab where special education students and students who thrive on kinesthetic learning—or learning through physical activity—can excel.

According to researcher and educator David Sobel, students who participate in outdoor or place-based education typically outperform their peers in traditional classrooms due to increased attention spans and mental focus. Children with attention deficit disorder (ADD) in particular have shown an increased ability to focus after learning and playing outdoors (Faber-Taylor et al. 2001). As the evidence supporting the positive benefits of outdoor education grows, youth gardens provide a unique setting for engaging education that celebrates the strengths of all youth.

Essential elements of garden-based learning

Belonging: "I belong here"	Power: "I matter"	Mastery: "I can"	Generosity: "I can make a difference"
Encourage children to work together in small groups to complete tasks to promote collaborative and cooperative learning.	Use experiential learning to teach concepts when possible, let children problem-solve on their own, and use shared decision-making in managing the garden.	Focus on the process, not the product; link gardening and challenges or activities from daily life, showing that failure can be a good learning experience.	Just as sharing the harvest can improve the lives of others, garden skills can be used to respect and encourage friendships, caring behaviors, and mentoring of younger children by older children.

Starting a youth garden

The people behind the plants: community partnerships

Behind every successful school or youth garden you'll find a network of community members. Here's how to start:

- **Assemble a core support group—a "garden committee"—to be your allies throughout the process.** Seek out like-minded individuals through the parent-teacher organization, neighborhood association, or school staff. Invite them to be part of the core team and work with you to make the project successful. For example, food service staff will be more likely to serve produce harvested from the garden if they have collaborated on the project.
- **Consider basic garden needs such as water, sunlight, soil, size, and location.** Then seek the support of the people—property owners, the principal, the head custodian—who may have the power to "yea" or "nay" your project idea. Be ready to listen to their concerns and share your vision for the garden. For more best practices, consult *Starting a Community Garden: How to put your plot on the path to success* (see Resources).

Next, invite community members to share their ideas at a garden-planning workshop. Include children, parents, master gardeners, and school or community center staff. Remember others will be more apt to support a youth garden if you collectively create an open-ended plan for the project. For ideas and best practices in gathering community input, visit the Community Action Coalition (see Resources).

Dream big, start small: educational theory and garden design

Natural, outdoor spaces are the original PlayStations. A garden setting can be a valuable tool for educators to integrate outdoor learning into core subject material. As children work on focused tasks in a living, outdoor classroom, they experience natural variables that encourage critical thinking and problem solving. Gardens also provide a supportive space for individuals with different learning styles, different moods, and different behaviors.

- **Have a vision.** When beginning a school or youth garden, have a vision that inspires and break that vision down into smaller action steps. You may picture a multi-faceted learning laboratory where students are engaged in hands-on educational projects or a large production garden to supplement school lunch with fresh, nutritious produce.
- **Start small.** However compelling your vision, it is wise to start small. Create a simple, realistic plan. Allow the garden to grow organically—pun intended—as students and staff become more involved and interested in using the space.
- **Involve the children.** As the primary stakeholders in the garden, children should be given "first dibs" at designing the landscape. Facilitate a "dreaming" workshop where they create maps and blueprints of what they imagine for the space. Whether they dream up water-catchment systems or rocket-launching platforms, their input will foster a sense of ownership and pride.

Design an educational garden setting with both structured and independent learning in mind:

- Meandering paths, staggered garden beds, changing landscapes, and a variety of sensory experiences encourage children to slow down, observe, and discover.
- Plants and structures of varied sizes, shapes, textures, and colors create an environment rich with experiences.

Themed gardens

- **Three sisters:** Grow corn, beans, and squash together to demonstrate symbiotic interaction and native agricultural heritage.
- **Math/counting:** Use plants and their different parts for math or geometry lessons; for example, counting the beans in a pod to extrapolate how many total beans are in the garden.
- **Food/recipes:** Grow the ingredients found in a recipe for salad, pizza, salsa, or vegetable soup to promote healthy eating and the understanding of where food comes from.
- **Fairy tales:** Use pole beans (*Jack and the Beanstalk*) or pumpkins (*Cinderella*) to enhance literacy lessons.
- **Butterfly/native plants:** Attract interesting insects to foster science topics such as pollination and the history of local ecosystems.

Safety and accessibility

In a child-friendly area, there is a fine line between an environment that provides safe opportunities for activity and one that harbors potential risks. Always consider ways to safely include children in the construction and maintenance of the garden. Recognize and eliminate clear safety hazards such as sharp points on fences, stray garden tools, or chemically treated lumber and lead paint chips falling from a nearby building. Other tips:

- Wide, mulched pathways are accessible to large groups and disabled individuals and eliminate extra mowing for groundskeepers.
- Raised beds (if wood, make sure it isn't chemically treated) that are narrow enough for arms to reach the middle will protect plants and improve accessibility. Include beds high enough for wheelchairs and individuals with physical limitations.
- A place to wash hands and produce is helpful.
- Child-sized tools and gloves are useful and important for safety.
- Borders and fences will help set your garden apart from its surroundings, protect it from browsing wildlife, and possibly provide a trellis for vining, climbing plants.
- Gathering areas and outdoor classroom seating such as benches, stumps, and picnic tables near shady areas will provide protection from the sun.
- Signs teach kids to identify and avoid hazards like inedible plant parts (rhubarb leaves) and to use tools properly.

Exploration stations

- Root view boxes have a clear Plexiglas panel to show the "dark underside" of plant growth.
- Habitat boards are a simple way to view a habitat of insects underneath a piece of wood.
- Human sundials cast children's shadows to read the time and understand the earth's rotation.
- Compost bins teach decomposition and organic waste control.
- Weather stations allow children to measure and practice amateur meteorology.
- Windmills and solar panels show how natural energy powers machines similarly to plants.

Tips for a low-maintenance youth garden

Perennials and self-seeding flowers create a self-sustaining garden for years to come (see the text box for suggestions). Fruits such as raspberries, grapes, and strawberries are always favorites! Limit the planting of annual vegetables and flowers to containers or garden borders, where they will have maximum impact. Lay out plantings before children arrive by starting the seed-spacing pattern in the row or putting a marker in spots where seedlings will go. Use "square foot gardening" and grid beds with string to make planting clear and simple to teach (see Resources).

Cut down on the grunt work. Kids may like activities like weeding and watering, but be careful not to overwhelm them with a mismanaged, overgrown garden. Although maintenance tasks foster responsibility among children, they should not crowd out time for other educational —and fun—activities.

Young gardeners love watering, but watering by hand isn't always the most efficient and thorough way to satisfy a plant's needs. Installing a drip irrigation system may be helpful to conserve water and precious volunteer time. If a roof or drainage spout is near, a rain barrel would provide an easily accessible water source.

Some great self-seeding flowers: amaranth, coreopsis, nigella, poppies, sunflowers, sweet peas, and snap dragons. Edibles: bachelor buttons, calendula, nasturtium, and violas.

Creative spaces

- A stage or raised platform for performances or displays.
- Digging areas or sandboxes for playing and discovering.
- Fenced tunnels and archways covered with vining plants such as beans, squash, or grapes to explore.
- Giant sunflower houses for reading or gathering.
- A found-object music area, where used pots, pans, and washboards create a cacophonous symphony.
- A produce market stand for food-based entrepreneurial projects.

Invite the community

The garden can become a hub of community activity if it is visible and inviting.

- Consider installing benches, artwork, and Little Free Libraries.
- Use signage to indicate edible plants for the public to pick.
- Have students run a market produce stand as part of a business project to encourage interaction with neighborhood members.

Modern communication tools such as blogs and social media can also bolster community involvement. Design the garden space to be a tool to connect and improve school and community relations.

Final thoughts

Above all, youth gardens should foster individual development and strengthen community ties. The garden schedule should be flexible and revolve around the children's involvement and experiences.

Resist the urge to plant "on time" and wait until children are available to do it. Don't be afraid to let the kids get a little dirty! Treat mishaps like trampled plants as teachable moments. Allow a child to be "distracted" by a butterfly or worm while they are working.

The most impactful learning is often unplanned. Through self-initiated learning and collaborative group projects, children can gain a healthy connection to the natural environment while mastering skills and discovering their own self-worth.

Like any community garden, a youth garden is a place for people to grow and learn together while nurturing plants and relationships.

> "There are no gardening mistakes, only experiments."
>
> —*Janet Kilburn Phillips*

References

Bailey, L.H. 1909. *The Nature Study Idea.* The Macmillan Company.

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Hayden-Smith, Rose. "Brief History of School Gardens," *Growing a Community Garden*, accessed May 16, 2013, http://gcgdl.omeka.net/items/show/38.

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Resources

Publications

The following publications are available on the Learning Store at learningstore.uwex.edu.

The People+Plants Community Garden series:

- *Community Gardens—Where people and plants come together* (A3905-01)
- *Starting a Community Garden—How to put your plot on the path to success* (A3905-02)
- *Soil Contaminants in Community Gardens* (A3905-03)
- *Raised Beds and Containers for Community Gardens* (A3905-04)
- *Common Crops for Community Gardens* (A3905-05)

Do-It-Yourself Compost Bin series (G4020)

Websites

To find your local Extension office: www.csrees.usda.gov/Extension/.

Community Action Coalition
www.cacscw.org/

Cultivating Childhood Wellness through Gardening
Online video training through the Wisconsin Department of Health Services: www.dhs.wisconsin.gov/physical-activity/FoodSystem/Gardening/index.htm

Little Free Library
littlefreelibrary.org

School Grounds Greening Resources
Evergreen: www.evergreen.ca/en/resources/schools/

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