

Make it Connect to the Curriculum

Math

- Real World Measurements – How long are vegetable beds, leaves, caterpillars?
- Geometry – Look for examples of symmetry, lines, angles, and 2D/3D shapes.
- Perimeter and Area – These concepts are so much easier to teach with a raised vegetable bed!

Science

It would be easier to list which science concepts CAN'T be taught outdoors!

- Earth Science – Look for real world examples of erosion/weathering and explore samples of soil dug up right in the schoolyard. Make real world weather observations!
- Life Science – Hunt for insects in their various stages (grub worms found underground are a great example of a beetle in its larval stage). Watch plants go from seed to flower to seed in the perennial or vegetable bed.
- Physical Science – Force and motion come to life when utilizing simple machines (a hand trowel is made up of a wedge and a lever).

Language Arts

- Descriptive Writing – Have students use as many adjectives, metaphors, and similes as possible to describe concrete objects in the garden.
- Making Inferences – Let students create riddles for different plants in the garden and have a partner infer which they've written about.
- Text to World Connections – How does the garden relate to what students are reading?

Social Studies

- Mapping Skills – Practice using a compass to map a space.
- Agriculture – How have agrarian societies changed over the years?



REAL School Gardens Learning Gardens 101



Advice for Getting Started

Establish a Team

It takes a community to raise a garden.

- School administrators, teachers, families, students and even outside community members should be involved in the planning, installation, and ongoing maintenance. Think twice about moving forward if only 2 - 3 people are committed.
- Strive for representation from each grade level on the garden team.
- The more people involved from the beginning, the more ownership there will be over the long term.

Seek Funding

Consider approaching campus administrators first. If the garden is a high enough priority, they might be able to allocate funds from the science or math budgets.

Start Small

Install just one feature at a time, and add more as the demand grows and maintenance proves to be manageable.

Key Design Features that are Simple to Install

Gathering Space

Ask for a donation of cut tree trunks from a local arborist and set them up in a shady area. Install an outdoor whiteboard or purchase a portable whiteboard that can be easily accessed by the whole staff.



Raised Vegetable Beds

Cedar wood is recommended. There are other creative options available, but avoid anything coated in toxic substances.



Perennial Flower Garden

A 20' x 4' space can fit a lot of plants while still being easy to maintain.



Tools

Try to have a class set of hand trowels, a few shovels, at least one wheelbarrow, and a water key (if applicable). It should be simple for anyone from the staff to access – use a portable caddy or install an outdoor shed. Use a combination lock that everyone on staff can easily memorize.

Systems for Long Term Success

The more of these systems a school adopts, the more likely the garden is to be successful for years to come.

- A garden committee that meets regularly
- A garden club that meets regularly
- A system for tracking garden usage by teachers and volunteers
- Family/community garden work days
- Local volunteers (parents, neighbors, Boy Scouts, Master Gardeners, etc.)
- Grant writing to support the garden
- An active composting system
- Easy access to garden supplies for all school staff
- A clear school year and summer maintenance plan that shares responsibilities
- Publications about the garden such as blog entries or school newsletters
- Integration of the garden during special events such as family science/math night, etc.



Compost Area

Wire bins are easy to use, effective, and affordable compared to other store bought composting systems. You can also just compost with a pile on the ground.