

What are the elements of a successful school garden?

What are the non-negotiable needs?

As you begin the process of imagining and planning for your school garden, please keep in mind the following elements that are essential to transforming an ordinary garden into an outdoor classroom:

Sunlight. The garden will need at least six hours of direct sunlight a day—eight hours would be better yet. Of course there are some plants that can grow in shade, but shade gardens grow so painfully slowly that they are unsuitable for school gardens. Shade gardens tend to be dark and sometimes dank places and we have never seen them work well. A school garden should be full of vigor and life, and of course the sun is the source of that.

Gathering Area. An effective school garden will need a gathering area that will accommodate an entire class. A gathering area can consist of benches, stools, hay bales, tree stumps, or anything else kids can sit on, arranged in a semicircle. This common seating area will immediately transform your school garden into an outdoor classroom. Teachers will feel more at home in their outdoor classroom if their students are not wandering around, and can be organized into one group.



A well-defined gathering area.

Pathways. The garden will need well-defined pathways for students to move through. Make sure some of the paths are accessible by wheelchair. A class of 20 students should be able to navigate effortlessly through a space, and know intuitively where and where not to stand or walk. Clearly defined paths will keep the garden teachers sane by not having to remind students that they are standing in the wrong place. To make the space handicap accessible, some of the paths must have a hard packed surface such as asphalt.

Plants. Once you have thought about where these elements will go, it is time to consider what plants to include in the garden. Food-systems gardens are endlessly fascinating to students, and offer excellent lessons on nutrition and botany. Some schools prefer native plant gardens; some have great success with historical gardens. There is no end to the possibilities.

We do recommend that you stick to plants that are hardy, can stand up to a bit of abuse, and are adapted to your particular climate. Hopefully the garden will have lots of opportunity for expansion—and as your program develops and incorporates more classrooms, you will soon find yourself outgrowing your original space.

Hose Bibbs. The garden will need adequate hose bibbs, or outdoor faucets. It is useful to have several of them scattered around the garden, as pulling hoses long distances is not fun. Watering is a pleasure for students, so don't rob them of their favorite job by installing automatic drip irrigation. It is also a basic garden task that students need to learn, as it will serve them a lifetime.

Fencing. You will need fencing around your school garden. Whether to keep kindergarteners in or balls and dogs out, a fence will define your project area and keep it safe. In our district, most fences are chain-link, which is not the most aesthetic option, but one that is durable, inexpensive, and easily available. Wooden frame fences with hog wire mesh have become a popular and more attractive option. However, wood requires maintenance down the line.

Tool Shed. The garden will need a tool shed for storing tools and equipment. The tool shed can be multipurpose—it might also serve as the garden coordinator’s “office,” or become a focal point in the garden, displaying the children’s tile mosaic artwork on an exterior wall, or support an outdoor workbench/potting station.



A sturdy tool shed will become a focal point in the garden.

Good Soil. You will need good soil in your school garden. Once you have decided on how your garden will be set up—with raised beds, in-ground planting, borders, or whatever you can dream up, you will need to calculate the amendment to your soil. Amendment is anything you add to your soil to increase its fertility and tilth (the ability to support plant and root growth).

The most likely amendment is compost. If you are taking up asphalt, there is likely to be four or more inches of gravel below it that will have to be removed to make it habitable for plants, so be prepared to bring in amendment and topsoil to fill the hole. The condition of the soil is an ongoing project; gardeners like to think that this year’s soil is not nearly as good as next year’s soil is going to be!

Products That Should Not be Used in a School Garden

- ✓ Pressure treated lumber, as it contains chemicals unsuitable for food crops or proximity to students’ hands (and mouths)
- ✓ Plastic lumber made with wood fiber, which can be from pressure-treated lumber and will eventually break down in the soil
- ✓ Railroad ties, because of their creosote content
- ✓ Old tires and products made from recycled tires, as they may leach contaminants into the soil
- ✓ Most plywood, which contains adhesives (urea formaldehyde and phenol formaldehyde) known to be carcinogenic in high concentrations
- ✓ Recycled wood, if you don’t know the origin
- ✓ Old bricks with paint on them, to avoid possible lead contamination

A Note on Topsoil

Before accepting a donation of topsoil for a schoolyard, ask where it came from and what was nearby. Don’t accept soil that used to be around the base of old buildings that might have been painted with lead paint, or near busy roads where there was a lot of lead-heavy exhaust and runoff.