

School Garden Essential Elements



**GARDEN CITY
HARVEST**

Water

- Water accessibility is absolutely essential to the success of your garden and the first thing you should think of when choosing a space for your garden (yes, even before sun exposure). You need water 24/7 from at least mid-April to mid-October. Do not tap into the school's irrigation system if it does not provide that access, it will be a disaster! Grass has much, much different water needs than vegetables and fruits.
- We recommend avoiding underground sprinkler systems inside your garden's fenceline. If something goes wrong then the garden will need to be dug up! Just get the water to the garden and then keep it either above ground along the inside of your fence lines or buried under the wood chips or other ground cover.

- There are many irrigation system options, use what is best suited for your situation.
- Water features: We don't recommend installing a water feature, we live in a semi-arid climate and they seem wasteful and something that can break/leak easily. They are a popular request by many folks, but we discourage their installation in School Gardens.

Soil

- Don't buy dirt! Buy high quality topsoil from someone you trust. Many times excavating/construction companies will try to pass off subsoil for topsoil, and if you buy a bunch of subsoil your garden will grow very poorly! Go check it out before you buy it and make sure it is screened as well.

Compost

- Buy high quality compost as well! Compost will often be the number one source for weed seeds, especially if it doesn't get "hot" enough during the composting process to kill/neutralize the weed seed bank that is almost inevitably in every compost.
- Aged manure is great, but it isn't always the easiest to use in small garden spaces like raised beds because it can be chunky. Bagged compost or bulk compost for the local nursery is sometimes a better option.
- Be careful using biosolid or effluent (sewer sludge) based compost, while it is a good quality compost, some folks have concerns about its use.

Sun

- Sunlight is also an essential, so make sure your garden space is getting at least 6 hours of direct sunlight per day, preferably mid-day exposure. South facing is absolutely preferable.
- Some shade in your School Garden is a good thing, and is an ideal space to put your classroom area.

- Remember this isn't just a garden, this is an outdoor classroom space and no one learns well in 90 degree heat with full sun exposure.

Size

- We recommend at least 4000-5000 square feet of space for your School Garden. This gives you room for all these essentials and some room to grow.
- Remember don't fill your whole space the first year! You may discover you want different things in your outdoor classroom that you didn't realize early on.
- We recommend at least a 25' x 25' space for the "classroom area".

Growing Spaces (we encourage schools to create a space that works best for their goals, but most gardens will include some combination of the following):

- Raised beds are recommended, especially for vegetable beds.
- Perennial beds.
- Native Plant beds.
- Berry patch beds.
- Pumpkin patch beds.
- Large pots/wine barrel planters work well for perennial herbs.
- In ground planting?

Fencing

- Fencing is important to help keep unwanted things out of the garden space. This includes kids (during the after hours), deer, dogs, other potential pest animals that could damage the garden.
- To lock or not? This is up to you, but we've found that locking out garden's with a combo lock that we can give the combo out to teachers and parents works great. It is a bummer to have to lock the space, but it does keep folks out that may do damage if it wasn't locked. It doesn't take a person long to destroy months of work in a garden.
- We recommend at least 6 feet tall (usually keeps out the deer, although 8' guarantees it).
- We also recommend 2 gates, one for people and one double gate big enough for a dump truck to get in, so at least 8 feet wide.

Ground Cover

- We recommend removing all grass with a sod cutter down at least 3 inches and putting down weed mat over the entire space. This reduces work (no mowing or weed whacking) and weeds in your garden.
- Pay the extra money for the best, heaviest weed mat available, it will be worth it in the long haul!!!
- To cover the weed mat we recommend wood chips over gravel. Gravel is loud and tends to carry enough dirt/dust on it to become a growing medium for weeds, plus it is extremely difficult to remove if something happens to your garden space.
- We recommend at least 4" deep for wood chips, 6" is even better.

- Wood chips do need to be replaced every 6-8 years as they do degrade (which can also become a growing medium!!!).

Bed Materials

- Beds can be made out of many different materials! Each situation is different so choose the one that works best for you.
- Wood is usually the cheapest, but it is worthwhile to avoid pine/white wood, and use at least larch/fir (usually lasts 8-12 years, while pine is 6-8), cedar can last 20 years+, but is much more expensive.
- Concrete, pavers, brick are all options but are also expensive.
- Don't make your beds too long or too wide! If beds are wooden and too long (over 10') they tend to bow and break down faster. If the beds are too wide the younger kids won't be able to reach to the center of the beds. We recommend 4' x 8' beds.

Classroom Space

- Seating for at least the largest class size at the school, arranged in a circle is best.
- Tables or convertible benches so students have flat surfaces to write on.
- Put as far away from the playground/school (if the garden space borders either of these spaces) as possible to reduce noise conflicts.
- Shade is beneficial in this area if possible.

Shed

- A shed is an essential part of your school garden!
- We recommend at least 8' x 8' in size.
- This is where you will store your gardening tools (both kid and adult sizes), educational tools like clipboards, whiteboards, soil test kits, etc., and other random things that are best kept in the garden and not in the school.
- Make it fun and kid-friendly! Use it for art projects, make it flashy to attract folks to the garden!

Signage

- Have at least one garden sign that tells a bit about the garden (when it was established, who are the partners, etc.), these will help attract people to the space.
- Also have an informational board/kiosk that can be changed with information about contacts, opportunities, events, etc.
- Plant labels are also essential for educational purposes and so folks know what is not a weed!

Accessibility

- School gardens should be accessible for students who are in wheelchairs or may have difficulty walking.
- ADA pathways: Minimum 36" wide, with 60" wide turn around areas. Decomposed granite (expensive) or $\frac{3}{8}$ " minus road mix (cheaper) can be used for this.

- Have some taller raised beds for folks in wheelchairs.

Trees

- While trees may sound antithetical in a garden space they can actually be a great part of your School Garden. They can provide shade and attract beneficial insects, as well as other animals that can be learned about in the garden space.
- Do make sure that if there is a tree in your garden space that it doesn't have any negative impacts, such as excessive sap droppage, squirrels living in it, suckers (like aspens), roots that start to enter beds and suck both nutrients and water, or shade out your veggies/fruits/etc.
- Fruit trees are a great addition to a School Garden if you have the space! They will eventually give you both fruit and shade.

Growing Techniques

- We encourage schools to use organic gardening techniques as much as possible. We believe pesticides, herbicides, and artificial fertilizers can have negative effects on humans, wildlife, existing plant life, and our water supply. We especially herbicides and pesticides should not be used around children.

Other things to consider

- Proximity to people walking/biking/driving by. Try to put your garden where folks can see it easily and get to it easily, if it is tucked in a corner you'll have less visitors.
- Animals already living in the space for your garden, in particular ants, ground nesting wasps, and ground squirrels, as these all can be a nightmare to deal with!
- Parking
- Accessibility for trucks, construction equipment, etc.
- Have a sink in your garden so kids can wash their hands and you can clean veggies.