CHAPTER 4

School Food Garden Planning and Design

Establishing a strong school food garden program is an important part of creating a sustainable youth garden, but certainly not the only component needed for success. Your garden design is another crucial step in the planning process. A well-designed garden maximizes the space available and creates the optimal conditions for your plants to thrive. In contrast, selecting a design or plant materials that are not appropriate for your location will create unnecessary challenges that can negatively impact your garden program.

We can't say it often enough: When designing a new youth garden, start small! It's easy to get carried away by the excitement of starting a garden; however, maintaining a large growing space can be overwhelming for both you and your young gardeners. Your initial design may include an extensive garden space, but break the installation of the garden into smaller, manageable stages by setting short- and long-term goals. Ask, What is reasonable to accomplish this year, given our funds, equipment, time, and people power? In three years? In five years? Prioritize your goals and then write down what you hope to accomplish each year so you'll have targets to aim for.

In this chapter we provide an overview of the design process for an outdoor garden and answer the questions:

- What is the best location for your garden?
- What components should be included in the garden design?
- What are some common themes for youth gardens?

Assess Your Site

In the first step of the design process, you'll assess potential garden locations with respect to your goals and the basic needs of the plants you'll be growing. This is a great opportunity to engage your youth gardeners and put their sleuthing skills to use by conducting a site analysis.

Begin by analyzing your entire site. As you look for potential garden locations, note what areas have access to water and 6-8 hours of direct sunlight. Also, since youth will be using the garden, look for locations that are easy to access and not far away from the school. Once you identify one or more locations, complete a site analysis for each. A site analysis includes:

- an inventory of existing features
- a summary of site conditions

Your analysis should also include a preliminary list of needs both for the garden and for your garden program.

If your list of potential sites is lengthy, consider breaking into teams to complete the work and then share the results for discussion.

Inventory Existing Features

Take a field trip out to your potential garden space (or spaces). Start by sketching the space from a bird's eye view by outlining the perimeter and all the existing features (e.g., shrubs, sidewalks, structures, fences) on a piece of blank paper. Use a large tape measure to take accurate measurements of the site perimeter and each existing feature noted on your sketch. Record the information in the appropriate places on the site sketch.

Measure and make note of:

- Existing plants. Identify by name, if possible, along with their approximate size (height and width).
- Features you may not be able to see, including underground electric, sewer, and water lines. You don't want to dig into or otherwise interfere with these lines! If you do not know this information already, contact school maintenance staff or utility companies for assistance.
- Location of and distance to a water source.
- Cardinal directions. Since the sun rises in the east and sets in the west, buildings, plants, and other features will create shade and shadows depending on the time of the day, potentially affecting the growing conditions of your plants.

Summarize Site Conditions

Observe your site at different times of the day so you can record differences in light availability. If possible, visit your site after a rain, so you can determine how well the water drains and where it goes. Use the following questions as prompts:

- How do people use the space now? If the proposed garden space is near a play area or high-traffic zone, will people be apt to walk/run through the garden?
- How will people access the garden? Is it near a path? Is it accessible to those with disabilities?
- Does the soil appear to drain well? Are there areas of poor drainage (e.g. can you see standing water after it rains)?
- Does the soil contain any contaminants, such as lead? If you are unsure, contact your state's soil laboratory or county extension office to learn how to conduct a soil test.
- Does the soil look healthy? One way to assess soil health is to look at how well existing vegetation is growing.
- From what direction does the wind usually blow? Is there a steady wind across the site?
- Does the ground have any unusual dips? Determine the slope of the land. Would you need to take measures to prevent erosion?
- What surrounds the space? Are there any views you would need to block, such as a busy road or dumpster? Is the space safe and secure or would you need a fence to protect gardeners from traffic or the garden from vandalism?

- Are there any trees or buildings that will shade the garden? If so, at what time and for how long?
- Are there any animal pests that may be of concern for the garden?

Brainstorming a List of Needs for the Garden

All plants need is light, water, and nutrients; however, plants require different amounts of these. During your initial garden program goal-setting process, you may have determined what type of plants you would like to grow. If so, then make a list of the conditions those plants require and compare that list to the conditions you observe at the potential sites. If you have not yet determined what you want to grow, use the information you collect about the conditions at each site to help guide your plant choice. Here are some ways to evaluate the light, water, and soil at each potential site:

Light

Since the school food garden is focused on growing vegetables and fruits, try to choose a site that gets full sun – at least six to eight hours of direct sun a day. But if your only growing spot has less than this, don't despair! While fruiting vegetables such as tomatoes, peppers, and squash require full sun, root crops like carrots and beets will get by with four to six hours of direct sun, and leafy crops like spinach and lettuce will still give you a reasonable harvest with just 3 to 4 hours of direct sun per day. Some herbs, like mint and cilantro, can grow in shady spaces! Have students check your potential garden site at different times during the day (and, if possible, at different times of year) to see how much sun it receives. If you are doing an assessment in winter, remember to factor in shade that will be cast by trees in leaf. Keep in mind that shady areas make good gathering places for activities and lessons, and for resting.

Water

Access to water is essential for gardening, and the closer water is to the garden, the better. Bucket brigades can work in the early stages, but eventually water needs a direct route to the garden via spigots or hoses. Make sure you have a potable (drinking water-safe) water source to irrigate your edible garden. Water provided by your municipality is usually a safe source. If the water you're using comes from a private well or untreated surface water source such as a pond or river, have it tested regularly for bacteria and other types of contamination. Your local health department can provide you with information on water testing.

Some gardeners use rain barrels to collect runoff from roof tops. Water collected in rain barrels is not considered potable and may contain harmful bacteria and other contaminants, especially if it is water collected as runoff from rooftops. The safest course is to use rain barrel water only for irrigating non-edible crops.

Soil and Nutrients

Most plants obtain their nutrients through the soil. While it may seem like a simple substance, soil is an amazing and complex ecosystem that is one of our planet's most valuable natural resources. It's a mix of inorganic minerals, water, air, organic matter from dead and decaying plants and animals, and an incredible array of living organisms, ranging in size from microscopic bacteria and fungi to earthworms, moles, and shrews. The topmost layer of this vital blanket, called topsoil, is the most productive one. It's the layer with the most biological activity and where most plant roots are found. A site with six to 12 inches of topsoil is ideal, but often difficult to find.

Two important characteristics of soil are its texture and its structure. Texture refers to the kinds of particles that make up the soil. Structure refers to the way these particles are held together into larger particles, or aggregates. Soil with a crumb-like, granular structure allows for the best drainage and aeration.

By identifying your soil texture and conducting soil tests, you'll be better equipped to improve it. Here's how:

❶ **Identify soil texture.** Soil is a mixture of mineral particles, organic matter, living organisms, air, and water. The mineral portion is made up of particles of sand, silt, and clay. Sand particles are the largest; silt particles are smaller than sand, and clay particles are the smallest of all. (If you think of a sand particle as being the size of a basketball, a silt particle would be the size of a golf ball, and a clay particle only the size of the head of a pin!) The relative amounts of these different size particles determine a soil's texture. Soil that has a lot of sand (large particles) has large pore spaces between particles and drains quickly (sometimes too quickly for plants growing in it) and is often low in nutrients; however, it warms up quickly in spring and is easy to work. Soil that has a lot of small clay particles has smaller pore spaces between particles and drains slowly; it may stay too wet for healthy plant growth and roots may suffer from a lack of oxygen. It warms up slow in spring and is difficult to work. However, it also has the capacity to hold on to lots of nutrients. The properties of soil with lots of medium-sized silt particles fall somewhere in between.

❷ **Identify soil structure.** A soil's structure refers to how well the soil particles are held together in small clumps, called aggregates. Soil with good structure has a crumbly look and feel (think moist chocolate cake). Soil with poor structure is powdery (think chocolate cake mix).

For many common garden plants — including most of the vegetables we grow — the ideal soil is loam. Technically speaking, loam is defined as a soil containing a balance of different-sized mineral particles (approximately 40 percent sand, 40 percent silt, and 20 percent clay). Loam soil offers both good drainage and water-holding capacity. The term

loam (or loam soil) is also commonly used to describe soil that has good structure and is rich in organic matter, characteristics that are also beneficial to plants.

"We've learned that hands-on activities really make a difference! They involve reticent children and allow those who don't usually star in the classroom to shine. They expend energy, see a difference, gain a sense of pride, and are then able to return to the classroom and maintain the control that is so often elusive."

— VANESSA WALLACE
SEBAGO KIDS GROWING GARDENS
SEBAGO ELENTARY SCHOOL, ME

Check your potential garden space to see if there are puddles after a hard rain, which may indicate a high percentage of clay. If the soil is generally dry and drains quickly after a rain, it contains more sand.

Don't worry if your soil is less than ideal. Adding organic matter such as compost will improve its structure and fertility, helping sandy soils hold on to water and nutrients and clay soils improve their drainage and aeration. As soil microbes digest organic matter, they make the nutrients it contains available to plants. The microbes also release the "glue" that helps create the aggregates that create good soil structure.

❸ **Determine pH and mineral composition of the soil.** A soil test will tell you whether you need to add amendments to adjust the soil pH before planting. The pH scale runs from 1 (most acidic) to 14 (most basic), with 7 as the neutral middle point. Nutrients are most available to most plants at soil pH levels between 6 and 7. If your soil pH is too low (too acidic) you can add ground limestone to the soil to raise the pH. If your soil is too high (too basic or alkaline), you can add sulfur to lower the pH. The size of the garden and the results of the pH test determine the quantity of these amendments you will need to spread to alter the pH appropriately. A soil test will also measure the levels of key nutrients such as phosphorus and potassium. Knowing the current level of nutrients helps you apply the correct amount of fertilizer for healthy crops and avoid over-fertilizing. Most soil tests results include recommendations for the types and amounts of fertilizer needed to correct any nutrient imbalances. Also, be sure to test your soil for lead and other contaminants (see below). Contact your local Extension Service for information on soil testing, the cost of which is usually quite reasonable.

❹ **Determine soil safety by learning the history of your site, if possible.** This can give you clues to possible hazards, whether it's industrial contaminants, lead from paint, or the likelihood of flooding. Also, assess the garden site's surroundings and take into consideration what might be carried into the garden along with runoff from areas nearby, such as parking lots or agricultural fields or pastures. Place gardens away from roadsides, older painted structures, garbage dumps, and industrial zones.

No matter where your garden is located, it's always wise to start out with a soil test that

includes testing for contaminants such as lead and other heavy metals. Although this type of contamination is often associated with urban soils, it's also possible for suburban and rural area soils to be contaminated from lead paint residues, pesticides, or car exhaust from the days of leaded gasoline.

The main route of exposure to lead in the garden is through inadvertent direct ingestion of the contaminated soil, as well as dust that gardeners and plants come into contact with in the garden. While plants grown on soil high in lead may take up some through their roots and store it in their leaves and fruits, most of the risk comes from ingesting the lead-contaminated soil or dust deposits on the plants, rather than from actual uptake of lead by the plants themselves. Similarly, contaminated soil can be ingested via dirt and dust on hands, a significant concern especially when children are working in the garden.

While it's typically considered safe to eat fruits and vegetables grown in soils with lead levels up to 300 ppm, a level found in many urban soils, this standard applies only where soil exposure to children is not a concern. Where soil ingestion can occur, as with children who may touch their mouths or food with dirty hands, soil with lead levels greater than 100 ppm should not be used for edible gardening.

If the soil test determines areas your site has lead levels above 100 ppm, be sure to seek out expert advice from your local Cooperative Extension Service or Health Department on the safest strategies before beginning to garden. Do NOT grow edibles in the ground. You may still be able to garden safely by laying heavy-duty landscape fabric over the ground and pathways and mulching thickly to keep kids from easily coming into contact with the soil. Then construct raised beds at least 18 inches tall and fill them with fresh, uncontaminated soil. Supervise young children to ensure they do not eat dirt or unwashed vegetables and make sure everyone washes hands immediately after gardening and before meals.

Even if your site is technically deemed "safe" but has somewhat elevated lead levels, it's a good idea for school gardeners to take measures to reduce exposure to soil-borne lead, such as:

- Add plenty of organic matter to the soil (helps to lessen plant uptake of lead).
- Maintain soil pH around 6.5 (helps to lessen plant uptake of lead).
- Supervise young children to ensure they do not eat dirt or unwashed vegetables.
- Make sure everyone working in the garden washes their hands immediately after gardening and before meals.
- Grow fruiting crops, such as tomatoes, peppers, beans, and okra, rather than root crops and leafy vegetables or herbs. Studies have shown that lead does not readily accumulate in the fruiting parts of vegetable and fruit crops, but accumulates more in leafy vegetables like lettuce and root crops like carrots.
- Peel root crops and remove the outer leaves of leafy crops before eating.
- Clean produce thoroughly before eating or storing to remove as much contaminated dust and dirt as possible.

KidsGardening.org related resource:
Digging into Soil

Taking the time to thoroughly observe and understand the light available, access to water, and soil composition of your potential garden space will set your garden program up for success.

Brainstorm a List of Needs for the Garden Program

In addition to considering the needs of garden plants, consider the needs of your garden program as your plan your space. Common needs include:

- Convenient distance to instructional space. Is the garden close enough for youth gardeners to visit on a regular basis? You will not want to spend a majority of your garden time in transit.
- Room for group activities and gatherings. Is there enough room to conduct lessons and activities in the garden? Can youth sit comfortably to work on projects? Will shade be needed for hot days?
- Adequate gardening space for hands-on engagement of all gardeners. How many youth will be working in the garden at one time? Is there enough room in the garden so that all your gardeners can be actively engaged in the process? Will all classes or groups involved be able to carry out their desired programming? Can the youth easily garden in the space with their smaller hands and shorter arm span?
- Enough of a harvest to meet goals. Many programs hope to grow enough food for youth to be able to enjoy the harvest. Is the garden space large enough to produce enough fruits and vegetables to meet that goal? Note that most schools do not have the space and time to maintain a garden large enough to significantly meet the needs of their school meal service. Growing enough fruits and vegetables to allow for regular taste tests by students is a good goal, especially when getting started.

Create a Base Map

Once your site analysis is complete, you will probably find that you have copious notes, along with a cluttered drawing of your garden space. The next step in the design process is to take the information you collected and turn your initial drawing of the potential garden space into a base map.

When you return to your classroom or indoor gathering area, provide your youth

gardeners with graph paper and have them create a scaled map from their measurements. Choose a simple scale like 1/8 or 1/4 inch for each foot so they can use a regular ruler and graph paper. Creating a scaled map can be difficult for younger children and is more age-appropriate for middle or high school students, so if you are working with elementary-aged students, you may want to lead the drafting of one group map. On this map, include all the permanent structures and features (including plants) that you plan to keep.

Next, use tracing paper to organize the other information collected. Place the tracing paper over your base map and add notes about the site conditions like drainage, light availability, etc. You can then add and remove layers to remind yourselves of the existing conditions as needed during the design process. In addition to these maps, also summarize your needs list, observations, and other notes on one piece of paper for easy reference. Remember to keep your original sketch and notes just in case you need to refer to them.

If you have been investigating multiple sites as potential garden spaces, you may want to use your base maps to select your final location. Discuss the benefits and challenges of each space. Bring key administrators and the garden planning committee into the discussion if they have not been involved in the data collection process. As a group, determine which location will best meet your needs. If the best choice is not obvious at this point, then proceed to the next step, which includes more brainstorming, and then review again.

(See Sample Base Map on next page.)

Brainstorm and Create Bubble Diagrams

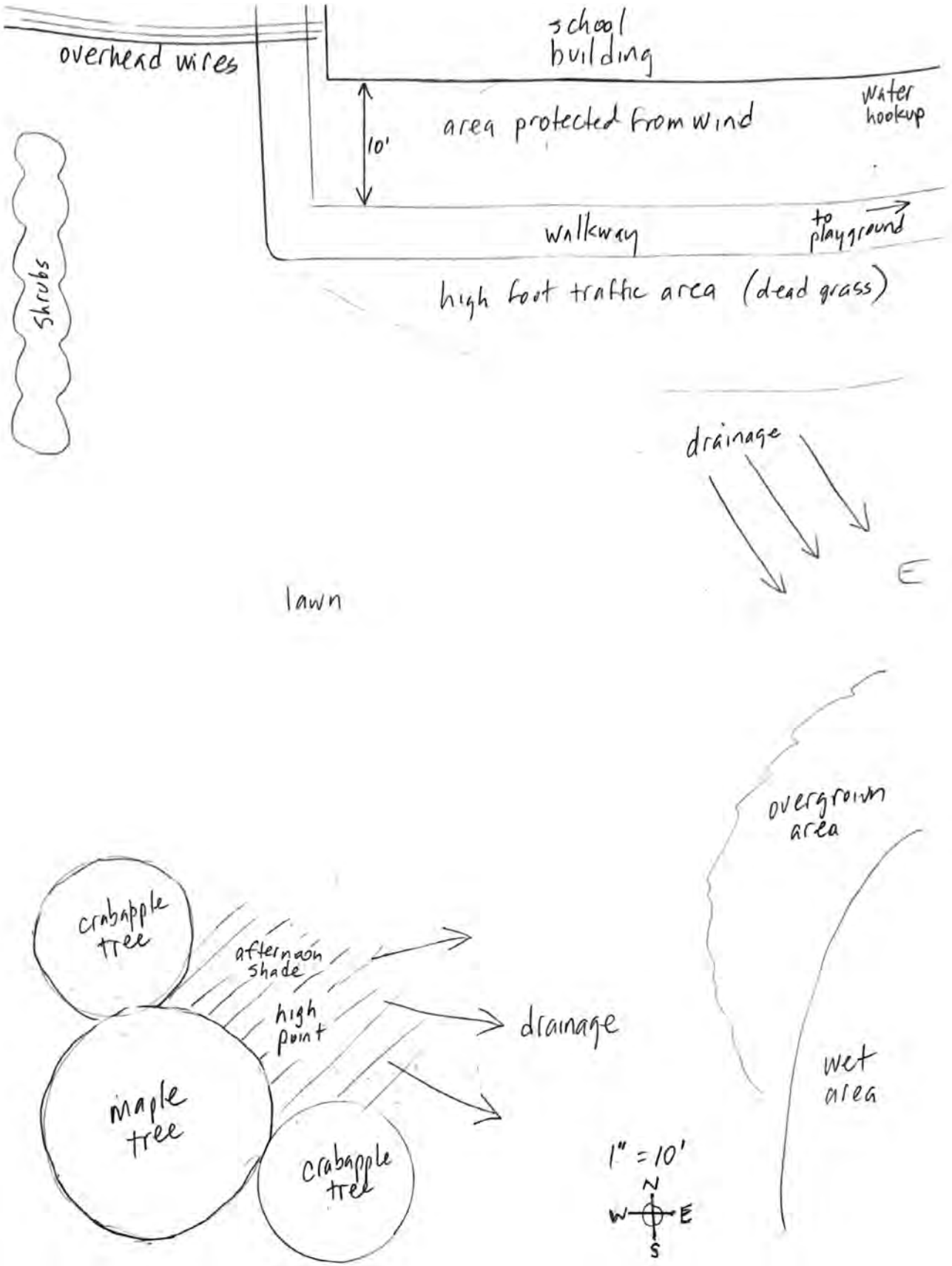
Once you have a base map, it's time to brainstorm. Many landscape designers brainstorm by using bubble diagrams. Bubble diagrams are quick maps that define open spaces using roughly drawn circles and squares rather than trying to determine specific sizes for the different areas. The advantage is that you can draw bubbles quickly, experimenting with different configurations and using different colors for clarity.

Start simply by once again laying a piece of tracing paper over your base map. Next, draw big "bubbles" on top of the base map to show the different garden zones being proposed. For example, your food production area may be a large bubble in the sunny zone, while a sitting area for instruction might occupy a more linear space along the building where there is shade from existing trees. Keep refining this concept to include more detail, like paths and places to sit.

An alternative approach to using tracing paper is to make copies of the base map and draw directly on the copies. To engage youth, you may ask them to work individually or in small groups to come up with design ideas. You can then discuss the different plans as a group and develop a final version using their favorite ideas from many plans.

Here are some things to keep in mind as you brainstorm.

Sample Base Map



Be Creative with Garden Bed Structure and Design

There are many options to choose from depending on your needs and the resources you have available, including:

- **In-ground gardens.** A traditional outdoor garden is planted in the ground. If soil quality is high, this can be your most cost-efficient option. A level site is easiest to garden on, but a sloped area can also be suitable if you build terraces. And there's no rule that your garden must be one big rectangle planted in straight rows. Garden beds can be designed in all sizes and shapes, vegetables can be mixed with flowers, and fruit trees and bushes can enhance the landscape. It's best to keep individual beds no wider than 3-4 feet across to make it easy for students to reach plants without having to step into the beds. The beds themselves can be arranged in any configuration that meets your needs and design goals. For example, you might arrange your beds in a circle or other geometric design around a central meeting area, or scatter beds of different sizes and shapes in a more naturalistic way throughout the garden site.

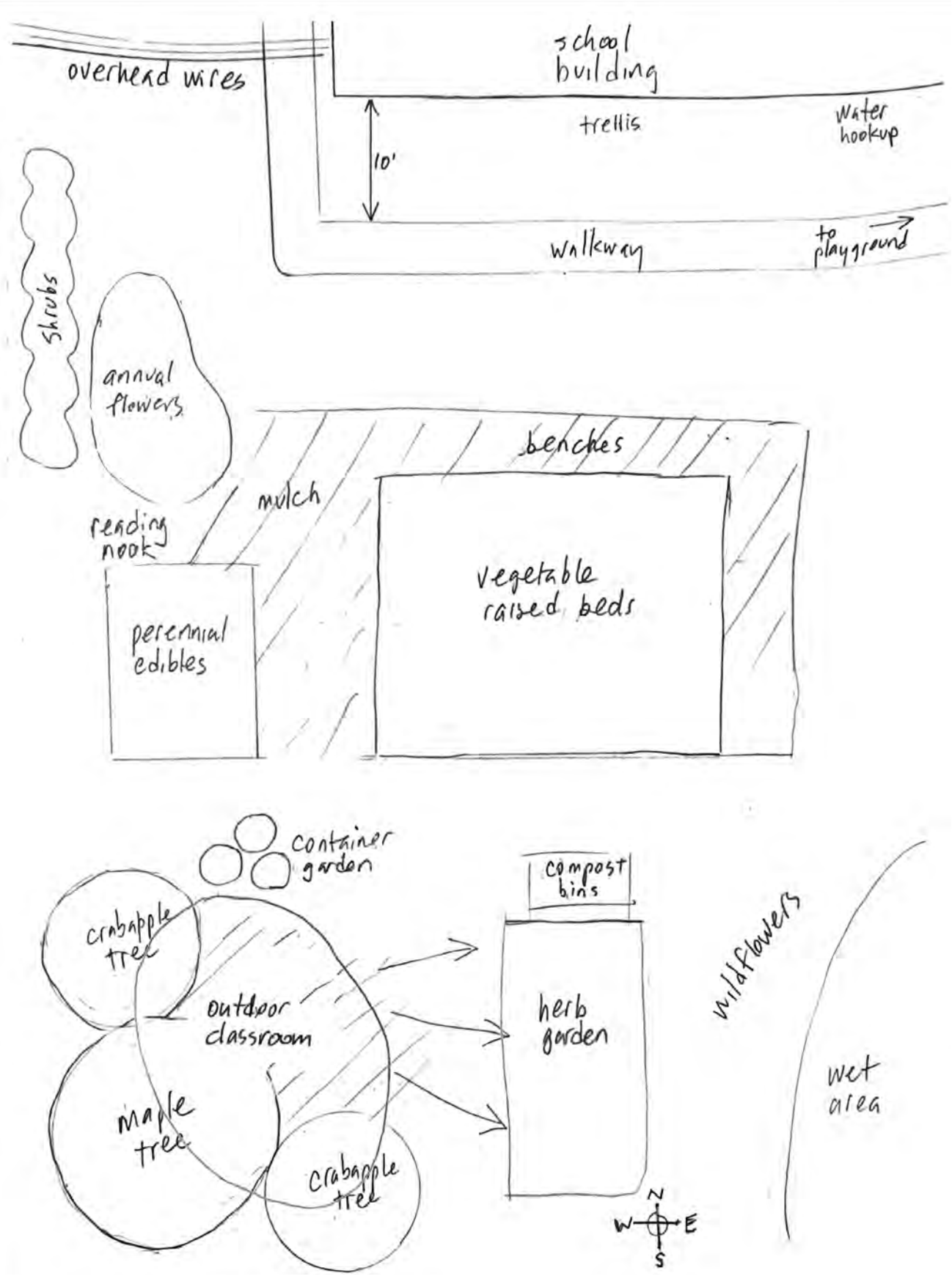
- **Raised-bed gardens.** Another common design uses raised beds. These are framed structures filled with soil, typically 9 to 12 inches deep (when set on soil) to 2 or more feet deep (when set on paved surfaces). They may be made of rot-resistant wood like cedar, concrete blocks, or recycled plastic planking.

  Although they require more initial investment than a traditional in-ground garden, the benefits of raised beds pay off in the long run. If your soil is on the heavy side, raised beds will improve drainage and help the soil dry out faster in the spring; they're easier to cultivate; they can minimize problems related to toxins in the soil, such as lead; there are fewer weed and drainage problems; and the raised soil and plants are protected from crushing footsteps. Plus, design is flexible – you can build them to be accessible to disabled gardeners and to fit the space available, whatever the shape or size.

KidsGardening.org related resource:
Raised Beds 101

- **Containers.** You can also grow a garden in containers. Typically, garden containers are pots or troughs made of clay, plastic, or wood, but plants aren't fussy – they'll grow in anything that holds soil and has drainage holes. Experiment with whatever is at hand, from discarded 5-gallon buckets to an old bathtub! Window boxes and hanging baskets are great if you have little or no ground space. By adding handles, wheels,

Sample Bubble Diagram



or placing containers on wheeled platforms you can make your garden mobile. This will allow you to move plants around the space to where they'll grow best as conditions change (e.g., the angle of the sun shifts slightly each day over the course of the summer). If the threat of vandalism is extreme, you can move containers to sheltered or locked areas.

KidsGardening.org related resource:
Container Gardening for Kids

Plan for Garden Access

Think about how students will move safely from the classroom out to the garden site and how they will move about within the garden itself. For example, you may want to plan for extra wide pathways to accommodate students working in groups or those with limited mobility, or design a spot for sitting large enough for the entire class to gather for discussions. Also, give consideration to pathway surfaces, keeping in mind the kinds of traffic they'll receive and how weather conditions will affect them. Plan to make the main paths of your garden 4 to 5 feet wide to easily accommodate wheelchairs, garden carts, and groups of children moving through the garden. If space is tight, secondary paths can be as narrow as 30 inches. Keep paths weed- and mud-free by covering them with cardboard, landscape fabric, or layers of newspapers overlaid with a layer of mulch, such as shredded bark or straw. For permanent paths, you can lay bricks, pavers, or crushed stone, or you can plant the paths with grass seed (or keep the original sod in place) and mow regularly.

KidsGardening.org related resource:
Accessible Garden Paths

Design a Gathering Place

In a shaded part of the garden, plan for a picnic table, bench, or even a group of cut logs or hay bales to sit on. This can be a place for cleaning and sorting vegetables, conducting outdoor lessons, doing arts and crafts, writing in journals, or just getting relief from the sun. If your site doesn't offer natural shade from a tall tree, build a structure with a roof or awning of some sort. Some garden programs are able to expand their gardening space to include an outdoor kitchen area to make food preparation and tasting experiences even more convenient.

Include Storage Options

Plan for adequate, secure, and accessible tool and equipment storage. Will you include a shed in the garden space to provide on-site storage? If tools and equipment must be stored away from the garden site, consider investing in a garden cart to move them easily. Also plan for how materials such as lumber for raised beds or bulk mulch can be delivered to

the garden site if needed. Locating the garden so that it can be accessed by vehicles when needed will be most convenient, but that may not always be an option.

Allow Space for Composting

If you designate a place for a compost pile or bin, students can convert garden waste (and perhaps cafeteria waste) into a rich, soil-building ingredients and witness the wonder of decomposition. You can create a free-standing pile, build an enclosure from materials such as lumber, chicken wire, or snow fencing, or use a manufactured composter. If you have more than one pile, you can have some compost "cooking" while you add new ingredients to another batch. While it's convenient to place compost bins near the garden, be sure to locate them where runoff from the bins will not drain into areas where edible plants are growing. If this is difficult to do on your site, consider using a completely enclosed, tumbler-type composter.

KidsGardening.org related resource:
Gardening Basics: Composting

Plan to Keep Unwanted Visitors Out

Consider garden security, whether from vandalism or four-legged marauders like deer. Do your best to keep both wild and domestic animals out of your garden site, as the waste they leave behind can be a source of harmful pathogens. How you accomplish this will depend on what is roaming around your neighborhood. A tall fence is most effective at keeping deer out; a lower wire mesh fence will exclude rabbits and woodchucks but needs to extend underground about 6 inches to prevent them from tunneling under. Most kinds of fencing will exclude dogs, but it's much more difficult to keep free-roaming cats out. If cats are a big problem, repellents applied regularly along a fence line may be helpful. Don't locate bird feeders or birdhouses within the garden area.

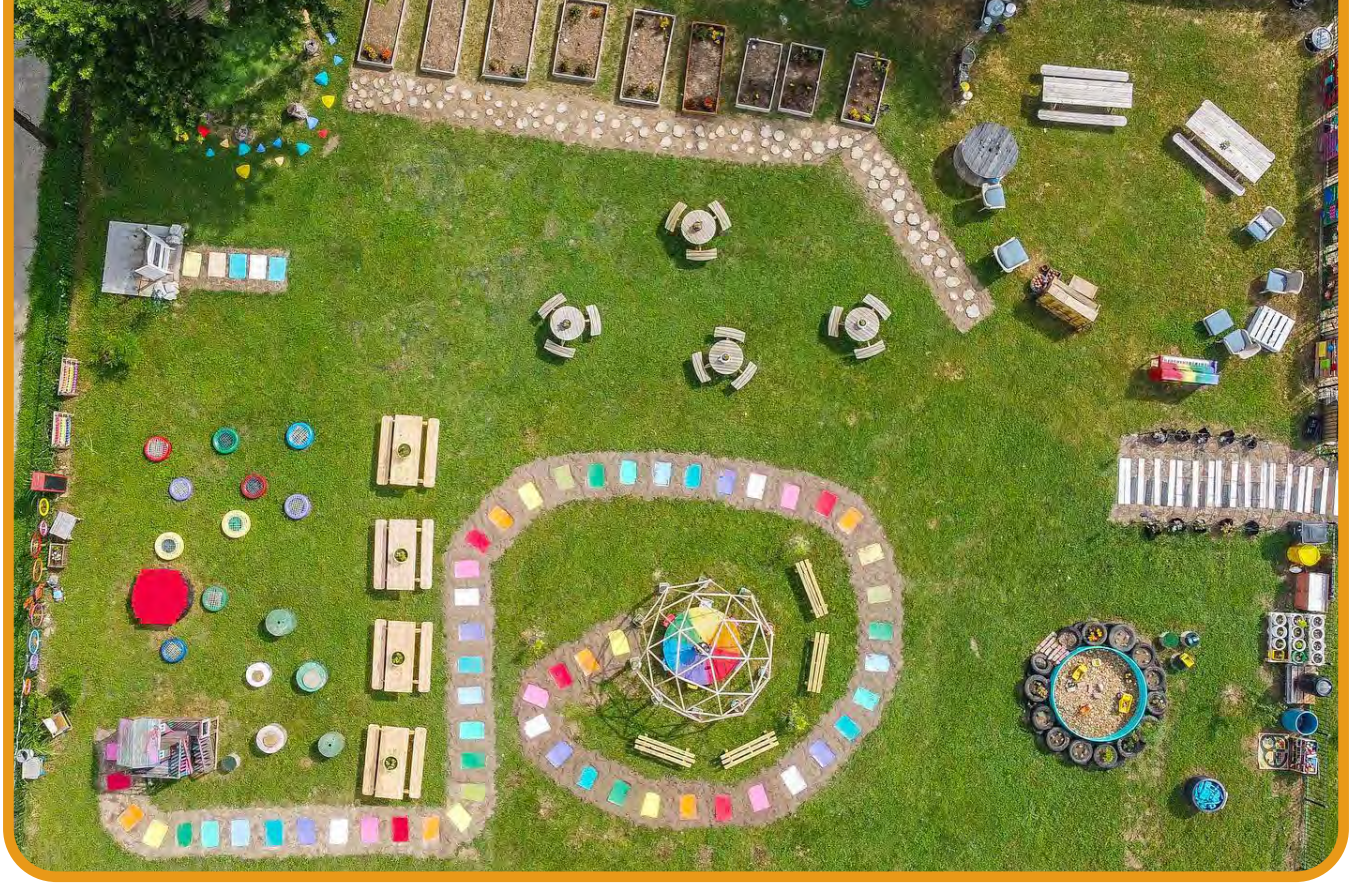
KidsGardening.org related resource:
Dealing with Garden Pests and Diseases

After you have completed your bubble diagrams and brainstorming, you should be able to make your final selection of a garden site. Be sure to get administrative approval if needed before moving on to the next step, the creation of a final design.

Create Your Final Design

The final step in the design process is to define the spaces that are currently represented by quickly drawn bubbles into specific sizes and shapes. During this step, you will need to decide on the types of garden beds (in-ground, raised beds, or containers) and pathways (hard or soft surfaces) you plan to construct. The materials you plan to use will impact the sizes and shapes available to you. Also, decide on other permanent structures you want to include, such as benches, tables, tool sheds, and compost bins. Even if you cannot afford to add all of these with the initial garden installation, you will want to include them in the final design for future expansion.

If you have not already done so, this is also the time to make a final determination about the first plants you want to grow. Even if you're focus is on growing edibles, add a selection of flowering plants to attract pollinators. Many youth gardens find it helpful to plan their gardens around a theme that then guides their plant selection. As your garden program



becomes more established, you might adjust the plant types growing in your garden based on student interest, grant funding, and school priorities.

KidsGardening.org related resource:
Planting for Pollinators

View the sidebar on the next page for some common youth garden themes to help you brainstorm ideas.

Creating a final design can seem like a daunting task to first-time gardeners. You may be able to call on the expertise of one of your garden planning committee members or an experienced gardener from your larger support network to draft your final design. If you are not feeling confident in creating a garden design and want help from someone more experienced, consider reaching out to local landscape designers to ask if they are willing to donate their time to help you through the process. They may be willing to serve in a consultant capacity and double-check on your choices, or perhaps have even greater involvement throughout the whole process. If you have a site with complex slope or drainage issues, a professional landscaper or landscape designer can provide valuable assistance. However, don't feel like you need the help of a professional landscape design to plan a successful youth garden program! With a careful site analysis and graph paper, plus a little research, you can plan a functional and successful youth garden.

In Summary

The garden design process is an important part of planning a sustainable school food garden program. Taking the time to match your goals and program needs with your garden plans will ensure that the installed garden will be useful and well-integrated into your school or organization's culture. Dream big, but start small! Implement your garden in stages as support and resources grow.

Edible Theme Garden Ideas

Recipe Gardens. Grow plants that provide essential ingredients for a recipe. For example, a Pizza Garden would include garlic, basil, oregano, tomatoes, bell peppers, onions, and other veggies that make good pizza toppings. The garden can even be shaped like a pizza composed of wedge-shaped patches. End the growing season with a pizza party! A Salsa Garden would include tomatoes, sweet and hot peppers, garlic, onions, oregano, and cilantro. Celebrate the harvest by making salsa to share at a party for the school community.

Herb Garden. Herbs hold an enduring place in history and folklore because of their many uses in cooking, teas, medicine, and fragrances. Kids can uncover how various herbs, such as dill and mint, have been used historically and then explore the many opportunities for making crafts, herbal soaps, and herbal vinegar.

Multicultural Garden. Kids can explore other cultures by growing plants from around the world. For example, an Asian garden might feature soybeans, Chinese cabbage, Chinese greens, and ginger.

Three Sisters Garden. Kids can explore the stories and customs associated with the native crops of the Americas. One of the best-known Native American gardening techniques is the interplanting of corn, beans, and squash – a trio known as the "Three Sisters." This garden provides many opportunities for trying new foods and recipes.

Alphabet Garden. Include fruit and vegetable plants whose names begin with each letter of the alphabet, from apples to zucchini. Consider Latin names as well as common names when choosing plants. Divide the garden into 26 blocks, each planted with a different kind of plant and labeled with a creative sign.

Storybook Garden. Growing plants from the gardens of popular children's books, such as Peter Rabbit (carrot), Tops and Bottoms (radishes, beets, corn, and lettuce), and Jack-and-the-Beanstalk (bean), can breathe life into these stories.

Rainbow Garden. Grow a rainbow by planting fruits and vegetables representing all colors. Your garden can serve as a tool to teach young gardeners the importance of eating a rainbow every day! Rainbow gardens can also used to promote inclusivity and create a safe space for LGBTQ+ students interested in gardening.

Pollinator Garden Space. Don't forget the pollinators. Without pollinators such as honey bees and native bees we wouldn't be able to enjoy many of the foods we eat. Alarmingly, populations of many pollinators are in sharp decline due to pesticide use, disease and parasite problems, and loss of food and nesting habitat. You and your students can help by planting a pollinator-friendly garden space in your edible garden to help increase your harvest and teach kids about why they are so important.