Planting the School Garden

School gardens are a fantastic educational tool and provide students with the opportunity to eat healthy foods, connect to nature, and learn about nutrition. School gardens also provide an avenue for students to engage in hands-on learning through gardening and farming. Once you've gathered your **garden committee**, **acquired funding** and **materials**, and **planned the layout and structure** of the garden, it is time to choose your plants and start growing!

For additional help and support in school garden development, contact Hanna Davis, State School Garden Manager at the Arkansas Department of Agriculture, hanna.davis@agriculture.arkansas.gov, (501) 295-8856.

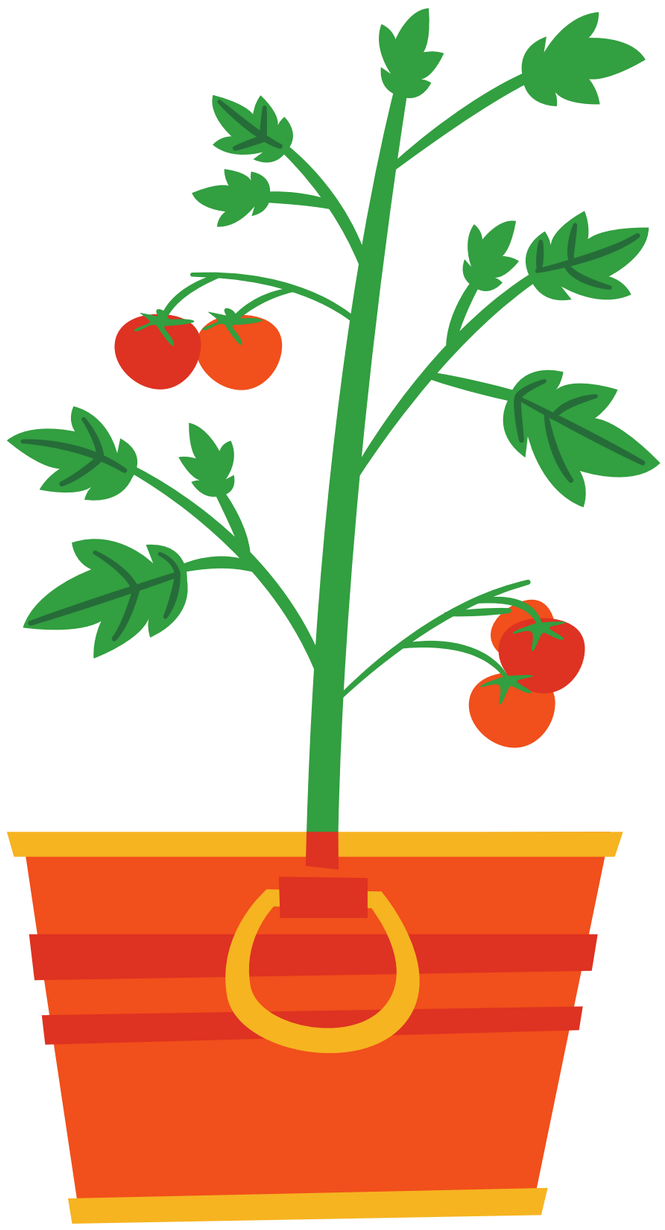
Consider the Goals of your Garden

Although it can seem difficult to decide what to grow in your school garden, it is helpful to first consider the **goals of your garden**, and which plants align with those goals. For example, if you started your garden in order to promote healthy eating habits, grow a variety of fruits and vegetables that can be harvested while school is in session. Radishes are one of the quickest growing vegetables and a fun one for students to taste. Watch out, they can be spicy!

Some schools want to grow more than just fruits and vegetables. If you want to teach students about plant biology, fill your garden with native plants for pollinators. Students can document the plant growth and observe local bees, butterflies, and other animals in real time. You could even create a sensory garden to teach about the five senses. Preparing your garden with intentional connections to the classroom is a great way to enrich student learning!

Consider the Garden Space and Maintenance Abilities

When planting, it is important to consider the physical attributes of your garden in order to plan what to grow. For instance, are you growing in containers or in-ground? Do you have a lot of room, or is your space limited? In addition to space considerations, be realistic about the time your team is willing to devote, as well as the skill level of those involved.



Containers

For those growing in pots and containers, consider growing herbs, greens, radishes, and flowers such as marigolds. These crops are low maintenance, so they are smart choices if you are still developing your gardening skills and knowledge, or do not have much time to maintain other crops. Vegetables like peppers, eggplants, tomatoes, and summer squash can also be grown in container gardens, but the containers need to be large enough to support the plants' roots. Ensure the plants do not outgrow the structure they are in! Depending on the variety, these crops may need to be trellised or staked. Tomato cages work as great trellises for many different crops grown in containers.

Small Space

If your garden is small, all of the crops previously mentioned can work well. In addition, consider other vegetables that are productive in smaller spaces. Pole beans and peas can be grown vertically and are a great space saver in the garden. Root vegetables like carrots and beets can also be very productive in small areas.

Large Space

If you have access to a larger space, whether it is an in-ground garden or raised beds, there are many options regarding what to grow in your garden! Larger cool weather crops include broccoli, cabbage, and cauliflower. If you have plenty of space, and are able to grow and maintain crops through the summer, consider sweet potatoes, melons, and winter squash.

Consider Seasonality

Be mindful of the school calendar when choosing plants for your garden. To ensure that food can be harvested while students are at school, focus on plants that thrive in fall, winter, and spring; during cooler weather. Peas, greens, broccoli, cauliflower, strawberries, turnips, radishes, carrots, and other root vegetables are ideal for these seasons. Check out the **local harvest calendar** for more information on when crops are harvested in Arkansas.

Ask students what types of fruit, veggies, and/or flowers they would like to see in the garden. Getting their opinions will not only help inform your decision, but it will also give students ownership and connection to the garden.

When preparing to plant your garden, note the amount of time it takes your crops to grow from seed to harvest; this is typically found on the back of seed packets, or can be researched online. Although many factors, like weather, can alter a plant's timeline, it is helpful to determine when you would like to harvest the crop, then count backwards to determine when the seeds should be sown.

Gathering Seeds and Plants

Once you have decided **what to grow**, it is time to acquire your seeds and plants! Plants can be seeded directly into beds, started from seed indoors, or obtained as mature plants to transplant into your garden. Buying seeds is relatively inexpensive, and starting plants from seeds can be very educational, allowing students to observe the life cycle of a plant. On the other hand, if you do not have the time or resources to start your own seeds, you can buy mature transplants at a local nursery or hardware store. You can even reach out to your community and local businesses for seed or transplant donations!

Direct Seeding

Some crops are better suited for seeding directly into the ground. For example, root vegetables like radishes and carrots are better directly seeded so their roots are not disturbed once they have started growing. Beans and peas are also recommended for direct seeding. Some plants, like greens, mature so quickly it may not be necessary to start them indoors.

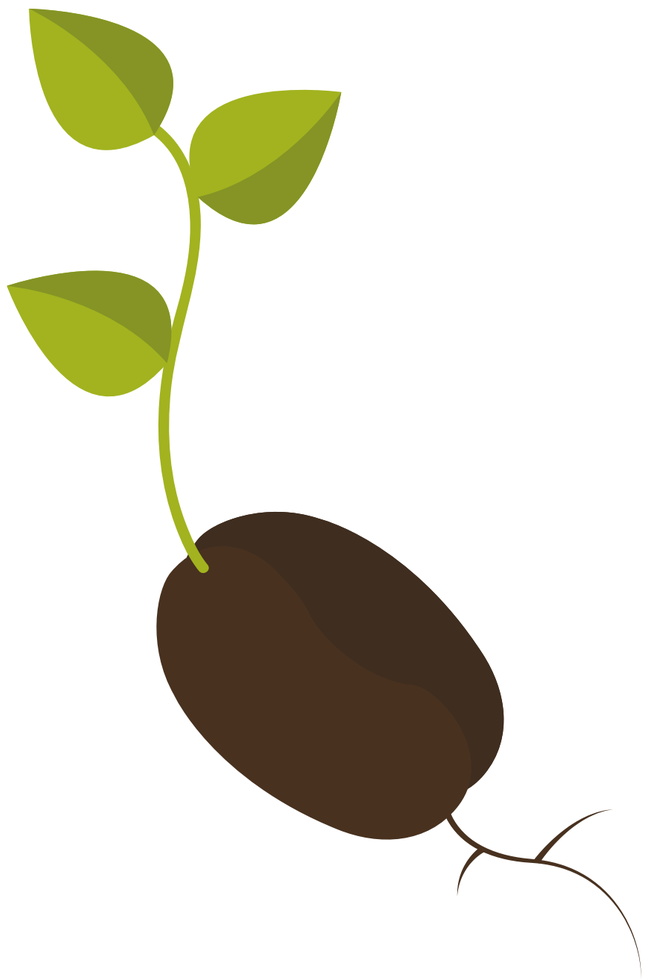
To direct seed, have students dig shallow holes or trenches, place one or two seeds in the ground, then cover them with soil. Pay attention to proper seed spacing and depth for the variety that you are planting. This information can typically be found on seed packets, but can also be found online. Once you have planted your seeds, create a label with the name and planting date so you can remember what is planted there. Water your seeds one or two times daily to keep the soil moist. Once they have germinated, reduce how often you water the seeds.

It may be necessary to thin out your seedlings for proper spacing by removing the weakest seedlings and allowing the stronger ones to have more room to grow. Students can use scissors to cut the weakest seedlings. This ensures that the stronger seedlings are not pulled out during the thinning process. Weed frequently so that your seedlings do not have to compete for resources.

Starting Seeds Inside

There are many benefits to starting seeds indoors. It allows you to get a head start on planting, which is especially beneficial in the cooler winter months. Starting seeds indoors also allows you to protect seedlings from pests, extreme weather, and other factors that could impede growth. Seeds can be planted in a greenhouse, a sunny window in the classroom, or with the help of grow lights in a darker indoor setting.

To plant your seeds, you can use small plastic pots, biodegradable pots, seed trays, or even cardboard egg cartons. Whatever you plant in, make sure that the containers have drainage holes. Plant your seeds in a seed-starting mix rather than potting soil, and moisten the soil before you plant. Be sure plants get plenty of light and water them regularly. As the plants grow, replant them in larger containers before transplanting outside or for use in an indoor garden.



Transplanting Outside

After starting seeds inside, or purchasing transplants from a local store, you need to harden off the plants before transplanting them outside. Hardening off means acclimating your plants to the outdoors so they are not shocked by weather and other environmental conditions. At least a week before you transplant, find a semi-shaded spot outdoors and leave your seedlings outside for a couple hours. Gradually increase the amount of time spent outside each day. After a week or so, your seedlings will be ready to plant!

Now that the transplants are hardened off, have students dig holes properly spaced out according to what you are planting. Be sure to research the correct spacing beforehand. For some plants, like tomatoes, it is important to dig a deep enough hole so that some of the stem can be buried.

Water the transplants thoroughly before pulling them out of the pot. If the transplants are in biodegradable pots, no need to remove them from their container. If they are in another container, be careful when removing them. Gently squeeze the pot in order to loosen the soil. It can be helpful to poke the underside of the pot or tray cell and turn the container upside down to remove the transplant. Instruct students to place the transplant into the hole and carefully push soil around it. After transplanting, water your plants and continue watering one or two times daily for the first couple of weeks.

Sow Your Seeds!

Planting your school garden is an exciting step. Not only are you planting seeds to grow food, but you are also growing your students' understanding about the natural world. Gardens require lots of patience, but every day the students can observe how it has grown, and develop new skills.

By keeping your goals and seasonality in mind, and carefully choosing the proper crops and planting methods, you will help your school garden flourish. After harvest, you'll be able to enjoy the crops you grew by leading a taste test, a nutrition lesson, or a cooking class.

For more information, and to sign up for the bi-weekly newsletter visit agriculture.arkansas.gov/arkansas-department-of-agriculture-programs/farm-to-school.