



## STARTING A SCHOOL GARDEN

### FACT SHEET

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## GETTING STARTED

School gardens have gained increasing interest from both public and private school systems in the past few years. School gardens can be a great asset in reinforcing many concepts taught in the classroom. They are also an important aspect of teaching healthy eating and proper nutrition. There are many examples of successful school gardens in the United States and some here in Dallas County. In those that are successful, all of the schools have adapted strategies that work for them by tailoring gardens to fit their schools' needs.

Our experience in helping schools begin their gardens has shown that there are a few basic components to making your garden a success:

- Before anything else, consider starting your own garden journal as a way to help you organize your thoughts and keep track of your progress as you plan your outdoor

classroom. Include a checklist of several basic components. Remember to leave space for notes and ideas that strike you as you work through the process. Your journal is also a great place to keep track of your garden contacts, including suppliers, volunteers, and outside experts.

- Garden Purpose:
  - The first thing you should do is ask yourself a few questions: Why am I interested in gardening with my students?
  - Why does my school currently have a garden? Or, why is my school considering establishing a garden?
  - How can I use a garden as an outdoor classroom?

As you ponder these questions, be sure to consider the teachers' and students' roles, the physical structures that will be needed, and the necessary procedures for successful interactions.

- Administrators: An enthusiastic and supportive principal is key to the development of your school garden, from approving and arranging teacher time for workshops, to finding and tapping outside funding sources. Your principal can also be an important school garden advocate outside of your school—an ambassador to your school district and your community. It is essential that the principal be an active participant in the process. Other school administrators can also play an important role as can your local government officials and even state and federal legislators. It's worth your while to make them part of your school garden "family."
- Teachers: At most schools a core group of teachers will be the catalyst for your school garden program. These teachers, often with the principal and a few parents, will serve as the central organizing body that gets your garden growing. This planning, or steering, committee will work with other teachers, students, and staff members to determine what the school garden will look like, how it will be utilized, as well as what resources and materials to collect and who will accomplish which tasks. Once the school garden plan is in place, the steering committee will oversee development and maintenance, evaluate successes, troubleshoot, and organize volunteers and community support. If your principal can't be a regular member of your planning team, be sure he or she is kept up to date on its progress. Some schools also include custodians on their steering committees, especially if their role will be important in implementation and maintenance. As you plan, be sure that your plans are incorporated into your school's short- and long range goals and objectives. Your committee should define its role and meet on a regular basis.
- Students: We like to say that each school's garden is "owned and operated by the students. The philosophy is for students to be actively involved in the entire process. The more students are involved in planning and building their outdoor classroom, the greater sense of ownership they will feel.

## **Connecting to the classroom**

As you begin to plan your garden, you will soon discover that this outdoor classroom provides endless opportunities for integrating your curriculum areas. The Texas Junior Master Gardener Program, which includes the Learn, Grow, Eat and Go curricula, is an excellent resource for connecting the state TEAKS to your outdoor learning center. We strongly recommend that each student maintain a garden journal, appropriate to his or her abilities, to record observations, collect data, make analyses of his or her experiments, and keep records and drawings of the garden. If your class is scheduled to use the school garden once a week, plan an outdoor lesson for that time and then plan related follow-up lessons for the classroom

**Nutrition Gardens:** Use your school garden as a place to help children learn more about where their food comes from. Students can learn about making food choices for a healthful diet and eating seasonal foods that are grown locally. Learning about where food comes from is a wonderful way to connect your garden to geography and history. You may wish to put together a class cookbook of favorite recipes using the crops from your class garden. The Learn, Grow, Eat, Go (LGEG) curricula is an excellent resource.

## **Community Involvement**

When your garden program is ready to involve the community, we recommend that you establish a community support system to assist in coordinating such activities as: soliciting donations, asking for volunteer aides, or developing greater community awareness. When you ask for community support, be sure to make it clear why you are involving the community and how you plan to do it. Offer an orientation so volunteers can contribute to what the school needs. In our experience we've found that community members are often people not associated with the school, yet are willing to offer their skills to the project.

## **PLANNING**

### **Planning Your Outdoor Classroom:**

Dream big, but start with a plan that is manageable for your school. Consider developing a three-year plan, adding a few components each year. You can organize your outdoor classroom in a variety of ways. We recommend allocating individual beds for each class to plan, plant, care for, and harvest together, as well as communal areas for the entire school to develop. In addition to planting areas, incorporating tables and benches creates a "user-friendly," manageable environment. We repeat the advice we can't give often enough: Be realistic and start small. While you may have visions of a mini-farm on the back parking lot or maybe a greenhouse for those cold winter months, the best way to realize your dreams is to build them step-by-step. Your first step should be to create a garden plan that works for your school, your teachers, and your students. With the support of your school community, you can take the next step—planning

for the future. What do you want your outdoor classroom to look like in three years? Let that vision guide you in making reasonable annual goals. And remember, bigger is not necessarily better. Consider the purpose of the garden: Is it to teach science, or social studies, or math, or another discipline? Many schools have taught all these disciplines successfully, by using indoor container gardens, planter boxes, rooftop gardens, and patio plants

## SITE SELECTION

Whether large or small, here are a few things to consider when choosing your garden site.

- **Sunlight:** Most flowers and vegetables need a minimum of six to eight hours of full sun. Check your future garden site for sun exposure at different times of the day and, if possible, in different seasons. Keep track of shady spots. Use them for shade gardens—great observation areas and teaching areas on hot, sunny days.
- **Water:** Watering the garden will be important for a good harvest and should be easy. The garden should be close to a water faucet so water is easily accessible to your plants. There are various systems you can consider: drip irrigation, soaker hoses, or watering cans. Be sure to consider the importance of conservation of resources in your planning. Use mulch to help the soil retain moisture. In most school gardens, we are recommending a drip irrigation system. Your County Extension Agent/Horticulture can assist with the design.
  - **A typical drip irrigation system for a 4x8 raised bed is \$125.00**
- **Raised beds:** Our native blackland prairie soils do not lend themselves well to in ground gardening. Raised beds are the recommended method for planting. Various materials can be used to make the raised beds. Consult with your County Extension Agent/Horticulture for recommendations and cost.
  - **The typical cost for a 4x8 raised bed 12 inches deep constructed of cedar will be \$185.00**
  - We recommend only a raised bed vegetable mix. **The cost of raised bed mix for the 4x8x12 inch deep bed is approximately \$80.00**
- **Drainage:** Both slope and soil type affect drainage. Avoid steep slopes; if that's not possible, consider terracing or raised beds. Don't plan a garden in a low spot where puddles form in wet weather.
- **Accessibility:** If your garden is a short walk from the classroom, there will be more teacher involvement than if the site is a long trek across the school grounds. A garden close to the classroom makes it more convenient, more visible, and easier to incorporate into the curriculum on a regular basis.
- **Security:** If possible, locate your garden within sight of classrooms and neighbors. Fences and natural borders of plants, if they don't obstruct visibility and hide intruders, provide security. Make use of existing fences, trees, and hedges in selecting your site.
- **Visibility:** Gardens always add beauty to school grounds. Try to integrate your garden with the existing landscape, but don't hide it. "Out of sight, out of mind" can apply to gardens that aren't in a central, visible location.

### Approximate cost for a 4x8x12" bed

• <b>Materials</b>	<b>\$185.00</b>
• <b>Raised Bed Mix Soil</b>	<b>\$ 80.00</b>
• <b>Drip Irrigation</b>	<b>\$125.00</b>
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• <b>TOTAL</b>	<b>\$393.00</b>

No two schools will have the same kind of outdoor classroom. One school's plan may be for planter boxes outside of the classrooms while another's may be an expansive garden site. Almost any site can be transformed into a thriving outdoor classroom, even a dirt parking lot or a rooftop.

### A Special Note About Gardening Tools and Equipment:

The quantity of each sort of gardening tool you buy will depend on your budget and the scale of your program. But be sure to buy quality tools, even though they cost a little more. Well-made tools will hold up under the wear and tear youngsters often give them. There are also tools available that are scaled to children's sizes. While gardening tools are not dangerous when used properly, it is important that all students (and adults) be instructed in their proper use. Set up a consistent training program to teach the basics of safe tool use.

Some basic gardening equipment:

- spades hoses/nozzles tool cleaning brush wheelbarrows
- iron rakes trowels spading forks stakes
- hoes twine/string leaf rake sharp knife
- watering cans pruning shears/scissors shovels harvest baskets
- worm box rain gauge compost thermometer clipboards

### Purchasing Tools and Materials:

As you make a detailed list of the tools and materials you will need, try brainstorming ways you can get them. Here are some things you might have on your list and some ways Life Lab schools have acquired them.

- Planter boxes and a tool shed: Approach a local lumber company about providing materials or offering a discount; a parent may have the skills needed to design boxes or a shed and/or lead a volunteer work party in construction.

- Fencing: See if district funds are available, or seek donations of material. Remember to include openings large enough for truck access.
- Tools: A local garden supply business or a local charitable organization may donate tools. Many schools have found garden tools at local flea markets and garage sales.

## **Raising Funds and More**

Donations of money and materials from community members, businesses, and charitable organizations can enhance your school garden program tremendously. Fundraising may provide a garden aide's salary, special science equipment, or reference books. Even if you can't get district funds for your school garden, your tool shed, or your dream greenhouse, there's a good chance you can get someone to donate many of the materials and much of the labor you need. Because most teachers don't have time for a lot of fundraising, many schools rely on the assistance of the community support committees such as a PTA or parents group. Here are some strategies that school gardens have found fruitful:

- Start locally: While you may have heard about "all those big grants" available from the state and federal government, your best bet for school garden support is right in your own backyard. Draw on any district funds that may be available. Go to your school's "network" for help—parents, the friends and relatives of faculty and staff, and neighborhood businesses that have helped your school before. The type of help easiest to get is a donation of goods or services—"in-kind" contributions. Consider such sources as: Local Merchants- Big Box Stores, Local Hardware, Local Nurseries, American Heart Association grant.

## **A Community Work Day**

Hosting a community work day is one of the most popular ways for school gardens to accomplish big tasks in their outdoor classrooms. Consider media coverage: a local newspaper reporter and photographer can document the event.

## **Outdoor Classroom Check List**

### **1 Planning the garden**

Form a steering committee of students, teachers, administrators, parents, and community members. Select a garden site with at least six hours of sunlight, access to water, and visibility from classrooms. Plan and design your outdoor classroom, indicating the location of the garden bed areas, the tool shed/storage area, the compost area, the outdoor instruction area, the greenhouse/cold frame area, and the water system. Purchase tools and materials

## **2 Breaking Ground**

Organize a community work day to build the raised beds and install the vegetable garden mix.  
Order seeds. Stake garden beds

## **3 Maintaining the garden**

Plant seeds in a square foot configuration. Cultivate garden beds. Protect from pests and harsh weather. Add soil amendments Plant and transplant. Maintain compost area. Water plants as needed .Weed and mulch beds. Harvest crops. Plant cover crops

## **4 Managing the Garden**

Schedule class use of the outdoor classroom. Post garden maintenance tasks in outdoor area.  
Develop a work schedule for volunteers. Plan a holiday and summer maintenance program.  
Create a supply-ordering system.

Adapted from: **Center for Ecoliteracy, Life Lab Science Program**

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