

Planning a Garden

Gardening is a wonderful way to engage and educate children about fruits and vegetables. It presents them with an opportunity to learn about new produce while developing a sense of pride for the work it takes to keep their garden in good shape. Gardens can also educate students about which fruits and vegetables grow in different seasons. It's easy to forget what is in season when our grocery stores have such a large selection of produce, but produce that is consumed during its primary growing season will have the greatest amount of nutrients.

Benefits of a Garden Program

Understanding a garden's importance is the first step in the planning process. According to Whole Kids Foundation (2012), "Today, only 2% of children eat enough fresh fruits and vegetables, and the typical elementary student receives just 3.4 hours of nutrition education each year¹." Many families often encounter problems with the cost and availability of produce. A school garden has the potential to increase students' familiarity with fruits and vegetables while also improving taste perceptions. Multiple benefits resulting from the introduction of youth to a garden program were found in a study by the Journal of Hunger and Environmental Nutrition (2012)². In the research, the garden showed to:

- Contribute to the community
- Provide opportunity for constructive activities
- Develop relationship and interpersonal skills
- Provide informal social control
- Explore cognitive and behavioral competence
- Improve nutrition and consumption of fruits and vegetables
- Improve access to fruits and vegetables
- Increase time outdoors

The following series of steps have been suggested by the [Whole Kids Foundation](#) to create your school's first garden.

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Engage stakeholders and organize a planning committee

If you are a part of the Healthy Zone School Recognition Program, then you should already have a wellness committee in place that is making decisions to maintain and support your school's health environment. If there is already a wellness committee in place, organize ways to involve parents through take-home letters, e-mails, and PTA meetings. Contact someone in your district with prepared information about why planning a garden is important to the needs of the students, and how it could positively impact their learning experience. This will be easiest to defend with the support of a planning committee and stakeholders.

Define the garden's missions and goals

There is much to be accomplished with a school garden, but defining its purpose should outline the expectation of achievement. Creating a brief mission statement communicates the goals and benefits of the project. Generally, this definition revolves around health education of both the community and its environment. Nutrition, outdoor physical activity, and environmental gains can all be long term goals of a school garden.

Build community partnerships

Develop associations with community churches, YMCAs, local restaurants and businesses, foundations, veteran groups, and nursing homes. These organizations might be willing to provide financial support, volunteers, or in-kind donations. Partnerships may spark community involvement and social activities that can benefit the program by reaching a diversity of people among different associations.

Also, talk to any plant nurseries in the area and create awareness of your upcoming plans. Nurseries might make an in-kind donation of materials and tools for a garden, give a reduced price on certain items, or refer you to others that can assist you in building your school garden.

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Secure funding and resources

There are many different options to secure funding for a garden. Take advantage of fund raising opportunities, online fundraising platforms, and grants available for school projects. Please refer to the Garden Funding and Resources document for specific opportunities.

Design the garden

In order to design a sustainable garden, choose an area that doesn't have high traffic during recess or break periods. The placement should allow faculty members to keep an eye on the garden to make sure students don't vandalize or harm it. Once placement has been decided, it is important to engage the students in the planning process to instill a sense of ownership. It's easy to forget during the planning purpose that this garden is ultimately for the *students*, and that one goal of the garden is for them to become knowledgeable enough to ultimately develop the skills necessary to be able to maintain the garden.

Have the students, possibly by class period, decide on something they would like to see grown in their garden. Use the [Texas Planting Calendar](#) and give students clear choices and time frames of what to expect³. (www.co.travis.tx.us, 2012) Start by giving a seed to each student and letting it germinate in a cup of water by the window. This will spark their interest of what is to come!

Research and understand the needs of your plants

There are many books and online resources available to help get started with the planting process. Before planting begins, find out the time frame of your crop(s), how often they will need to be watered, when they should be picked, and the best time to plant. The [Texas Planting Calendar](#) is a useful guide to get started, and for further details, [The Food Gardening Guide](#) breaks down the needs of your plants by fruits, vegetables, and herbs.

Prepare beds, order seeds and tools

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In-ground beds and raised beds are two styles to choose from and both have different benefits. In-ground gardens require soil testing and cultivation of the land, but cost less upfront. There will be more work to be done to an in-ground garden for maintenance as well, such as weeding. Raised beds cost more upfront to build, but are easier to drain, cultivate, resist weeds, and resist damage from footsteps.

If deciding on an in-ground, have the soil tested by the [Texas Agricultural Extension Service](#) to ensure high levels of plant nutrients are available. The three step process consists of obtaining proper sampling bags and instructions, collecting composite samples, and sending off soil for testing. The “routine” test selection is a sufficient indicator of soil health for a school garden, and it is only \$10. [Texas A&M Soil and Testing Laboratories](#) has more information about this process. Once results come back, lacking nutrients may be supplemented through proper fertilization based on the results of the test. [Fertilizer Basics](#) has helpful information about the best fertilizers to use and why.

For a raised bed approach, the [National Garden Association](#) has step-by-step instructions and information on how to begin, build and maintain this style of gardening. There are also many books available with more detailed information on raised bed gardens.

Develop activities and curriculum

[Digging for TEKS](#) provides useful information about gardening and how to implement it into the school testing curricula. This easily highlights the multiple education benefits of gardening for students across a multitude of subjects without getting off track from testing subjects. Subjects included are math, social studies, science, and language arts.

Recruit volunteers

Your number one volunteers will be your students. Offer a sign-up sheet for students to start a supervised garden club where they take on leadership roles

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and further their knowledge of gardening. They can be responsible for researching and making good decisions about necessary maintenance work.

Parents, teachers, and grandparents should also play a large role in the garden program. Designate a contact person to sign up any volunteers that have experience, express an interest in learning, or simply want to be a part of the project. Instilling a sense of ownership and pride in a diverse group of volunteers is important to maintain their valuable participation. You never know what different qualifications and experiences others have that could positively impact the garden's development and maintenance.

Maintain safety in the garden

Safety in the garden includes a number of concerns, such as properly using undamaged tools. Your initial garden investment should include appropriately sized and shaped tools for all age groups involved. Proper use and storage of all tools should be given in the form of written and oral instruction.

Keep thorough records

However it is decided, it will be very important to have a designated group be responsible for monitoring funding, expenses, and use of the garden. Have an accessible and central storage space inside the school so that many different teachers have access. It would be beneficial to have a sign-in sheet and calendar to create a log for reference, safety, and reservation of the garden (See Garden Tool Reservation document).

Whether the garden is being taken care of by a club, a few teachers, faculty, or all of the above, it is important to have one central calendar to track when something is planted and where. Always utilize an organized labeling system, and communicate with other teachers to share how different crops can optimize learning benefits for different classes.

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Once again, designating a garden club would be a great opportunity to keep the garden organized and well kept. There will be frequently made purchases of seeds, tools, and fertilizers, and it is important to maintain proper financial records - especially to justify funding. Proper budgeting should be implemented to document how all funding is used throughout the school year.

Spread the word & reach out to the community

Create a buzz around the garden with signage, take-home letters, and classroom photos. Have a PTA meeting and tour the garden to create awareness. Taking photos of the produce across different growth stages and sending home progress reports is a great way to engage parents. Take photos and write a brief letter thanking supporters and post on public bulletins. Local businesses, nurseries, YMCAs, and restaurants love to show that they are supporting the community, and might offer funding for recognition of support. Gaining as much support as possible can secure future funding by those stakeholders interested in supporting the garden.

1. Saunders, K. L. (2010). Impact of school garden-enhanced nutrition education on primary students' vegetable intake and preferences, knowledge, and quality of school life. *Obesity Research & Clinical Practice*, 4, S58. doi: 10.1016/j.orcp.2010.09.115.
2. Whole Kids Foundation. (2012). School garden resource center. <http://wholekidsfoundation.org/gardenresourcecollection.php>.
3. Texas A&M Agrilife Extension (2012). *Planting Calendar*. www.co.travis.tx.us.