

Creating an Outdoor Learning Center: The Home of Your New School Garden

So you want to create a school garden? First things first, don't do it! We suggest that instead, you create a multi-use *Outdoor Learning Center* that will be the home of your school garden. A garden alone is great, but it can be limited in its use as an outdoor classroom. It also can be intimidating to teachers who aren't gardeners. But if you intentionally create a space that will be used to teach many subjects (not just food and nutrition education and science), you will create a classroom that can and will be used by all teachers and staff members.

This is a guide to help make the process of creating an Outdoor Learning Center easier for you and your school! Each individual situation at each school will be unique, but this guide gives an overview of things to think about and mistakes to avoid.

TABLE OF CONTENTS

SECTION 1: FIRST STEPS – Moving forward from an idea for a school garden to the planning process

- **PROJECT SUPPORT**
- **WHAT IS THE GOAL OF THE SPACE?**
- **SITE IDENTIFICATION**
- **CREATING A SCHOOL GARDEN COMMITTEE**

SECTION 2: DEVELOPING AND EXECUTING A PLAN TO CREATE AND INSTALL A SCHOOL

GARDEN -Once you have moved past the first steps you can now begin to create a plan for your school garden. Creating and executing the plan will happen somewhat simultaneously, execution of the plan occurring just a step behind the creation of a plan. This may seem quick but it works best as it keeps the project's momentum moving forward.

- **CREATING A PLAN**
- **CREATING A BUDGET**
- **INSTALLATION**

SECTION 3: MAXIMIZING THE USE OF YOUR OUTDOOR LEARNING CENTER – After the garden is installed you'll want to make sure the space is being used as much as possible as an outdoor learning center. You'll also want to figure out what to do with all the produce you grow!

- **PLANNING TO USE THE SPACE**
- **GARDEN PRODUCE**

SECTION 1

FIRST STEPS

PROJECT SUPPORT

- **Project Support:** Gain internal and external support at the school from teachers, students, parents (the PTA in particular is a fantastic partner to have for School Garden Projects), principal, custodians, the school food service staff, neighbors (especially those near or bordering the garden space), local businesses, upper level school district administrators, upper level grounds and maintenance managers/directors, and outside community organizations.

INTERNAL SUPPORT

- **Students:** The garden is being developed as a classroom for students to learn about a wide variety of topics, not just gardening, remember to include them as much as practically possible in the planning process.
- **Teachers:** These are the folks who will be using this educational tool, make sure you involve them from day one in the planning of the new outdoor classroom.
- **After school/summer program groups:** Don't limit the use of the garden to during school hours! This is especially important in regards to summer use and maintenance (when the garden is at its best and needs the most care!). After school and summer programs can be essential partners from funding to filling usage gaps.
- **Parents:**
 - The PTA can act as the liaison between teachers and any outside community partners/educational organizations that help you use the garden as a classroom. It can also act as the fiscal agent for the garden, basically keeping the bank account for the garden.
 - Parental support during the construction process, i.e. equipment, tools, skills, etc.
- The **principal's** involvement and support are extremely important. They help to encourage teachers to engage with and use the space. They are also the bridge to upper level administrators and the school board.
- **Custodians** are a fantastic and necessary ally as well. Remember these folks are the caretakers of the school and grounds, any space you end up using as a garden will have been in their care. Engage them in the project in any way you can without creating any more work for them (unless they volunteer to help!).
- **School Food Service Staff:** Can help get food from the garden into lunches, breakfasts, snacks, etc. This includes staff that works at the school and upper level administrative staff (that may not work directly at the school).
- **Upper Level School Administration and Grounds/Maintenance:** These folks are essential. Their support will ensure buy in from the district as a whole.

Grounds/Maintenance folks are essential to irrigation system development, access to resources and tools, and potential expansion down the road.

- o Remember to tie the project into any existing **district wellness policies**.

EXTERNAL SUPPORT

- o **Community members:** Most importantly, neighbors that directly border the proposed garden space. They must also “approve” of their new “neighbor”. Most will be excited, but sometimes you may have to quell some fears about the new project.
- o **Local businesses:** Can be garden sponsors and/or donate materials/funds for the building process.
- o **Community Organizations:** These can be essential to the process of creating the space as well as ensuring its long-term success. Most teachers do not want to spend their summers at the school tending to the garden, so partnering with outside community organizations can offer a solution to fill that gap. Many organizations might also be a good match for educational programming both during the school year and during the summer.
- o Etc.

WHAT IS THE GOAL OF THE SPACE?

- **What is the goal of space?** Before you identify the space where the garden will be built, it is good to begin to brainstorm ideas about how you want to create and use the space as an outdoor classroom (this process continues throughout the garden’s existence). Some questions you may want to ask:
 - o **What are our goals for this space educationally?** Is the focus only on food and gardening? A lot of gardens are only used for teaching science and maybe a little math. But gardens are a great, place teach many subjects, including art, reading, writing, history, social studies, and even music. Establish the educational
 - o **How will/can teachers tie the space to their existing curriculum?** This is a question that MUST be answered by the teachers. It is integral to include them in the planning process on some level. This may be through a questionnaire/survey or a brainstorming session or, better yet, a forum to discuss the new project. Not every idea will be practical or achievable, but including teachers in the process will pay off in the long haul.
 - o **What do we want to grow in this space?** Vegetables, berries, fruit trees, native plants, non-native perennials, hops, etc. This is all up to your team, and does not all need to be decided before installation, but having a rough idea of your horticultural goals is a good idea.
 - o **Who will use the space and how will they use it?** Teachers, students, parents, after school programs, summer programs, garden clubs, outside community organizations, etc. The space is not limited to garden related activities, it can be

a community gathering place that hosts events of all kinds!

SITE IDENTIFICATION

- **Site Identification:** Identify potential spaces at your school that may work for a School Garden. Things to think about in regards to this:
 - **Water access:** *The #1 most important issue*, without easy water access a garden is doomed to fail. Water must be available 24/7 during the growing season. DO NOT just tap into existing grass irrigation systems if they are zoned irrigation systems. Grass and vegetables/fruits have very different needs in regards to water.
 - **Sunlight/shade:** As sunny a spot as you can find is best, no shade is ideal for the growing area, but some shade is nice for the “classroom space”
 - **Current ground space:** Including soil quality, existing weeds (especially bindweed), existing overhead and underground utility lines, levelness, drainage (if doing an in ground garden).
 - **Existing sprinkler systems** (in ground or otherwise): Avoiding existing sprinkler systems is ideal, as they can be difficult to work around/with. Having an independent water system that is “charged” all the time is essential to the garden’s success.
 - **Accessibility** for disabled students, this includes easy entrance and exit and a ground cover that is ADA accessible.
 - **Proximity to the school** (for ease of use by teachers and students): How long is the walk to the garden space, is it too far away that distance is an easy excuse for teachers to use who don’t use the space? Also make sure it is not too close the building, as it could disturb other classrooms, although bordering the building
 - **Visibility:** The more visible the garden the better the chance to engage community members and gain support for the garden. If the garden is not in a visible spot, some kind of signage somewhere to direct folks to the garden if it is not close to a road, etc.
 - **Accessibility to electricity:** Electricity is not necessary to the garden space for gardening purposes necessarily, but it does help for construction and for potential cooking classes, etc.
 - **How will the will the maturing garden affect the infrastructure (irrigation, etc) as well as the school (trees, perennials, etc)?** Gardens grow vertically and often, after a few years, in square footage. Leave space for that growth! A successful project will lead to calls for expansion if possible; think about this when choosing your garden space.

******SPECIAL NOTE ON WATER****:** This point cannot be stressed enough. You must make sure the potential garden spaces have easy access to water 24 hours a day, 7 days a week during the growing season (basically April 1st through October 31st here in Montana). This is the **most important thing** when choosing your space. If you don’t have water whenever you need it, you can’t grow a garden! Remember

gardens and grass each have very different water needs; meaning existing sprinkler/irrigation systems for watering grass will almost always be inadequate for use in your school garden. Specifically, the garden watering system almost always needs to be separate from the lawn irrigation systems.

CREATING A SCHOOL GARDEN COMMITTEE

- **Begin to create a “School Garden Committee”:** This will be made up of internal supporters at the school and outside community partners (non-profits like Garden City Harvest or for-profits like a nursery or a landscaping company or a local farm). This will be a process that takes some time, but the quicker you have a committee in place the easier the process will be (see “School Garden Committee” appendix for more details).

SECTION 2

DEVELOPING AND EXECUTING A PLAN TO CREATE AND INSTALL A SCHOOL GARDEN

PLANNING

- **Creating the Plan:** First thing first is to always come up with a reasonable plan for the watering system. After that, the gardening system (in ground or raised beds), fencing, classroom space, etc. can be more fully developed into a realistic plan. Once these plans are outlined you can then begin planning your budget and start fundraising. It is often helpful at this point to appoint some titles/jobs to Garden Committee members, ie Chair, Fundraising, Garden Liaison (between the teachers, committee, and any outside partners), Materials, Donations, Secretary (to take minutes at meetings), etc. (see School Garden Committee appendix). **** Think about how the install will go: ie Who will install the garden?, etc.
- **When should we begin garden Planning Meetings? And how many should we have?** Garden planning meetings should begin in the fall and be at least once a month for a spring School Garden install (usually after 6-8 meetings of the committee all the planning will be done and you will be ready to secure building materials). At these meeting the garden committee members will focus on their respective responsibilities, but most importantly early on is fundraising to pay for building materials, which means a budget needs to be developed as soon as possible during the planning process (see “Creating a Budget” section for more details).
- **When should we install our new garden?** Spring garden installation is optimal as you then don’t lose any momentum with you garden committee due to the winter if you did

a fall installation. But fall installation is possible, just more difficult due to the summer in between when momentum is often lost. You also can't plant during the fall (or at least not much), whereas a spring installation allows ample time for planting for the first season.

- **How will we ensure the garden will be used as an outdoor classroom?** This is an essential question that must be answered relatively early in the planning process on some level. Each school will have their own unique answer to this question, which most likely will include a strong garden committee, community partners, teacher training, having the appropriate educational tools in the garden for teachers to use, including a guidebook/list of what tools are in the garden for educational use, after school/summer programs that use the space etc.
- **How will we maintain the garden, especially during the summer?** Another essential question to answer early on in the planning process. Spreading the responsibility of garden care is a great way to encourage engagement and sense of ownership, but also takes coordination and sometimes fails (which is a big deal when talking about watering during the high heat of the summer). Garden City Harvest will provide maintenance support for all GCH-partnered gardens. **WATERING NOTE:** We recommend an automatic-timed watering system to take that responsibility off any one individual and to ensure consistent watering.

BUDGETING

- **Where will the money come from?** A very important question to ask early on in the planning process. There are a number of funding sources that have worked well in past projects, but fundraising should not be limited to the below options:
 - **Grants:** There are a number of local and national grants that are available for school garden projects
 - **Business Sponsorships:** Local businesses often give one time gifts for projects like these, or you may be able to find a business that will sponsor the garden year-in, year-out.
 - **Playground Improvement Money:** Most often the garden will be installed on what is considered "playground" area at your school. If this is the case the principal may have money that is specifically deemed for improving these areas. If so, this money may potentially be used for a new garden project.
 - **PTA:** Box tops, bulb sales, the like, etc. As well as being the ideal fiscal manager for the project
 - **Fundraising events for the garden:** This means a specific community event that all the funds will go the garden project. This can include anything from a bake sale or bulb sale to a larger event with silent and live auctions. Which events you use depend on your school, the community it is a part of, and your ability to create the event.
- **Creating a budget:**
 - The largest line items will normally be fencing, bed making materials, soil,

- compost, weed mat, and ground cover (wood chips or gravel/pebbles, remember to make sure whatever you use is ADA accessible).
- A shed is a very nice and integral part of your garden, but not completely necessary the first year, and can be left out if costs are too high.
 - Garden and educational tools are integral to the success of the outdoor classroom, especially making sure you have enough for each student when necessary.
 - In-kind donations from local businesses, construction/building skills from school parents and teachers, borrowing equipment, and gathering volunteers are all great ways to keep garden installation costs down.
 - Elaborate irrigation systems can be expensive to install and maintain. If possible, just using a hose, oscillating sprinkler, and a timer is a great low cost way water the garden. Remember, keep it simple and it will be easier to maintain in the long-term.
 - Plan for the future: The garden will need new items in the future, whether to replace old, broken tools or the creation of more beds or addition of fruit trees, money will be needed each year to keep the garden going. This money is much easier to acquire earlier in the garden's life, as that is when momentum for the project will be at its highest. Any extra money that can be raised early and put aside for future yearly improvement and maintenance costs is great!

INSTALLATION

- **When should we install the garden and how long will it take?** Late April/Early May seems to be the best time to install a new garden considering weather, the school year, and folks' availability. A fall installation is possible, but a bit more difficult to pull off because of these same reasons. Most installations take two weekends with one of those days each weekend being a work day incorporating as many volunteers as possible. The other two days are prep/finishing days.
- **When should we secure materials to build the garden?** This usually occurs no earlier than a week or two before installation due to a lack of storage space at most schools, but the earlier you can secure building materials the better.
- **Installation: What tools do we need?** This depends on a few factors, but here are the basics used at most installations:
 - Multiple pick-up trucks to pick up supplies
 - Cordless drills
 - Shovels (both spades and square-nosed)
 - 4+ Wheelbarrows
 - Extension cords
 - Circular Saws
 - Chop Saw
 - Reciprocating Saw
 - Metal garden rakes

- o Pulaskis
- o Hammers and mallets
- o Levels (the longer the better)
- o Measuring tapes, long and short
- o String line
- o Cement mixer
- o Auger/Post-hole diggers
- **What materials will we need for installation days?** This depends on a few factors, but here are the basics used at most installations:
 - o Fencing
 - o Soil
 - o Compost
 - o Hoses
 - o Sprinklers
 - o Water timer
 - o Wood Chips/Gravel
 - o Garden Bed making materials (whichever you choose)
 - o Weedmat
 - o Edging

SECTION 3

MAXIMIZING THE USE OF YOUR OUTDOOR LEARNING CENTER

PLANNING TO USE THE SPACE

- An initial plan should be established before installation concerning how the school garden will be used in regards to educational programming. But inevitably this will change after the space is completed. Again, each school and situation will be unique; the key is to integrate the school garden into the school just like any other classroom. To ensure the most usage and best results the garden must be a real part of the school, not an external project where the expectations are on an external organization. Make the garden an official part of your school by integrating it to your school educationally and culturally. This is challenging to do, and much easier to do if you do it from the beginning (before you even build the garden).
- Don't limit the space to educational programming! Use it for meetings, events, and celebrations, or whatever else you decide it can be used for!
- Partnerships!!!
 - o These are essential to make sure the garden is used to its full potential.
 - o Even after your garden is built and established continue to seek out and be open

to new partnerships. They may come in forms you didn't expect during your initial planning.

- Share the responsibilities!
 - Not only is this a good idea to avoid the burnout of the garden creators, but it will create a sense of ownership in many stakeholders, which can help ensure the garden's success long-term.

GARDEN PRODUCE

- How will the garden produce be used? During the School year? During the Summer?
 - There are a variety of options and it will be unique to your school.
 - Some ways to use produce from school gardens:
 - School lunches (food is usually easily integrated into salad bars if they exist at your school)
 - School snacks
 - Educational lessons in the garden
 - Taste testing events
 - Cooking classes (both in school and special after school/summer classes)
 - Sell extra veggies at a farm stand to raise funds for the garden project
 - Donate to students' families
 - Backpack programs (send food home with students in need)
 - Donate to local hunger agencies
 - Special school events (like a Harvest Festival)
 - Donate to neighbors of the school (especially elderly neighbors)
 - Sent home (especially during the summer) with the volunteers that help maintain the garden

APPENDIX 1.

SCHOOL GARDEN COMMITTEE

Garden Committee Roles and Responsibilities

Roles and Responsibilities:

- **Chair/President*** - someone who is willing and enthusiastic about the garden who can take on a leadership role. This means leading garden meetings and continuing to develop and create a garden community.
 - sets up the garden committee meetings
 - creates the meeting agenda
 - writes up garden updates for school newsletter/website?
- **Secretary*** - someone who enjoys writing and takes diligent notes.
 - takes notes during the garden committee meeting

- keeps a running record of meeting minutes
 - sends meeting minutes out to garden committee members
- **Treasurer*** - someone good at handling/keeping track of funds.
 - keeps track of the garden funds
 - reports garden funds at every garden committee meeting
- **Garden Education Liaison(s)*** - the “go-between” person who works with teachers, the principal, parents, outside partners, and the committee.
 - Helps teachers schedule garden lessons and sends out lesson reminder emails to teachers and outside partners
 - contacts/arranges for outside educators to teach garden/other lessons in the garden
 - coordinates volunteers to work in the garden during open garden hours in the summer
- **Fundraiser(s)** - someone who enjoys writing and raising money.
 - identifies garden needs
 - writes grants for the garden
 - contacts local organizations/businesses for money
- **Event/Party Planner(s)** - someone who enjoys planning events/parties.
 - comes up with ways in which we can use the garden for non-educational events
 - plans and helps execute the event/party
 - writes up garden updates/events for school’s newsletter/website
- **Interested Garden Committee Person(s)** - people excited about the garden who want to come to garden committee meetings and provide input and ideas, but can’t give their time to a specific role on the committee.
- **Project Leader(s)** - someone who wants to take the lead on a specific garden project.
 - researches ways to improve upon the garden, incorporate in new learning tools, beautify the garden
 - presents research ideas to the garden committee

***Roles that are starred (*) are essential to a functioning garden committee. Any unstarred roles are simply ideas for other roles within the committee. Positions can be combined.**

APPENDIX 2.

Garden Committee Checklist for Spring Prep in the Garden

- Remove any leaves
- Tidy up shed.
 - Put tools in their appropriate place - shovels, rakes, watering cans, etc.

- Sweep shed.
- Set up irrigation system
- Pull any early weeds.
- Empty trash cans.
- Set-up trellises/t-posts and wire/any other plant supports and put in shed.
- If applicable, mow grass.
- If necessary, make fence repairs.
- Add compost to garden beds
- Prep beds for planting

APPENDIX 3.

Garden Committee Checklist for Fall Clean-up in the Garden

- Pull all annual plants out of garden beds.
- Trim back perennial plants.
- Throw away or compost plants.
- Tidy up shed.
 - Put tools in their appropriate place - shovels, rakes, watering cans, etc.
 - Sweep shed.
- Roll up hoses and put in shed.
- Pull weeds.
- Empty trash cans.
- Remove trellises/t-posts and wire/any other plant supports and put in shed.
- If applicable, mow grass.
- If necessary, make fence repairs.