

Slow Food USA's

School Garden Guide

**Build.
Grow.
Learn.**



Slow Food USA®

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Slow Food USA®

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Introduction

Hello Slow Food Garden Leaders and Volunteers—

I am very excited to finally share this *School Garden Guide* with the Slow Food community. The intent of the guide is to share among Slow Food chapters what has worked well elsewhere and to stimulate some ideas and new projects in your chapter. The vision for this guide came from the successful Seed to Table School Food Program of Slow Food Denver and the desire to share our successes from the school grounds in Denver Public Schools. Our goal was to bring together in one volume many of the similarly great school gardens efforts related to school gardens throughout the Slow Food community.

We also want to hear about your best practices so that we can add them to updated versions of the guide. We are (internally) calling this product *School Garden Guide Version 1.0*. I hope that you will take a look through it and provide feedback on its content and message, and even let us know what is missing. Our goal is to assimilate all your feedback and provide a 2014 Guide – version 2.0.

We recognize that there is a considerable amount of information and resources about school gardens available in the world, and we wanted to make sure this guide was additive to the considerable existing good work of our partners and friends. What sets this volume apart is that it was created by Slow Food chapter leaders and volunteers for Slow Food chapter leaders and volunteers. We explicitly sought to address the unique challenges to and opportunities for working on school garden projects under the Slow Food banner, from the importance of incorporating “good, clean and fair” into the garden, to the opportunity for growing Ark of Taste projects, to the challenge of executing school garden projects when everyone is an unpaid volunteer.

Since the scale of this effort was new to Slow Food USA, I would like to dedicate a portion of this introduction to explaining how this guide came together. The first step was to identify successful Slow Food-driven school garden work across the country. Slow Food USA staff and Regional Governors provided help in identifying chapters that could contribute great ideas and successes from their garden programs. After a series of phone interviews, I selected a total of 14 school garden leaders from across the country and invited them to come to Denver this past February to start the process of pulling together the guide.

These garden leaders came together for a two-and-a-half-day retreat organized by the Denver chapter that included intense discussions, idea sharing and content development for the manual. The Denver planning team ensured that the great conversation was intertwined with exciting food experiences representative of the Rocky Mountain region and that the meeting location was a setting that helped foster long-lasting relationships between the participants.

While it was very exciting to bring together these Slow Food leaders around the school garden projects, it was also very important not to fall into the Slow Food trap of too many social events around local foods and not enough concentration on the task at hand. To keep us Slow Foodies on track, we brought in an outside facilitator, Spark Policy of Denver, to facilitate the

meeting, to keep notes from all the sessions, and help to assimilate the massive amounts of ideas that were shared by all.

As the convening broke up and our guests started to head back to their homes, there was much excitement about the prospects of the guide and a strong desire to get to work on the contents. We had planned out nine chapters and agreed that each chapter would be led by one of the meeting participants, with other participants providing contributions from their own programs back home. Once we received the organized notes from Spark Policy, the task became one of finding time in our busy spring schedules to put our ideas and enthusiasm on paper. Everyone did the best they could while acknowledging that life events sometimes interfered with the ability to spend as much time as planned.

The group writing process was no doubt the most difficult part of this journey. Each person took on the task in their own way, and the degree of cooperative writing varied across chapters. There was no doubt that everyone enjoyed sharing their great ideas and the successes that they have experience in their school gardens. As the main ringleader for the writing process, I was overall impressed by how everyone responded to my requests for more content and to meet deadlines. The advantages of drawing valuable insights and experiences from such strong leaders far outweighed the occasional frustrations of delays and lack of materials that occasionally came up.

We were very lucky that one of our meeting attendees, Philip Lee from Slow Food Seattle, has tremendous experience in book publishing and content development. Philip helped us secure a copy editor and designer and then managed the process of turning the manuscript into a final product.

And now it is time to share the fruit of our efforts with all of you in the Slow Food school garden world. I hope that you enjoy the *School Garden Guide* and that you see the potential it has to

strengthen school garden efforts across the Slow Food community. I look forward to working with your school garden programs and bringing more resources to support the amazing team of volunteers that drive them.

So I am excited to share the end result of this amazing process that has been in action for nearly a year.

Slow Regards,

Andrew Nowak

Slow Food USA School Garden Program Manager

Andrew@slowfoodusa.org



Acknowledgements

Kate Krauss and Jovan Sage at Slow Food USA joined our convening in Denver and provided helpful support and guidance along the way. Thanks also to the Slow Food USA Regional Governors, who helped us uncover pockets of excellent school garden work across the country.

Thank you to our friends at the Queen Anne Bed and Breakfast, which hosted our convening, and to Cook Street Cooking School, and Osterio Marco restaurant, all of which helped us lay the foundation for a very successful meeting.

Much appreciation goes to Jewlya Lynn and the team from Spark Policy for their very professional and skillful handling of a bunch of “Slow Food cats” as we tended to go into many different directions during the meetings.

Special thanks to Philip Lee, co-leader of Slow Food Seattle and owner of the publishing firm Readers to Eaters, for assuming the monumental task of taking all the content and putting it together into a coherent volume on a tight timeline. His leadership and expertise really made this guide come to life. Additional thanks to Jean McMackin, our tireless editor, and to our excellent designer Carol Bobolts of the firm Red Herring.

Finally, I want to acknowledge a group of people I refer to as the Denver team. It has been my extreme pleasure and honor to work with a small group of dedicated volunteers for 12 years in projects that have been very fulfilling and opened so many doors for me to explore. Gigia Kolouch has been the “yin” to my “yang” for all 12 years with Slow Food Denver as we have been garden and project partners from the beginning of Seed to Table. While we have approached the gardens from different philosophies, we have always come together to produce high-quality programs that have benefited an entire school district. I also have been fortunate to be supported by two strong chapter leaders over the years. Matt Jones was a co-founder of Slow Food Denver, then a Governor and now on the Slow Food USA Board. Matt brought the original vision of the Seed to Table program and then gave me lots of rope to go into the school cafeterias with projects. Krista Roberts followed Matt as chapter director and has built a very supportive environment in Slow Food Denver so that I could push the envelope and test the systems around school food. All I had to do was “keep her in the loop,” which allowed me to dive into some great relationships between school gardens and school food. Finally, we were fortunate to have Laurie Schneyer as part of the leadership team for a couple of years as she brought sense and order to our sometimes-chaotic methods. I could not imagine a more supportive team of volunteer leaders to work with for these past 12 years.

Contributor Bios

Christine Brinkmann, *Slow Food Bluegrass*

Christine studied oil painting and Scottish art history. She finished up school in Scotland and didn't want to leave, so she turned to her other love to help pay the bills, cooking. She is self taught and has always cooked and gardened and loved the Slow Food philosophy, without even knowing it. Christine now cooks in schools and has developed a Slow Food curriculum to bring to the kids.



Willard Brooks, *Slow Food Buffalo Niagara*

Willard is a native of western New York from a family of German farmers and Irish workers. He always had a big garden growing up and developed a lifelong interest in personal agriculture, the joys of the kitchen, and sharing these daily at table with fiends and family. Willard is co-founder of the SSPP Edible Schoolyard, co-founder of Slow Food Buffalo Niagara, on the board of the Field & Fork Network, and chair of Buffalo Beer Week.



Judiann Carmack-Fayyaz, *Slow Food East End*

Five years ago, Judiann started the Bridgehampton Edible Schoolyard Project and subsequently formed the Edible School Gardens of the East End group to share information and practices with other schools and organizations in the region who were interested in promoting farm to cafeteria initiatives by starting school gardens and greenhouses. At present, Judiann teaches Environmental Design, horticulture classes, and Farm to Table classes at Bridgehampton High School. She studied Landscape Design at the New York Botanical Garden in the Bronx and has a bachelor's and master's degree in French Language and Civilization from New York University in Paris.



Linda Colwell, *Portland, OR*

Linda received her culinary training in Paris, France, and has worked as a chef, butcher and sausage maker, and commercial fisherman. Linda supports school food agencies and administrators to set and meet their goals in Farm to School and School Garden Education.

Linda founded the Garden of Wonders, aka Abernethy School Kitchen Garden, a school garden education project in Portland, Oregon. She is lead developer and author of the eat. think. grow. School Garden Curriculum. As adjunct faculty at Lewis and Clark College, Linda leads professional development and continuing education courses in school garden education.



Lynn Hyndman, *Slow Food Chicago*

After graduation from Western Michigan University, Lynn moved to Chicago and taught for 36 years before retiring. For the last third of her teaching years, Lynn ran an elementary science lab program, focusing on using nature as a tool to educate students.. In 1989,

Lynn was recognized as one of the outstanding teachers of science by the National Science Foundation, the Illinois Science Teachers Association, and Illinois State University.



Kendall Kendrick, *Slow Food Charlotte*

Kendall represents Slow Food Charlotte in school garden policy. She is the project coordinator of childhood nutrition for the Charlotte Mecklenburg Food Policy Council where she partners with other organizations to bring a unified approach to awareness, education, and sustainability of school garden programs. She lives on an urban farm with 18 chickens, 4 daughters, and her husband.

**Martina Rossi Kenworthy**, *Slow Food New York City*

Martina is the co-founder of Gustiamo, Inc., an importer of fine, artisanal Italian food products, that caters to both wholesale and individual clients across the country. In 2010 Martina began a community program in the Bronx focused on cooking with children and instilling in them an appreciation for healthy foods. A board member of Slow Food New York City since 2010, Martina has led the recent urban gardening in schools initiative and works with Slow Food's very own urban garden, Ujima Farm, in Brownsville, Brooklyn, where children from the community harvest and learn to cook their own food with the help of Slow Food volunteers and staff.

**Gigia Kolouch**, *Slow Food Denver*

Gigia is currently the Director of the Seed to Table Program at Slow Food Denver. Her work involves transforming people's relationship to food and cooking in order to restore its prominent place in everyday life. She has been a cooking instructor for the past 25 years, a gardener for 40 years, and has increased her knowledge with a master's in Nutritional Anthropology from the University of Colorado Denver.

**Kate Krauss**, *Slow Food USA*

Kate joined Slow Food USA in 2009 as Director of Development and then spent seven months as Interim Executive Director before assuming her current role. Prior to Slow Food, she worked for The Nature Conservancy, where she served as a fundraiser for the Conservancy's China program and its climate change initiative. Kate began her career in television journalism, working in production for the ABC News programs World News Tonight and Nightline. She is a graduate of Columbia University.

**Philip Lee**, *Slow Food Seattle*

Philip co-founded READERS to EATERS in Bellevue, Washington, with his wife, June Jo Lee, in 2009 with a mission to promote food literacy. A native of Hong Kong, Philip moved to California as a teenager and attended UC Berkeley, where he started his publishing career working at the university bookstore. Philip developed his interest in food when he reported for a Seattle radio station on the connection between food and student learning and how we can build a community through food.

**Wendy Levitz**, *Slow Food Miami*

Wendy was raised in tropical Miami, Florida, and after a wonderful stint in New York City is thrilled to be back and in the gardens of Florida. She is a Miami Dade Master Gardener and loves teaching children the lesson of where healthy food comes from. She feels blessed to be working with such a wonderful Slow Food team and, with their help, managed to plant 120 gardens around the Miami area.



Jewlya Lynn, *Spark Policy, Denver, CO*

Dr. Lynn and her colleagues at Spark Policy Institute specialize in helping stakeholders find sustainable solutions to complex problems at the local, state, and federal level. Dr. Lynn's experience is in public policy, evaluation and real-time strategic learning for advocacy, collective impact, systemic change, and community mobilizing.

**Andrew Nowak**, *Slow Food Denver*

From 2001-2012, Andrew was the Project Director for Slow Food Denver's Seed to Table (STT) School Food Program, leading the development of the Youth Farmers' Market and Garden to Cafeteria programs. For the past five years, Andrew has been the community partner for Denver Public Schools and Jeffco Schools' School Food Learning Lab (School Food FOCUS), helping with local procurement protocols and implementation of scratch cooking. On the National level, Andrew was one of 6 chefs invited to the White House in 2010 to help develop the Chefs Move to Schools Program.

**Henry Owen**, *Slow Food Charlotte, NC*

Henry has been a summer camp director, a 2nd grade teacher, and a mission and outreach director. He currently spends his time as Program Director for Friendship Gardens, a non-profit project growing fresh, healthy food for Friendship Trays, a meals-on-wheels program. Henry is a husband, father, environmentalist, local food advocate, garden nerd, worm composter, nature play advocate and backyard chicken raiser.

**Krista Roberts**, *Slow Food Denver*

Krista, a former management consultant and professionally trained cook is the President of Slow Food Denver. She leads the activities and community outreach of the organization and is active in all of its programs; including Slow Food Denver's Seed to Table School Food program and Community Table events. Krista has been instrumental in creating a professional, focused organization that is poised for growth, while maintaining it's grassroots character. She is passionate about supporting local producers, sustainable food systems and educating children about growing and cooking food.

**Jovan Sage**, *Slow Food USA*

Jovan joined Slow Food USA in 2012 and is a community organizer with over 10 years of experience grassroots organizing at national and community-based organizations. Her work focuses on enhancing the political education, self-knowledge and leadership skills of staff and volunteers, fostering a greater sense of community and fueling campaign-specific successes along the intersections of race, class, ability, gender and sexual orientation.

**Laurie Schneyer**, *Slow Food Denver*

Laurie is a lifelong gardener and learned to appreciate the Slow Food way of life during a year of college in France. She worked in Finance and Project Management for 19 years, but left the corporate world 3 years ago. Laurie loves working with kids, gardens and foods and being able to give back to my community through our programs at Slow Food Denver.





1 Design + Build

CHAPTER LEAD:

Henry Owen, *Slow Food Charlotte, NC*

CONTRIBUTORS:

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Lynn Hyndman, *Slow Food Chicago, IL*
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Andrew Nowak, *Slow Food Denver, CO*



Slow Food USA®

Introduction

A Slow Food garden reflects the values and mission of Slow Food USA in that it:

1

accentuates food that is **Good, Clean, and Fair**

2

is available for all members of the school community to enjoy

3

incorporates design features to promote Taste Education

4

promotes awareness and growth of Slow Food's Ark of Taste products

This chapter will give beginning school garden leaders the vision and tools needed to design and build a Slow Food school garden. Leaders will learn how to define the vision of their school garden program, how to keep the relationship between design and purpose in harmony, and how to build a garden tailored to the school's special needs and strengths. The importance of geographic diversity and seasonality will be highlighted to ensure that the design is appropriate for a garden in your region. At the end of the chapter is a list of resources of other design and build considerations. After reading this chapter, a leader will know what it means to build a Slow Food garden and will have a plan for building a Slow Food school garden.

School Garden Committee

Successful school garden programs start with a core group of motivated parents, teachers, school staff, and community members who come together under the shared vision of providing students with hands-on opportunities to engage in Slow Food-based food programs. The Garden Committee will be essential for creating the initial vision for the garden program, designing the garden, and implementing the gardening lessons with the students. While the size of the Garden Committee can vary greatly, four to six committed garden team members is generally a good size to get the project started.

It is best to recruit garden team members with a variety of backgrounds and skill sets.

Below is a short list of qualities to look for in potential garden team members when recruiting for the Garden Committee.

- Local Slow Food chapter member or volunteer
- Schoolteacher or curriculum support staff member
- Community or neighborhood volunteer
- Leader or member of the school's Parent Teacher Association (PTA)
- School parent volunteers with passion for gardening or specific skill sets (gardening, mentoring kids, culinary skills, etc.)
- Members of potential partner organizations such as FoodCorps, local farmers, community gardens, landscape architects, garden clubs, Master Gardeners, etc.
- School principal or other school administrator
- Student(s) at the school interested in gardening

As a recruiting tool, consider writing a short description of the proposed garden project that can be used to recruit garden team members through the local Slow Food chapter (website, newsletter, etc.) and through the school's volunteer recruiting process.

School Garden Committee Needs You!

Are you passionate about gardening? Are you interested in teaching kids how to grow their own food and connect with food that is good, clean, and fair?

We are putting together a team of volunteers to help lead a school garden program. We need volunteers with a variety of skills: gardening, working with kids, community organizing, strategic planning, or culinary education.

Please contact us if you are interested in helping to shape the new school garden program.



Defining the Vision of the School Garden Program

Once the Garden Committee has been assembled, the next step is to start defining the vision for the school garden program. A successful school garden project has the vision, goals, and program elements outlined even before the garden is built on the schoolyard. It should be noted that the vision, goals, and program elements may change over time as the capacity of the Garden Committee changes or the interests of the school community grow. The following questions should be considered by the Garden Committee when working on the vision and goals of the school garden program.

PROGRAM QUESTIONS:

What are the goals or mission of the garden? This can be a simple list.

For example, “teach students where food comes from” or “use the garden as a way to teach other subjects, such as science or social studies.” It will be important to refer back to this list of goals when making programmatic decisions. It is helpful to rank these goals in order of importance. The goals: “grow as much food as possible” and “involve children in growing as much as possible” are both great goals but are usually in conflict. Educational opportunities in the garden don’t usually result in the highest yields from the garden. Five-year-olds don’t make the best gardeners! They plant things too close together, stand on plants while watering, and pull carrots too soon. But they are learning the whole time!

How will the students be involved in the garden?

While there are many answers to this question, a priority should be given to the capacity of the Garden Committee. Whatever program elements are decided upon, the Garden Committee must run or at least support the garden program in order for it to be successful. Don’t expect that already overworked teachers will take their classes out to the garden each week without any support from the Garden Committee simply because it is there.

When will the students work in the garden? During the school day? As part of an after-school program?

What will the Garden Committee do to support students working in the garden? Who will teach the gardening lessons? Who is going to run the after-school garden club?

Will classes adopt beds, or will the garden be communally worked? Both approaches have been successful, but be careful not to force a teacher to take responsibility for one of the garden beds.

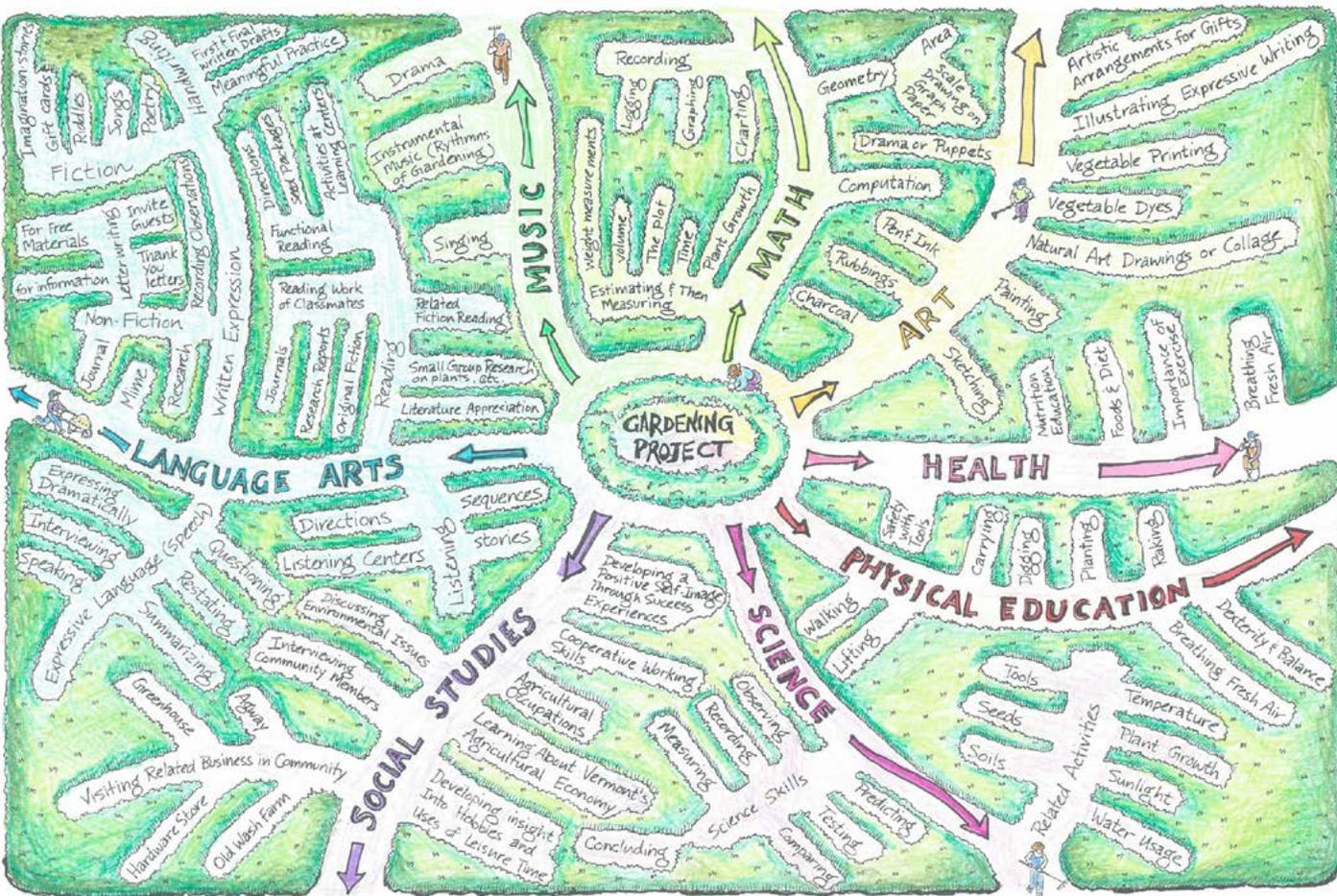
Don't expect that already overworked teachers will take their classes out to the garden simply because it is there.

What will happen to the harvest? Can the students eat it in the classrooms for a snack? Can the harvest be given to the kitchen staff and be prepared for school lunch? Do you want to send some home with the students? Do you plan to sell some at a farmers’ market to make money for the garden program? Do you want to donate a portion to a local hunger-relief nonprofit agency?

How can everyone at the school touch the garden in some way?

How can the garden positively affect each adult and child in the school? Your school garden will be more successful if you invite each staff person to play a role within their program area. For example, get the art teacher on board to work with their students to paint plant-identification signs. Ask the physical education teacher to weave the school garden into their healthy eating unit. A great tool to help brainstorm this topic is the “Why a Garden” example and graphic worksheet designed by the National Gardening Association. It can be found in the resources list at the end of this chapter.

WHY A GARDEN?



PARTICIPANT QUESTIONS:

What age are your student gardeners? The grade level of the students involved in the garden will have an impact on the design of the garden program. An ideal garden for a high school does not look the same as an ideal garden for an elementary school.

Will your garden be a community garden, community-school garden hybrid, or simply a school garden? If you have enough space and community interest, a traditional, rental-plot-based community garden can work well paired with a school garden.

DESIGN QUESTIONS:

What space is available at the school? Is there a site at the school that is well-suited for a garden? (See “site requirements” section below.) What permissions do you need to proceed with the design phase of the garden program?

RESOURCE QUESTIONS:

What are your existing resources? Does someone on your garden team know anyone who owns a soil company? A hardware store? Does your team have any connections to expert gardeners or chefs?

Are there any similar programs nearby? There is no sense in reinventing the wheel. Do a little research to see if other schools in your district have successful gardens. Learn as much as you can from the success of others. Maybe you could form some sort of partnership or network that shares resources and information.

What organization can you partner with? Do a little research to learn if there is a local resource that helps start or maintain school gardens. You may find startup funding, design help, or an existing network of school gardens that you can join.

POLICY QUESTIONS:

What are the relevant local school district or city policies concerning school gardens? This is a great question to ask the organizers of other successful gardens or the principal at your school.

CASE STUDY

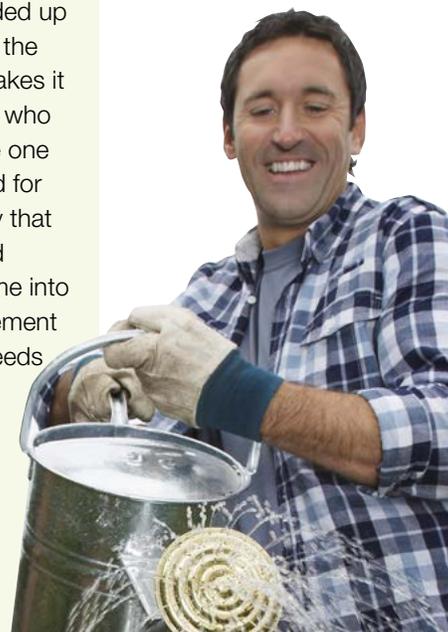
Saints Peter & Paul (SSPP)

Edible Schoolyard, Planning Process

WILLARD BROOKS, SLOW FOOD BUFFALO

The Edible Schoolyard project began when the proposal to build an Edible Schoolyard project at SSPP was accepted by the school board. Our announcement garnered several parent volunteers to help with the project. Our research included reading Alice Waters’ book, *Edible Schoolyard*. We also visited the program at the Giving Garden in nearby Hamburg, NY, at a K-6 school with one garden bed per grade and an educational classroom used for sprouting, transplanting, and various taste demos and educational workshops. Our original vision was to have a six-bed garden focusing on one bed for each of the Grades 3–7, with lower grades participating with in-classroom aspects and garden visits. After proposing various locations for the garden beds to our

church/school management, we were assigned a limited area that decreased the scope of our plans. As such, we ended up with one large, raised bed in front of the school and church, with a lip that makes it easy for small kids to sit on. Parents who pulled together to build the structure one Saturday morning donated the wood for the bed construction. We were lucky that two of our parents were experienced gardeners and put a great deal of time into planning what to plant and the placement of plants. We purchased all of our seeds from Seed Savers Exchange and received a donation of several yards of organic compost blend to fill the bed. All of the focus on making the soil and seeds organic was a bit of a surprise to some, but everyone got on board with the decision.



Garden Design

Now that the Garden Committee has defined the vision of the school garden, it is time to work on the garden design. The following sections will walk you through the major design decisions the Garden Committee will need to make.

SIZE: HOW BIG SHOULD THE GARDEN BE?

In the cool, crisp days of early spring, everyone wants a large garden. In the harsh heat of late summer, a huge garden to tend to might not seem like the best idea. Remember that whatever size garden is built, someone will need to sustain it. To set the budding school garden up for long-term success, it is a good idea to start with a smaller garden area than is available to plant. It is important that the garden program has success in the first year and that the students, teachers, and volunteers celebrate the successes and see the possibilities of growth in the future. If the garden is too large the first year, the Garden Committee may throw up their hands and get discouraged, and the garden program may be abandoned because it is viewed as too much work. If the garden is too small the first year, there may be a little frustration with the lack of growing space. Just remember that the garden can always be expanded in the future. Be sure that there is room to expand the garden, but don't expand until the school gardening program and volunteers can handle the increased workload. Keep the program within the capacity of the Garden Committee and its pool of volunteers to ensure success.

SHOULD WE BUILD RAISED BEDS OR IN-GROUND GARDENS?

Raised beds are usually built with wood or stone to create a small wall or container and then filled with soil that you purchase. In-ground gardens use the existing soil and have no wall around them (perhaps some edging to define the growing bed). In-ground gardens are created by simply removing the grass in a garden area and mixing in some sort of soil amendment (usually compost) to the existing soil. There are positive and negative reasons to both methods so choose the best solution for your situation.

RAISED BEDS	POSITIVE	NEGATIVE
	<p>High soil fertility in year one. Because the soil is “fresh,” it will be very fertile right from the start. There is a great chance of being very successful in year one.</p> <p>Less weed pressure. Because the soil is weed free and is contained by a short wall (the garden box), the weed pressure will be greatly reduced as compared with an in-ground garden.</p>	<p>More expensive. Buying soil and wood or rock to build the beds is more expensive than simply amending the existing soil.</p> <p>The soil in raised beds tends to heat up to higher temperatures and will get compacted over a couple of years, thus affecting its ability to grow plants and produce food.</p>
IN-GROUND GARDENS	POSITIVE	NEGATIVE
	<p>It's cheaper!</p> <p>It is very easy to expand or change your bed design.</p> <p>NOTE: If the choice is an in-ground garden, it is important to do a soil test to make sure the existing soil is not contaminated and that it is fit to grow food in. Most likely the state's agricultural university or extension office will do a soil test for free or for a minimal price.</p>	<p>You will spend more time pulling weeds.</p> <p>You may not be starting with healthy soil. It may take several years of growing and adding compost to improve the quality of the soil.</p>

WHAT SIZE SHOULD EACH GARDEN BED BE?

Whether the choice is in-ground or raised-bed gardening, the size of each garden bed will be important for the success of growing food. Plants grow best in light, fluffy soil that has not been compacted by hundreds of little footsteps, so it is a good idea to make the garden beds small enough that students can easily walk around them instead of through them. Four foot by eight foot beds work well because students can easily reach to the middle from either side, and a small class of students can fit comfortably around the perimeter of the garden.

HOW SHOULD WE LAY OUT THE GARDEN BEDS?

Here the Garden Committee can choose to be really creative or simply line up the beds evenly in a grid fashion. This is a great place to gather input from students. Remember, some of the design/layout options will be limited by the space that is available. Here are a few examples of successful school garden designs.



SEDFIELD ELEMENTARY FRIENDSHIP GARDENS



BILLINGSVILLE ELEMENTARY FRIENDSHIP GARDENS

SAMPLE PLAN: THE DAWES SCHOOL GARDEN OF EATIN'

THE DAWES SCHOOL GARDEN OF EATIN'

A Slow Food in the Schools Project

EVANSTON, IL

RASPBERRY

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TABLES

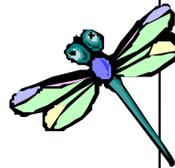
BUTTERFLY
GARDEN



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PRAIRIE
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6



8

RAISED BED
8' x 4'

7



PUMPKIN
PATCH

GATE

TO FENCE OR NOT TO FENCE?

Do you need a fence around your garden? How do you know? What are you trying to keep out? A deer fence looks different from a rabbit fence. Some schools may require that you install a fence with a locking gate from the beginning for student safety, liability, or security reasons. If there is no requirement to install a fence, it may be better to wait a growing season to see if you really need a fence. It is better to lose a few crops to rabbits in the first year than to pay the money for a six-foot deer fence that doesn't keep rabbits out anyway. It is better to know what animals are threats to the garden and then design a fence to keep them out. Or, perhaps the first growing season may show that there is not much of an animal-pressure issue and no fence is needed.

LOCATION OF THE GARDEN

There are many considerations when looking at the available space on the schoolyard and trying to fit in a garden that will support the vision and goals of the Garden Committee. Like any decision with multiple variables, there needs to be a list of priorities that are more important to the Garden Committee, while some choices are less important. In the following discussion, some of the different factors affecting the placement of the garden in the schoolyard will be considered.

Size. There are a couple of approaches to deciding how large of a garden is needed. The first tactic would be to mark off the largest space available on the schoolyard for a garden with cones or string and then see how many beds can be fit into the space. Alternatively, draw up an ideal garden design on a piece of grid paper, determine its optimal size, and look at the schoolyard for a space that can accommodate the desired garden. In either example, involve some students in determining the size of the garden. Provide the students with some standard parameters (e.g., four foot by eight foot beds, three-foot pathways, compost area, work table) and allow them to fit these pieces into the marked-off



space or on the grid paper. As discussed earlier, try to capture as much space on the schoolyard as possible so that the garden can expand in the future.

Ask for student input in determining the design of the garden.

Level. Not only is it important to find a large enough space on the schoolyard for the garden but it is important to find a rather level area for the garden. Most schoolyards are flat, but it is possible that the proposed area is a patch that is not desired by the PE program or by athletics because of a slope. Gardens can deal with some slope, but try to minimize the amount of slope.

Drainage. Part of the consideration of slope is: how does the proposed space drain when it rains? Vegetables grow best in well-draining soil. Be sure to observe the prospective space after a rain to see if there are puddles or a temporary stream running through the space.

Sunlight. To have a very successful garden and the ability to grow all types of plants, you need a minimum of six hours of sunlight per day, while eight hours per day is preferred. If your only gardening spot gets slightly less than six hours of sunlight per day, you might still be able to grow leafy vegetables like lettuce and spinach that prefer cooler temperatures.

Water access. The availability of water access is often one of the largest determining factors in where to place a school garden. If the budget is limited, it will be important to pick a spot that is close to an exterior hose hookup at the school. Alternative water sources like rain barrels are possible in some municipalities, so check with your local water officials. Even if you are planning on installing a rain barrel (more on this later), you still need to have access to a hose that is hooked into the school's plumbing in case your garden needs more water than the rain barrel holds or you experience a drought.

Soil quality. Since students are considered an at-risk population for health issues, it is advisable that any new garden site be tested for contaminants in the soil. Even if the plan is to install raised beds and add soil from other sources, a soil test will inform the Garden Committee of any risks from the soil.

Safety issues. School gardens have many inherent safety risks when you consider the major users will be young children and that the garden generates much activity. When designing the garden, go over the plans with the eye of a risk management officer to identify potential dangerous situations. Things to watch for include: sharp corners, exposed nails and screws, objects that can be climbed, uneven surfaces, holes, and places to hide.

Current use. What is the school currently using the space for that they would have to give up? In the school's eyes, is the garden's benefit worth the loss of this space for other activities?

Access for all students. The location of the garden needs to take into consideration the access for students with physical disabilities. Are there sidewalks to the garden space, and is the space relatively close to exits from the building? And once the garden is being constructed, proper materials on the pathways are affected by ADA rules. It is ideal to use materials like crusher fines for the pathways so that wheelchairs and crutches are able to traverse the pathways to different beds. See picture of a table bed at a Friendship Garden in Charlotte that meets ADA height requirements.

Line of sight. One of the responsibilities of the principal is to ensure the safety of all students when they are on school grounds. When considering the placement of the school garden, the principal will want direct lines of sight from the school building to all points in the school garden. The garden should not be tucked away behind the school parking lot or behind a berm or hill where students could hide or predators could conceal themselves.

Permission. Once the Garden Committee has found an ideal spot on the campus, the next step is to approach the principal for permission to use the space. The principal will likely have to go to the Facilities Department for the district to seek their blessing for the placement of the garden. Facilities will know about any five-to-ten-year plans for the school and whether there are construction plans for the schoolyard.



Additional Features for Your School Garden

Consider incorporating a few of these additional garden features in your design. They are not only great companion activities for garden activities with children, they can also be used as increased educational opportunities for the students. You can choose to add these features during the initial design and build or anytime in the garden's life.

Compost Pile. What do you plan to do with plant refuse during the length of the growing season? Consider building a compost pile for your garden. Compost piles can be located in the shade or the sun. A corner spot in the garden works well. Materials used to make a compost pile can incorporate lessons such as recycling or re-using. Old pallets do a nice job as the walls of a three-bin compost system.

Rain Barrel. Installing some sort of rain collection system is a great option for school gardens. Before you do, be sure to check your local laws and city ordinances to see if rain collection is allowed (in Colorado, saving rainwater has not been allowed since water laws were created in the 1850s). Rain barrels reduce your water bill and can be used to teach kids about water conservation and water pressure. The easiest way to install a rain barrel at a school is to tap into a downspout from the gutter system. It is a good idea to build a small platform for your rain barrel. The higher the rain barrel, the more water pressure available due to gravity. The rain barrel will need to be as close to the garden space as possible to reduce the distance needed to haul the water.

Irrigation System. If you are installing a larger garden space or if no one will be around in the summer to water, it may be advisable to install a drip or spray irrigation system. Irrigation systems are not necessary but can make watering the garden much easier. You can choose to install a timer (added expense) or simply turn the system on and off manually. There are many different types of irrigation systems for gardens. Chances are your local hardware store will have drip irrigation supplies and someone who can walk a Garden Leader through the design/setup. Or do some online research to pick the right system for your garden.

Season Extenders. Season extenders are different pieces of garden equipment that can be used to make the growing season longer. Some season extenders allow for more time at the beginning of the growing season, and some provide more time at the end of the growing season. Examples include: row covers, cold frames, and greenhouses. Gardens in the South are able to grow almost year-round, so it may not be worth the investment in season extenders. In the northern climates with a short growing season, season extenders are a great option for making sure crops reach maturity. The Special Projects chapter will have a lengthier discussion of season extenders.

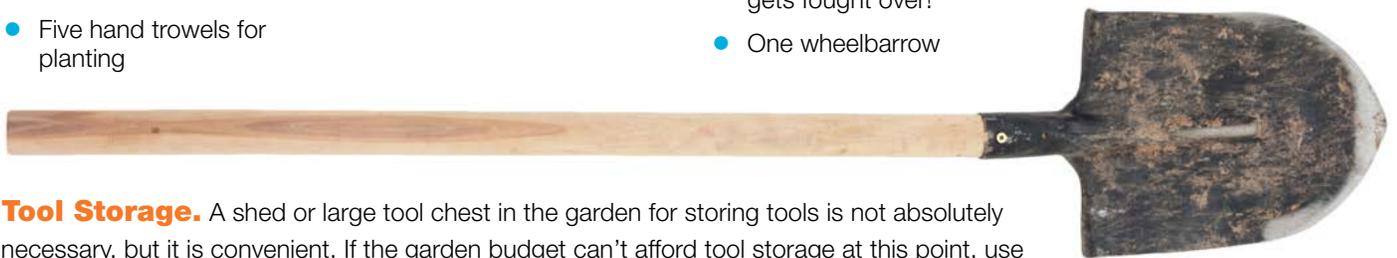




Garden sign. Consider making a sign for your garden. Along with the name of the garden, you could choose to include an email address or Web address for people interested in learning more or to volunteering. You might also want to include some sort of recognition that this is a Slow Food garden and thank any sponsors in some way. Consult with your school art teacher about the garden sign. Is this something their art class could make?

Tools. The garden program will need at least a few basic tools. As the garden grows, the Garden Committee may want to add more tools to the collection or ask volunteers to donate them. Here is a short, relatively inexpensive list that will get the garden project started.

- Gloves: you will need several pairs of various sizes
- Two or three long-handled shovels
- Five hand trowels for planting
- One flat metal rake (bow rake)
- One hose that easily reaches all areas of the garden
- Five or six watering cans. When gardening with young children, many watering cans is way better than one hose that gets fought over!
- One wheelbarrow



Tool Storage. A shed or large tool chest in the garden for storing tools is not absolutely necessary, but it is convenient. If the garden budget can't afford tool storage at this point, use a rolling cart that can hold all the garden tools and can be stored in a closet inside the school building. Some school districts do not allow sheds to be built on school property. In this case, a large metal tool chest works well. Be sure the chest has locking capabilities so that the tools are safely tucked away from inappropriate use or can't be stolen.

Finding Materials for Your Garden Build

Once the design of the garden is complete and all the initial features of the garden have been identified, it is time to construct a materials list for the garden project. Divide materials into several categories, including:

1

things needed for the garden build, including beds, pathways, and fencing

2

small pieces to be used in the garden, such as tools, tables, benches, cages, and planting supplies

3

educational materials such as workbooks, science kits, posters, and weather station

Of course, all these materials will put a stress on most garden budgets, so the Garden Committee needs to be creative in finding funding streams or donations to obtain the supplies.

Here are some ideas of where the Garden Committee can look for the needed materials.

Any connections to local businesses on your school Garden Committee?

Does anyone on the Committee know someone who works at a hardware store, lumberyard, nursery, etc.? Would they be willing to help negotiate a donation or discount?

Be creative in finding funding streams or donations to obtain supplies.

Even if the Committee does not have a personal connection to a local store, it may still be beneficial to ask for an in-kind donation of supplies needed to build the garden.

Often store managers at large hardware stores have a certain amount of discretionary gift certificates for small amounts that they can give away. If they can't help with a donation, ask them for a discount. If they do give a donation or discount of some kind, be sure to follow up with them after the garden build with a thank you note and a picture of the garden. They will be more likely to help the garden project in the future.

Negotiate with a local business a standing discount for materials that will be used often.

This is a great strategy for saving garden budget money on supplies needed each growing season, such as seeds and compost.

Buying in bulk when helpful.

Depending on the size of the garden, it may be wise to purchase garden soil or compost by the pickup truckload or even dump-truck load. Several cubic yards of soil will be much cheaper purchased in bulk than purchased in bags. Soil companies can deliver using a dump truck but usually have a minimum amount and will charge a delivery fee. A cheaper way to go is to round up a bunch of friends with pickup trucks.



Finding Volunteers for Your Garden Build

All of this work has now led up to the big day when the garden will be built. Unless there is a large budget to hire a professional crew to build out the garden, it will be necessary to bring in volunteers from the school community as the labor force. There have been many great examples of volunteers building successful school gardens. Below is a list of groups to approach about volunteering for the garden build day. Before beginning to recruit volunteers, estimate how many volunteers will be needed and divide the work project into shifts with specific skills and subprojects that will be completed in the designated time slots.

School garden team

The build day is a good way to get the spouses involved

Your Slow Food chapter

Members like the opportunity to volunteer on a one-day basis

Students at the school

Involving the kids will build buy-in to the garden program

School PTA Volunteers and fundraising are their specialty

Nearby faith groups

also looking for one-time volunteer large group opportunities

Volunteer organizations in your town

sometimes have lists of businesses that are looking to engage their employees in volunteer opportunities

Other school partners?

The school may already have a church, civic group or business that provides volunteers for them.

Businesses that donated to the project

If a local business wants to donate supplies or funds to the garden build, ask them if they would like to supply volunteers as well. Many businesses want their employees to volunteer in the community as well as give in-kind or monetary donations.

Budget: How much is all this going to cost?

The budget for a garden project will depend on many different factors like the size of the garden, whether a fence is required, the amount of any donated materials, and if you are planning to include any additional features, etc. For a sample budget see the following page. There are two general categories for your garden budget.

ONE-TIME GARDEN BUILD COSTS

soil, wood, or stone (if building raised beds), fence (if needed), hose, tools, shed, etc.

RECURRING COSTS

compost, mulch, seedlings, water (the school may pay for this, but it is a good idea to confirm this in the planning stage). Recurring costs for a garden can be quite low, but it is a good idea to plan a small yearly budget to cover the costs.



SAMPLE BUDGET

Estimated Costs

Cooking Supplies

Mobile food cart	\$ 350.00
Induction burners (2)	\$ 450.00
Kitchen supplies	\$ 375.00
Paper goods	\$ 100.00
TOTAL KITCHEN	\$1275.00

Gardening Supplies

Seeds/plants	\$ 55.00
Plant propagation	\$ 50.00
Soil	\$ 150.00
Science supplies/soil test	\$ 250.00
Compost bins	\$ 100.00
Propagation mats (2)	\$ 70.00
Grow lights (one 3-shelf)	\$ 175.00
Garden tools	\$ 150.00
Wheelbarrow	\$ 50.00
Drip supplies	\$ 250.00
TOTAL GARDEN	\$1300.00

Improvements

Water	\$ 500.00–\$2000.00
Fence (30x50) installed price	\$4000.00–\$5000.00
Mulch	\$ 100.00–\$ 500.00
Manure	\$ 75.00–\$ 200.00
TOTAL IMPROVEMENTS	\$4675.00–\$7700.00



What should be grown in the garden?

Hooray! The garden is built, now what? It is time to decide what to grow. The crops that can be grown will depend somewhat on the local climate and growing season as well as the native soil structure. It is a good idea to do a little research about what typically grows well in the local area. Here is a list of some considerations when planning what to grow in the school garden.

Slow Food USA Ark of Taste (website link in the resources section at the end of this chapter). This is a list of over 200 delicious foods that are in danger of extinction. Help ensure that we don't lose these varieties forever by growing a few of the vegetables on this list.

Heirloom Varieties. Heirloom varieties of vegetables usually taste much better than conventionally grown varieties and often look cooler, too! Kids will love to grow purple tomatoes.

Ask the students what they want to grow. Student gardeners will be more invested in gardening from the beginning if they get some say in what to grow. Let them choose what they like to eat or let each student pick one thing out of a seed catalog.

Grow root crops. By far the most fun thing for kids to harvest are root crops. Harvest day is like a treasure hunt! Plant potatoes, carrots, turnips, radishes, beets, etc.



Maintenance in the Garden

The garden will require regular maintenance throughout the year in order to flourish. Gardening is a seasonal activity. The growing season will be your busy time for garden maintenance and gardening lessons with the students. The winter will be your time to reflect on the successes of the last growing season and plan for the upcoming growing season.

DURING THE GROWING SEASON	DAILY OR EVERY OTHER DAY	WEEKLY	MONTHLY
	watering, pulling weeds	⋮ harvesting, mulching (as needed)	⋮ replanting as needed ⋮

Summer vacation can pose a challenge for school gardens because a good chunk of the garden work needs to be done during the summer. Make sure that there is a plan for maintaining the garden through summer vacation and other breaks. The Garden Committee might want to engage a summer-school program at the school or recruit more community volunteers to help during summer break. School gardens in the South have the option of simply not planting a summer garden. Because of the South's long growing season, school gardens can plant large spring and fall gardens and avoid the summer completely if need be.

CASE STUDY

Student Summer Watering Jobs

ANDREW NOWAK, SLOW FOOD DENVER

Schools always seem to struggle with a solution to keep the gardens watered and weeded over the course of the summer when there is very little activity in the school. In most cases, the facility manager and his/her staff are not willing to water the garden in fear that they will do a poor job or just because they are busy with other duties inside the building. With no classes or activities at the school, trying to get someone from the school community to commit to a regular watering schedule seems daunting.

In Denver, Slow Food Denver garden leader Andrew Nowak solved the summer maintenance issue by using an incentive that tends to attract students of all ages. Andrew devised a summer schedule of two-week rotations that required at least one family to commit to watering and weeding the garden. To attract families to this job, Andrew posted in the school newsletter a job opportunity for students. For a \$25 stipend, a student could sign up his/her family to care for the garden. Of course, the student had to get his/her parents' permission and commitment to be involved. But in most cases, if the student expressed interest in the two-week position, the parents were willing to indulge the child's wishes. Andrew has had this program in effect for five years, and each year more families sign up than are needed.

Andrew posts the job and stipend opportunity around mid-April with a signup deadline for mid-May. Families that sign up early get first pick for their two-week session. If more families express interest than are needed, Andrew selected a few to be backups in the event a family has to pull out. Once the summer season started, Andrew would conduct a training to show families how the watering system works, what kind of plants and their watering

needs are found in each bed, and how to weed and compost the materials coming from the garden. Andrew estimates that a family will spend one hour per day in the garden completing these responsibilities.

Overall, the stipend program works very well. The families first complete their two-week session, and then the next family starts. Andrew then processes the cash stipend for the student and writes a thank you note to the family. The families are happy to help out and to be part of a valued program at school. In some cases, these summer families also later step out to volunteer for other garden needs. Andrew still checks on the garden from time to time during the summer, but with the stipend program, he does not need to be there every day.



CASE STUDY

School Garden Alliance

ANDREW NOWAK, SLOW FOOD DENVER



Now that there is a school garden in the district being supported by a Slow Food chapter, what are the next steps to increase the number of gardens while not putting too much pressure on the Slow Food chapter? Many Slow Food chapters will share that once one school garden is having success, there will be other schools that will approach Slow Food to help get other gardens started. Like potato chips, it will be difficult to just have one garden.

Slow Food Denver had just this “problem” six years ago as the number of gardens in Denver Public Schools started to outpace the size of the Educational Committee within Slow Food Denver that was responsible for the Seed to Table School Food Program. Recognizing that the number of school gardens was going to put too much strain on the Educational Committee, members Gigia Kolouch and Andrew Nowak devised a new format to support school gardens. They formed the School Garden Alliance between Garden Committees and Slow Food Denver to allow a small number of Slow Food leaders to support a large number of school gardens.

The Alliance represented a shift in managing the school gardens from a direct “put Slow Food volunteers on the ground” approach to more of a Resource Approach and a membership format. Currently, the Seed to Table School Garden Alliance allows Slow Food Denver to provide resources

such as workshops on how to garden and cook with students, free seeds, plants and materials from local businesses, a source of volunteers for garden projects, connections to the higher levels of District Administration (Food Service, Facilities), and community partners like Whole Foods and Chipotle.

Since the inception of the Alliance, the number of school gardens has grown to over 60 working with Slow Food Denver while the Seed to Table leadership fluctuates from two–three people. The Garden Leaders at each school are able to meet once a month at the Seed to Table workshops to be trained for different aspects of a school garden program, meet new volunteers interested in being involved, and to network with each other to hear Best Practices. The Alliance is able to provide seeds and transplants donated from local nurseries as well as arrange for wholesale-priced herb plants. Gigia has developed a team of culinary professionals who will be available for cooking classes in the school. Andrew works with Food Services to strengthen the Garden to Cafeteria program so that schools can use the garden produce in the lunch services. All of these benefits would be nearly impossible for a single Garden Leader to arrange on his or her own. The strength of the Alliance is the number of gardens, the strong connections to the District and community, and the networking across the different gardens.

Resources

Books

- Bartholomew, Mel. 2013. *All New Square Foot Gardening, Second Edition: The Revolutionary Way to Grow More In Less Space*. Minneapolis, MN: Cool Springs Press.
- Bucklin-Sporer, Arden, and Rachel Pringl. 2010. *How to Grow a School Garden: A Complete Guide for Parents and Teachers*. Portland, OR: Timber Press, Inc.
- Jaffe, Roberta, and Gary Appel. 2007. *The Growing Classroom: Garden-Based Science*. South Burlington, VT: National Gardening Association.

Websites

- California School Garden Network www.csgn.org
- The Center for Ecoliteracy: www.ecoliteracy.org
- The Edible Schoolyard Project: www.edibleschoolyard.org
- Friendship Gardens: www.friendship-gardens.org
- Getting Started: A Guide for Creating School Gardens as Outdoor Classrooms: www.ecoliteracy.org/downloads/getting-started
- Life Lab: www.lifelab.org
- The National Gardening Association: www.garden.org and www.kidsgardening.org
- School Garden Wizard: www.schoolgardenwizard.org
- Slow Food USA: slowfoodusa.org
- Slow Food USA Ark of Taste: www.slowfoodusa.org/index.php/programs/details/ark_of_taste/
- Square Foot Gardening: www.squarefootgardening.com
- “Why A Garden” graphic from *The Growing Classroom: Garden-Based Science*
<http://www.sfdseedtotable.org/wp-content/uploads/2011/03/StartingaGarden.pdf>