



Victory Gardens
San Diego

REGIONAL GARDEN
EDUCATION CENTER



GARDENING 301: How to Start and Sustain a School Gardening Program

COUNTY OF SAN DIEGO



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WELCOME TO YOUR REGIONAL GARDEN EDUCATION CENTER COURSE!

HEALTHY WORKSSM
VICTORY GARDENS SAN DIEGO
REGIONAL GARDEN EDUCATION CENTERS
GARDENING 301: HOW TO START AND SUSTAIN A SCHOOL GARDENING PROGRAM

Victory Gardens San Diego (VGSD) is a project of San Diego Roots Sustainable Food Project. Our mission is to help people start growing their own food through collaborative garden builds, hands-on garden education and community outreach.

VGSD has helped start dozens of gardens throughout San Diego County, including several school and community gardens. VGSD offers ongoing garden education classes and has started many participants on their way toward homegrown food. VGSD garden education participants and teachers make up a growing network of gardeners that you can tap into or become a part of at anytime.

Healthy WorksSM is helping support the next phase of garden education in San Diego County. Healthy WorksSM is a program of the County of San Diego Health and Human Services Agency (HHSa), funded by the federal Centers for Disease Control and Prevention through the American Recovery and Reinvestment Act (ARRA). In partnership with the University of California San Diego (UCSD); San Diego County Childhood Obesity Initiative, a project facilitated by Community Health Improvement Partners (CHIP); and VGSD, Healthy WorksSM is establishing community-based hubs for basic, school, and community garden education.

The Regional Garden Education Centers (RGEc) program is designed to create central establishments for the development of garden knowledge and expertise. The RGEc program is modeled after the Victory Gardens San Diego (VGSD) "University of Gardening" or "UGardening" education courses and includes garden courses on community garden management and school integration in addition to basic gardening.

VGSD is partnering with agencies countywide to train staff and volunteers at regional sites to deliver RGEc courses and establish gathering places for garden knowledge and expertise. After training, VGSD will monitor and certify each site to deliver the RGEc curriculum. It is our hope that these VGSD-certified RGEc sites spark dynamic conversations between local agencies and community residents on the role gardens can play in creating a healthy, more sustainable future. RGEc sites will connect residents interested in the local food movement and provide hands-on garden and project planning experience. Additionally, the RGEc sites selected, trained, and funded through Healthy Works will host regional tool lending libraries that allow residents to borrow tools for garden projects in the community or at home.

We invite you to attend one or several classes at your local RGEc site. Ask questions. Share garden stories and resources, and get to know neighbors with a similar interest in growing healthy communities. A formal avenue for feedback will be offered at the end of each course and ongoing feedback is also welcomed.

In good health,

The Regional Garden Education Center Team



a project facilitated by:
COMMUNITY HEALTH
IMPROVEMENT PARTNERS
making a difference together



Made possible by funding from the Centers for Disease Control and Prevention, through the County of San Diego in partnership with the University of California San Diego.

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We thank all those that contributed to this manual. We especially want to thank Community Health Improvement Partners (CHIP); the San Diego County Childhood Obesity Initiative (Initiative), a program facilitated by CHIP; the San Diego Community Garden Network; Resource Conservation District of Greater San Diego (RCD); and San Diego Master Gardeners for lending the support of their staff, consultants, and volunteers to the development of this manual; a sincere thank you to San Diego Community Garden Network's Judy Jacoby; Master Gardener Jerry Louis; RCD's Diana Bergman; Terri Hughes-Oelrich; Michelle Cox; and Healthy WorksSM/CHIP/Initiative staff JuliAnna Arnett and Erica Salcuni and expert consultant Mindy Swanson. We would like to extend a special thank you to Lauren Shaw, Victory Gardens San Diego / San Diego Roots Sustainable Food Project, who researched, compiled, and wrote the content for this manual.



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GARDENING 301: **HOW TO START AND SUSTAIN A SCHOOL GARDENING PROGRAM**





CONTENTS

Introduction: Sustainability as the Guiding Principle	11
Guiding Principles	
Defining Sustainability in a School Garden Context	
Lesson 1: Making the Case for School Gardening Programs	13
History of School Gardens in the United States	
Promoting the Garden to School and Community	
Examples of Existing Successful San Diego School Gardens	
Garden Highlight: Down to Earth Garden	
Lesson 2: Building a Garden Leadership Team	21
Asset-Based Community Development as a Method for Team Building	
Steps to Take to Recruit and Retain Team Members	
Garden Highlight: Allen Elementary School	
Lesson 3: Garden Planning and Design	27
Overall Principles to Guide Planning	
Design Process	
Garden Elements	
Ongoing Maintenance	
Garden Highlight: VIP Village Preschool	
Lesson 4: Financially Sustaining your Gardening Program	33
Guiding Principles	
Funding Sources	
Way to Request Funds	
Garden Highlight: The Gecko Garden	
Lesson 5: Community Partnerships, Volunteers and Joint Use	37
Types of Possible Partners	
Joint-use Agreements	
Considerations for Using Volunteers	
Garden Highlight: Albert Einstein Academies Charter School	
Lesson 6: Curriculum and Outdoor Class Management	43
Gardening to Teach All Subjects	
Gardening to Address State Learning Standards	
Scheduling and Rules for Garden Use	
Garden Highlight: Solana Santa Fe School	
Lesson 7: Before- and After-school Garden Clubs	49
Tips for Program Staff	
Garden Highlight: Healthy Hawk Garden	
Lesson 8: Gardens in the Wellness Movement	53
Using Garden Produce in the Cafeteria: Permissions and Strategies	
Composting Cafeteria Waste	
Food and Garden Celebrations	
Using the Garden to Promote Farm-to-School	
Garden Highlight: Alice Birney Elementary	
Appendix	
1. Plant Good People and Cultivate Relationships: How School Gardens Sustain their Programs	57
2. Benefits of Gardening for Children; Fact Sheet #3	63
3. Let's Go Local: Recommendations for Linking Locally Grown Food, School Gardens, and Joint-use Agreements for School Wellness Policies	65
4. Joint-use Gardens: Building Community, School by School	69
5. Conditional Approval of a Culinary Garden Food Source for a Regulated Food Facility	71
6. Flow Chart: How to Start a School Gardening Program	
Key Links on School Gardening	
San Diego Master Gardeners: www.mastergardenerssandiego.org/schools/schools.php	
California School Garden Network: www.csgn.org	
California Ag in the Classroom: www.cfaitc.org/index.php	
National Gardening Association: www.kidsgardening.org	

COURSE INTRODUCTION

Welcome to your training on starting and sustaining your school gardening program!

The purpose of this curriculum is to introduce you to general approaches and strategies for starting and sustaining a school gardening program. A successful school gardening program involves a variety of people including teachers, students, parents, and sometimes community members and agencies who have an interest in creating an outdoor classroom where learning of all kinds can take place. The goal of this course is to equip you with the knowledge and resources to help you find the allies you'll need to design and sustain a gardening program that works for your school.

The Guiding Principles of this curriculum are as follows:

1. School gardening programs should be built to benefit students as a primary goal, but will likely have positive impacts on teachers, school/afterschool staff, parents, and the greater community.
2. All garden planning should be done with the goal of creating a long-lasting program.
3. The strength of a gardening program comes from welcoming a wide range of partners and partnerships.

1. School gardening programs should be built to benefit students as a primary goal, but will likely have positive impacts on teachers, school/afterschool staff, parents, and the greater community.

School gardening programs ultimately enhance the education of student learners. Life Lab Science Program founding director Roberta Jaffe summarized the benefits to students well in her forward to "The Growing Classroom":

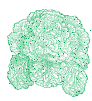
"[Garden-based learning] nurtures children's curiosity and desire to explore the world. It also prepares children for the future by helping them ask relevant questions; develop processes for thinking and searching for answers; and communicate and work cooperatively. As students learn and apply basic academic skills in the garden, they incorporate learning processes that help them be informed, knowledgeable, responsible citizens."

However, students are not the only ones who benefit from gardening programs. The foundation of a strong garden program is an active team of garden program supporters and leaders, and these people often benefit as well. In recruiting help for a gardening program, you'll want to be able to convince them of the benefits to students, themselves and others.

2. All garden planning should be done with the goal of creating a long-lasting program.

We often use the word "sustainable" in describing a strong garden program. This word simply means the program has the ability to exist, thrive, and serve the target audiences for many years. This curriculum is designed to help you build a garden that is set up to succeed for the long term. All too often a great school garden is started by a lone parent or teacher, even supported by the administration, yet the garden goes fallow after the garden champion leaves the school. This is a great loss considering the hard work necessary to start a garden program and the benefits it provides to the school and community. Sustainability is therefore a primary goal in all aspects of this curriculum and we will revisit this concept repeatedly.





3. The strength of a gardening program comes from welcoming a wide-range of partners and partnerships.

A school garden program cannot be built and maintained by one or two champions alone. It is necessary to create collaboration among a variety of groups, such as parents, students, teachers, administrators, custodial staff, food service staff, and community members. By actively involving representatives from each of these groups in all stages and aspects of garden program planning, you will create a garden program that everyone can feel proud of and connected to. In addition, you'll need a variety of garden program leaders to carry out the various tasks and avoid burnout on the part of any one person. We'll give you suggestions to help you include, recognize, attend to and benefit from the involvement of these different groups at every stage of garden development and maintenance.

Course Overview

In Lessons 1 and 2, we'll give you information on garden program benefits, community-building techniques, and successful school gardens that you can emulate. These existing sites can help you identify gardening program benefits, partners, and strategies for gaining support and involvement. In Lessons 3 and 4, we'll get into the details of creating and sustaining the garden itself, through fundraising and maintenance. In Lesson 5, we'll discuss involvement of the community and introduce the idea of joint-use gardens, i.e., gardens that provide some plots for school use and some plots for community use. Finally in Lessons 6, 7 and 8, we'll teach you strategies for making the garden a key part of the school environment, by connecting it to the classroom, the cafeteria, and after school programs.

Activity Note:

One helpful homework assignment would be for participants to do some research to find and read their own district's wellness policy and/or school garden policy. Wellness policies aren't covered in this manual until the last lesson, but you'll want time for participants to do this research and bring it back to the group for discussion on what they find.

Reference

1. Jaffe, R. and G. Appel. 2007. *The Growing Classroom: Garden-Based Science*. South Burlington, VT: National Gardening Association.

LESSON 1

Making the Case for School Gardening Programs

Imagine if every child in the U.S. was taught to grow food from seed to harvest, if resources were provided to ensure that parents could model these same garden lessons at home, and if gardens were located in nearly every school and community in the country. This is exactly the approach the federal government took in 1917 with the launch of the U.S. School Garden Army (USSGA). This national program was designed to address and reduce concerns that youth living in increasingly urban populations were losing their agricultural roots and to alleviate production pressures placed on farmers to produce food for both the general population and those serving abroad in WWI. This initiative integrated garden education into ALL subject areas and even supported gardening activities at home. By the end of WWI, the USSGA touted several million student members and 13,000 gardens in Los Angeles alone! The idea of school gardens as sites for food production, with important educational benefits, is not a new one.

School garden programs can have many benefits for all parties involved - not just students. Most likely, you're taking this course because you already recognize the benefits to children, but you may not have thought about all the benefits to others, and how your effort can be helped by demonstrating those benefits to potential collaborators. Brainstorming the potential benefits will not only help you focus your goals and effort, but it will help you present the project positively to potential collaborators, participants, funders, etc, with a variety of benefits that might catch their eye. In this lesson we outline potential benefits for various groups of people, and provide a table of great school garden examples in San Diego that you can visit and emulate.

Learning Objectives

1. Know the various benefits of a school gardening program provides to students and others.
2. Increase your awareness of successful school garden models around San Diego County.

Benefits

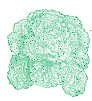
A school garden program is ultimately developed for the benefit of students at the school. Research has shown that school gardens can have many benefits for students, including influencing healthy eating habits, fostering understanding in multiple academic subjects, and cultivating environmental stewardship, self-esteem, improved collaboration skills and responsibility (CSGN 2006; U Colorado 2009). The authors of these two resources and others (see references below) have gathered results from many academic studies on the effects of school gardens, so they are good resources for data of all kinds to support your case.

Additionally, it is valuable to identify how a school garden program supports the efforts of and benefits teachers, administrators, parents, and other community members. Support from each of these groups is necessary to build a strong, sustainable gardening program. You will need to be able to illustrate benefits to each stakeholder group as you recruit support.

For teachers the garden is:

- An applied learning lab where they can teach subjects in the areas of science, math, social studies, and language arts. The garden is an outdoor classroom to reinforce lessons or apply concepts and ideas learned inside, and help students make connections between disciplines that can seem unrelated. Integration across disciplines has been shown to make learning more meaningful for students (U Colorado 2009). It is also a place for cross-cultural learning (CSGN 2007).
- An opportunity for physical activity. The garden can be a place to get exercise while learning math, science, art, etc. According to an Active Living Research brief, a study found that at schools that increased school-based physical activity time, students had improved grades and test scores, even though less time was spent in the classroom.





- A break from the indoor environment to provide variety during the school day. Garden activities can help teachers break up the school day so students remain motivated, enthusiastic and attentive.
- An opportunity for volunteer teaching assistance. Especially in the case of a joint-use garden, or an involved community partner, teachers benefit from the presence and knowledge of experienced garden volunteers who might also offer opportunities for positive intergenerational learning (U Colorado 2009).
- A positive, productive and often therapeutic space for helping all students, including at-risk and/or special needs students in particular, to learn teamwork and collaboration skills (CSGN 2007).
- A resume-builder. Experience teaching in a school garden can help teachers get future teaching jobs with a garden component.

For School Administrators the gardening program:

- Contributes to district educational goals and the development of dynamic and thriving learning environments by providing experiential learning opportunities.
- Contributes to the implementation of a school district's wellness policy. All school districts that participate in the USDA meal program are required to set goals for nutrition education, physical activity and other school-based wellness activities on campus. Many schools are expanding on these district wellness policies to ensure the school environment is a place where students can develop skills for lifelong wellness. The school garden is a natural fit for nutrition education, healthy food promotion, and fun physical activity, all of which are typically included in wellness policies.
- Attracts quality teachers to the school—successful gardens can help attract enthusiastic, wellness-minded teachers to the school. One principal at a Denver Public School with a garden started by Denver Urban Gardens (DUG) commented to DUG that almost all teachers who contact the school for potential jobs mention that they want to teach in the garden.
- Attracts new families, particularly neighborhood families, to enroll in a local school. For parents and families who have an interest in gardening, environmental issues, and/or healthy food, the garden can be their entry point in becoming volunteers and advocates for the school.
- Can be a financial benefit to the school if the garden is attractive to grant and individual funders. In addition, a successful, beautiful garden can improve the overall reputation of the school, which can have positive financial impacts.

For parents a garden is:

- A way to get involved with their children's education. Research has shown that parental involvement, which is beneficial for students, is greater at schools with garden programs (U Colorado 2009).
- A safe, healthy place for before- and after-school activities. The garden can be an alternative to otherwise unstructured before and after-school time, helping parents know that their children are safe and in a positive space.



For community members a garden:

- Creates a space for community education. Schools that allow community gardeners onsite, particularly during school hours, can interact with students and impart their gardening knowledge. Or they might become even more involved and assist teachers more formally. School and community gardeners who garden after school or on weekends educate other community members about food production methods, composting and a host of other gardening topics.
- Provides a beautiful neighborhood attraction. The school garden can be a source of beauty and pride for a neighborhood; a place to gather and build relationships with neighbors. It can even help reduce crime by encouraging a positive outdoor presence by community members.
- Provides land for growing food. Joint-use gardens (details in Lesson 5) provide community members with a safe place to grow food and an opportunity to invest in the community. For community groups looking for a community garden space, schools often provide a very attractive option.



ACTIVITY 1

Allow time for a brainstorming session on the additional benefits of school gardening programs.

Successful San Diego School Garden Examples

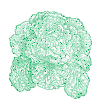
There are numerous school gardens across the county of San Diego and many of these gardens have stood the test of time. Often this is because the garden “champions,” enthusiastic parents and/or teachers who started the gardens, were able to build relationships and create systems for sustainability. In San Diego County, there are several common elements in a successful gardening program:

- Partnerships with community organizations such as the San Diego Master Gardeners, Solana Center for Environmental Innovation, International Rescue Committee, local garden clubs, etc.
- Strong parental involvement and support through the Parent Teacher Association (PTA) or Parent Teacher Organization (PTO)
- Active involvement of multiple teachers using the garden for academic subjects
- Strong administrative support, particularly from the principal
- Inclusion of the garden in the school district’s wellness policy

There are several resources for learning more about the commonalities in a successful garden project. The supplement “Plant good people and cultivate relationships: How school gardens sustain their programs” by Diana Bergman provides local examples of some of the relationships that have helped sustain gardening programs across the county. Additionally, below is a list of exemplary San Diego County-based school gardens. It provides a brief description of successful garden programs and the organizer’s contact information. Visiting and seeing what other schools have done in space utilization, plant choices, and programming is one of the best ways to get ideas for your school gardening program. It is strongly encouraged that you take field trips to visit other sites! The San Diego Master Gardeners School Program web site also provides photos of existing school programs and resources for school gardeners: www.mastergardenerssandiego.org/schools/schools.php.

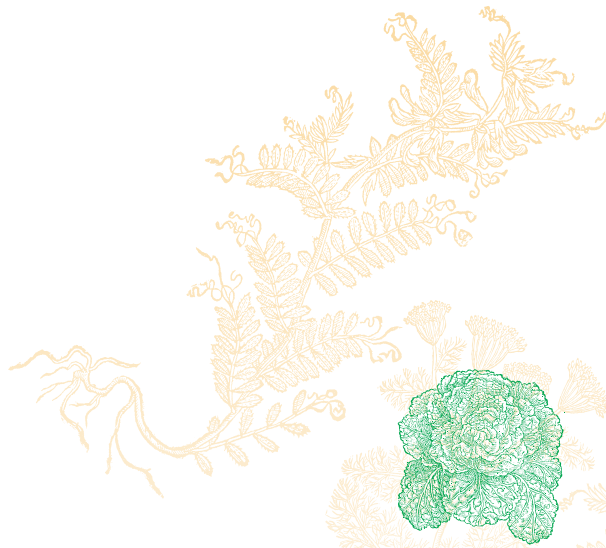
San Diego County-based school garden examples:

SCHOOL	LOCATION	CONTACT	FEATURES
Albert Einstein Academy	3035 Ash St San Diego, CA 92102	Terri Oelrich-Hughes (619) 795-1190	Strong with nutrition and wellness messaging. Seasonal vegetable areas, orchard, native plants, art in the garden, garden integrated into school wellness policy
Birney Elementary School	4545 Campus Drive, San Diego, CA 92104	Mindy Swanson, (619) 294-5811, mindysue@igc.org	With two orchards, native plant area, butterfly gardens, composting and several raised bed areas school has great examples of gardening on campus. Birney has pioneered garden to cafeteria in San Diego Unified School District, teaches garden during the school day to K-3 and runs afterschool garden club.
Explorer Elementary Charter School	2230 Truxtun Road San Diego/Point Loma, CA 92106	Cindy Jenson-Elliott (619) 398-8600	Actively integrated into the curriculum for early grades, specifically for science but also social studies and language arts. Good website and blog: www.explorerelementary.org/garden.htm
Grant Elementary	1425 Washington Place San Diego, CA 92103	Shirley Demer/ Dave Martocchio (619) 293-4420	Located in Mission Hills, a neighborhood with a strong garden reputation, garden is integrated into classroom for science – and has particularly good composting program (large worm bin created with help of Solana Center for Environmental Innovation)
La Paloma	300 Heald Lane Fallbrook, CA 92028	Nanette Noonan (760) 731-4220	Garden Club run by Fallbrook Garden Club. Garden club also helps apply for grants and helps teachers integrate garden based learning into the classroom. Excellent examples of art in the garden.
Buena Vista	1330 Buena Vista Way Carlsbad, CA 92008	Dolores Fangon (760) 331-5400	Garden used as reward and site for literacy work. The garden champion is a former teacher and grows a unique mix of cultural foods including yam, sugar cane and chayote.
Alamosa Park	5130 Alamosa Park Drive Oceanside, CA 92057	Nancy Jones (760) 940-0007	Avid composter and former parent gardener continues to run organized garden club and integrate garden with annuals and perennials into classroom. Excellent use of space and outdoor classroom management. Garden Champion has also been instrumental in getting other schools support for their gardens.





SCHOOL	LOCATION	CONTACT	FEATURES
Solana Santa Fe	6570 El Apajo Rancho Santa Fe, CA 92067	Peggy Kenney (858) 794-4700	Garden has areas for each grade to explore various subjects using garden based learning. Garden Coordinator is Master Gardener who is paid by PTO to care for garden and open it up during recess for students to enjoy. The garden has beautiful signage (parent with sign company) and now a greenhouse!
Crawford High School	4191 Colts Way City Heights, CA 92115	Michelle Raymond (619) 583-2500	Garden created and supported through a partnership with the International Rescue Committee. Students receive service learning credits and/or a stipend when participating in the after school garden club or garden internship. Food from garden has been integrated into the cafeteria. The garden club works with the cafeteria staff to compost 100-150 lbs of salad bar leftovers every week, reducing waste and trash pick-up cost.
Ocean Knoll Elementary	910 Melba Road Encinitas, CA 92024	Natalie Bruey (760) 525-4997	Good example of building garden through asking broadly for donations and support. Well integrated into the school day using garden based learning and parent support for teacher garden time.
VIP Village Preschool	1001 Fern Ave. Imperial Beach, CA 91932-2199	Jeanette Zimmerman (619) 628-8690	Great garden that gives students a place to explore. Garden Champion is a tireless fundraiser and also a teacher with brilliant ideas of how to make the garden a place to explore – a digging area is one of the features.
Hamilton Elementary	2807 Fairmount Ave. San Diego, CA 92105	Jessie Wallace (619) 262-2483	Habitat restoration and garden build conducted with the community partner formerly known as Aquatic Adventures.
Vista La Mesa Elementary	3900 Violet St. Lemon Grove, CA 91941	Craig Johnson (619) 825-5645	Garden grew from California School Yard Garden Grants with Champion teacher and support of others. Large space provides opportunity for classroom teachers to apply garden based learning and after school program to enjoy the harvest.
Rosa Parks	4510 Landis St. San Diego, CA 92105	Candace Goss 619 282-6803 x 2113	Located in separately fenced area and supported by parents and community volunteers this garden is called “community garden” and it includes a large space for growing, teaching area with shade sails, sinks for cleaning produce and hands, and composting, which uses food scraps from the cafeteria.



GARDEN HIGHLIGHT

Down to Earth Garden

Buena Vista Elementary School, Carlsbad Unified School District

The Down to Earth Garden was started in 1997 by Dolores Fangon, who has continued to run the garden as her own passion project. Formerly a teacher and a tutor, Dolores has developed the garden as a space for one-on-one learning, as students are brought to the garden in groups of 2-3 during class time, and for growing a **wide variety of unusual and tropical plants** like sugarcane, cherimoya, peanuts, taro, and pineapples. Dolores also hosts harvest lunches and informal visit times during the lunch hour. The school has sometimes been able to pay for Dolores' time through the school's discretionary fund.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.



References

1. Bergman, Diana.

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How school gardens sustain their programs."

Resource Conservation District of Greater San Diego County.
California School Garden Network. 2006. Gardens for Learning:
Creating and Sustaining Your School Garden.
Available: www.csgn.org/page.php?id=36

2. California School Garden Network. 2007.

Quotes from Educators.

Available: www.csgn.org/page.php?id=76

3. Children, Youth, and Environments Center for Research and Design. 2009.

"Benefits of gardening for children; fact sheet #3."

University of Colorado at Denver and Health Sciences Center.
Available: www.cudenver.edu/cye

4. Active Living Research.

"Active Education: Physical Education, Physical Activity and Academic Performance."
Robert Wood Johnson Foundation.

Available: www.activelivingresearch.org/files/Active_Ed.pdf



LESSON 2

Building a Garden Leadership Team

In this lesson, you will learn about how to build an effective and lasting garden leadership team using the Asset-Based Community Development approach. A garden program dependent on a sole parent or teacher is extremely difficult to sustain once the champion moves on and, unfortunately, the program usually does not survive. Building a strong team of people can prevent the garden from falling to the wayside when that one important person leaves the school. It is essential to have a number of diverse stakeholder groups involved in contributing to the garden program's success from the beginning. A "stakeholder group" is simply a group of people who have a shared interest in the garden. As an example, teachers at the school would be a stakeholder group.

A second, equally-important reason for a strong garden leadership team is that it can more effectively represent and address all the diverse opinions, concerns, and needs of those affected by the garden. Students, parents, teachers, administrators, food service workers, maintenance staff, and community members will all have thoughts on the garden program and how to maintain it, so it's necessary to have representatives of each of these groups on the leadership team. That way, each stakeholder group has someone who they can go to with concerns or suggestions who can, in turn, represent their views in garden leadership meetings. If each stakeholder group feels that their views are acknowledged and addressed, they are more likely to support the effort.

In both this course and in Gardening 201: How to Start and Manage Community Gardens we emphasize Asset-Based Community Development as an effective organizing strategy. Much of the material in this lesson also exists in Gardening 201, but we emphasize differences and important considerations for school garden program planning in this course .

Learning Objectives

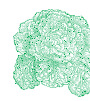
1. Understand Asset-Based Community Development as a method of building a leadership team.
2. Know the steps to take to recruit and retain leadership team members.

Asset-Based Community Development

Asset-Based Community Development (ABCD) is a framework for organizing of any kind – not just for gardens – emphasizing the strengths and assets of a community and its members and making the most of these assets for the particular development project. ABCD promotes a "glass-half-full" mindset for the school garden creation process. The guiding question of the ABCD approach is "What existing resources and skills are available to us at our school and in our local community?" This approach puts a positive spin on the "needs-based" approach to community development, in which a group would seek to identify solutions to a particular problem in their community.

As described by the Asset-Based Community Development Institute at the School of Education and Social Policy at Northwestern University, ABCD "is intentional about keeping our focus on assets and celebrating what is right with our community. You will notice that as people begin to talk about the positive things in the community, when they are encouraged to talk about what is working, when they learn of all the great resources that are in their neighborhood (and in some cases have always been available in their neighborhood), the energy level will increase exponentially" (INRC Organizers Workbook). We see a successful school gardening program as being a part of the surrounding community, not separate from it, so school garden planning can benefit from this positive, community-based planning perspective.

Below are three concise characteristics of ABCD and three types of assets that you might find in your school and community (both adapted from the Toronto Community Garden Network's "Community Garden Handbook"), to help you visualize the ABCD approach.



Three Primary Characteristics of ABCD

1. Asset based – Garden planning is based around individual contributions, associations, local institutions and the local ecology and economy of a school and neighborhood.
2. Internally focused – Development strategies focus on the interests and problem-solving capabilities of school members, local residents, local associations and local institutions.
3. Relationship driven – This approach promotes the development of relationships between students, parents, teachers, administrators, local associations and other local institutions by constantly asking whether actions will positively contribute to stronger relationships.

Five Categories of Assets

The following are the types of assets you might find in your school and community. When you are brainstorming possible assets, make sure to think about all of these categories.

1. Personal skills and tools – The specific talents, skills, and resources that you individually possess that can be put to work to build the garden program. (Examples: gardening experience, people-organizing skills, computer skills, construction skills, legal knowledge, musical talents, monetary donations, materials donations, etc.)
2. People you know and their skills and tools – The people you know well or relatively well who might have skills or tools like those listed under personal skills, and also those peoples' connections to others.
3. Groups/businesses in which you have direct connections– The local groups and businesses that have a member that you know personally, and the specific help they can offer. Help can come in the form of monetary donations, material donations, promotion, volunteers, space for meeting, etc. (Examples: local government, community organizations, churches, printing shops that can do free copies of posters, local newspapers that publish stories on community projects, garden centers that donate plants, etc.)

22



ACTIVITY 1: MAPPING COMMUNITY ASSETS

In this activity you will practice identifying the potential partners and assets available to you when planning your school garden. All schools are different; therefore, it is recommended that you conduct this activity with your own school garden planning group early in the planning stages. The goal is to brainstorm all the assets available from the different groups, people, and organizations involved in the garden project, using the three categories of assets as a guide, and the benefits those entities can gain from involvement in the garden. You should do this early on to help guide your recruitment (see below), and then once again after you have established a larger core garden leadership team, to expand your reach and strengthen the program.

The following steps and example map are adapted from the Toronto Community Garden Network's "Community Garden Handbook."

1. On a large sheet, draw a circle in the middle and write "School Garden Project," or the appropriate name for your own project, inside.
2. On the outside edges of the paper write the names of partners or potential partners you can identify and draw a circle around each of them. Think creatively about potential partners.
3. Brainstorm ways that each partner can help the school gardening project, again thinking creatively. For example, a local senior center might be a great resource for garden volunteers, which would allow for intergenerational learning at the garden.
4. Draw an arrow from each partner to the garden circle and label each arrow with the ways that partner can contribute to the garden effort.
5. Brainstorm what the garden can offer each partner, referring back to the benefits in Lesson 1 for inspiration. For example, the school garden might provide participating seniors with a source of low-impact exercise and mental stimulation.
6. Draw an arrow from the garden to each potential partner, and label those arrows with the ways the garden can benefit the partners. The result is labeled arrows in both directions between each partner and the garden project.

Growing a Team of School Garden Leaders

The following is a list of steps to take to build a garden team, which you can follow in approximately chronological order.

1. Identify 2-3 initial organizers.

Most likely a school garden project will start with just a couple of organizers, and that's fine. The goal should be to make that group of organizers larger early on, to distribute tasks and responsibility and to create the stakeholder support necessary for a successful sustainable garden. The first 2-3 might be a couple of parents and/or teachers who see the educational benefits of a school gardening program.

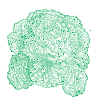
2. Brainstorm all possible stakeholder groups.

Together with your 1-2 additional early organizers, make an assets map for your project. Be creative and include as many possible stakeholder groups as you think might be involved. Groups might be: students, parents, teachers, administrators, food service staff, maintenance staff, after-school program organizers and instructors, school neighbors, local community groups (e.g. faith communities, homeowners associations, nonprofits), city or county garden organizations, local government officials, local law enforcement officials, etc. This can be a broad list to start. Put these people on the assets map and label the map with your ideas for how the garden program can benefit those people and vice versa.

3. Brainstorm people to approach in each stakeholder group.

Go through the stakeholder groups and brainstorm a list of contacts for each group. The focus should be on people team members know personally, but don't limit the list too much early on. You can include people who are once-removed (i.e. friend of a friend). Divide your list up between the initial organizers, and prioritize based on how well you know the person and their expected interest and possible contributions.





4. Personally contact people on the list to assess their interest.

Make personal contact with each person, ideally through a face-to-face meeting or phone call. With personal contact you can make the person feel that they are important to the process and give them a chance to express thoughts and questions. The goal should be to introduce the idea of the school gardening program and the expected benefits to the various groups, and to assess whether that particular person would be interested in joining the core organizing group for the garden. You can ask questions such as:

What benefits do you see for yourself/your family/the school/the community from a school gardening program?

- What kind of garden do you envision?
- What skills might you be able to bring to the effort?
- Would you be interested in joining the garden leadership team? If not, how would you like to be involved?
- What is your availability for meetings?
- Do you have any concerns about the program?
- Who else would you suggest we get in touch with?

Before your meetings, anticipate potential concerns that people might bring up, and come up with some responses to these challenges ahead of time. Overall, you are aiming to recruit more people with interest and skills, time, or funds to offer as a member of the leadership team. You are also aiming to assess interest across the stakeholder groups. These people you contact will often approximately represent the views of others in their stakeholder groups.

5. Schedule an open meeting for all interested parties for initial planning of the school gardening program.

Plan a meeting, ideally at the school, and invite all of your contacts that expressed interest in the project. Encourage them to invite their friends/colleagues/etc. who might be interested. Advertise the meeting around the neighborhood. The goal should be to get a large number of potential collaborators to attend. At the meeting, introduce the project idea, and allow plenty of time and opportunity for people to express their thoughts and concerns.

6. Use the stakeholder groups' input to guide the goals for the garden.

After you've taken the steps above and have a sense of who is most interested in getting the garden project off the ground, you can use this information to guide the type of garden program you build. For example, if you have more support from after-school program organizers than teachers, plan a garden program that more heavily focuses on after school time rather than time during the school day. This does not diminish the importance of having teacher support. It allows you to build a successful gardening program even if few teachers are currently interested in the garden as an outdoor classroom. The effort of the garden team would then be focused on after-school planning. The support of teachers can be built over time. This approach responds to current interests and creates more excitement about the program. It is an example of Asset-Based Community Development- focusing your efforts on existing interest, and then building from there.

7. Schedule regular meetings for the garden leadership team.

Find a time that tends to work for the group and schedule meetings during that time. Schedule these meetings well ahead of time so people can plan around them. Assign a leader, note taker, and timekeeper (doesn't have to be three different people). For efficiency and reliability, always have a clear meeting agenda and follow it closely during the meeting. This will help leaders feel that their time is being used well. This efficiency will make them and possibly new leaders more likely to participate. An agenda should include the following, and amounts of time allotted:

- introductions of attendees
- overview of the agenda and goals for the meeting
- initial thoughts on the gardening program from the initial planners and any plans that have already been made

- time for each attendee to state their goals for the gardening program
- open discussion time
- define roles for participants
- next steps (spell out clear actions and goals for each interested participant that will be accomplished by a stated date; making expected actions clear and known to the whole group will increase action after the meeting)
- schedule the next meeting

A note on school principals: It's very important to speak with the school principal about the garden project early in the planning process. The principal can have a lot of influence over whether the project is encouraged or impeded so assess their receptivity to the project early. It's good to know the principal's style concerning new activities, if possible (is he/she conservative with new ideas or generally open to new ideas?). This knowledge will help you shape your approach for gaining his/her support for the project. Come prepared with lots of examples that demonstrate the benefits of the project, **as well as thoughts on how you'll manage risks and sustain the garden.** Encourage the principal to withhold judgment until there's a more solid plan in place, but if it's possible the principal will never be a supporter, it's good to know this early so you can avoid wasting your time.

8. Find multiple levels of involvement for leaders.

Some garden leadership team members will have more time to spend on the project than others, but all contributions are valuable, so it's useful to have multiple levels of involvement. You could schedule meetings that certain members are only requested to attend every other month or quarterly, to provide the most active members additional perspectives in making decisions. You could also schedule meetings on a particular agenda topic so that not everyone has to attend every meeting. These kinds of techniques help reduce or eliminate burnout.



ACTIVITY 2: STEP INTO STAKEHOLDER SHOES

Each class participant is assigned to imagine themselves as a member of a single stakeholder group (i.e., teacher, parent, student, etc). Each stakeholder group gets a chance to express their goals, needs, and concerns for the garden. Write these thoughts on an erasable board. The purpose is to help participants consider a variety of potential perspectives. You can use benefits from Lesson 1 as inspiration for your brainstorming.

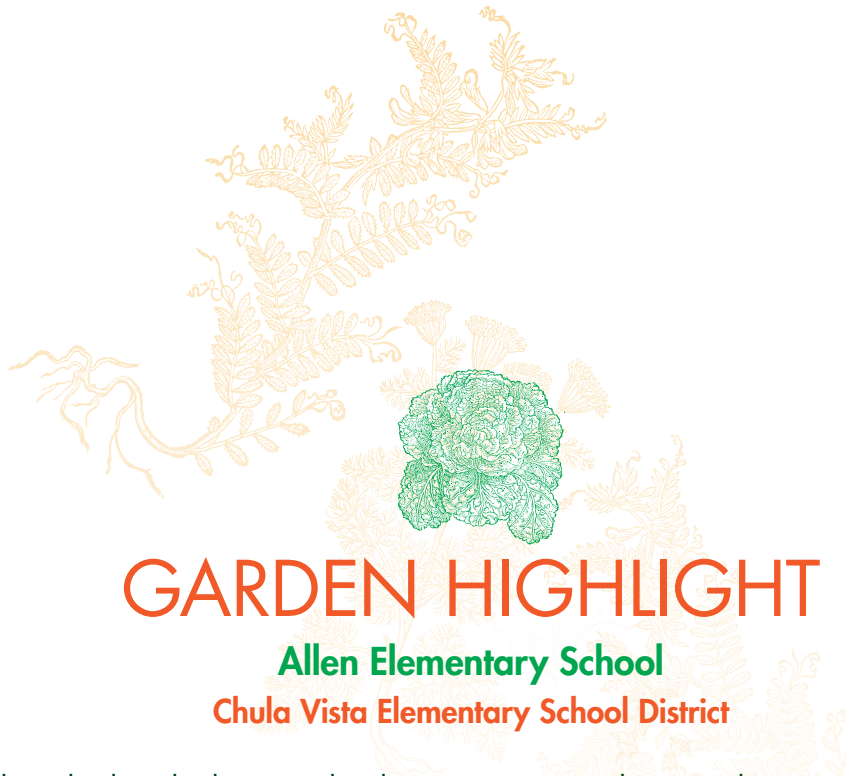
Reference

1. INRC Organizers Workbook.

Asset Based Community Development Institute.

Available at: www.inrc.org/resources/publications





GARDEN HIGHLIGHT

Allen Elementary School

Chula Vista Elementary School District

The Allen School garden has existed and grown since 2004, despite not being an integrated part of any classroom routine. It has 7 raised beds, fruit trees, **a milkweed planter, and a butterfly garden** designed and built by a local nonprofit. The garden has benefitted from a small, but dedicated group of volunteers – a few teachers, including coordinator Carla Kriss, and a few community volunteers and parents. They split up the necessary tasks, and teachers can use the garden for teaching as they please.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

LESSON 3

Garden Planning and Design

In this lesson we go over the details of planning and building the school garden space and setting up policies to ensure that the garden is maintained over time. The general purpose of this course is to teach you how to build a school gardening program, so this lesson focuses on how to build the physical garden for the gardening program. It also emphasizes that sustainability should even be considered in the design of a garden so that it can keep serving the school and community for many years despite changes in personnel and volunteers.

Learning Objectives

1. Understand guiding principles to aid in the garden design and planning.
2. Learn ideas for creating an effective and inclusive design process.
3. Learn common school garden design elements.
4. Learn strategies for effective ongoing maintenance of the garden and information on safety requirements.

Guiding Principles

- Create realistic expectations: Planning a school garden program takes time, patience, and compromise. Try not to expect too much too fast; personnel and volunteers can burn out if too much is expected of them. A good example of this approach in practice is to keep the garden small to start. Plan to build it in phases with room to grow as the garden gathers interest and support. Expecting success out of a small, more manageable garden at first will likely create more satisfaction with the project from teachers, administrators, and planners. Especially when money and resources are time-sensitive, it's tempting to build too big too quickly, without the necessary relationships and plans in place, but keeping this in mind and resisting fast growth will help prevent difficulties in the future.
- Document all agreements: Keep good records of all agreements between the school, school district, community groups, gardeners, etc. This can help solve disputes later and avoid liability, especially if there is turnover in the management of the garden. A school garden is unique in its need for care and clarity in documentation, in order to ensure a safe environment for the children it serves.
- Seek input from all relevant stakeholders: As discussed in Lesson 2, it's important to actively involve all interested stakeholders in the planning process. This helps people feel connected and responsible for the garden and can prevent challenges in the future due to people feeling ignored or unheard.

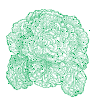
Design Process

We recommend that the design of the garden be a collaborative process between the garden leadership team and the members of each stakeholder group. The garden design is also a great time to get students who will benefit from the project excited and engaged. One possible idea is that each class creates a design for the garden, and the elements of these are melded together in the final design. The design process can be a learning opportunity for practicing math, geography, science, drawing, and overall problem solving techniques. Look for every opportunity to meet California's curriculum goals and standards with garden planning and activities (more on this in Lesson 6). In doing this, you will make the gardening program, including its design, a key part of school instruction, not an additional burden for teachers. Local colleges or universities may be able to point you to additional resources or students who can help you with the design process and provide greater educational support for teachers- a school garden might be an interesting case study for design students, and their ideas might be right for your garden.

Garden Elements

The following are elements to consider in the design of the garden (adapted from LifeLab's "Getting Started: A guide for creating school gardens as outdoor classrooms"). Remember, it's often a good idea to start small and expand later. The design can always allow for growth of the garden in the future (more beds, an orchard, etc). Also, keep in mind the various garden participants while you're designing, so that the garden incorporates





components that are appealing to all of them. For additional ideas, check out the garden design section of the Master Gardeners' "Plant a Seed, Watch it Grow" guide (available at: www.mastergardenerssandiego.org/schools/gardenbook/index.html), or consider signing up for the Mother Earth News Vegetable Garden Planner, which is \$40 for 2 years.

Available at: www.motherearthnews.com/garden-planner/vegetable-garden-planner.aspx

- Outdoor classroom and meeting area: The garden is an outdoor classroom and should have many of the same elements as an indoor classroom (seating, place for writing, whiteboard/blackboard). This area should be shaded.
- Plot for each classroom: School gardens often have a bed/plot for each classroom and common garden space. Typically, beds are 4 feet across to allow gardeners to reach from both sides without stepping on the bed. For younger children, you may want to consider building them 3 feet across, or have a mix of 4-foot and 3-foot wide beds. Your choice of in-ground versus raised beds will depend on various factors such as quality of your soil, drainage, water availability, and aesthetics (See Gardening 101 and 201 for more detail on these soil considerations.)
- Planting containers: You might have an area of container gardening, to add diversity of learning and accessibility to the garden. Container gardening is an opportunity for creativity on the part of students designing the space, because all kinds of things can be used as containers. Containers might also be used for experiments, allowing comparison of growth in and out of containers.
- Shared growing area: This might be an area where the entire school works together to grow something, like flowers, herbs, pumpkins, or plants to attract beneficial insects. This type of space allows for a variety of learning and interaction with the garden and an extra space to practice teamwork and collaboration.
- Student experimentation space: This would be a space for older students to conduct individual or group experiments. They could label their spaces with information about what is being tested in each small portion of this space.
- Pathways: Pathways between beds should be at least 3 feet wide to accommodate wheelbarrows. The paths should be covered with a recognizable substance, such as large wood chips, to make sure children can differentiate the pathways from the garden beds. This is especially true if you're going to use in-ground beds rather than raised beds, since in-ground beds don't have walls around them.
- Compost area: The compost area is vital to reusing garden and kitchen scraps, teaching about decomposition and soil, and creating a soil amendment that can improve the garden. Your compost area, depending on size, might use a variety of techniques (e.g., hot-pile, enclosed bin, vermiculture bin) to increase teaching opportunities. Compost should generally be located in a shaded area without too much debris so that critters can't hide in it. To learn more about composting, see Gardening 101 and/or Building Fertile Soil, referenced below.
- Tool shed: This area is used to store tools and post information on proper tool use so that users can avoid injuries and maintain the tools. Post rules for use on/in the tool storage area, with particular attention to how tools are shared between school and community members, if applicable.
- Greenhouse or cold frame: A greenhouse or cold frame (or even an indoor space inside the school) is a great place for starting seeds to be used in the garden, even in our mild San Diego climate.

- Irrigation setup: It's important to think about the availability of water early in the design process, to avoid having the only spigot be too far away for easy use. Irrigation can be anything from a nearby spigot for filling bins/ watering cans, to a drip system set up in beds. Either way, make sure you consider where the closest water source is located.
- Sink: It can be useful to have a sink in the garden for washing hands and rinsing vegetables. Remember to think about the height of the children who will be using it, and plan appropriately.
- Community space: If you're planning a joint-use garden (discussed in detail in Lesson 5), you'll need dedicated garden plots for community members in addition to students. The size of the garden space will determine both the number and size of the plots. Community garden plots range in size, with plots 4x8 to 20x20 and everything in between. Lesson 5 touches on other considerations you will want to take into account if the space is open to community gardeners.



ACTIVITY 1

Take a field trip to a school garden or two during course class time or between classes. There's no better way to get ideas for your school garden than by visiting others, especially for elements of the garden itself.

Ongoing Maintenance

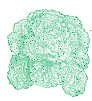
A thoughtful plan for maintenance of the garden, with attention to summer and other school breaks, will help ensure the garden is always a beautiful and positive learning space. Regular use of the garden in the school day and after-school program (discussed in detail in Lessons 6 and 7) will go a long way toward a well-maintained garden as classes and students develop ownership and pride in their garden. Summer vacation requires careful planning to ensure the garden is in good condition when school starts again. A joint-use garden where community members are allowed to maintain personal plots and common areas can help immensely with summer maintenance.

At all times, extra care should be taken to work with maintenance and landscape staff. Treat them with respect, communicate regularly, and respond to their requests. Landscape staff who feel their advice and opinions are valued are much more likely to support the garden program. It should be noted that in some districts landscapers are limited in the support they can lend to gardens, even if they want to, due to their labor contract. This problem can often be worked around if the construction and maintenance of the garden follow district protocol. Talk with the landscape staff to gain an understanding of contractual limitations and to work around misunderstandings and problems.

The following is a list of suggestions for developing a maintenance plan for your garden:

- For any type of garden, recruit help from parents and families for garden maintenance during vacations, especially the summer. The garden could sign up volunteers for a week or two of maintenance or monthly visits staggered throughout the summer so someone is at the garden regularly. A system will have to be set up to ensure volunteers have access to the garden during the summer.





If the garden is not being used over the summer, prepare the space at the end of the school year to minimize weed growth and reduce the hours needed for summer maintenance. Here are a couple approaches:

- Mulch the ground and/or beds with materials such as woodchips or plastic that keep weeds from getting sun to grow. You'll still want to periodically check-in, and weed.
- Sow cover crops such as clover, vetch, fava beans to improve the soil passively. You'll still want someone checking on growth and maybe cutting back cover crops to keep the garden well groomed.
- Schedule volunteer work parties for times when you expect to need additional maintenance, like at the beginning of the school year. Schedule in advance, advertise well, and make it a fun event by incorporating music, food, etc.

A couple notes on safety requirements for maintaining the garden:

- Recycled water, or "purple pipe" water, is allowed for irrigation of the garden, but it is prohibited for students to come in direct contact with this water. Therefore, it should not be used for student activities or immediately prior to being in the garden. It can be used at other times, like school breaks or when only a teacher or coordinator is watering.
- According to the California Healthy Schools Act, schools must label with signage that pesticide use will take place on school grounds 24 hours in advance and 72 hours after it is applied. In addition, annual written notification of expected applications must be sent to parents and teachers. You can avoid these issues in the garden entirely by not using sprays, but if that's not a possibility, be sure to review the FAQ available at: apps.cdpr.ca.gov/schoolipm/overview/faq2000.cfm.

References

1. **Healthy Works-VGSD.**
"Gardening 101: How to Grow Your Own Food."
Available at: www.victorygardenssandiego.com
2. **Healthy Works-VGSD.**
"Gardening 201: How to Start and Maintain a Community Garden."
Available at: www.victorygardenssandiego.com
3. **Life Lab Science Program. 2007.**
"Getting Started: a guide for creating school gardens as outdoor classrooms." Center for Ecoliteracy.
Available at: www.lifelab.org/wp-content/uploads/2010/06/GettingStarted.pdf
4. **San Diego Master Gardeners.**
"Plant a Seed, Watch it Grow."
Available at: www.mastergardenerssandiego.org/schools/gardenbook/index.html
5. **UC Santa Cruz Center for Agroecology and Sustainable Food Systems.**
"Building Fertile Soil."



GARDEN HIGHLIGHT

VIP Village Preschool

Imperial Beach School District

This garden is designed with preschool learning and foundations in mind. Instead of several raised beds for the classes, as was the case when the garden started, it now has **one large shared raised bed, a digging area, a vine-covered hiding teepee**, and activity tables with rotating activities for kids. The garden coordinator, who is a part time teacher there and who has mostly been able to be paid for the position, schedules garden time with teachers, and each class uses one recess period per week to learn in the garden. The communal design prevents stress on the coordinator due to fallow beds, and puts less pressure on teachers to maintain their bed.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

LESSON 4

Financially Sustaining your Garden Program

Monetary and in-kind donations can help build a garden's infrastructure and teaching resources, and can even help pay for a garden coordinator's salary. It is ideal when a school district or community partner incorporate the gardening program into the budget. The respective school or agency will likely cover the garden maintenances, but it will still be helpful to find donations of materials and supplies for the garden. These kinds of in-kind donations can be an easy way for businesses and individuals to contribute to the project. It can also further benefit the garden by allowing contributors, small or large, to become involved and invested in the garden. Fundraising can be intimidating, so the purpose of this lesson is to provide concrete strategies and sources for acquiring the resources you need for the garden.

Learning Objectives

1. Learn general guiding principles for finding funds.
2. Identify a variety of possible funding sources.
3. Learn a variety of strategies for requesting funds.

Guiding Principles for Fundraising Success

The following are overarching ideas to keep in mind and ongoing practices that will help you have fundraising success for your school gardening program. As a practical point, always remember to check with school administrators regarding any regulations on using donations.

1. **Don't be afraid to ask:** If you don't ask, you won't get the donation. As an organizing group, be creative and thorough in brainstorming a list of possible donors, including friends, gardeners, neighbors, faith communities, local businesses (both garden related and not), and nonprofits. Include companies that might donate a particular item (such as unused seeds from a seed company or lumber from a home improvement store), in addition to or instead of money. Be creative about what you need. For example, pumpkin patches in the city might have hay bales to donate after Halloween.
2. **Be patient, persistent, and polite:** Funds may not pour in overnight, so it's important to have patience and keep trying. Follow up with potential donors by phone about a week after your initial request if you haven't heard a response. It's okay to keep in touch with people and businesses who initially turned you down and make a second request a year or more later. Always be polite in all interactions, both formal and informal, with donors and potential donors. Always say thank you regardless of the response to your request.
3. **Present organization and care:** Present organization and care in yourself, the gardening program, and the donation needs. People generally wish to donate to a cause when they are confident that their donations will be used carefully and for a purpose they support. It therefore helps to communicate the gardening program goals, target audience, benefits, and needs in an attractive, appealing way. A sloppy presentation or brochure does not instill confidence in donors even if your goals are commendable.
4. **Take photos:** Take photos regularly and even at special events; photos can go a long way toward making your garden appealing to potential donors. Assign the photography role to one or more garden organizers and teachers who are interested. Remember to take some "before" photos when you're starting the garden and/or making garden additions, since it's fun to see and display positive changes. Take photos of children engaging in the garden. Photos can be used in garden promotional materials (brochures, etc), on a garden website or blog, on Facebook, and printed and displayed at the garden.
5. **Do your homework on possible funders:** Before ever applying for any particular source of funds, find out as much as you can about that funder. Look around the website and/or talk to connected people to find out what



the funder has funded in the past, particular areas of interest, information on board members and/or key staff and funding ranges. Also, pay attention to key words and phrases used on the funder's website or application- it never hurts to use these in your application (without plagiarizing, of course.)

Funding Sources

The key is to be creative when brainstorming possible funding sources, but here are a few places to start.

1. Local garden stores, nurseries, irrigation suppliers, lumber stores, bookstores, hardware stores, and other businesses are great sources for materials and expertise.
2. Local farmers, garden clubs and other gardening experts can provide expertise and donated time in the garden.
3. Parents and community members may donate money, supplies, or time.
4. School foundation- some schools have associated foundations that are separate from the PTO. They may be willing to fundraise for your school garden or allocate some of their budget, and they may have talented grant writers.
5. Community service groups (like Kiwanis or Rotary) and local companies might have dedicated funds available for donations to projects like yours and/or a ready team of volunteers to help with a one-day project.
6. The school's PTO/PTA can be a powerful supporter for the garden, with funds, volunteer support, advocacy, etc. Remember that a particular PTO can only make commitments for a single school year; they're not able to commit the future PTO group to anything.
7. Granting organizations such as foundations can be a source for larger sums of money. The San Diego Master Gardeners has one of the most up-to-date grant calendars with grants specifically for school gardens: www.mastergardenerssandiego.org/schools/grants.php

Fundraising Strategies

Using a variety of fundraising approaches rather than a single approach will increase your success in fundraising. Just like an organic garden relies on diversity of plants to have a strong, resilient system, diversity in fundraising approaches will create more chances to appeal to your potential donors. The following are the types of approaches you might use:

1. **Face-to-face requests:** For all of the possible local funding sources listed above try to make face-to-face requests whenever possible. Meeting with a person, either an individual or a representative of a company or organization, makes the request feel more personal. During a meeting, the potential donor has an opportunity to ask questions, and you can convey your friendliness and competence. Anyone who is confident, outgoing and polite can get good at this kind of interaction with a little practice.
2. **Mailed requests:** Direct mail requires that you create an appealing, simple donation-request packet to mail to potential donors (you could also bring this along to personal meetings). The packet should include a personalized request letter, a wish list, and a brochure on the project with goals and photos of students using the garden or the garden site if it's just starting. It should also outline recognition packages available to sponsors for their donations, such as placement of their logo on the school garden sign or verbal acknowledgement at special events. Develop a schedule to call or email potential funders if you have not yet heard back from them after a week.



3. **Grant proposals:** Grant writing takes research to target likely grantors, careful writing, time, persistence, and repeated attempts, but it can yield high payoffs. Depending on the size of the grant, it can be worth the energy to apply. Grantors that fund school gardens enjoy seeing photographs of the garden being used, student art, writing and general learning from this experience; be sure to include these in applications and reporting, as some grants will refund the following year. There are many excellent references that support grant writing, although for many of the smaller grants the personal touch is more important than the background research and data. For good recommendations check out *The Only Grant-Writing Book you'll Ever Need* by Ellen Karsh and Arlen Sue Fox. theonlygrantwritingbook.com/?p=2
4. **Events:** Special events at the garden can help raise funds and friends who may want to offer a donation. A few fundraiser ideas include: vegetable and/or plant start sales, craft sales, garden cookbooks or art, benefit concerts, lectures and workshops, auctions, raffles of donated items, garden tours, and harvest festivals. Students can be a great resource and help in the event; make sure to include them when appropriate. For example, students can be responsible for leading garden tours or creating cookbooks. Be careful not to overspend on events or wear out your organizing group with all of the logistics, though. You want to make sure there's a reasonable payoff for the effort spent. Make it easy to donate at the event, with a donation can or box. The more your event is tied to the garden's mission, the greater likelihood of success.

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1. Karsh, E. and A.S. Fox. 2003.
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Top Grant Writers and Grant Givers Share Their Secrets. New York: Carroll and Graf Publishers.
2. San Diego Master Gardeners.
"Calendar of grants available to school gardens."
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GARDEN HIGHLIGHT

The Gecko Garden

Grant School, SDUSD

Founded in 1997, The Gecko Garden is designed for participation of each class, with one bed per class, and focuses the garden learning on actually **producing a product for the Annual Farmer's Market**. Over the last several years, parent volunteer Shirley Demer has developed curriculum binders for teachers of each grade, and the activities in each curriculum focus on a particular crop for that grade. That way, students focus their attention and learning on a single crop each school year, and can be proud to sell that crop at the fundraising farmers market.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

LESSON 5

Community Partnerships, Volunteers and Joint Use

Establishing partnerships between the school gardening program and other community groups and organizations can greatly strengthen the program. Partnerships often create greater commitment and ownership of the garden within the school setting and greater community, making the garden's chance for survival much more likely, even once a "champion" parent or teacher leaves. Partnerships can greatly enhance the educational possibilities of the gardening program, in ways that we'll discuss below. As we mentioned in Lesson 2, a garden leadership team should have participants from a variety of stakeholder groups. In this lesson, we discuss how to connect to community organizations and volunteers to support a traditional school garden or to create a joint use garden. In a joint use garden model, a nonprofit or government agency partner with a school to operate a garden that is used as both a school garden and community garden.

One important take-away point that applies to all forms of community and volunteer involvement in the garden is that there are always safety concerns when bringing people onto the school campus. Administrators have legitimate concern for student wellbeing and safety, so it's important to work with the administration to make sure volunteers go through the proper background and safety procedures. A joint use garden will trigger additional safety concerns, including those mentioned above, that you should anticipate and take seriously. If as an organizer, you recognize the concerns of the administrators in the establishment of a joint use garden, you can more easily work to create a system that works for all parties.

Learning Objectives

1. Understand important considerations for using volunteers at a school garden.
2. Identify several possible local organizations that could be garden partners.
3. Understand the benefits, challenges, and considerations of joint use agreements.

Volunteers in the Gardening Program:

Safety Concerns

Schools are always careful when it comes to allowing volunteers to work with students, whether in the classroom, the garden, or elsewhere. The school is liable if something happens to a student, so they need to know who is interacting with their students at all times. Depending on the form of involvement by the volunteer, a district may require some combination of:

- Photo ID and sign-in at the school
- Megan's Law check (registered sex offender database)
- Tuberculosis (TB) test clearance
- Background check
- Fingerprinting

Factors that determine which of these steps a volunteer must go through are:

- One-time or ongoing volunteer position
- volunteer position will take place in the classroom
- volunteer position will work directly with students
- volunteer position will have unsupervised time with students

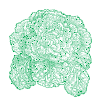
Generally, the place to find out the exact requirements and start the paperwork is at the school site itself. Most often volunteers must pay for the TB test while the school may pay for other costs, but this also depends on the district.



A useful resource on recruiting, training, and utilizing volunteers in the school garden is the Master Gardeners' manual "Plant a Seed and Watch it Grow", particularly the "Getting Started" section. The manual is available at: www.mastergardenerssandiego.org/schools/gardenbook/main.html

Local Organizations and Volunteers

- School gardens can benefit from the support of both individuals and local organizations. The following are several San Diego local organizations that might be good partners for getting your school gardening program going and for putting the garden to good use. Partnerships that can provide pre-screened volunteers (volunteers who already had a background check for their respective organization, which would apply to your school, too) are always the most convenient partners for local school districts. Also see the supplement entitled "San Diego County School Garden Resources" for more ideas on who to contact and what they can provide.
- University of California Cooperative Extension (cesandiego.ucdavis.edu) is an established, state-based organization with a great deal of agricultural knowledge. They can provide curriculum information and technical assistance in designing and building the garden itself.
- San Diego Master Gardeners (www.mastergardenerssandiego.org) provides school garden support as one of its primary activities. They are available for curriculum information, teacher training, and one-on-one technical assistance including garden visits.
- Victory Gardens San Diego (www.victorygardenssandiego.com) is a local nonprofit that can provide volunteer effort to help build the garden, as well as a website with many gardening resources.
- Aging and Independence Services (www.sdcounty.ca.gov/hhsa/programs/ais) is a service of the County of San Diego that can be a great resource for acquiring the assistance of older adults in the garden as volunteers and developing intergenerational learning.
- San Diego Community Garden Network (sandiegocommunitygardennetwork.org) is a local nonprofit that can connect you to a network of gardeners, particularly community gardeners. Community gardeners will be a beneficial resource if exploring the joint use garden concept. San Diego Community Garden Network can provide group liability insurance (more detail on this below).
- National FFA Organization (aka Future Farmers of America) (www.ffa.org) is a national organization with state and local chapters, dedicated to facilitating agricultural education, that may be interested in the garden as a space for its outreach programs.
- 4-H (www.4-h.org) is the youth development branch of the nation's Cooperative Extension Program, which is focused on science, citizenship, and healthy living for kids. They may also be interested in the garden as a space for their programs.
- San Diego Ag in the Classroom (www.sdfarmbureau.org/AgintheClassroom/Ag-in-the-Classroom.php) is a county-based nonprofit organization aimed at increasing the ag literacy of our students. They may also use the garden space, or be a potential source of funding and/or instructors and volunteers.
- California Rare Fruit Growers, San Diego Chapter (www.crfgsandiego.org) is dedicated to educating about rare fruits, researching locally-appropriate varieties, and propagating and distributing plants. Periodically this group gives away young fruit trees to schools and nonprofits (check the website for opportunities), and they may also be a source of guest speakers/activity leaders related to fruit trees.





Joint Use Agreements

The term joint-use refers to two or more entities, such as a school and a nonprofit or government agency, formally or informally agreeing to share indoor or outdoor spaces like gymnasiums, athletic fields, and gardens. Both schools and their partners can benefit from the shared responsibility for facilities maintenance, and the resources that each can attract to help build programs supporting nutrition and physical activity.

The term “joint-use garden” refers specifically to a garden that serves as both a school garden and a community garden. It can be located on school property or other public or private lands. Typically, there are some plots designated for community residents and others for school use.

A joint-use agreement or in many cases a license, shared use, or real property agreement between the school district and a group of community gardeners (typically represented by a nonprofit organization or government agency) is created to detail roles and responsibilities, maintenance procedures, and liability procedures for the partners – the school district and the nonprofit organization or government agency. A school district and community organization that decide to share use of a garden at a particular school site can allow the school and community to use the garden at the same time or at separate times of the day to avoid gardener-student interaction, but some benefits are lost in this case.

Community gardeners allowed to garden during school hours may be required to adhere to the requirements outlined above. Joint use inherently requires more organization than a traditional school garden. There are more interests and concerns to address, but there can be many benefits for all involved that make the negotiations worthwhile.

Benefits of Joint Use

- School property is wonderful open space for community gardening, especially when land for community gardens is scarce.
- Having more gardeners responsible for and invested in the garden makes maintenance easier, especially during summer and other school vacations.
- Students gain the opportunity to interact with and learn from community members, especially older adults and people from an array of ethnic backgrounds.
- Teachers and after-school staff gain from having gardening expertise close at hand.
- Community gardeners get a way to contribute to their neighborhood and local youth by sharing their knowledge, in addition to the opportunity to grow healthy food for themselves.
- For many gardeners, especially parents and grandparents, the garden enhances their connection to the school, their neighbors, and the community.
- The entire community shares in the pride that comes from having a thriving garden on campus.

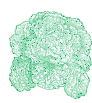
For more on joint-use gardens, please see the San Diego County Childhood Obesity Initiative web site at: www.OurCommunityOurKids.org. It includes resources on garden benefits, joint use, sample agreements, and joint use garden models. Additional resources on joint use can be found at:

- National Policy and Legal Analysis Network to Prevent Childhood Obesity: www.nplanonline.org/nplan/joint-use
- Prevention Institute, JointUse.Org: www.jointuse.org/home
- California Project Lean: www.californiaprojectlean.org/doc.asp?id=224&parentid=221
- Center for Cities and Schools: citiesandschools.berkeley.edu

Planning for Joint Use

If you're interested in pursuing a joint use garden at your school, it's important to know the considerations that the school and its district will have so that you can address these concerns from the outset. Please refer to Gardening 201: How to Start and Manage Community Gardens for more detailed information on organizing the community gardening aspects of the garden.

1. **Types of partnerships:** Joint use partnerships can be formal (based on a legal document) or informal (based on a handshake), but formal agreements can be more appealing to both parties because of their built-in legal protections. School and organizational staffing change over time, so an informal agreement between a school staff member and community members is not the best method to guarantee that community gardeners will have access to the garden into the future. A formal agreement can also help prevent future misunderstandings surrounding maintenance, operations, liability, ownership, and cost. Typically a school district would enter into an agreement with an established nonprofit or government agency. There are instances in some communities where school districts have worked directly with community residents or neighborhood associations to make land available for gardening such as Pixley Union Elementary School District and Sacramento City Unified School District. For more on this approach and sample agreements, please see the San Diego County Childhood Obesity Initiative web site.
2. **Legal considerations of schools:** School districts may be reluctant to open school property to community members, concerned about the legal risks of having adults unaffiliated with the school engaging with students as well as the costs associated with potential injury or property damage. The good news is that California state law actually offers school districts strong protections against liability through the Tort Claims Act and requires that schools and organized groups using school facilities carry liability insurance. School districts can minimize their risk by carefully maintaining their property, carrying insurance, requiring groups who use their property to maintain insurance, entering into formal joint use agreements, and treating gardeners officially as volunteers, as described above. Knowing these legal guidelines may help encourage a reluctant administrator to accept a joint use agreement.
3. **Accessibility of the garden space:** Typically in San Diego, school properties are fenced off, which means community gardeners would need a way to gain access to the property before and/or after school hours and on weekends. Community gardeners can be given a key with a deposit (to discourage loss of keys) or the code to a combination lock, where the code can be changed periodically to ensure security. In four joint use garden (i.e., school-community garden) pilot projects conducted under Healthy WorksSM, each site proposed to have the garden fenced with separate entrances from both school and community access points. These decisions will likely have to be negotiated between school districts and their respective partner(s) to reach a reasonable and safe solution.





4. **Steps to take for joint use:** There's no single path to developing a joint use agreement, and crafting a successful one requires care, cooperation, and ongoing communication among the partners as they address concerns and work out logistics. The first step is something you'll do anyway: bring together key stakeholders to talk about and define their vision for the project and begin building relationships. People to include are school and district leaders, teachers, after-school staff, parents, community residents, and representatives from city government and local nonprofits. If the vision, mission, and goals for the garden program seem feasible, you'll work with school district and school leadership to draft a joint-use, a license, shared use, or real property agreement that clearly spells out each partners' roles and responsibilities.
5. **Good examples:** There are strong existing examples of shared garden spaces in places like Seattle (www.seattle.gov/neighborhoods/ppatch/), Denver (www.dug.org), and communities throughout California (see the San Diego County Childhood Obesity Initiative web site) that you can discuss with your district to encourage similar types of collaborative opportunities. Each model is different. In Seattle, community gardens invite schools to have a plot or plots and the normal plot fee is waived for youth gardeners. In Denver, the gardens are on school property, with community gardeners approved as official school volunteers who can serve as onsite experts to help students and teachers learn and grow their gardens. In California, the models range from community gardens on school property to school-community gardens on public parkland adjacent to a school.

Joint-Use Garden Maintenance Ideas

A joint-use garden can have a different method for ongoing maintenance than a typical school garden because the community gardeners provide an additional source of maintenance labor.

The following are just a few ideas for how to use community gardener assistance most effectively:

1. Include guidelines for expected maintenance of one's individual plot in the contract that garden plot holders sign. Rules for maintenance might include limits on how long the plot can be untended, maintaining the plot free of pests/weeds/disease, keeping gardening contained to one's assigned space, efficient water use, and approved chemical use. Teachers and students should also know at what level they're expected to maintain their plots. (Because you'll be integrating use and care of the plots into the curriculum, maintenance of school plots doesn't have to be a chore, it can be part of the learning.)
2. Require plot holders to spend some time caring for common areas and/or school plots, especially during school vacations, but during the school year too. One of the benefits of joint use is greater ease maintaining the garden during summer and other breaks. Required maintenance could be organized as one or several of the following, or others that you think of:
 - a. Required number of common area maintenance hours per month or year
 - b. Signing up for responsibility to maintain the garden for a particular week of school vacation as individuals or pairs
 - c. Required attendance at some number of group work parties
3. Create and post a routine garden maintenance schedule in the garden. The schedule can relay information related to planting and harvesting seasons and when certain plants and common areas should be tended to.



GARDEN HIGHLIGHT

Albert Einstein Academies Charter School

SDUSD

Einstein's gardens, coordinated by parent Terri Hughes-Oelrich, highlight creativity and productivity. With a central vegetable-growing area, an orchard, international gardens and various native plant areas around campus, the site offers great examples for integrating gardens throughout campus. Students in the 3rd grade attend biweekly garden classes that incorporate theater and science. **Elementary and middle school students walk to a local restaurant, Alchemy, to learn about cooking local foods.** Alchemy is also a hub for the local food movement and has been generous in supporting annual fundraising events to support the school. The school is the first to have a DSA-approved earth oven where the school hosts pizza events during the year featuring garden produce.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

LESSON 6

Curriculum and Outdoor Class Management

As was mentioned in the introduction, one of the keys to creating a school gardening program that can stand the test of time is to make the garden an essential teaching tool for teachers in all subjects, rather than an additional school feature that is used only if teachers feel particularly motivated. Doing this requires that teachers have access to lots of possible activities and lessons in a range of subjects to be conducted in the garden or about the garden. It also requires rules and plans to make garden time easy for teachers to incorporate into their lesson plans. This means careful, consistent scheduling of classes in the garden, and simple rules for children to follow while they're in the garden. In this lesson we'll discuss ways to help create meaningful curriculum in the garden and guidelines for garden use.

Learning Objectives

1. Learn ways to use gardening to teach all subjects.
2. Gardening to address state learning standards.
3. Know ways to facilitate use of the garden through teaching methods, scheduling, and rules.

Using the Garden to Teach All Subjects

School gardens are commonly used to teach science and environmental lessons, from life cycles, to species interactions, to scientific experimentation and human-environment interactions. But the garden can be an outdoor classroom to teach a broad range of subjects. The following are ideas for using some of the stronger existing garden curricula and creating your own activities.

Adapt Existing School Curricula to the Garden

District-adopted curriculum already contains activities that, with a little creativity, can be easily adapted to take place in the garden or use garden elements. Particularly now, when district curriculum leaves little time for additional activities, teachers need easy ways to use the garden within the lessons they'll already be teaching. Teachers can scan the suggested activities in their curriculum, with a creative eye, for minor adjustments to use the garden. For example:

- Life sciences: plant a seed in a raised bed, rather than a cup inside; look for and observe butterflies, other insects, worms, etc. in the garden rather than with a photo; find and observe habitats of garden-dwelling species.
- Language arts: use the garden as the topic for writing assignments such as poetry and stories; have nature or garden-based readings and poetry posted in the garden.
- Social studies: for Native American history, help students choose and grow a plant that was or is significant for a Native American culture; for California history, plant a small plot based on plants commonly grown in a California mission.
- Math: measure and chart plant growth over time; weigh and measure garden yield and calculate what the produce could sell for given sample produce prices; search for examples of shapes and symmetry in plants and animals in the garden.
- Visual and performance arts: use the garden or garden elements as models for painting or drawing; use the garden as a theater performance space.





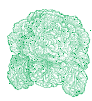
Use Existing Garden Curricula

There are many wonderful resources that provide numerous garden-based activities to teach all subjects, so there's no need to invent your own, unless you're feeling creative! These resources can make garden use much easier on teachers (as well as after-school staff and other garden users) because they've already been used, tested, and written out to be copied. The following table lists some resources you can check out, with notes in the "Uses" column on particular uses of that resource, so you can skim through and find which one(s) may be most applicable. For reference, "Gr" refers to the grade levels covered, "standards" addresses California state standards, "after-school" addresses before- and after-school activities, "food systems" addresses broader food system ideas, "nutrition" addresses nutrition, food and wellness, "composting" addresses composting and soil formation particularly, "music" has songs and uses of music in the garden, and "environmental" addresses environmental studies issues.

CURRICULUM	SOURCE/ REFERENCE	WEB LINK	USES
A Child's Garden of Standards	California Department of Education	www.cde.ca.gov/ls/nu/he/documents/childsgarden.pdf	Standards
Gardens for Learning: Creating and Sustaining Your School Garden	California School Garden Network	www.csgn.org/page.php?id=36	Standards, all around good reference
Gardens for Learning: Linking State Standards to Your School Garden	California Ag in the Classroom	www.cfaitc.org/gardensforlearning/	Gr K-6, Standards
Closing the Loop: Exploring Integrated Waste Management and Resource Conservation	California Waste Management	www.ciwmb.ca.gov/Schools/Curriculum/CTL/	Gr 1-3, Gr 4-6, Standards, Composting
Worms Eat Our Garbage: How to Set Up and Maintain a Worm Composting System	Appelhof, Mary. Flower Press, 1997.	www.wormwoman.com/acatalog/Worm-woman_catalog_Worms_Eat_My_Garbage_3.html	Gr K-6, Composting, Afterschool
Healthy Foods From Healthy Soils: A Hands-On Resource For Teachers	Patten, Elizabeth and Lyons, Kathy. Tilbury House Publishers, 2003	www.tilburyhouse.com/Children's%20Frames/child_health_fr.html	Gr PreK-6, Afterschool, Nutrition, Composting
Botany on Your Plate	Sarah Pounders	www.gardeningwithkids.org/11-3350.html	Gr 4-6, Standards, Nutrition
The Growing Classroom: Garden-Based Science	Jaffe, Roberta and Appel, Gary. Addison Publishing Company, 1990.	www.lifelab.org/products/activity.html	Gr K-6, Standards, Nutrition, Composting, Environmental, Music
TWIGS (Teams With Intergenerational Support)	ED. Johns, Marilyn J. University of California Cooperative Extension, 1997.	cesanmateo.ucdavis.edu/Custom_Program850/	Gr preK-6, Standards, Nutrition, Afterschool



CURRICULUM	SOURCE/ REFERENCE	WEB LINK	USES
Nutrition to Grow On		www.cde.ca.gov/ls/nu/he/nrttogrow.asp	Gr 4-6, Standards, Nutrition
NOURISH curricula		www.nourishlife.org/teach/curriculum/	Gr 6-8, Standards, Nutrition, Food Systems
Growing Together	Food Project	thefoodproject.org/books-manuals	Gr HS, Afterschool
Food, Land, and People	Project Food, Land, and People, 1998.	www.foodlandpeople.org/	Gr K-HS, Food Systems
French Fries and the Food System	Food Project	thefoodproject.org/books-manuals	Gr HS, Afterschool, Food Systems
Harvest of the Month	Network for a Healthy California	www.harvestofthemonth.com	Nutrition, Standards, Afterschool
Fresh Fruit and Vegetable Photo Cards	California Dept. of Education		Nutrition
Kids Cook Farm Fresh Food: Seasonal Recipes, Activities, and Farm Profiles that Teach Ecological Responsibility	Kraus, Sibella. California Dept. of Ed., CDE Press, 2002.	www.cde.ca.gov/ls/nu/he/documents/kidscookcomplete.pdf	Gr K-6, Nutrition, Standards, Food Systems, Afterschool
Junior Master Gardener, Handbook, Level 1	Texas A&M University, 1999.	www.jmgkids.us/index.k2?did=6019&sectionID=6019	Gr K-6, Afterschool
Junior Master Gardener, Teacher/Leader Guide	Texas A&M University, 1999.		Gr K-6, Afterschool
Garden Mosaics	Cornell University	communitygarden.org/gardenmosaics/index.htm	All ages
Banana Slug String Band: Singing in Our Garden CD	Banana Slug String Band	www.bananaslugstringband.com ; 888-327-5847	Gr K-6, Music
Green songbook	Guitars in the Classroom	www.greensongbook.com/	All ages, Music
No Student Left Indoors	Kirkland, Jane	www.takeawalk.com/no-student/	All ages especially K-6, Environmental



Since some of these resources are not available for free, here are three ideas to get started finding appropriate lessons.

1. Use the California School Garden Network “Curriculum” page (www.csgn.org/page.php?id=22) to see sample lessons for several full curricula and determine which ones you like best and might want to buy.
2. Visit the SD Master Gardeners library at their office (9335 Hazard Way, San Diego, CA 92123) to read some curricula in person, or leave a message for the school garden committee on their hotline (858-694-2860) with a question about the type of curriculum or activity you’re looking for.
3. Google for those curricula in the table above that don’t show links. Many resources are becoming available for free online all the time, so some may be available now that were not when this manual was published.



ACTIVITY 1

Pick an active, hands-on activity (before class time), and do it with the class. Participants get to be stand-ins for kids, get a feel for how activities might work in the garden, and get to stretch their legs and have some fun.



ACTIVITY 2

Have participants get into groups and look at some of these existing garden curricula and discuss how they might use these curricula, as well as other ideas for activities that they’ve used.

Gardening to Address State Education Standards

Often teachers feel limited using class time in the garden unless they can argue that they are addressing the state’s required educational standards. Therefore, the more that the garden can help teachers teach those standards in an engaging and fun way, the more teachers will want to use the garden as an outdoor classroom. The table shows several resources that are great for incorporating state standards into the garden, but two in particular (at the top of the table) are “A Child’s Garden of Standards” and “Gardens for Learning.”

Facilitating Use of the Garden

Equally important for helping teachers want to use the garden actively and regularly is making sure it’s easy to do so. In this section we’ll talk about ideas for teaching methods in the garden, how to schedule use of the garden between classes, and rules for children to follow in the garden to create a positive space for learning.

Teaching Methods

Outdoor classrooms are often new environments for teachers and can provide challenges for class management. It’s helpful for teachers if they know some garden-specific teaching methods that will allow them to teach the intended subject matter in the garden. Here are some tips:

- Find ways to use both individual and group work. Use team-building activities and small-group work to help students support each other’s learning and work together to accomplish the activity, even if the teacher doesn’t have the luxury of a teacher’s aide.
- Involve parents and community members (including retired folks) to make outdoor class time one of the highlights of the day for children. If it is possible to have a lower ratio of students to adults, this can help accomplish

activities. Volunteers will have to fulfill the safety requirements of the school (described in detail in Lesson 5). Remember to regularly acknowledge and thank volunteers for their contributions.

- Garden journals and planned backup activities are good for occupying students who complete the garden lesson quickly or those who have trouble focusing on the lesson. Planned backup activities will also keep a student from disrupting a lesson. More on this in the after-school lesson below.
- Be aware of the seasons of the garden to help guide lessons. Knowing the growing time from seed to harvest and animals' life cycles will help you count backwards to time your lessons. Because of weather or pests, lessons may still have to be adjusted. Learn with the garden. For example, if you want to witness a caterpillar making a cocoon in your garden, you may have to adjust your lesson(s) to correspond with the lifecycle of the butterfly you are studying. Vegetables and fruits have their seasons and their growing times, so be sure to think about these things when you're planning lessons. While we live in a temperate climate and can grow food year-round in San Diego, it's still important to recognize the time it takes for a crop to grow and the appropriate time to plant that crop. (Take Gardening 101 for more on planting times or see the Master Gardener Publication specific to the crop you're interested in).
- The Master Gardeners School Program is here to help you get started, locate resources and keep your garden happy and healthy. To use them as advisors to help your activities go smoothly and for troubleshooting. Sign up by calling or emailing the Master Gardener Hotline at 858-694-2860. Some Master Gardeners are retired teachers and have suggestions for many aspects of teaching in the garden.

Garden Use Scheduling

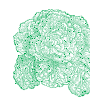
Careful scheduling for use of the garden by classes will make garden use easier for teachers. If each class has a plot or designated area, then teachers can independently decide what times they use their plots, but coordinating with other teachers still helps prevent crowding and facilitate sharing of resources. The number of classes that could be in the garden at once will depend on the size of the garden and layout of the plots. Ideas:

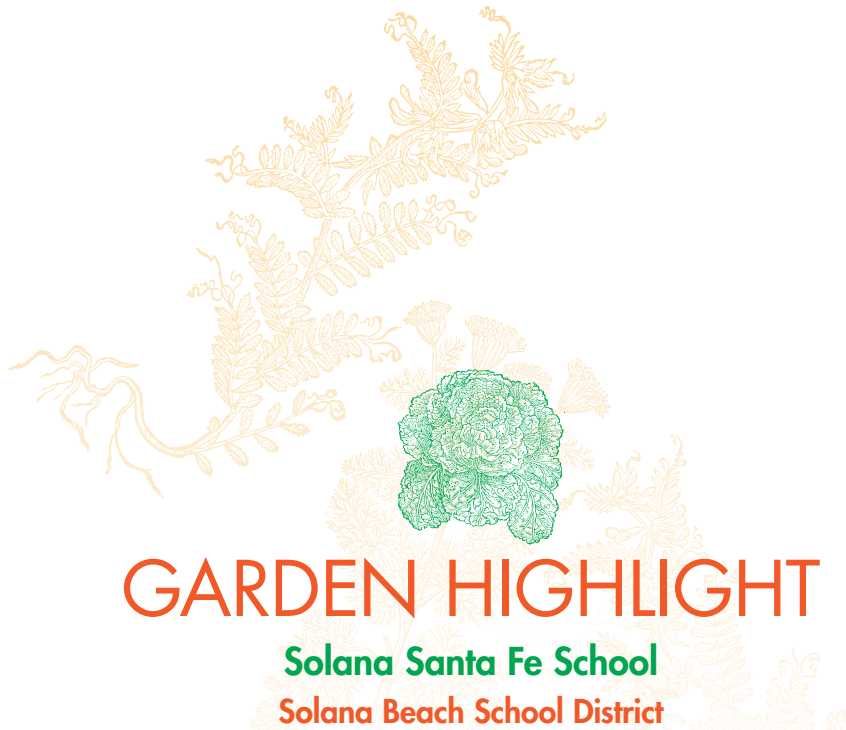
- Teachers could seek to schedule visits so that classes of different grades are in the garden at the same time, allowing for interaction and collaboration between ages that might not normally occur.
- Especially for younger children, schedule one or more regular times each week when a class gets to visit its plot. Regularity of visits eases scheduling, helps students expect and look forward to their garden time, and can aid in activities like observational experiments for older children.
- Designate a portion of each garden visit specifically for maintenance tasks such as weeding, in addition to more designed activities. This way, maintenance happens in small, manageable chunks of time that are less burdensome on teachers and students.

Garden Rules

Having a set of simple, easy-to-follow rules will help children know what's expected of them in the garden and help them see the garden as an outdoor classroom rather than a playground. Students can help develop the rules as well, for more ownership. LifeLab recommends the following rules, but you can always add more that pertain specifically to your garden. Aim for no more than about 6 rules to keep them manageable for young kids, and try to phrase the rules to use positive words ('always', 'please', etc.) rather than negative words ('never', 'don't', etc.). Post the rules in a prominent place, like the toolshed.

1. Always walk when in the garden.
2. Stay on the paths.
3. Always ask before using any tool or harvesting any crop.
4. Respect the plants, the animals, the nonliving things, and each other.





GARDEN HIGHLIGHT

Solana Santa Fe School
Solana Beach School District

This garden was established in 1990 and revitalized after a 7-year fallow period in 2004. Now it is enlivened by a **strong focus on arts in the garden**, and is used by almost all classes, especially for art and science. Each grade level has a plot with one to several beds in it, and the garden coordinator has helped develop lessons for each grade. The coordinator is there when teachers bring their classes, so teachers just have to sign up and lessons are waiting for them in the garden. The garden, with its focus on welcoming design and art, is a popular space for students who want a calmer recess atmosphere.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

LESSON 7

Before - and After-school Garden Clubs

Before- and after-school programs need activities for long hours before and after school. Gardens are an excellent way for staff and students to integrate school day concepts, get physical activity, observe seasonal changes and help sustain a program that the school and community enjoy.

While many after-school programs like the idea of gardening, often staff does not have experience with gardening and may be intimidated by the perceived work involved. Administrators and program directors can encourage after-school staff by providing training and mentorship in gardening and garden education. We encourage after-school staff to attend a Gardening 101 class or work with a RGECE site to set up a class at your school site. Alternatively, you might plan a workshop for after-school staff with an experienced local gardener to teach them the basics of gardening. You may also identify local community members who have gardening experience to volunteer with the after-school program. A good way to increase visibility and school participation in the garden is to start a Green Team or Garden Club that uses the garden for simple and fun activities that help maintain the garden and teach students gardening skills.

Learning Objective

1. Learn tips for before- and after-school program staff to use the garden.

Tips for Staff

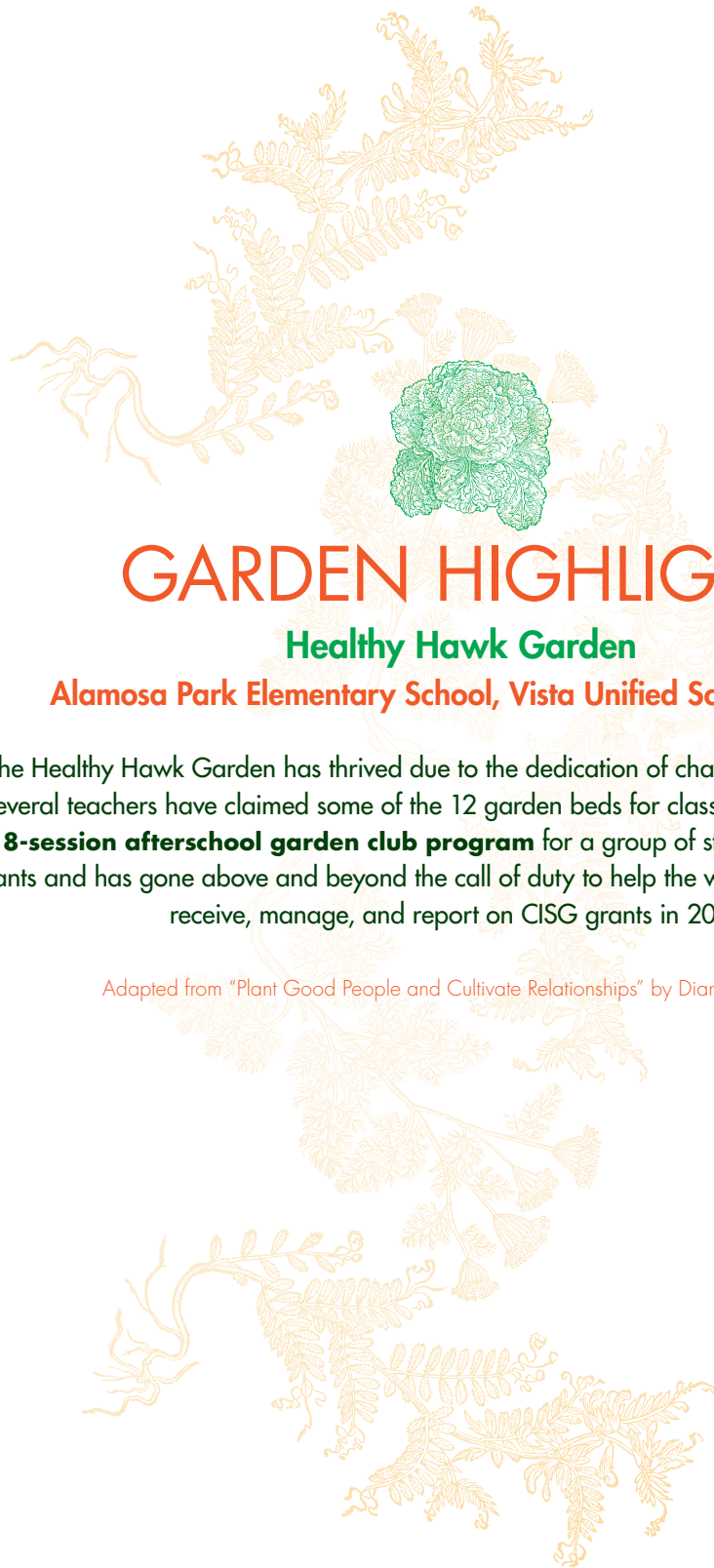
Before and after-school staff often lack garden-specific training and knowledge to lead students in activities in the garden. They may have valuable skills for working with students outdoors in larger groups, but they may be anxious about introducing tools and other garden-specific issues. The following are some suggestions to help direct before- and after-school activities to be successful in contributing to the garden program overall:

- Use some of the same standards-based and subject-based activities discussed in Lesson 6 in the after-school program (see the resources table in Lesson 6). Because the group will likely be diverse ages, modify the activities to help facilitate mentorship of younger students by older, more experienced students. Keep students engaged by having 2-3 prepared activities for the particular day that vary in theme and level of activity, so students can find tasks that match their energy level and interests.
- Use teamwork activities. Team activities are a great way to learn cooperation and help keep a larger group of students focused. Some wonderful activity examples for elementary school students are available in the curriculum *Growing Classroom*. For activities for older students check out the books and resources from The Food Project (thefoodproject.org/food-project-toolbox).
- A garden club or green team for students can be a way to help students feel excited about the garden and responsible for its care. If starting a garden club or green team, identify particularly enthusiastic and capable after-school staff, parents and older students who need service learning units, and nurture their participation by giving them special training and responsibilities. Their participation can help create a garden culture in the after-school program. Some clubs even purchased t-shirts to proudly identify themselves as garden team members. Help these identified staff connect with gardening mentors in the community, including Master Gardeners.
- Help after-school staff plan multiple activities, structured and unstructured, that they can use in a pinch, when kids lose interest, or when a planned activity finishes quickly. There are always tasks to be done in the garden (weeding, watering, turning compost, removing dead flowers, harvesting seeds and produce, addressing pest problems, etc), so staff should decide on some of these and some backup structured activities before starting their planned activities, in case they need to start something new on the fly. Some activities are included in Life Lab's excellent videos: www.lifelab.org/2010/01/back-pocket-garden-activities.



- Document the work of the garden team/club through photos and notes so that when staff change, new staff can continue garden work with the students with guidance from past experience. Older students can be in charge of photography and documenting.
- Make sure at least one member of the after-school staff is part of the garden leadership team (Lesson 2). A successful gardening program requires clear communication between all garden users. Participation in the garden team means the views of after-school staff and their students are represented, AND after-school staff can coordinate their activities with others, especially teachers. The garden leadership team should also be sure to publicly acknowledge the contributions of the after-school staff in helping care for the garden.
- Plan garden-based celebratory events that highlight the after-school program and its use of the garden. Harvest events and other similar events (more in Lesson 8) can feature the efforts of the after-school program to create more pride in the program.





GARDEN HIGHLIGHT

Healthy Hawk Garden

Alamosa Park Elementary School, Vista Unified School District

The Healthy Hawk Garden has thrived due to the dedication of champion Nancy Jones. Several teachers have claimed some of the 12 garden beds for class use, but Nancy runs an **8-session afterschool garden club program** for a group of students. She also writes grants and has gone above and beyond the call of duty to help the whole VUSD apply for, receive, manage, and report on CISG grants in 2006.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

LESSON 8

Gardens in the Wellness Movement

The reauthorization of the 2004 Child Nutrition Act included a provision that requires each educational agency participating in a federal school meal program to establish a local school wellness policy. By law, the policy must set goals for nutrition education, physical activity, and other school-based activities that promote student wellness; establish food guidelines for all foods available on campus; involve a variety of stakeholders in the policy development; and establish a plan for measuring the effects of the policy. With a national obesity epidemic and nearly 1 in 3 school-aged children overweight or obese in SD County, wellness policies and other efforts to help instill healthy habits in children are vital to creating a healthier future. School gardening programs can help schools meet wellness goals by promoting healthy nutrition and physical activity. Gardens are a source of fresh healthy food and promote food literacy and an understanding of how food gets from farm to fork, and meaningful physical activity. These are all important lessons if we hope to reduce the obesity rate. In this lesson, we'll focus specifically on connecting the gardening program to the cafeteria and using the garden to promote larger farm-to-school efforts.

Learning Objectives

1. Know the approval process and basic implementation strategies for incorporating garden produce in the cafeteria.
2. Understand how to compost cafeteria waste for the garden.
3. Learn ideas for celebration that promotes the garden and healthy eating.
4. Understand benefits of Farm-to-School and how the garden can promote it.

Using Garden Produce in the Cafeteria

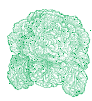
The school cafeteria is a classroom itself for teaching students the benefits and joy of life-long healthy eating habits. Research has shown that students that grow their own food are more likely to eat the food they helped grow, and they also tend to be more adventurous and healthier in other food choices (U Colorado 2009). Using and promoting school garden produce in the cafeteria can be a valuable teaching tool, even if the amount of produce available can only be a supplement to the other food.

School cafeterias face many challenges providing students with fresh and healthy foods. These include: low meal budgets, tight USDA-based nutrition guidelines, cost-saving kitchens equipped only for reheating frozen foods, and untrained staff. When considering a garden-to-cafeteria program you'll need to acknowledge these challenges directly, and work with the cafeteria staff closely to hear their ideas and concerns. Staff in many instances are major advocates of the program, and they are essential to making it work, so it's vital that at least one representative of the food service staff sit on the garden leadership team. Depending on budget, the food program might even support the garden by purchasing produce from the garden, plant seeds and starts for the garden, or supplies for the garden and/or garden to cafeteria program.

The next two subsections discuss two key considerations for a creating a garden-to-cafeteria program: (1) permission and regulations for using the produce, and (2) how to use the produce.

1. **Permission:** It is permissible to use garden-grown produce in cafeterias and retail outlets, including school cafeterias. Federal law does not specifically speak to the use of garden-grown produce, but a 2009 memo from the USDA does point out that school food services may permit the use of school garden-grown produce in the cafeteria. At the state level, the California Retail Food Code governs food service practices. While the code doesn't speak to the subject directly there are no disallowances of garden-grown produce. In an effort to help clarify uses of garden-grown produce in regulated food facilities and promote safe food handling practices, the County of San Diego Department of Environmental Health released its Conditional Approval of a Culinary Garden Food Source for a Regulated Food Facility in 2011 (see Appendix 5). Shortly there after





in 2012, San Diego Unified School District launched its Conditional Approval of a Food Source for SDUSD's Garden-to-Cafeteria Program. For a great summary of the relevant laws please see and share NPLAN's publication "Serving School Garden Produce in the Cafeteria" (available here: www.nplanonline.org/childhood-obesity/products/school-garden-produce). Talk with food service staff and school administrators to make sure they are all aware of the permissions, and so everyone is on the same page about wanting the program to happen. As with any food used in the cafeteria, food safety protocol must be followed very carefully, including for washing and preparation. You can find several great resources to support your case for Garden to Cafeteria on the Farm to School web site (www.farmtoschool.org/CO/pubs.htm) and San Diego County Childhood Obesity Initiative web site (www.ourcommunityourkids.org/domains--committees/schools-and-after-school/healthy-works-school-gardens.aspx).

- 2 **How to use produce:** Herbs are a good, simple way to start; they are quick and easy to grow and can be incorporated into lots of recipes, if the kitchen is set up for cooking. The salad bar is also great; student growers can promote their garden-grown veggies to their peers at the salad bar, as occurs in the San Diego Unified School District, and small amounts can easily be used to supplement the bar. Support classroom projects by planning harvest-of-the-month activities, and cooking and/or tasting lessons. These lessons can easily coincide with the school food services menu when garden-grown produce or local foods are served, and students can work with food service staff to plan plantings to work for recipes. Some sites have adopted the model of mobile cooking carts to provide teachers with easy access to the tools to conduct a tasting. You can find some good information about a cooking cart system in the Vista Unified School District at: <http://www.vusd.k12.ca.us/cns/teachresoures.htm>.

ACTIVITY 1

Brainstorm and share ways that garden produce might be incorporated, however small the amounts, into breakfast, lunch, and snack. Design ways to promote that produce to the school community.

Composting Kitchen Waste for the Garden

Composting is a great opportunity for food services to support and benefit from the garden. Data from pilot waste reduction projects show great success of school composting (Cal EPA 2002). Composting waste from the food program engages the whole school community in supporting the garden (by providing it with nutrients from leftovers) and reduces costs for hauling food waste off the site. When done systematically, it provides a needed soil amendment to the garden from food and paper waste generated on site. Food services can provide receptacles for food waste and students can create a well-labeled system for helping staff and fellow students collect waste at the end of each meal (this would make an excellent class project for older students!). The garden team can then coordinate with classes and after-school staff to incorporate routine composting time/activities. For basics on composting, Gardening 101 and "Building Fertile Soil" (casfs.ucsc.edu/publications/for-the-gardener) offer good resources. For information on waste audits and institutionalized waste reduction use this link from CalRecycle: www.calrecycle.ca.gov/ReduceWaste/Schools/composition.htm

Celebrations for Promoting the Garden and Healthy Eating

Food- and garden-related celebrations help involve food service workers, build community, fundraise, promote other healthy food initiatives like Farm-to-School and reward the organizers and student growers for their hard work! Again, the school garden typically won't produce enough food to source large amounts of food to school meal programs, so celebratory events are a good way to use garden produce in a visible and positive way.

Seasons and seasonal garden harvests are natural ways to organize garden events and celebrations. You could schedule an annual fall harvest festival where food service workers help students prepare a squash dish for their families and classmates. New families would get to meet food service workers, bridging a gap in garden participants that is often left open.

Any garden celebration is an opportunity to praise and thank the people who grow the food (students, teachers, community members), the people who cook the food (food service workers), and the people who provide the infrastructure for the program (administration, maintenance, etc). Make sure to always take photos at events like these – photos like this are essential additions to fundraising and grant requests.

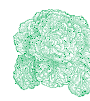
How the School Garden Can Promote Farm-to-School

The Farm-to-School movement uses local, fresh foods in school meal programs to support student health, the environment, and the local economy. Local foods provide an alternative to highly-processed foods and keep local farmers farming on their land. Garden-grown produce is the most local of food sources, and a key component of the farm-to-school movement, but local farms can provide more food to really change what students are eating at school. As a part of a successful Farm-to-School program, whenever fresh foods are sampled and served, acknowledging the growers (farmers or the students themselves) will help instill pride in the local producers and help students make a connection between the people who grew their food and the food itself. Student growers will help promote the school-grown food, but beyond this, using garden produce in the cafeteria helps the whole community respect the role that growers play in the food system, which can build support for buying local food for the cafeteria.

Again, celebratory events can be key in promoting and acknowledging what local growers do for creating a healthy population. Celebratory events could incorporate school garden food as well as food from a local grower. A local grower might even come to the event, modeling farming as a possible career choice and connecting families to their local farmers. Think creatively about how the school garden can be a family-based outdoor classroom- one where families can learn about the food in their local community and the food system, and learn how to model at home the healthy food lessons being taught at school.

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GARDEN HIGHLIGHT

Alice Birney Elementary
SDUSD

After a garden makeover from the County Television Network's Down to Earth Program in 2007 this garden has become the centerpiece of school activity. With two orchards and planter boxes located in and around campus, students interact with crops and seasonal produce and a healthy population of monarch butterflies. After-school program students help care for the garden and K-3 students have biweekly classes to learn about plant growth, composting, and garden-based nutrition. In addition to garden time, **teachers use the garden for life science units, art projects and ecosystem observations, among other standards-based projects.** The rambling path through the garden offers a great cool-out zone for special needs students during counseling sessions. Birney is one of the pioneering sites integrating some of the garden grown produce into the cafeteria salad bar and doing classroom taste tests and Chef demonstrations with local restaurant chefs.

Adapted from "Plant Good People and Cultivate Relationships" by Diana Bergman.

APPENDIX

1. Plant Good People and Cultivate Relationships – How Schools Sustain their Garden Programs

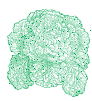
Sustaining school gardens is a very pressing matter due to the large number of new programs that sprouted as a result of the California Instructional School Garden grant program and a rise in interest about “green” living. The initial excitement of starting a garden must quickly transition into practical resolve, as it requires regular work and a minimum infrastructure to support it long term. Several schools in San Diego County have managed to keep their garden programs going for many years, leading us to wonder “what’s their secret?” After examining the garden programs at seven exemplary schools, a few commonalities became apparent. They almost all had a school garden coordinator, supportive administration, a stable teacher population, and a garden whose size and design were tailored to its use. Perhaps one of these “secret ingredients” might inspire you, so read on!

At these schools, one or more persons were clearly identified as the School Garden Coordinator or Team, so that people knew who to go to if they needed something related to the garden or had something to offer. These people were sometimes paid, and sometimes not; however, garden coordinators who were volunteers tended to have a vested interest in that school, whether it was prior teaching experience or children in attendance. Nancy Jones, former Vista USD teacher, just couldn’t stay retired and still volunteers at her former school to teach in the garden and provide support for other teachers district-wide. Shirley Demer at Grant Elementary in San Diego went from parent volunteer to paid staff member and created grade specific binders of lessons for each teacher as part of the science curriculum. Understanding that one person has neither the skills nor time to do everything, many programs had 2 to 3 people who each provided whatever their particular strength or interest was – at Allen Elementary in Chula Vista, teacher Carla Kriss wrote grants, while volunteer Steve Cooper regularly maintained the vegetable garden. Garden Coordinators also tried to make it as easy as possible for teachers to be involved, by providing lesson materials, teaching assistance, etc.

The importance of having supportive (or at least not hostile) administration cannot be underestimated. Principals help to set the tone at the school among teachers regarding use and importance of the garden. Principals at all of the schools interviewed for this article recognized that the garden was seen favorably by parents and community members, making it great for public relations. Most of them personally believed in the connection between the garden and the emotional, academic and nutritional health of their students. “It’s a necessity, not a luxury,” said Director David Sheppard at VIP Village Preschool in Imperial Beach. Motivated principals such as Julie Norby at Solana Santa Fe Elementary were often able to find creative ways to fund garden coordinators, or in this case assist in the development of a partnership with the PTA to do so.

No garden I visited looked the same -the garden’s size and design were tailored to the school’s use, and each year I am told they looked a little different. This concept was best illustrated at VIP Preschool, where they redesigned their garden recently and actually removed the old teacher-assigned beds, opting instead for a design that garden coordinator Jennie Zimmerman could manage on her own. Ms. Zimmerman plans and organizes activities in the garden, classes visit the garden in place of one recess a week, and children self-select the activities they wish to participate in. Tying gardening to learning does not require one model garden. Schools should design an area that is usable by the school’s faculty in the way they determine is most effective for them. At Solana Santa Fe, the garden had grade-specific beds, while teachers at San Diego’s Doyle Elementary School annually adopted a bed. If interest at a school is plain-and-simple limited, a teacher can employ planters outside their classroom or develop something small with an after-school garden club. A sustainable garden program is one that does not overwhelm those involved, and whose design best fits with the needs and skills of those individuals.





Interestingly, at all of the visited schools, the garden coordinator indicated that the school has a fairly stable teacher population. This got me thinking about whether the presence of the garden was connected at all to teacher retention rates. And did one cause the other, and which way? It's no secret that all relationships require investments of time and energy, and that knowledge is stored in key people. Garden Coordinator Dolores Fangon at Buena Vista Elementary in Carlsbad is an energetic octogenarian who, for 13 years, has encouraged students to grow and try new foods like cherimoya, sugar cane, and hyacinth beans in their "Down to Earth" Garden. It is simply easier to maintain a relationship when you have the same person/people involved for several years. At some point, however, you start to wonder if the garden grounds its teachers and students, or do the people ground the garden? This issue is worth further investigation.

Investigated the practices of some of San Diego County's long running urban school garden programs clarified and confirmed one important insight -while gardens do require funding for materials such as soil amendments and tools, the secret ingredient in sustained school garden programs is the people involved. One main priority is to have identified a coordinator or team to support the garden – someone who has gardening experience, an interest in passing this information to others, and willingness to organize the other related tasks and people. A second very important priority is to get school leadership invested in the garden. If principals are like the rest of us, more are living in urban areas and have limited personal experience with agriculture/gardening or even healthful eating. It is essential to educate principals about the effectiveness of gardens as learning tools for academic subjects as well as life skills, bearing in mind their interests in maintaining a cost effective and high performing learning environment. If a captain doesn't understand the value of a destination, then he or she probably won't steer the ship in that direction or pass information to the crew or passengers. We already knew how important we all are, but the priorities listed above demonstrate investments in people -their knowledge and their relationships. Gardens are essentially symbioses between nature and people. It may be financially and logistically difficult to strengthen the human component of the relationship, yet it's a highly effective way to sustain a garden program as was demonstrated at the interviewed schools. Most importantly, we reap the benefits for ourselves, our school communities, and our kids according to what we sow. Special thanks to all of the individuals interviewed for this article. For more information about sustaining school garden programs, visit www.csgn.org.

Grant School, San Diego Unified School District

Garden Description: The Gecko Garden was established in 1997 has been overseen by Shirley Demer for the past 6 years. Ms. Demer is a parent volunteer but was paid this year as a science lab coordinator 4 days a week. There are 21 beds (one per class), compost bins, a shed, and irrigation at each plot.

Main Points: Ms. Demer created a curriculum binder for each grade as her child advanced through the grades and she volunteered with a new grade. Each K-5 classroom now receives two binders (one for teacher and one for parent volunteer) with 6 lesson options (one per month). The lessons center on one crop per grade and if possible take kids through an entire planting cycle. Most teachers have been at the school for a while and are very receptive to the program as it has been built into the school routine. Grant was formerly a math and science magnet school. When kids visit the garden with their homeroom, they divide the class into two halves, one with teacher/volunteer, and the other with Ms. Demer. The culminating event is the Annual Farmer's Market, where each class is responsible for raising one product for the market, which occurs in May. Proceeds from the event (\$800 to \$1000) are enough to maintain the program annually. A major remodel of the garden is being planned though and fundraising has begun for this.



Doyle Elementary School, San Diego Unified School District

Garden Description: Not every garden can boast a crayfish pond, but this one can! The garden also has a shed, covered sitting area, and eight garden beds with irrigation. The garden is tucked behind the baseball field backstop, protected by a chain link fence.

Main Points: A core team of teachers who are also passionate gardeners has helped sustain this school garden for nearly 15 years. Having used it for so long, they are self sufficient with their own lessons and manage their own classroom garden bed from year to year. Their commitment often comes in the form of garden supplies that they purchase on their own, unless the PTA or EDUCATE, the local community's school foundation, is approached to help pay for something larger. In general though, there isn't a formal budget for the garden, and there isn't one single garden coordinator. It's simply the synergy of several devoted teachers like Gail Janes and Vicki Barham that keeps the garden actively used. Visits to the garden occur during the school day with the teacher – sometimes half the class will work with the PE teacher, while the other half does the garden lesson, and then the groups switch.

Allen Elementary School, Chula Vista Elementary School District

"Build it and they will come."

Garden Description: The 40x40ft. fenced vegetable garden was established in 2004 and contains 7 raised beds. There are a few fruit trees outside the fencing, as well as a large repurposed horse trough that now contains milkweed. The CISG grant provided funding to construct a butterfly garden in 2007, and a local nonprofit partner helped design and build it.

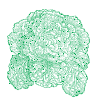
Main Points: Garden Coordinator Carla Kriss is a 3rd grade teacher at the school. There are two main volunteers, each of whom is informally in charge of one half of the garden. The garden is used by interested teachers and children throughout the day but is not built into any class's regular routine. Children often visit before school when volunteer Steve Cooper is there. Now that the garden is established, the main expense is soil amendments. Ms. Kriss points to a "divide and conquer" strategy as one reason for the garden's success at the school – she and a colleague do the grant writing, while volunteers maintain the garden as suits their skills and interest. The other strategy is persistence and open ears to tips about local resources. Grant funds go through the PTA for ease of reimbursement. The school is fortunate to have parent and community (Eagle Scouts) volunteers who have asked to be involved with the garden, as well as good relations with district staff. Student interest in the garden has been spurred by the annual growing of pumpkins, and also an easily accessible butterfly garden when children can regularly observe insects, including Monarch caterpillars. The school's long range plan is to foster more family gardens at students' homes.

Buena Vista Elementary School, Carlsbad Unified School District

"The charming garden."

Garden Description: The "Down to Earth" Garden was established in 1997 under the supervision of garden coordinator Dolores Fangon. The most unique aspect of this garden is its global variety of plants including sugarcane, cherimoya, chayote, taro, peanuts, persimmons, and even pineapples.

Main Points: Dolores does things her way and everyone seems pretty fine with that. As long as she's able to, fiery 83 year old Dolores will pour her passion and commitment into the garden. Formerly a certificated teacher, when Dolores moved to Carlsbad she became a paid tutor at the school, and voluntarily developed the school garden. The funding dried up this year but Principal Tina Howard worked hard to fund Dolores' time through the school's discretionary funds. She feels it's worth it since the garden adds a degree of charm to the small school



and is favorably viewed by the surrounding community. Many children also find refuge in the garden. Every child gets individual attention in the garden, as they are pulled out of class in groups of 2-3 at a time for lessons. Larger groups converge at lunch when Dolores opens the garden for casual visits, or when she hosts salad or stir-fry parties with harvested vegetables. The food parties provide an opportunity to teach about food safety, nutrition, and meal etiquette.

Alamosa Park Elementary School, Vista Unified School District

"The Healthy Hawks -It's all in the name."

Garden Description: The Healthy Hawk Garden is tucked just behind a bungalow and under a large Pine tree. Several of the dozen beds have been claimed by classroom teachers and boast handmade signs. Native and drought tolerant plants are planted along the edges.

Main Points: Garden Coordinator Nancy Jones loves gardening with kids so much that she just couldn't fully retire. Currently, she volunteers to oversee the "Healthy Hawks" Afterschool Garden Club every two weeks. For a fee of \$10 each to cover supplies, twenty students get 8 one-hour sessions of garden club after school. She also writes grant applications for garden supplies. Ms. Jones helped her district schools apply for, use, and report back on their use of the CISG grants. Two thirds (20 out of 30) of Vista USD school received the grants in 2006. While final reports from grant recipients were not requested by the state due to the budget crisis, Ms. Jones voluntarily coordinated the collection of final reports from the VUSD recipients and compiled information into a presentation for the school board.

VIP Village Preschool, Imperial Beach School District

"It's a necessity, not a luxury."

Garden Description: The garden has several features that are developmentally appropriate for preschool-aged children. These include a large permanent raised planting bed created with keystone, a digging area, teepee-shaped hiding area covered with vines, shaded activity tables with rotating self-directed activities, composting area, storage sheds, and a native plant exploration area.

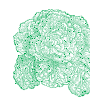
Main Points: The garden underwent a major remodel last year. Old wooden raised beds that were assigned to each class were removed. There were problems associated with the previous design, in that visiting parents sometimes associated beautiful garden beds with teacher quality. Furthermore, fallow beds became the burden of the garden coordinator, which led to stress on her part. The new design is manageable for one part-time garden coordinator to maintain. Teachers can elect to be involved in planting activities if they arrange it with the garden coordinator. "Plant It Earth" has been folded into the weekly routine of all classes at this large preschool. It replaces one recess a week for each class. The rotating activity station generally has activities that support science-oriented preschool "foundations", which are similar to K-12 academic standards. The school director is very supportive of the garden and is committed to maintaining the program. He has managed to pay the garden coordinator this year for 10 hours a week through special "First 5 -Preschool for All" funds supporting "enhanced quality programs", and has used other budgets in the past as available and appropriate, but it has become more difficult each year to find available funds due to budget cuts. G.C. time is the major garden expense since the G.C. has been able to acquire donations for other garden-related materials. The G.C. is a part-time teacher at the school who has gardening skills and has taught there for 15 years.

Solana Santa Fe School, Solana Beach School District

Garden Description: Rustic fence posts separate the garden from the neighboring ball fields, but otherwise it is open to the school grounds. Each grade level has its own fenced plot, protecting 1 to 6 garden beds from hungry rodent visitors. A shed and greenhouse keep tools and materials protected and organized. Two picnic tables provide seating for activities or parties. Large metal and wood rose trellises create a shaded path through the garden. Themed gardens include a recycled garden, butterfly garden, and succulent garden. Art is strongly prevalent through the incorporation of mosaics, statuary (a metal dinosaur!), and painted objects.

Main Points: The garden was established in the 1990's through the work of local "farm to the stars" Chino Farms, but experienced a fallow period of 7 years where it was not regularly in use. It was revived in 2004 when a local Eagle School troop volunteered to build the existing raised beds, and Principal Julie Norby with the school PTA decided to fund a part time garden coordinator. Now, garden use is common for almost all classes at the school, especially the art and science teachers. The principal has expressed her clear support for the garden and set the expectation that all classes should use it. Garden Coordinator Peggy Kenney had a teaching background as well as Master Gardener certification. She worked with teachers to design lessons that focus on specific standards for each grade. Teachers simply sign up and show up, and the beds/supplies are ready to go for that particular focus. Classes also use the garden as a beautiful and relaxing backdrop for independent reading and parties. Children can also come on their own during the Friday lunch period to help with garden maintenance – many appreciate its non-competitive atmosphere, which is rather different from other parts of the playground. PTA representative Carolyn Nguyen writes grants and a newsletter for the garden so that the garden coordinator can focus on what she does best—work with kids and teachers in the garden.

**Adapted from Diana Bergman, Education Coordinator Resource Conservation District of Greater San Diego County*





2. Benefits of Gardening for Children

Gardening provides different forms of engagement for children, including designing, planting, and maintaining gardens; harvesting, preparing, and sharing food; working cooperatively in groups; learning about science and nutrition; and creating art and stories inspired by gardens. The studies summarized below have been selected because they include control groups, pre- and post-measures, well controlled correlations, or in depth qualitative analyses. For more studies and on analysis of this research, see reviews by Blair (2009) and Robinson-O'Brien, Story and Hein (2009).

Key Studies

Lifelong Benefits

In a nationwide telephone survey of 2,004 respondents, people who reported picking flowers, fruits or vegetables, planting trees, taking care of plants, or living next to a garden in childhood were more likely to show an interest in gardening as they aged and to form lasting positive relationships with gardens and trees (Lohr & Pearson-Mims, 2005). In two interview studies with adult gardeners (sample sizes of 18 or more than 100), most respondents recalled vivid positive memories of play and exploration in childhood gardens, which inspired garden ideas and a desire to garden later in life (Francis, 1995; Gross & Lane, 2007).

Positive Social and Interpersonal Skills

When third to fifth grade students who participated in a one-year gardening program filled out a survey of life skills, they showed a significant increase in self-understanding and the ability to work in groups compared to nonparticipating students (Robinson & Zajicek, 2005). Youth interns in community gardens reported increases in maturity, responsibility and interpersonal skills (Hung, 2004). In a community garden program in San Antonio, qualitative interview of teachers, parents, a principal and 52 second and third grade students revealed that children are likely to have positive bonding experiences with their parents and other adults (Alexander, North, & Hendren, 1995). These findings are consistent with research that indicates that community gardening projects "grow" community (Glover, 2004).

Healthy Eating and Nutrition

Children who grow their own food are more likely to eat fresh fruits and vegetables (Canaris, 1995; Hermann Et al., 2006; Libman, 2007; McAleese & Rankin, 2007; Pothukuchi, 2004) or express a preference for these foods (Lineberger & Zajicek, 2000; Morris & Zidenberg-Cherr, 2002). Garden programs often include lessons on nutrition, resulting in greater knowledge about healthy eating (Koch, Waliczek & Zajicek, 2006; Morris & Zidenberg-Cherr, 2002).

Science Achievement and Attitudes Towards Learning

Fifth grade students who participated in school gardening activities scored significantly higher on science achievement tests than students who had a curriculum without garden experiences (Klemmer, Waliczek, & Zajicek, 2005). Evaluations of the Junior Master Gardener program in Indiana (Dirks & Orvis, 2005) and Louisiana (Smith & Motsenbocker, 2005) also found greater science achievement gains among gardening students compared to control groups. Gardening activities can be integrated into all areas of the school curriculum, making learning more meaningful (Canaris, 1995). Parent involvement, shown to enhance student achievement (Henderson & Mapp, 2002), increases at schools with garden programs (Alexander, North, & Hendren, 1995).

Design Skills and Environmental Stewardship

Even young children can contribute to designs that make gardens enjoyable places (Whiren, 1995) and older children can competently design and create gardens and garden programs with a range of elements and themes (Canaris, 1995; Heffernan, 1994; Lekies et al., 2006). Second and fourth grade students in a school gardening

program in Texas showed significantly more gains in proenvironmental attitudes than students in a control group, and the more outdoor experiences they had, the more positive their attitudes (Skelly & Zajicek, 1998). In a qualitative assessment of an intergenerational gardening project, students expressed an increased understanding of ecology, interconnections in nature, and responsibility to care for the environment (Mayer-Smith, Bartosh & Peterat, 2007).

Special Populations

According to observations, interviews and journals, a multicultural school gardens program for recent immigrants provided a space where children could share their cultural heritages, feel a sense of belonging, and form connections to the local environment (Cutter-Mackenzie, 2009). When juvenile offenders assessed their participation in a horticultural training program, most believed that it sparked their interest in further education, gave them ideas for green careers and improved their job skills (Flagler, 1995). Pre and post-tests of juvenile learning horticultural techniques and working on community landscaping found that participants increased their levels of self-esteem (Cammack, Waliczek & Zajicek, 2002a), horticultural knowledge and proenvironmental attitudes (Cammack, Waliczek & Zajicek, 2002b). Gardening has long been recognized as a therapeutic healing activity which can positively impact mental health and well-being (Ulrich, 1999).

*Adapted from Children, Youth and Environments Center for Research and Design, University of Colorado at Denver and Health Sciences Center; Fact Sheet #3, December, 2010 www.ucdenver.edu/cve



3. Let's Go Local: Recommendations for Linking Locally Grown Food, School Gardens, and Joint-use Agreements for School Wellness Policies



Let's Go Local: Recommendations for Linking Locally Grown Food, School Gardens, and Joint-Use Agreements to School Wellness Policies

The Reauthorization of the Child Nutrition programs in 2004 included a provision that requires each educational agency participating in a federal school meal program to establish a local school wellness policy. Districts have begun to examine the impact of these policies in improving the health and wellness of students. The law requires that these policies must, at a minimum:

- I. Set goals for nutrition education, physical activity, and other school-based activities that promote student wellness.
- II. Establish nutrition guidelines for all foods available on campus during the school day.
- III. Ensure that guidelines for school meals are not less restrictive than those set at the federal level by the Secretary of Agriculture.
- IV. Establish a plan for measuring the impact and implementation of the local wellness policy.
- V. Involve parents, students, representatives of the school authority, the school board, school administrators, and the public in development of the local wellness policy.

Every five years, the USDA School Meals Initiative (SMI), in partnership with the California Department of Education, is required to conduct a formal review to monitor each district's compliance with the established nutrition and physical activity wellness policy.

Using These Policy Recommendations

This resource was developed to help districts more readily integrate wellness into core activities for a more holistic and sustainable approach to school wellness. These recommendations specifically promote policy language that supports local purchasing, farm-to-school activities, school gardens, and joint use agreements.

Gardens serve broad and multifaceted roles in the school environment, and when made accessible to the surrounding neighborhood, they serve the community as well. Gardens offer experiential learning opportunities and a place for students to learn about the food system, cultivate food, engage in physical activity, and taste the most local food possible. They also offer an interactive learning lab for math, science, literature arts, and other core curricula. Fostering the involvement of after-school programs, clubs, and community partners in the care of school gardens expands the nutrition and physical activity benefits and can greatly enhance garden sustainability.

Wellness Policy Highlight:

Albert Einstein Elementary School

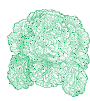


Albert Einstein Elementary School has taken care to incorporate language specific to gardening into its policy's Nutrition Education guidelines. Instituting standards similar to those listed below is an integral way to teach students about how food affects their health and future.

The following garden language was adopted by San Diego Unified School District's Albert Einstein Academy (AEA):

- AEA should maintain an instructional garden (tilled ground, raised bed, container, nearby park, community garden, farm, or lot), of sufficient size to provide students with experiences in planting, harvesting, preparation, serving, and tasting foods, including ceremonies and celebrations that observe food traditions, integrated with nutrition education and core curriculum, and articulated with state standards.
- AEA encourages staff to integrate hands-on experiences in gardens and kitchen classrooms, and enrichment activities such as farm field studies, farmers' markets tours, and visits to community gardens, with core curriculum so that students begin to understand how food reaches the table and the implications that has for their health and future.



**Using These Policy Recommendations** (continued)

The term joint-use agreement refers to two or more entities, such as a school and a city or nonprofit organization, formally or informally agreeing to share indoor and outdoor spaces like gymnasiums, athletic fields, and gardens. These partnerships help schools and communities collaborate in maintaining facilities, building investment in programs that support nutrition and physical activity, and sustaining resources that serve both the neighborhood and the school.

Farm-to-school activities promote the inclusion of locally produced (or school garden-grown) products into school meals or other food sales. Farm-to-school activities are gaining popularity across the county as a means of enhancing food quality, conducting nutrition education, raising school funds, and teaching students about the food system. Incorporating strategies for using local or garden-grown produce into a school's meal program can help pique the interest of students in nutrition, teach life skills, and improve the physical and fiscal health of the local community.

The following policy recommendations provide a menu of options; pick those that make the most sense for your district. The policies can be used individually or all together to help create a healthy school environment. Please refer to the resources section for more information and additional tools on developing a comprehensive wellness policy.

Model Language for School Wellness Policy**Joint-Use Policy Highlight:****Denver Public Schools**

For over a decade, Denver Urban Gardens (DUG), Slow Food Denver, and Learning Landscapes have been collaborating with Denver Public Schools (DPS) to establish innovative joint-use agreements that give community members a way to contribute to the sustainability of school gardens and associated education programs. The collaboration has manifested itself at dozens of elementary schools. These agreements have many mutual benefits, including the following:

- Since school sites often have excess land, DUG is using it to increase the number of community gardens in Denver; this in turn increases access to fresh, locally-grown produce, both for schools and the community.
- The practice of having community members gardening onsite offers school staff support in managing and sustaining the gardens. Further, community gardeners often offer their expertise to assist in gardening and nutrition education for DPS students.
- Sometimes, DUG and DPS collaborate to attract funders to invest in the school and community. Fundraisers in Denver have yielded awards from businesses such as Whole Foods Market and Chipotle.

Wellness Policy Requirement 1: Set goals for nutrition education, physical activity, and other school-based activities that promote student wellness.

The following model language strengthens support for school gardens, joint-use, and farm-to-school through nutrition education.

Nutrition Education

- Each school shall establish a school garden to be used as an outdoor classroom for nutrition, science, history, culture, and other lessons.
- Staff shall integrate experiential education activities—such as planting, harvesting, cooking demonstrations, farm and farmers' market tours—into existing curricula at all grade levels as a means to enhance student investment and understanding of health, environment, and the food system.
- Nutrition education messages from the classroom will be modeled in the cafeteria and across campus by offering garden- and local farm-grown food whenever possible within the reimbursable federal meal program, a la carte sales, vending machines, student-run vending programs, and after-school/extracurricular programs.
- School food service, in partnership with other school departments and community organizations, will creatively market and promote locally-produced food to students, through such activities as:
 - sampling of locally grown items, including school garden grown-produce, in the school cafeteria through the USDA meal program
 - developing cafeteria themes relating to local farms, farmers, and products grown seasonally in the region
 - developing creative campus fundraisers based on healthy food items like cooking competitions, farm stands, or take-home family produce boxes that integrate produce grown on local farms or from the school garden where appropriate.



Model Language for School Wellness Policy (continued)

Physical Activity

- The district recognizes that school gardens and farm visits offer opportunities for physical activity and agricultural education by engaging students in such activities as planting, harvesting, and weeding. Teachers and students are encouraged to take advantage of these physical activity opportunities during the school day and through after-school activities.
- In many communities, schools provide the only open space for recreation, physical activity, and gardening. Schools are encouraged to adopt policies, practices, and joint-use agreements that support community use of outdoor facilities before, during, and after the school day as a means of improving community health and public safety.

Other School-Based Activities

Promote community involvement and support through joint-use agreements that allow community members to help maintain, sustain, and support school resources, including joint use gardens (i.e., community gardens on school property).

Wellness Policy Requirement II: Establish nutrition guidelines for all foods available on campus during school day.

- Meals served within the federally reimbursable meal program will be designed to feature fruits and vegetables and other healthy foods from local sources to the greatest extent possible.
- Schools are encouraged to offer locally-grown food, including items from a school garden, at every location on the school site where food is sold and in all school-sponsored events and activities.

Wellness Policy Requirement III: Ensure that guidelines for school meals are not less restrictive than those set at the federal level by the Secretary of Agriculture.

- The School Food Services Director will review this policy and ensure that the policies are not less restrictive than those set by the Secretary of Agriculture or state law.

Wellness Policy Requirement IV: Establish a plan for measuring the impact and implementation of the local wellness policy.

Evaluation of farm-to-school programs should include the effects of including locally sourced farm products in the school meal programs as well as the effects of any in-class or experiential education programs.

The nutrition and financial aspects should be evaluated, as well as the knowledge gained as a result of the overall farm-to-school program. Some possible indicators/methods include:

- the percentage of food purchased from local sources (including the school garden)
- the budgetary impact of increasing local purchases
- the impact of local purchasing on participation in the school meal program
- qualitative pre- and post-studies on what students have learned about healthy eating and local, seasonal eating
- persistence of school gardens as an outdoor classroom and afterschool activity, and the impact of joint-use gardens on school enrollment, garden persistence, and community volunteerism at schools

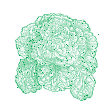
Farm to School Highlight: Crawford High School



San Diego Unified School District in partnership with the International Rescue Committee has fostered activities that have led to the development of a Garden-to-Cafeteria program at Crawford High School.

Here are some of this program's successes:

- Students grow crops in the school garden for the cafeteria's salad bar. Radishes, featured in Fall 2010, were grown organically and nourished by compost made from leftover fresh vegetables from Crawford's salad bar. The yield was enough to use in 3 school salad bars.
- The Garden-to-Cafeteria program is supported by a number of other school programs, such as media and marketing clubs, math, science, computer technology, journalism, video arts and more. A student in the Multimedia and Visual Arts School designed the sign above to advertise the radishes cultivated in the school garden and used in the cafeteria salad bar.
- The Food Services Department hopes to pay full market price for the garden-grown food as the program expands. Rewarding land stewardship and healthy eating with cash will encourage business acumen, entrepreneurship, garden maintenance and further, will instill Farm-to-School values into SDUSD children and schools.





Model Language for School Wellness Policy (continued)



Wellness Policy Requirement V: Involve parents, students, representatives of the school authority, the school board, school administrators, and the public in development of the local wellness policy.

The wellness policy committee should involve parents, students, representatives of the school authority, the school board, school administrators, and the public in development of the local wellness policy. Representatives from the local agricultural community and food and nutrition professionals could be key members of the committee; they may be farmers, representatives from organizations that represent farmers, farmers market representatives, agricultural industry representatives, representatives from community organizations that work to promote local foods, public health professionals, chefs, nutritionists, and health educators.

Resources

Local Resources

- San Diego County Childhood Obesity Initiative: www.OurCommunityOurKids.org
- Tierra Miguel Foundation: www.TierraMiguelFarm.org
- California Project LEAN: www.CaliforniaProjectLEAN.org

Farm-to-School

- National Farm-to-School Network: www.farmtoschool.org
- Community Food Security Coalition Farm-to-School Program: www.foodsecurity.org/farm_to_school.html
- "Linking Farms with Schools: A Guide to Understanding Farm-to-School Programs for Schools, Farmers, and Organizers," available at www.foodsecurity.org/pubs.html
- "Healthy Farms, Healthy Kids: Evaluating the Barriers and Opportunities for Farm-to-School," available at www.foodsecurity.org/pubs.html
- "Rethinking School Lunch Guide," available at www.ecoliteracy.org/rethinking/rsj.html
- "Feeding Young Minds: Hands-on Farm-to-School Education Programs," www.foodsecurity.org/pubs.html

School Garden

- San Diego Master Gardeners School Garden Program: <http://www.mastergardenerssandiego.org/schools/schools.php>
- California School Garden Network: <http://www.csgn.org/>
- California Foundation for Ag in the Classroom: <http://www.cfajtc.org/>
- National Gardening Association: <http://www.kidsgardening.org/>

Joint Use

- Joint Use: <http://www.jointuse.org/home/>
- Center for Cities and Schools: <http://citiesandschools.berkeley.edu/joint-use.html>
- Public Health Law and Policy, NPLAN "Model Joint Use Agreement Resources": <http://www.phlpsnet.org/childhood-obesity/products/nplan-joint-use-agreements>



Made possible by funding from the U.S. Department of Health and Human Services, through the County of San Diego.

"Let's Go Local: Recommendations for Linking Locally Grown Food, School Gardens, and Joint-Use Agreements to School Wellness Policies" was created in partnership with Healthy WorksSM, County of San Diego Health and Human Services Agency, University of California San Diego, Tierra Miguel Foundation and San Diego County Childhood Obesity Initiative, a program facilitated by Community Health Improvement Partners.



4. Joint-use Gardens: Building Community, School by School

Healthy WorksSM School and Community Gardens Intervention



Joint Use Gardens : Building Communities, Supporting Schools

In a time of shrinking budgets, joint use projects provide an opportunity for schools and communities to work together to maximize resources and achieve shared goals. Establishing a joint use garden—a garden shared by a community and a school, typically on school land, with some plots designated for school use and some for community residents—is a great way to share resources, build relationships that strengthen a community, promote exercise and healthy eating, and ensure the sustainability of a school garden.

Benefits of Joint Use Gardens

Joint use gardens offer many benefits, especially in urban areas, where space for gardening is scarce:

- Students gain from opportunities for experiential learning and intergenerational engagement.
- Teachers and after-school staff gain from having gardening expertise close at hand.
- Schools receive support and assistance in maintaining the garden
- The entire school shares in the pride that comes from having a thriving garden on campus.
- Community residents get a place to garden nearby, access to healthy, affordable food, and a way to contribute to their neighborhood by beautifying school grounds and sharing their knowledge with youth.
- For many gardeners, especially parents and grandparents, the garden enhances their connection to the school, their neighbors, and the community.

Joint Use Partnerships

Joint use is happening in cities throughout California and across the nation. In fact, the concept of joint use is not new. Schools have shared their land and facilities for community use for over 200 years. Most states, including California, have policies to encourage or require schools to make facilities open to the public¹. In California, a 2008 survey conducted by the Center for Cities and Schools revealed that close to 60 percent of responding school districts already have some type of joint use partnership. San Diego Unified School District, for example, is a partner in over 40 joint use agreements. Joint use partnerships can be formal (based on a legal document) or informal (based on a handshake), but formal agreements offer increased protections for both the facility

¹ The Community Recreation Act and the California Civic Center Act promote the use of California school facilities for community purposes. The Community Recreation Act allows public agencies and schools to “do any and all things necessary or convenient to aid and cooperate in carrying out” community recreation programs that “promote and preserve the health and general welfare of the people of the state.” The California Civic Center Act identifies public school facilities as civic centers for the convening of any public groups that pertain to the educational, political, economic, artistic, and moral interests of the citizens of the communities in which they reside.





and the community group using the facility. Since school staffing can change over time, personal relationships are not the most secure way to guarantee access to facilities into the future. A formal agreement can also help prevent problems related to maintenance, operations, liability, ownership, or cost from arising.

School districts may be reluctant to open school property to the community after hours, concerned about the legal risks and the costs associated with injury or property damage. The good news is that California state law offers school districts strong protections against lawsuits. By prudently maintaining their property, carrying insurance, and requiring groups who use their property to maintain insurance—and by entering into formal joint use agreements—districts can minimize their risk.

There's no single path to developing a joint use agreement, and crafting a successful one requires care, cooperation, and ongoing communication among the partners as they address concerns and work out logistics. A first step in developing a partnership is to bring key stakeholders together to talk about their vision for the project and begin building relationships. People to include are school and district leadership, teachers, after-school staff, parents, community residents, and representatives from city government and local nonprofit organizations. As the partnership evolves, clearly spelling out each partners' roles and responsibilities and putting these into an agreement will minimize any potential conflict and ensure that the benefits of the partnership outweigh the challenges.

Resources

For excellent information on joint use partnerships, including a joint use toolkit and sample agreements, visit the websites of these organizations:

- National Policy and Legal Analysis Network to Prevent Childhood Obesity: <http://www.nplanonline.org/nplan/joint-use>
- Prevention Institute, JointUse.Org: <http://www.jointuse.org/home/>
- California Project Lean: <http://www.californiaprojectlean.org/doc.asp?id=224&parentid=221>
- Center for Cities and Schools: <http://citiesandschools.berkeley.edu/>



Made possible by funding from the U.S. Department of Health and Human Services, through the County of San Diego.


The Healthy WorksSM School and Community Gardens Intervention is implemented in partnership with the University of California San Diego and the San Diego County Childhood Obesity Initiative, a program facilitated by Community Health Improvement Partners.

5. Conditional Approval of a Culinary Garden Food Source for a Regulated Food Facility



County of San Diego

DEPARTMENT OF ENVIRONMENTAL HEALTH
FOOD AND HOUSING DIVISION
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
Phone: (858) 505-6900 FAX: (858) 505-6998
1 (800) 253-9933
www.sdcdeh.org



Conditional Approval of a Culinary Garden Food Source for a Regulated Food Facility

<p>Food Facility Identification</p> <p>Name of Facility: _____</p> <p>Address: _____</p>	<p>Health Permit #: _____</p> <p>City _____ Zip _____</p>
<p>Operator Identification</p> <p>Name: _____</p> <p>Address: _____</p>	<p>Phone: () _____</p> <p>City _____ Zip _____</p>
<p>Garden Location</p> <p>Address: _____</p>	<p>City _____ Zip _____</p>

Introduction and Purpose

Ensuring the safety of the food supply is critical to a healthy community. Retail food facilities regulated under the California Retail Food Code are required to obtain their food from an “approved source” as defined in sections 113725 and 114021 of the California Health and Safety Code. The regulation of food sources helps to ensure a safe food supply.

Some on-site gardens that provide food for a single co-located regulated food facility (“culinary gardens”) are considered by the Department of Environmental Health to be approved food sources for that food facility. Express documentation of these determinations and of the considerations, underlying these determinations will help to ensure safe practices in culinary gardens.

This conditional approval is intended to ensure that the culinary garden supporting the food facility identified above is a safe source of food. The practices and standards required under this agreement are consistent with applicable standards for approved food sources, and are in conformity with current public health principles and practices, and generally recognized industry standards that protect public health.

The certifications within this agreement document the food facility operator’s understanding of critical factors that play a role in preventing the microbial or chemical contamination of produce, and document the operator’s agreement to adhere to these minimum requirements. If the culinary garden addressed in this agreement is managed by a contractor, the operator shall require that contractor to co-sign this agreement, and shall provide a copy of the cosigned agreement to DEH

No transfer to or use of garden-grown food in any food facility other than the facility identified above is allowed under this approval.



Department of Environmental Health
Food and Housing Division

Conditional Approval of a Culinary Garden Food Source for a Regulated Food Facility

Water Quality

1. Water used for irrigation must be obtained from a public water system or wells that have been tested and shown to be free from pathogens
2. Graywater or recycled water is not an approved water source for culinary gardens.
3. Water runoff from other irrigation practices unrelated to the culinary garden or rainfall water runoff must be prevented from coming into contact with the culinary garden.

Septic Systems

4. Gardens shall not be planted over septic systems or leach fields

Presence of Animals

5. Efforts shall be maintained to exclude animals, including domestic animals, from the growing area.
6. Animal waste may not be used in culinary gardens.

Pesticides

7. Pesticides shall not be applied on or around culinary gardens without the written authorizations of the County Agricultural Commissioner (CAC). Gardens claiming to be organic must register with the CAC.

Compost

8. Compost applied to culinary gardens must be fully composted, and may not contain animal fecal materials. Composted manure is not permitted on culinary gardens.

Sanitary Practices

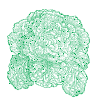
9. Gardening and harvest equipment must be maintained in a clean condition and stored in a sanitary location. Dedicated equipment shall be solely used in the garden and not used for other purposes on the property.
10. Vegetation at the edges of vegetable patches should be minimized to prevent harborage places for rodents and insects.
11. The grounds surrounding the garden should be maintained in a manner such that pests are not attracted to the area.

Worker Sanitation

12. Workers harvesting produce from culinary gardens must properly wash their hands before handling produce and be free of open cuts or wounds on their extremities.
13. Restroom facilities with warm water and soap must be readily accessible to anyone working in a culinary garden.
14. Workers should avoid cross-contamination of produce by ensuring equipment, gloves and other sources of contamination do not come into contact with produce after being potentially contaminated by compost or other materials.

Inspection/Notification

15. All garden facilities, equipment, operations and records shall be subject to inspection by Environmental Health at any time without prior notice. DEH costs for offsite inspections will be reimbursed by the operator at the labor rates established in the County Code.





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Conditional Approval of a Culinary Garden Food Source for a Regulated Food Facility

Food Facility Operator's Certification

I certify that I am authorized to enter into this agreement on behalf of the food facility operator identified above. I certify that the information in the attached Garden Questionnaire is true and correct. On behalf of the food facility operator and myself individually, I agree to adhere to the requirements listed above and agree to implement best agricultural practices in this culinary garden.

Printed Name and Title

Signature

____/____/____
Date

Garden Contract Operator's Certification

I certify that I am authorized to enter into this agreement on behalf of _____, the contract operator of this culinary garden. This operator agrees to adhere to the requirements listed above and agrees to implement best agricultural practices in this culinary garden.

Printed Name and Title

Signature

____/____/____
Date

DEH Conditional Approval of Food Source

The County Department of Environmental Health approves the culinary garden identified above as a food source for the food facility identified above. The approval is conditioned upon the operator's adherence to the requirements and best agricultural practices described above, and shall be void if those practices are not followed.

Printed Name and Title

Signature

____/____/____
Date





Department of Environmental Health
Food and Housing Division

Garden Questionnaire

Garden's Name: _____

Operator's Name: _____

Street Address: _____ Phone #: (____) _____

City _____ CA Zip _____

PLOT PLAN: Attach a plot plan showing the garden as well as major structures, chemical and equipment storage sheds, and septic systems within 100 feet of the garden.

PLANT/TREE INFORMATION: Include the type and number of plants and/or trees. Use additional sheet(s) if more space is needed.

Produce type	<input type="checkbox"/> Plant <input type="checkbox"/> Tree	#	Produce type	<input type="checkbox"/> Plant <input type="checkbox"/> Tree	#
_____		_____	_____		_____
_____		_____	_____		_____
_____		_____	_____		_____

Water Source: _____

Fertilizer Used: _____

Compost Used: _____

Pesticides Used: _____ (include source)

Quantity (in lbs.) _____ Application frequency _____

Are handwashing and restroom facilities available onsite? YES NO Distance form garden: _____

- ANIMALS:**
- Are animals excluded from the growing area? YES NO
 - Are any animals raised at this location? YES NO If YES:
 - Are animals separated from growing area? YES NO
 - Identify animal type(s): _____
 - Do the same workers take care of animals and produce growing areas? YES NO

- PRODUCE:**
- Where is produce sold or used? _____
 - Is produce washed prior to sale or use? YES NO
 - Is produce processed at this location? YES NO

