



# Policy



Slow Food USA®

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## Introduction

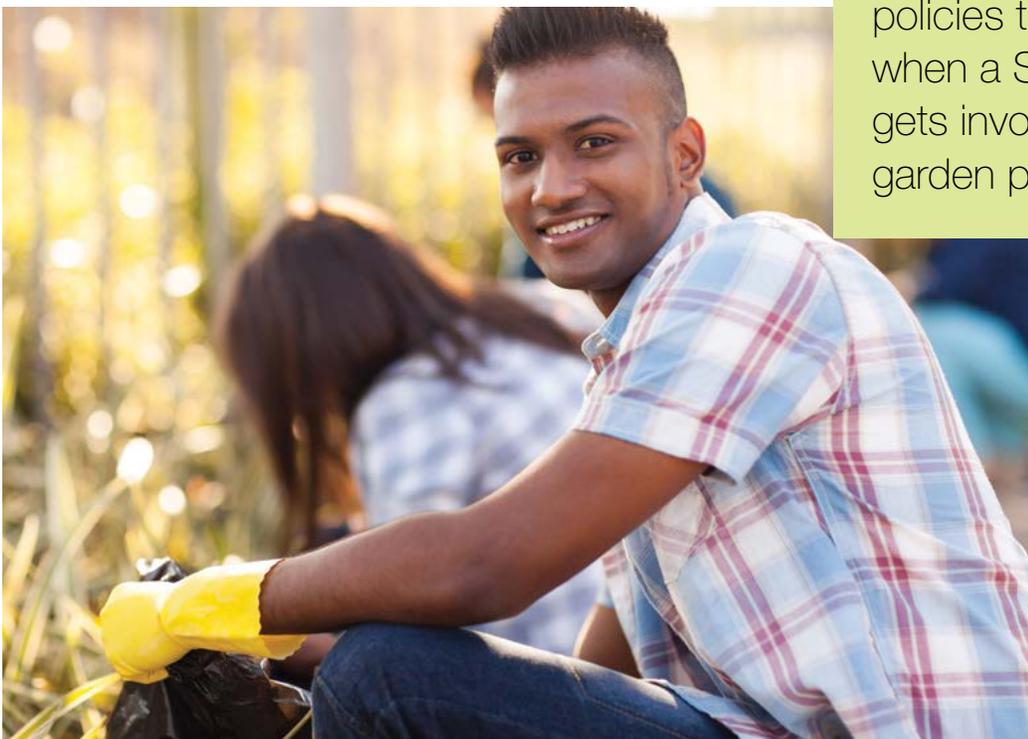
**S**ince school gardens involve growing fresh food on school grounds with students of all ages, there are many sensitive issues that come into play that require certain policies to be put in place. As Slow Food chapters get more involved in school garden projects, it will become more important that chapter leaders are well-versed in understanding how to navigate different levels of policies and to become the designers of policies.

The goal of this chapter is to describe some of the policy challenges that school garden projects will face and how Slow Food chapters can help lead the efforts to write effective, while not restrictive, policies around school gardens.

## Different levels of policy within a district and community

There are many levels of policies that will be in play when a Slow Food chapter gets involved in a school garden project. For example, just getting a garden started will bring the attention of a school district's Facilities and Grounds Department and their policies on safe use of school grounds and the use of materials in a garden. The Facilities department will also be checking the garden to see if it meets American Disability Act (ADA) standards for access to all students. At another School District level will be the Food and Nutrition Services Department and their need for safe food handling protocols during the cooking classes using fresh produce from the garden. Finally, the Risk Management Department will have policies in place for the background checks of volunteers and for cooking equipment that can be used in the school.

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At the school level, the principal will have certain policies in place to allow students outside in the schoolyard to work the garden. To ensure the safety of the children, there will be rules about garden tools and the amount of supervision required in the garden. Each school has a Facilities Manager who may have certain rules on water access and use of the school building for storage.

Teachers may have their own policies around class management and what kind of lessons can be incorporated into the classroom instruction. Ideally, the school garden is viewed as another classroom, so all rules that apply in the classroom should be applied in the garden setting.

We can even look at levels higher than the school district for possible policies that may affect school garden work. Once a garden program starts looking to supply the school cafeterias with fresh produce, the City Health Department will be involved to ensure that the food coming into the school kitchens is handled properly. Since the garden produce may be part of the school meal service, the State Department of Education or Human Services may have policies in place as they manage the National School Lunch Program. In some states, the State Department of Agriculture is insisting that school gardens fall into the same category as farms when it comes to Good Agricultural Practices.

In the next sections, descriptions of possible policy challenges will be provided for such issues as designing and building school gardens, volunteers, growing and harvesting of fresh produce, preparing and cooking fresh produce, curriculum, production of value-added products, and licensing needed for special projects. Within each section, examples will be provided of specific policies that have been developed by Slow Food chapters and descriptions of the partnerships that were created to accomplish these policy documents.



## CHECKLIST: LEVELS OF POLICIES ENCOUNTERED AROUND SCHOOL GARDEN PROJECTS

### State Level

#### Department of Agriculture

Farming practices

#### Department of Education and Health and Human Services

National School Lunch Program

### City Level

#### Health Department

Food safety in school kitchens

#### City government

Use of public lands and permits

### District Level

#### Facilities Department

Land use, safe building materials and ADA

#### Risk Management

Safe cooking procedures

#### Food and Nutrition Services

Food safety

### School Level

#### Principal

Students outside of the classroom

#### Facilities Manager

School storage and water use

### Classroom Level

#### Teacher

Curriculum and classroom management

As school garden programs become more developed and sophisticated, it is useful to produce a list of principles that guide all the discussions and decisions that may need to be made throughout the process. Slow Food Denver, working with their partners Denver Urban Gardens and Learning Landscapes, developed a list of Guiding Principles that became the foundation for school garden programs within a large urban district that involves many community partners.

## GUIDING PRINCIPLES FOR SCHOOL GARDEN PROGRAMS:

- School gardens are spaces for experiential, hands-on education, incorporating the full cycle of learning associated with healthy food - from growing to nutrition to cooking.
- School garden programs are designed to involve teachers and support their multi-disciplinary curriculum primarily in the subjects of science and social studies, while also promoting self-growth and a respect for diversity.
- Student education, rather than food production, is the primary purpose of a school garden program.
- Community involvement from the school administration, parents, and neighborhood volunteers is essential to the function and sustainability of a school garden program and its inclusion into the day-to-day culture of the school.
- School gardens are outdoor classrooms that utilize the grounds of the school to expand learning and stewardship opportunities for students without having to leave the school site.
- School gardens are engaging spaces for children to develop both a respect and a nurturing relationship with nature and their community.
- School gardens should model environmental stewardship and sustainability, while emphasizing the importance of seasonality to these concepts.
- Students should be provided with simple and culturally relevant take-home messages and practical skills to put what they've learned into practice at home.
- School gardens and programs should serve as training spaces and models for others interested in developing a similar program at their neighborhood school.
- School garden programs are inclusive by design, promoting a respect for all backgrounds and points of view and providing each student involved with an opportunity to participate.

This list of Guiding Principles then became the beginning for the construction of a School Garden Manual for the entire Denver Public Schools District. For over a year, Slow Food Denver, Denver Urban Gardens, and Learning Landscapes worked on the District School Garden Manual to carefully detail the district's policies that would impact a school garden program. The intent of the Manual is to provide a school with all the necessary information and contacts to launch a new garden program and follow the district policies in the process of getting started. Within the manual are links to District websites that detail the construction standards that gardens are supposed to follow and contact information for the Facilities Department. There are also policies concerning volunteers, food safety, fire safety, garden safety, garden maintenance guidelines, and greenhouse standards. Once the manual was completed, a coalition of community partners met with Denver Public school officials to work on any missing pieces and to get acceptance for the manual.

**The Denver School Garden Manual can be found at: [www.sfdseedtotable.org/stt-documents/](http://www.sfdseedtotable.org/stt-documents/)**



## Design and build policies

Most school garden programs begin with a series of meetings to organize and develop the goals and mission of a garden program. Slow Food chapters are often part of these initial meetings, helping to frame the discussions to focus on the purpose of the gardens and how the learning opportunities from the garden can be incorporated into the school day. One of the more anticipated segments of this planning is where to place the garden in the schoolyard. Often the attendees of the planning meetings are not aware of the district or school policies that may affect the location of the school garden. The missing link of communication is often from the district departments such as Facilities, Land Use, Risk Management, and Water to the groups representing gardens at the school. Slow Food chapters can serve as this link by first getting to know the important players at the district level that could make decisions that impact school gardens. The previous checklist shows the possible different district departments that could be engaged in the early phases of planning a school garden. Slow Food chapters can be a valuable resource of district information for school groups that may not be that well connected. And the district may prefer dealing with one group, like a Slow Food chapter, rather than dealing with numerous garden groups from multiple schools.

At the District level, the concern with school gardens is how the precious school property will be used as a garden and whether it will impact on the other needs of the school such as physical education classes, athletics, traffic flow, and noise control. Most Districts will require a site visit from a representative of the Facilities Department to go over the proposed location of the garden. The main concern of the Facilities Department is the long-term use of the land. Will there be much work required to prepare the land for a school garden and how will the placement of a school garden affect the visual appeal of the school? Are there long-term needs for expanding the size of the school or changes in the use of the schoolyard that need to be considered before placing a school garden at the site? Will the site be accessible to all students and are there any potential risks to the students at this site? See the checklist below for potential questions from the Facilities department.



## CHECKLISTS: TYPICAL CONCERNS OF THE LOCATION OF A SCHOOL GARDEN

# 1

### Line of sight

Are there uninterrupted sight lines from the school building to the farthest extent of the garden?

# 2

### Existing use of the site

Are there any structures or natural features (trees, slopes, boulders) that may interfere with the placement of a garden?

# 3

### Visual appeal

Does the placement of a school garden at this site affect the visual appeal of the schoolyard?

# 4

### Future plans for the site

Does the District Planning Department have a five-year and ten-year plan for expansion for the school and the proposed site?

# 5

### Existing state of the site

How much will need to be done to get the site garden-ready?

# 6

### Risk management

What are the possible risks of the proposed site (traffic, strangers, animals)?

# 7

### ADA accessible

Is the site accessible to all students, no matter their physical or mental disabilities?

# 8

### Pest control

Are there any threats of pests to the students (wild animals, bees, stray dogs or cats)?

Once the site of the new school garden has been approved, the Facilities Department will probably have a list of materials and features that will be approved for use on the schoolyard as part of the garden. Again, the main concern is safety for the students and the long-term sustainability of the materials. There are big differences between what districts may allow in the gardens (e.g., wood vs stone for raised beds). The following checklists are some of the considerations when planning for materials and features in a school garden.

## CHECKLIST: ISSUES CONCERNING MATERIALS IN SCHOOL GARDENS

**1**

**Soil**

Most districts will want to conduct soil tests for the presence of metals, poisons, and organic material.

**2**

**Amendments**

It will be necessary to know the source of compost and age of manures used in the gardens.

**3**

**Building materials**

Facility departments want gardens to use materials that will last for a long time and pose minimal risk to the students. Check on the use of wood vs stone/block vs synthetic materials.

**4**

**Pathways**

ADA requirements dictate use of crusher fines vs wood chips.

## CHECKLISTS: TYPES OF FEATURES IN SCHOOL GARDENS

**1**

**Compost systems**

Is the proposed compost system a good distance from the school building and made from materials that will not rot?

**2**

**Worm boxes**

Will they attract critters wanting the food that is fed to the worms?

**3**

**Pergolas**

Provide nice shade but are they made from materials that will not rot?

**4**

**Garden tables**

Will they splinter and hold up to the use by lots of students?

**5**

**Fencing**

Does the district require the garden to be fenced and what are acceptable materials (chain link vs. wood)?

**6**

**Water/irrigation**

Does the irrigation system become a threat to theft and is the water source secure?

**7**

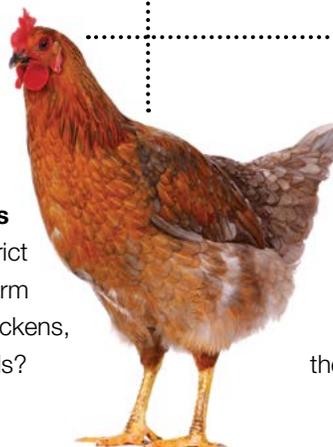
**Greenhouses**

Does your district have greenhouse construction standards as student safety will be first concern?

**8**

**Chicken coops**

What are the district policies around farm animals, including chickens, on school grounds?



**9**

**Beehives**

Can a beehive be installed on school grounds or perhaps on the roof of the school?

Another point of discussion with the Facilities Department is whether the school garden will be using organic practices to grow the fresh produce. Most school garden leaders will want to use organic gardening practices because of the concern of chemicals affecting the children eating the fresh produce. To be really organic, the rest of the schoolyard will also need to be organic so that there is no runoff of chemicals onto the school garden. The Facilities Department may not be familiar with organic practices for grass and weed control in a schoolyard.

As detailed above, there are many policy issues that need to be worked out with the Facilities Department to get a garden started on a schoolyard. Once you have cleared the district-level hurdles, the next step is to check with the principal to see if there are any school policies that need to be addressed for the school garden. Slow Food chapters can help organize a meeting between the Garden Committee, teachers, staff, PTA, and the principal. A typical concern of a principal is the amount of time the garden may take students away from their core course work. Especially if the school is a low-performing school based on state test scores, a principal may be wary of allowing students to be in the garden during the school day. The best way to integrate the garden into the school day is to get teachers to use the garden during classes in science, math, social studies, and even art. The more the garden becomes a classroom with opportunities for hands-on, experiential learning, the more the principal will see the garden as a resource. In cases where the principal does not allow garden classes during the school day, the garden program usually becomes an after-school program.

## Policies concerning volunteers in garden programs

The availability of volunteer opportunities in food-related activities in the community is a trademark of Slow Food programs. Most Slow Food chapters will have standing policies around the recruitment, training, and appreciation of volunteers. When it comes to school garden programs, the success by Slow Food chapters in schools would not have been possible without a dedicated pool of new and returning volunteers. Since volunteer opportunities in school gardens bring adult volunteers closer to children, Slow Food chapters have to be extra careful concerning who volunteers in schools and what kind of activities they are involved in with students in the gardens.

School districts will have policies in place concerning volunteers on school properties. A best practice for a Slow Food chapter is to become very familiar with those volunteer policies and make it a point to meet in person the officer who is in charge of these policies. If you are in doubt of the office in a school district that is in charge of volunteers, a good place to start is with Risk Management. They should be able to point you in the direction of an office in charge of volunteers in the district. But it may not always be very clear who is in charge. In Denver Public Schools, there are two offices that are managing volunteers for the district while in the neighboring district, Jefferson County Schools, there is no one in the central administration that manages volunteers, but rather each school is responsible for their own volunteers.

An initial meeting with the district volunteer coordinator would be an opportunity to describe the activities of Slow Food volunteers in school gardens and cooking classes to hear from the District if there are any special concerns relating to volunteers. Be sure to try to get specifics from the district volunteer coordinator so that you don't try to build a program on either incomplete or inaccurate information. Find out from this representative what are the major concerns for the district of volunteers on school grounds and what can be done to minimize those concerns.

Slow Food chapters have to be extra careful concerning who volunteers in schools and what kind of activities they are involved in with students in the gardens.

Slow Food Denver has been recently informed by Denver Public Schools of a recent clarification concerning what kind of background check is necessary for different types of volunteers. The district has started to make a distinction between volunteers who will be alone with a group of students or who will be accompanied by a teacher or staff member. According to Denver Public Schools, any volunteer who will be alone in any sort of activity with students needs to go through a full background check. In addition, any volunteer tied to an outside organization will have to go through a full background check that will involve both the full name and social security number of the volunteer. The chart below shows the different classifications for volunteers established by Denver Public Schools and the level of background checks.

<b>LEVEL OF BACKGROUND CHECK REQUIRED</b>				
<b>SITUATION</b>	<b>ALONE WITH STUDENTS YES / NO</b>	<b>BACKGROUND CHECK NEEDED YES / NO</b>	<b>TYPE FULL/NAME ONLY</b>	<b>RESPONSIBLE PARTY DPS / OUTSIDE ORGANIZATION</b>
<b>Ongoing Events</b>				
<b>School-Based Garden Leader</b>	<b>YES</b>	<b>YES</b>	<b>FULL</b>	<b>DPS</b>
<b>Parent Volunteers</b>	<b>YES</b>	<b>YES</b>	<b>FULL</b>	<b>DPS</b>
<b>Parent Volunteers</b>	<b>NO</b>	<b>YES</b>	<b>NAME ONLY</b>	<b>DPS</b>
<b>After-School Instructor, parent</b>	<b>YES</b>	<b>YES</b>	<b>FULL</b>	<b>DPS</b>
<b>After-School Instructor, Outside Organization employee</b>	<b>YES</b>	<b>YES</b>	<b>FULL</b>	<b>OUTSIDE ORGANIZATION</b>
<b>After-School Instructor, Outside Organization volunteer</b>	<b>NO</b>	<b>YES</b>	<b>FULL</b>	<b>OUTSIDE ORGANIZATION</b>
<b>Cooking Classes in Classroom, Outside Organization employee</b>	<b>NO</b>	<b>YES</b>	<b>FULL</b>	<b>OUTSIDE ORGANIZATION</b>
<b>Cooking Classes in Classroom, volunteer</b>	<b>NO</b>	<b>YES</b>	<b>NAME ONLY</b>	<b>OUTSIDE ORGANIZATION</b>

In addition to the requirements for volunteers established by a school district, Slow Food chapters should have some sort of training and evaluation process in place as volunteers become active in school gardens. Working with young children can be a challenging enterprise, and not every volunteer is going to be best fitted for these opportunities. It would be ideal for the Slow Food chapter to provide some sort of orientation for new volunteers and then have them shadow a couple of classes conducted by garden leaders or veteran volunteers. Not only will these opportunities allow new volunteers to experience first-hand what happens in the school gardens with a group of students, but the Slow Food leaders can observe these new volunteers in action. It might be necessary to provide some more training for a volunteer if they are not comfortable around students. See the “Volunteers” chapter in this manual for more information and suggestions on working with volunteers.

# Policy issues around the growing and harvesting of food

There is a lot of sensitivity around school gardens when the major output of the garden is food and we want to engage children in tasting that food. There are always concerns around the safety of the food that is produced in a school garden and whether we can feed the food to the children. Since one of the goals of a Slow Food garden is to get children to appreciate the food that is grown, a Slow Food chapter can play an important role in assuring that the food safety concerns are addressed at all levels of the district and city.

In this section, we will address the safety issues around the food and the children when we consider *growing* and *harvesting* fresh produce on school grounds. Some of the issues that come up seem to stem from the same expectations that USDA and state agriculture departments expect for large-scale farmers. We will address how a Slow Food chapter can support a school garden project by understanding some of the Federal, State, and local regulations placed on the growing and harvesting of the fresh produce.

**Growing Food Crops.** Fresh produce from a school garden can be considered wholesome and free of pathogens (microbes that cause food-borne illness) if precautions are followed to prevent microbial contamination. Knowing the potential risks in a school garden and then establishing commonsense practices is the best way to maintain the wholesome nature of a school garden. The main threats to a school garden's food safety come from human hygiene, animals, use of manure as a fertilizer, and irrigation water. Established practices can minimize the risk of these factors and still allow students to have a great educational experience in the garden.

At the Federal level, the USDA has prepared safe farming practices called Good Agricultural Practices (GAP) and safe harvesting practices called Good Handling Practices (GHP). In most cases, it is not required for a school garden leader to be familiar with GAP and GHP (the USDA promotes these practices and some large farm operations are GAP and GHP certified).

The USDA prepares a checklist for both GAP and GHP protocols. **These checklists can be found at: [www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateN&leftNav=GradingCertificationandVerification&page=GAPGH PAudit VerificationProgram&acct=freshgrdcert](http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateN&leftNav=GradingCertificationandVerification&page=GAPGH%20AuditVerificationProgram&acct=freshgrdcert)**

Within each checklist are major categories that are possible entry points for contamination to occur. In GAP protocols, which concern themselves with the growing process, there are eight major principles:



- |                      |                                |                                  |                            |                                   |                                    |                       |                     |
|----------------------|--------------------------------|----------------------------------|----------------------------|-----------------------------------|------------------------------------|-----------------------|---------------------|
| <b>1</b>             | <b>2</b>                       | <b>3</b>                         | <b>4</b>                   | <b>5</b>                          | <b>6</b>                           | <b>7</b>              | <b>8</b>            |
| <b>Water sources</b> | <b>Manure use and handling</b> | <b>Worker health and hygiene</b> | <b>Sanitary facilities</b> | <b>Field sanitation</b>           | <b>Packing facility sanitation</b> | <b>Transportation</b> | <b>Traceability</b> |
| water                | soil amendments                | students and volunteers          |                            | animal control and tools/utensils |                                    |                       |                     |

Looking at this list, there are some obvious principles (highlighted in italics) that will have a direct connection to food safety concerns in a school garden. **Luckily for school garden leaders, the USDA has produced several publications that relate GAP and GHP to the school garden:**

*Food Safety Tips for School Gardens*

*Fresh, Healthy and Safe Food: Best Practices for Using Produce from School Gardens*

**In addition, there are some publications that detail safe growing practices for home gardens that apply well to the practices used in school gardens:**

*Food Safety Tips for your Edible Home Garden*, Trevor V. Suslow and Linda J Harris.

Western Institute for Food Safety and Security, University of California, Davis.

[wifss.ucdavis.edu](http://wifss.ucdavis.edu)

*Five Steps to Food Safe Fruit and Vegetable Home Gardening*. University of New Hampshire Cooperative Extension.

The most logical place to start when talking about students growing food is hygiene. Fortunately, schools are usually very active in trying to minimize the risks of children infecting each other, so talking to the children about hand washing after the use of the toilet and before we go out to the garden should not be too much trouble. But it is important that this discussion becomes part of the garden practice at your school.

In most cases, the source of water for school gardens should also not be much of a problem. Typically, the water source will be from the city and is the same water that goes into the school. In some cases, municipal water companies are starting to install “purple pipes” that carry recycled water that is safe for lawns and flowerbeds. It is not recommended that recycled water be used on gardens growing fresh food. Finally, states will have different regulations concerning collecting rainwater on school grounds to be used in gardens. The school garden leader should be familiar with the local regulations concerning the collection and use of rainwater.

It is commonplace to see families bring their dogs to school while picking up the children at the end of the day. The presence of animals like dogs, cats, chickens, wild birds, and larger wildlife like deer may increase the risk of contamination in the school garden. It is highly advisable to limit the presence of all influences of animals in the garden during growing and harvesting seasons, especially in parts of the garden with edible produce. Also, minimize the presence of piles of decaying fruits and vegetables adjacent to your garden as they may attract unwelcomed visits by animals. Any compost system should limit the access to the piles by most animals.

The use of manure is a common practice to enrich the soils in a school garden and is a great lesson for students on how to provide nutrients to the soil that will grow their food. It is important for a Slow Food garden leader to understand proper management of compost to minimize pathogens. It is advisable not to use manure from pigs, dogs, and cats for composting or to fertilize the garden as some parasites from these animals are not destroyed by composting and might remain a threat to humans. Properly composted manures, mainly from cows, horses and chickens, are unlikely to be a source of microbial pathogens. The best practice is to be sure to purchase your manure from reputable sources that can offer traceability of the compost or to purchase compost without any manure in it.

It is equally important to understand when to apply manures to a school garden to minimize possible contamination. The best practice is to apply approved, composted manure at the end of the season, after all harvests are completed. If you desire to apply composted manure closer to the growing season, a best practice is to mix the composted manure into the soil at least 60 days before planting. Do not leave manure on the soil surface and do not apply manure after seeding or transplanting edible plants.

The presence of animals may increase the risk of contamination in the school garden.



**Harvesting Food Crops.** The concern for food safety is heightened as students are in the garden harvesting ripened fruit and vegetable crops to be used in cooking classes, in the cafeteria, or for just for tasting. While a school garden leader should always make it a priority to assure the safety of the garden produce, we don't want to limit the educational experiences for the students with all the great fresh food coming from the gardens. Fortunately, there are some great publications from the USDA that allow for the safe handling of fresh produce by students and volunteers in school gardens.

## Best Practices: Handling Fresh Produce in Schools

The major concerns for food safety during the harvesting and consuming of fresh produce from the school gardens are the hygiene of the students and the cleanliness of the cookware that is used to process the produce. As a general rule, everyone should wash their hands prior to harvesting and then again prior to handling the fresh produce during its preparations and eating. The teachers and volunteers who are leading the harvesting activities should be familiar with safe preparation and cooking procedures. A great resource for these procedures will be the Food and Nutrition Services department in the district. A Slow Food leader could be the connector between the Food Service Department and the garden leaders to get training in safe food handling.

Storage and timing of the use of garden produce is also a food-safety concern. According to the USDA, just-harvested fresh produce should be consumed within two hours of picking. A typical Slow Food class will involve the harvesting, preparation, and eating all within an hour so the timetable should be no problem. If produce is harvested one day to be used the next day, then it should be refrigerated after harvesting. Any leftover produce from a class that has been handled by students should be composted rather than used another day.

Another food safety concern is the threat of garden produce items to affect the allergies of some students. Garden leaders should be in direct communications with the teachers and school nurse to be aware of any allergic reactions to fresh produce. If a student is identified as having an allergy to some sort of fresh produce, there should be a discussion on what kinds of actions are necessary to avoid risking any incidences.





## CASE STUDY

# DPS Garden to Cafeteria Program

SLOW FOOD DENVER, COLORADO

Since 2009, Slow Food Denver has been the District partner with Denver Public Schools (DPS) for various programs with the goal of purchasing Colorado-grown-and-raised agricultural products for the school kitchens. The programs, some with School Food FOCUS, have been very successful in getting local produce and meats into the school menus.

In the spring of 2010, Leo Lesh, then the director of Food and Nutrition Services for DPS, asked Slow Food Denver leader Andrew Nowak what it would take to use fresh produce from the school gardens as local produce in the school kitchens. The immediate issue facing this proposal was food safety with students growing and harvesting fresh produce for the school kitchens. So Andrew contacted Danica Lee of the Denver Department of Environmental Health for advice. Danica's department is responsible for the inspections of school kitchens as required by the USDA at least twice a year. These inspections pay close attention to the safety of food products as they cross the threshold into the school kitchens.

Danica shared with Andrew that her department had no jurisdiction in how the produce was grown in the gardens. Since school gardens in DPS used organic growing practices, there was a reasonable assurance that the fresh produce was safe on the plant. So Andrew and Danica started to address the possible risks associated with students harvesting the produce and delivering it to the school kitchen manager.

These risks were the same as those identified by the USDA in the GAP and GHP protocols: water, health and hygiene, harvesting tools, and traceability. Since the garden produce was being used at the same school and not transported to another school, there were not any concerns about the safety issues surrounding the produce leaving the school grounds. The other risks were addressed quite easily. Any student who was ill within the last two weeks was not allowed to participate in the harvest that day. All students were shown how to wash their hands. The harvest baskets were made of food grade plastic and could be sanitized in either the school's dishwasher or in the three-compartment sink in the school kitchen. (Many thanks to Whole Foods Rocky Mountain Region for the donation of plastic shopping baskets to be used as harvest baskets.) The harvested produce was rinsed off while still in the harvest baskets using water from the garden hose to remove the large clumps of dirt.

The students then carried the produce in the baskets to the school cafeteria. Here the produce was weighed, using scales from the school kitchen, and the weight of each produce type was recorded along with the names of the students. This served as both a log of the weights of each kind of produce item (the garden programs got paid for the produce items) and as a trace back record sheet. In the event that a food-borne illness was traced to the garden produce, the kitchen manager would have a record of the students who participated in the harvest.

Overall the Garden to Cafeteria program in DPS has become a model for school garden programs growing food for the school cafeterias. This program minimizes the food-safety risks associated with fresh produce harvested by students while maximizing the educational and nutritional opportunities of students growing their own food to be served on salad bars and lunch lines. While the overall quantities may not be too great, the symbolic meaning of school garden produce being used to feed the students at lunch is huge in promoting the consumption of fresh fruits and vegetables as part of a healthy diet.



## CASE STUDY

# Growing Food for Hunger Relief Agencies

SLOW FOOD DENVER, COLORADO



Many school garden programs will grow food that they will donate to hunger-relief agencies to feed their needy populations. With these donate a row type programs, students learn valuable community support skills and become knowledgeable about needy members of their community. In turn, the hunger-relief agencies receive fresh produce that is often difficult to get donated or is expensive to buy.

From a policy standpoint, these donate a row programs only present a few challenges to the school garden program. Since hunger-relief programs deal with populations with stressed immune systems, it is important that the garden produce be handled as safely as possible from the garden to the receiving area of the agency. In general, the food safety rules discussed previously in the DPS Garden to Cafeteria program will apply equally well for produce donations to food pantries or food banks.

The new wrinkle with Donate A Row programs is the transportation needed to take the produce from the school gardens to the agency's location. In this case, it is highly recommended that the harvest and delivery occur on the same day so that there are no safety issues around the storage of the fresh produce. To move the produce, it is advisable that the fresh produce be placed in food-grade plastic bags and then placed in ice chests that have been cleaned with a soapy solution. If ice is used in the chests, make sure that the ice comes from a reputable source, using potable water.

Food safety concerns should continue as the agency receives the fresh produce. If the receiving agency has a kitchen, then they will probably already have some sort of protocols in place to receive fresh

produce. If the agency is a pantry, they may be limited in the extent that they can receive and hold fresh produce. The best-case scenario is that the donated produce is distributed to the recipients that same day so the storage is of minimum concern. If the produce is to be stored past one day, try to get the pantry to place the produce into a refrigerator or an iced cooler to help preserve the freshness of the produce.

In Denver, Slow Food Denver is part of an eight-member collaboration called Produce for Pantries (P4P). The goal of P4P is to connect school gardens, community gardens, and backyard gardens with local food pantries so that extra produce grown in the gardens can support the local community with fresh produce. Slow Food Denver helped to introduce some basic food safety protocols to P4P so that any sort of gardener or volunteer could be informed on how to minimize any risks of donating their garden produce to a pantry. The protocols were written to be easily understood and implemented by all gardeners. When a gardener signs up to donate through P4P, they are pointed to the website that contains the food safety protocols.



## Policy issues concerning cooking with students in schools

A high priority of most Slow Food school garden programs is to get the students to taste and consume the fresh produce coming from the school gardens. In most districts, the responsibility of the food that is served to students during the school day rests with the Food and Nutrition Service (FNS) Department. But in most cases, the school garden program lies outside of the jurisdiction of the FNS department so there is very little coordination between the two programs. This being the case, there are often concerns expressed by the principal, teachers, and parents on the safe nature of the fresh produce coming from the school garden or being prepared in the cooking classes. This section will go over steps and protocols that a Slow Food chapter can help develop so as to minimize any risks associated with student consumption of fresh produce from school gardens. These risks can be classified under the categories of Food Safety, Location of Cooking Classes, Safety with Kitchen Tools, and Cooking with Heat.

**Food Safety.** The FNS department is certainly the expert in any school district when it comes to food safety. So even if the school garden program is not directly associated with the FNS department, it makes lots of sense that the Slow Food chapter reach out to the FNS department for advice and leadership concerning food safety issues when using fresh produce from the school garden for tastings and cooking classes. For guidance on how to harvest fresh produce from the school garden with students, please refer to the previous Garden to Cafeteria section. This section will deal more about food safety issues during Tasting and Cooking classes.

There are several issues concerning food safety during tastings and cooking classes. When students are out in the garden, there often is the desire to sample some of the produce right off the plant. While there is nothing inherently dangerous about eating a cherry tomato or a strawberry out in the garden, there are several steps that should be included in the garden protocols to ensure safer food. It is always advisable to wash any piece of fresh produce before it is eaten, using a potable water source. This is especially important if the produce item was either dug from the ground, such as a root vegetable, or was resting on the ground like a cucumber or a melon. The best practice would be to set up a wash station in the garden so that the students can give the item a sufficient wash with clean water. If the fresh produce is to come into the school for a cooking class, it is still advisable to wash the garden items in the garden first to get rid of any large dirt particles before going into school. Once in school, the fresh produce can receive a more thorough washing using a conventional sink.

Food safety follows the garden produce to the cooking classes as it is best to set up procedures and protocols for safe food handling and safe work surfaces inside the school. The object with these protocols is to minimize the risks of cross-contamination from dirty surfaces, infected hands, or other body parts and the general germs that seem to follow young children to the fresh produce. Of course, all students and volunteers should wash their hands thoroughly before handling the fresh food. The table surfaces at which the food preparation will occur should be cleaned with a bleach solution. In Denver, DPS requires that all food preparation from the garden occur in the cafeteria where the tables can be disinfected effectively and there is no other clutter typically found in a classroom setting. The cafeteria also allows for easier cleanup



of any spills. The use of the cafeteria also puts the classes closer to the school kitchen where it may be possible to use the dishwasher or three-compartment sinks for washing dirty dishes and food preparation items.

Besides general sanitation concerns, food safety also deals with the proper preparation of dishes so that there is minimal risk in consuming the finished product. A Slow Food chapter can support a school garden program by teaching proper cooking techniques to ensure the safe consumption of the food. For example, much of the school garden produce may be eaten uncooked in salads and other raw preparations. Thus, it will be very important that the fresh produce is cleaned properly once harvested from the garden and handled safely in the cooking class. In the event of cooking meat to go with the finished dish, all cooking instructors should be properly trained in achieving the correct final temperatures to minimize any food safety risks associated with raw meat.

Finally, it is advisable to either consume all the food that was prepared in class or to throw away the extra food. Proper cooling down and storage of leftover food is very important and, if not done properly, could be a source of food risks to the next class.

Many young children display allergic reactions to different food substances, which contributes another element of complexity to the issue of food safety in cooking classes. Typically, the school nurse and classroom teacher are aware of the allergies of the children in the school. It is advisable to share with the nurse what kind of ingredients are going to be used in the cooking classes so that she can advise you on any potential issues with allergies. As a backup, be sure to touch base with the classroom teacher to see if any allergy issues will arise with your lesson that day. There are many food substitutes that can be made to remove a possible allergen from a cooking class so that all students can participate equally in the lesson. Alternatively, special accommodations can be made for the single students who may not be able to eat gluten but could enjoy the recipe using a non-gluten substitute.

**Location of Cooking Classes.** Most schools no longer have a separate room dedicated for cooking classes, such as the Home Economic rooms of days gone by. In many cases, cooking classes from the garden are conducted in the classroom for convenience sake. However, there are many potential risks associated with cooking in the standard classroom, such as increased clutter of flammable materials, difficulty in cleaning up spills, lack of proper sanitation of surfaces, and less-than-adequate washing facilities. Thus, it is advisable to connect with the FNS department to see if it would be possible to use the cafeteria space for cooking classes outside of the time periods in which meals are being served. The use of the cafeteria minimizes the risks associated with all the factors listed above. In addition, by conducting cooking classes with healthy food and themes, Slow Food is reinforcing a relationship for the students between healthy food and the school cafeteria. Ultimately, it would be great if the kitchen staff would participate in the cooking classes from time to time so that the students begin to associate the kitchen staff with the healthy lessons coming from the garden program.

**Safety with Kitchen Tools.** Inevitably there are concerns with students using kitchen implements during cooking classes. Knives are an obvious target for concern by principals, teachers, and parents. Slow Food Denver has developed a procedure by which students gain proficiency with knives by first starting with plastic picnic knives to demonstrate safe handling skills. Each cooking class starts out with a brief review on knife safety, and students are warned

Food safety deals with the proper preparation of dishes so that there is minimal risk in consuming the finished product.



about any inappropriate behaviors while handling a knife, even a plastic one. When the garden leader is convinced that the students understand the knife safety rules and demonstrate sufficient skills, then the students are allowed to use simple chef knives while still being supervised by an adult volunteer.

Besides knives, other kitchen equipment can cause safety concerns for the school administration (we will address the use of heat in the next section). Devices like carrot peelers, cheese graters, and simple machines such as a food mill may not cause great harm if used improperly but can still cause a scrape or break the skin if the student is not careful. The use of these kitchen tools should be first demonstrated by the cooking teacher, and then their use should be carefully supervised by an adult volunteer. Students should gain a respect for all kitchen tools so that they have a comfort level in the kitchen that will lead to safe practices.

**Cooking with Heat.** Eventually, all cooking programs will want to use some sort of heat to cook the fresh produce from the raw state to some form of cooked produce. The use of a heat source introduces the risk of fire and smoke issues, as well as safety issue with young students around the heat source. In Denver, the Risk Management Department of DPS actually shut down the ability of garden programs to use heat in cooking classes because they were concerned about the risk of fire and hot-oil splashes. Slow Food Denver worked with Risk Management, the Denver Fire Department, and FNS to find a solution so that garden programs could cook with heat around students. The final solution that Slow Food Denver proposed was to use induction burners as the sole source of heat to cook with in classes. At the time, the Fire Department was not familiar with this technology but they were impressed with its low use of electricity and that it shut off as soon as the pan was removed from the burner. So starting with induction burners, the rest of the safety protocols were easily developed for cooking with heat in Denver Public Schools:

# 1

**Cooking with heat can only be done with an induction burner.**

# 2

**The induction burner is used on a cooking cart with a stainless-steel surface, away from the worktables that the students occupied.**

# 3

**The cord for the induction burner is covered with a heavy-duty cord cover.**

# 4

**Each cooking cart has a fire extinguisher, and all cooking instructors are trained on how to properly use an extinguisher.**

# 5

**No more than 1 Tablespoon of oil can be used in the pan.**

# 6

**Students can observe an adult volunteer use the induction burner in class but can not be engaged with the burner or pan.**



## Media involvement

At some point in every school garden program there will be the desire to engage the local media to provide coverage for an event, to get the word out about the special projects, or just to show cute pictures of children in the garden with healthy food. Or there may be a film project that wants to create a documentary on the school garden project that will require the students to be in the footage. Also, photographs of students in the garden may be used on websites to promote the program. In all of these cases, Slow Food can assist the garden leaders to make sure that the necessary and proper media release forms are filled out for each student and properly compiled with. Be sure that the principal is aware of the media coverage and that there has been a check on the media release forms. Also, most districts have a Media Department and they usually like to be informed when one of their schools is going to be featured in an upcoming article of news coverage.

Most schools have established policies around students appearing in photographs in the newspaper or on websites. At the beginning of each new school year, parents need to complete and sign a Media Release Form, allowing their student to be photographed and the picture used in a basic newspaper or website application. Teachers in the classrooms know which students have permission to be in a photograph and which students do not have releases signed by their parents. So when a journalist or photographer is in the gardens with the students, the Garden Leader can gently steer away students from being in a picture. And when the final story is ready to go to press, Slow Food leaders can help make sure that every child in the photographs has the proper releases.

Make sure that necessary and proper media release forms are filled out for each student and properly complied with.

## Licensing required for special projects

There may be times that a Slow Food chapter helps develop a special project from the school garden that comes to the attention of regulatory agencies in the state that will require a special license to be applied for and purchased. Such was the case in Denver and the Youth Farmers' Program. To supplement the supply of school garden produce to have a full range of available produce, Slow Food Denver worked with its partner, Denver Urban Gardens, to develop a distribution system to bring local produce from four area farms into Denver to be used in the Youth Farmers' Markets. Every time the truck visited a farm, the driver would pay for the produce in cash so that there were no long-term invoices needed.

An issue came up with the Colorado Department of Agriculture and their regulations that are designed to protect the farmers from unpaid invoices. There is a Colorado law that requires a third party purchaser and distributor of Colorado farm produce to have a sales license so that the state is aware of these transactions. According to the law, each of the YFM school sites would have been required to buy a license to sell the farm produce at the school. Slow Food Denver contacted the Department of Agriculture to understand the law and to see how the schools can best follow the law. After some discussion, it was decided that, since this was an educational program and the truck paid for the produce with cash each time, only one license was necessary for the entire Youth Farmers' network. Slow Food Denver purchased the license and then shared copies of it with every farmers' market site.