Cultivating a Successful School Garden Network:
Notes from Washington D.C.

National Children & Youth Garden Symposium
Denver, Colorado July 12, 2013
Presenters

Sam Ullery
School Garden Specialist
Office of the State Superintendent of Education
sam.ullery@dc.gov

Sarah Bernardi
Program Director
DC Greens
sarah@dcgreens.org
Presentation Goals

- Describe the framework used to support school gardens in Washington, DC
- Share examples of how school gardens are supported in Washington, DC
Washington, DC

- 61 square miles
- 632,000 Residents
- 50-plus LEAs
- 217 public schools
- 80,000 public school students
What is the School Garden Program (SGP)?

- Established under the Healthy Schools Act
- Housed at the Office of the State Superintendent of Education (OSSE) within the Division of Wellness and Nutrition
- Mission:
  
  “Establish gardens as integral components of public and public charter schools.”
Services Provided

DC School Garden Program Services

School Garden Grants

Professional Development

School Garden Tracking

Technical Support
### School Garden Tracking Overview

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td># of School Gardens</td>
<td>93 (42% of all DC schools)</td>
</tr>
<tr>
<td># of acres under cultivation</td>
<td>3.4 acres</td>
</tr>
<tr>
<td># of local garden-based organizations</td>
<td>16</td>
</tr>
<tr>
<td># of students Impacted</td>
<td>11,000 (14% of all students)</td>
</tr>
<tr>
<td># of School Garden Coordinators</td>
<td>42</td>
</tr>
</tbody>
</table>
School Garden Tracking

<table>
<thead>
<tr>
<th>Garden Type</th>
<th>Number of School Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edible Garden</td>
<td>80</td>
</tr>
<tr>
<td>Pollinator Garden</td>
<td>44</td>
</tr>
<tr>
<td>Schoolyard Greening</td>
<td>31</td>
</tr>
<tr>
<td>Stormwater</td>
<td>31</td>
</tr>
<tr>
<td>Native Garden</td>
<td>29</td>
</tr>
<tr>
<td>Wildlife</td>
<td>21</td>
</tr>
<tr>
<td>Greenhouse</td>
<td>5</td>
</tr>
</tbody>
</table>
School Garden Tracking
Activity Type

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Number of School Gardens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Instruction</td>
<td>36</td>
</tr>
<tr>
<td>Extra Curricular Instruction</td>
<td>34</td>
</tr>
<tr>
<td>Summer Programs</td>
<td>24</td>
</tr>
<tr>
<td>Lunch-time activities</td>
<td>16</td>
</tr>
</tbody>
</table>
School Garden Tracking: Geographic Distribution

<table>
<thead>
<tr>
<th>Ward</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward 1</td>
<td>15</td>
</tr>
<tr>
<td>Ward 2</td>
<td>5</td>
</tr>
<tr>
<td>Ward 3</td>
<td>15</td>
</tr>
<tr>
<td>Ward 4</td>
<td>13</td>
</tr>
<tr>
<td>Ward 5</td>
<td>11</td>
</tr>
<tr>
<td>Ward 6</td>
<td>19</td>
</tr>
<tr>
<td>Ward 7</td>
<td>6</td>
</tr>
<tr>
<td>Ward 8</td>
<td>6</td>
</tr>
</tbody>
</table>

Map showing the distribution of school gardens across different wards.
Technical Support Requests

<table>
<thead>
<tr>
<th>Technical Request Type</th>
<th>Number of Technical Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management</td>
<td>26</td>
</tr>
<tr>
<td>Systems Designs</td>
<td>14</td>
</tr>
<tr>
<td>Horticulture Support</td>
<td>10</td>
</tr>
<tr>
<td>Green Ribbon</td>
<td>3</td>
</tr>
<tr>
<td>Constructing Structures</td>
<td>7</td>
</tr>
<tr>
<td>Modeling Garden Instruction</td>
<td>11</td>
</tr>
</tbody>
</table>
Technical Support: Assessment

**DESIGN (18%)**
- Circulation
- Seating
- Signage
- Meeting Area
- Tool Storage
- Security Features
- Accessibility

**SYSTEMS (26%)**
- Soil
- Biologic
- Pest Management
- Wildlife
- Water
- Compost
- Community Participation

**PROGRAM ORGANIZATION (30%)**
- Vision Statement
- Funding
- Institutional Support
- Garden Coordinator
- Garden Committee
- Student Involvement
- Maintenance Plan

**CURRICULUM & INSTRUCTION (26%)**
- Standards-based curriculum
- Teacher Involvement
- Student Impact
School Garden Grants
Overview

• Schools receive up to $10,000 to support their school garden program ($200,000 annually)

• Programs requirements include:
  • Partnership with an organization
  • Establish a School Garden Coordinator
  • Establish a School Garden Committee
  • Attend Trainings
Impact of 2012-2013 School Garden Grant:
• 22 schools awarded
• 4700 students impacted ($42/ student)
• 143 teachers impacted
• 810 lessons taught
• 16 partner organizations provided support
• 5 new gardens built
Professional Development Framework

Program Management
- Securing Funding
- Managing Volunteers
- Managing Committees
- Engaging the Community (Outreach and Promotion)
- Supporting Teachers
- Using Produce

Technical Skills
- Facilitating Planning and Design
- Building Structures
- Managing Garden Systems ("Eco", Soil, Compost, Water, Plants, Pests)
- Maximizing Harvests

Garden Instruction
- Managing Student Groups
- Lesson Planning and Curriculum Integration
- Structuring School Staff Garden Trainings
- Assessing the Program
- Cooking in the Garden
Professional Development:
School Garden Coordinator

- Manages the day-to-day operations
- Coordinates with teachers, school staff, and the community
- Facilitates garden-based lessons
- Maintains garden health
School Garden 101, 201, and seasonal trainings
– OSSE conducts these trainings, and partners with multiple local garden-based NGOs for support.
– Over 200 teachers, administrators, and community members have attended.
– Seasonal trainings include school garden tours, and seasonal specific planting.

Growing Garden Teachers Program
– DC Greens runs the program, OSSE provides support.
– 11 monthly trainings for 30 School Garden Coordinators.
– One two-day training, four one-day trainings, six two-hour trainings and two city-wide school garden tours.
Join the District’s professional network of School Garden Coordinators
Growing Garden Teachers:

- Trains school garden coordinators in program management, technical skills, and instruction.
- Creates a unique professional network of garden educators that provides peer support and a forum for the sharing of best practices.
- Includes 12 workshops over 1 year

Support Programs:

- Seedling program
- Internship program
March  Role of a School Garden Coordinator: Best Practices
April   Garden Science
        Environmental Literacy
May     Carpentry Skills
June    Composting
August  Support Programs: internship program, seedling program, engaging school staff
September  Fall Planting with Kids
October  Engaging the School Community: art in the garden
November Season Extension: prepping the garden for winter
December Grant Writing
January  Indoor Activities
February Engaging with the Broader Community
Seedling program:
- Supplies school garden programs across the district with seedlings.
- Trains students and teachers to manage their greenhouse.
Our School Garden Army:

• Supports school garden coordinators in program development and implementation.
• DC Greens provides training for school garden soldiers on creating sustainable school garden programs.
• Has placed 50 soldiers in DC school gardens to date.
Some quotes from participants:

“They are creating the model to duplicate for professional learning in this career field. It validates our position in the schools and spells out our responsibilities and potential!”
– Jennifer Finnegan

“Its a great opportunity to share ideas and learn from others in the field. My creativity is always sparked after collaborating with others during the GGT trainings. I always walk away with new ideas to try with my students. It makes me feel not so alone!”
- Kealy Rudersdorf

“Having a platform and time built in for collaboration with other garden teachers is huge. I makes you feel less alone out there!”
- Sarah McLaughlin
Major Accomplishments

• First and only shared school garden between a D.C. charter and a public school (A. Kiger Savoy ES).

• Maintained and used by students and faculty year-round.

• Contains a variety of elements including storm water management, edible gardens, and native wildlife habitat.

<table>
<thead>
<tr>
<th>Creation Date</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden Size</td>
<td>6,500 sq. feet</td>
</tr>
<tr>
<td>Annual Cost</td>
<td>$12,000+</td>
</tr>
<tr>
<td>Grade Levels</td>
<td>9-12</td>
</tr>
<tr>
<td>Students Impacted</td>
<td>150</td>
</tr>
<tr>
<td>Assessment Score</td>
<td>78%</td>
</tr>
</tbody>
</table>
Kate Lee

Thurgood Marshall Academy, Hardy Middle School Wilson High School, Peabody Early Childhood Elementary School
• 600 students, preK – 12
• 25 hours/week

Favorite Garden Activity: Most students scream when they see a bug. Demonstrate how harmless the bug is, and their fear turns to curiosity.

Experience: Horticulture degree from the University of Georgia; founder of an edible landscape consulting company

“I'm part of giving students an opportunity to learn and explore that I'm not sure they always get. It allows them to be physical, interact with their surroundings, and learn in a manner that doesn't outright seem like learning, at least not in the structured way they are used to. It's one of the most rewarding jobs anyone could every have.”
DC School Garden Profiles
Capital City Public Charter School

Major Accomplishments

• Edible, pollinator, and storm water components provide many opportunities for students to become engaged.

• Expeditionary Learning model allows students the opportunity to conduct in-depth project based fieldwork using the garden.

• Hosts community volunteer hours after school each Friday.

<table>
<thead>
<tr>
<th>Creation Date</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden Size</td>
<td>2,500 sq. feet</td>
</tr>
<tr>
<td>Annual Cost</td>
<td>$10,000-$12,000</td>
</tr>
<tr>
<td>Grade Levels</td>
<td>K-8</td>
</tr>
<tr>
<td>Students Impacted</td>
<td>50</td>
</tr>
<tr>
<td>Assessment Score</td>
<td>77%</td>
</tr>
</tbody>
</table>
Ryoko Yamamoto

**Capital City Public Charter School**
- 960 students, preK - 12
- 10-30 hours/week, $30/hour

**Favorite Garden Activity:** Exploring garden “desserts” like nectar or Stevia.

**Experience:** Long-time gardener

“The students' questions of the natural world is most inspirational and … drives me into better teaching.”

“Understanding how things are inter-connected is possible only through exposure and own experience. The garden contains all foundation of support which remain for life… [I hope] they will take the lessons from the garden and … cultivate a better place for every living creature.”
DC School Garden Profiles
Bancroft Elementary School

Major Accomplishments

- Students heavily involved in the initial planted of the White House Garden and maintain a strong relationship with this initiative.
- Students are involved in every aspect from trellising to maintenance.
- The garden was part of the modernization of the school facility.

<table>
<thead>
<tr>
<th>Creation Date</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden Size</td>
<td>300 sq. feet</td>
</tr>
<tr>
<td>Annual Cost</td>
<td>$4,000-$7,000</td>
</tr>
<tr>
<td>Grade Levels</td>
<td>K-5</td>
</tr>
<tr>
<td>Students Impacted</td>
<td>370</td>
</tr>
<tr>
<td>Assessment Score</td>
<td>76%</td>
</tr>
</tbody>
</table>
Experience:
Peace Corp volunteer in natural resource management, home gardener, high school and middle school teacher

Favorite Garden Activity:
Worm composting – especially when they get to find the worms

“I love to watch the kids explore, get dirty and have fun in the garden or out in nature.”

Devon Bartlett
Bancroft Elementary School
465 students, preK – 5
30 hours/week, $25,000/year
**Major Accomplishments**

- Contains many essential elements including edible, pollinator, bug gardens and a greenhouse

- Engages every student in the school in hands-on garden-based learning

- Strong support from the school’s parent teacher organization and partner organization has allowed the garden to provide meaningful instruction throughout the year.

**DC School Garden Profiles**

**Stoddert Elementary**

<table>
<thead>
<tr>
<th>Creation Date</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garden Size</td>
<td>5,000 sq. feet</td>
</tr>
<tr>
<td>Annual Cost</td>
<td>$1,000-$4,000</td>
</tr>
<tr>
<td>Grade Levels</td>
<td>PS-5</td>
</tr>
<tr>
<td>Students Impacted</td>
<td>350</td>
</tr>
<tr>
<td>Assessment Score</td>
<td>88%</td>
</tr>
</tbody>
</table>

![Bar chart showing design, systems, program organization, and instruction](chart.png)
Kealy Rudersdorf

Stoddert and Murch Elementary Schools
- 900 students, preK – 5
- 40 hours/week, $30,000/year

**Experience:**
Volunteer on farms abroad, certified in permaculture, masters in teaching, 2 years of teaching

**Favorite Garden Activity:**
Make a few salad dressings with different herbs and flavors, and let students perform a taste test.

“There are so many lessons that can be taught in the garden: patience, team work, biology, compassion, math, protecting the earth, social studies, etc. Why wouldn’t I want to teach in the garden?? I love what I do!! “
Thank You!

Sam Ullery
School Garden Specialist
Office of the State Superintendent of Education
sam.ullery@dc.gov

Sarah Bernardi
Program Director
DC Greens
sarah@dcdgreens.org